

“The ministry of science and higher education of RF”

“SIO "Academy of cognitive natural sciences"”

“The international banking institute”

Vetrov Anatoly Nikolaevich

**“The scientific-educational consortium
"System and financial analysis
based on cognitive modeling technology"”:**

“SIO "ACNS"”,

“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”,

“SF "SFA CMT" n. a. Prokopenko N.A.”,

“"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."”

and “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

The scientific monography on the rights of manuscript

RF, Saint-Petersburg city

2013 y., 2014 y., 2022 y.

Reviewers:

Vetrov A.N. "The scientific-educational consortium "System and financial analysis based on cognitive modeling technology": "SIO "ACNS"", "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.", "S F " S F A C M T " n. a. Prokopenko N.A.", "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." and "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.": the scientific monography on the rights of manuscript (philosophical sciences (natural, technical, economic, humanitarian, social, medical, sports and military sciences)) (spec. 01.02.01, 05.13.01, 05.13.10, 19.00.02 (19.00.03), 08.00.10) / A.N. Vetrov; "SIO "ACNS"". – SPb.: "SIO "ACNS"", "IBI", 2013, 2014, "SIO "ACNS"", 2022. – 637 p.

In the scientific monography on the rights of manuscript are presented the structures of "The state international organization "Academy of cognitive natural sciences"", "The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N.", "The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.", "Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A." and "The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after academician Burdenko N.N."

It is intended for the scientists, staff of SRI, teachers and students of HEIs, and also the qualified specialists-experts on the scientific specialties: 05.13.01 – "The system analysis, control and information processing" (technics), 05.13.06 – "The automation of technological processes and manufactures" (industry), 05.13.10 – "Management in the social and economic systems" (technics), 19.00.02 – "Psychophysiology of perception" (technics and medicine), 19.00.03 – "Psychology of work, engineering psychology and ergonomics" (psychology), 08.00.10 – "Finance, monetary circulation and credit" (economics and finances), 08.00.12 – "The accounting and statistics" (the accounting-documentation of (credit) organizations), 08.00.13 – "Mathematical and instrumental methods of economics" (the financial analysis), 01.02.01 – "Theoretical mechanics" (the modeling of hybrid systems with the difficult structure), 02.00.04 – "Physical chemistry" (the multi-nucleus chemical elements and nuclear polymers) and 03.00.03 – "Molecular biology" (the modeling of desoxyribonucleic acid).

on the rights of manuscript

The table of contents

The introduction	13
1. "The state international organization "Academy of cognitive natural sciences" "	14
1.1. The general details about "SIO "ACNS" "	17
1.2. The divisions of fundamental scientific researches (at the microscopic level) of "SIO "ACNS" "	20
1.2.1. The fundamental scientific researches branch "Cognitive modeling in the mathematical sciences" ("CM in MATHS") ("OMN") of "SIO "ACNS" "	23
1.2.2. The fundamental scientific researches branch "Cognitive modeling in the physical sciences" ("CM in PHS") ("OFN") of "SIO "ACNS" "	28
1.2.3. The fundamental scientific researches branch "Cognitive modeling in the nano-technologies and information technologies" ("CM in N-T and IT") ("ONIT") of "SIO "ACNS" "	30
1.2.4. The fundamental scientific researches branch "Cognitive modeling in the exact sciences" ("CM in ES") ("OEMMPU") of "SIO "ACNS" "	36
1.2.5. The fundamental scientific researches branch "Cognitive modeling in the industry and chemical sciences" ("CM in I and CHS") ("OHNM") of "SIO "ACNS" "	40
1.2.6. The fundamental scientific researches branch "Cognitive modeling in the biological sciences" ("CM in BS") ("OBN") of "SIO "ACNS" "	45
1.2.7. The fundamental scientific researches branch "Cognitive modeling in the physiology, fundamental medicine and public-health-services" ("CM in PHFM and P") ("OFFM") of "SIO "ACNS" "	47
1.2.8. The fundamental scientific researches branch "Cognitive modeling in the sciences about The Earth" ("CM in S about E") ("ONZ") of "SIO "ACNS" "	51
1.2.9. The fundamental scientific researches branch "Cognitive modeling in the social sciences" ("CM in SS") ("OON") of "SIO "ACNS" "	54
1.2.10. The fundamental scientific researches branch "Cognitive modeling in the global problems and international relations" ("CM in GP and IR") ("OGPMO") of "SIO "ACNS" "	62
1.2.11. The fundamental scientific researches branch "Cognitive modeling in the historical-philological sciences" ("CM in H-PHS") ("OIFN") of "SIO "ACNS" "	67
1.2.12. The fundamental scientific researches branch "Cognitive modeling in the sports sciences" ("CM in SPS") ("OSN") of "SIO "ACNS" "	69
1.2.13. The fundamental scientific researches branch "Cognitive modeling in the military sciences" ("CM in MILS") ("OVN") of "SIO "ACNS" "	70

- 1.3. The divisions of applied scientific researches (at the microscopic level) of "SIO "ACNS"" 71
 - 1.3.1. The applied scientific researches direction "Cognitive modeling in the natural sciences" ("CM in NS") ("NEN") of "SIO "ACNS"" 74
 - 1.3.2. The applied scientific researches direction "Cognitive modeling in the applied technical sciences and technologies" ("CM in ATS and T") ("NNT") of "SIO "ACNS"" 94
 - 1.3.3. The applied scientific researches direction "Cognitive modeling in the geo-political sciences and researches" ("CM in G-PS and R") ("NSGI") of "SIO "ACNS"" 101
 - 1.3.4. The applied scientific researches direction "Cognitive modeling in the society steady development of post-industrial country" ("CM in SSDP-IC") ("NURS") of "SIO "ACNS"" 104
 - 1.3.5. The applied scientific researches direction "Cognitive modeling in the social-economic and jurisprudential sciences" ("CM in S-E and JS") ("NSEPP") of "SIO "ACNS"" 109
 - 1.3.6. The applied scientific researches direction "Cognitive modeling in the biological and medical sciences" ("CM in B and MS") ("NBME") of "SIO "ACNS"" 118
 - 1.3.7. The applied scientific researches direction "Cognitive modeling in the humanitarian sciences, art and creativity" ("CM in HSA and C") ("NGNOT") of "SIO "ACNS"" 122
 - 1.3.8. The applied scientific researches direction "Cognitive modeling in the physical training and sport" ("CM in PHT and S") ("NFS") of "SIO "ACNS"" 131
 - 1.3.9. The applied scientific researches direction "Cognitive modeling in the military sciences" ("CM in MILS") ("NVN") of "SIO "ACNS"" 132
- 1.4. The local and international scientific newspapers and journals of "SIO "ACNS"" 133

2. "The scientific-educational institute "System and financial analysis based on cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N." 136
 - 2.1. The general details about "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 139
 - 2.2. The divisions of fundamental developments (at the microscopic level) of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 142
 - 2.2.1. The fundamental developments branch "Cognitive modeling in the mathematical sciences" ("C M i n M A T H S") ("O M N") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 145
 - 2.2.2. The fundamental developments branch "Cognitive modeling in the physical sciences" ("C M i n P H S") ("O F N") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 150
 - 2.2.3. The fundamental developments branch "Cognitive modeling in the nano-technologies and information technologies" ("CM in N-T and IT") ("ONIT") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 153
 - 2.2.4. The fundamental developments branch "Cognitive modeling in the exact sciences" ("C M i n E S") ("O E M M P U") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 159
 - 2.2.5. The fundamental developments branch "Cognitive modeling in the industry and chemical sciences" ("CM in I and CHS") ("OHNM") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 163
 - 2.2.6. The fundamental developments branch "Cognitive modeling in the biological sciences" ("C M i n B S") ("O B N") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 168
 - 2.2.7. The fundamental developments branch "Cognitive modeling in the physiology, fundamental medicine and public-health-services" ("C M i n P H F M a n d P") ("O F F M") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 170
 - 2.2.8. The fundamental developments branch "Cognitive modeling in the sciences about The Earth" ("C M i n S a b o u t E") ("O N Z") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 174
 - 2.2.9. The fundamental developments branch "Cognitive modeling in the social sciences" ("C M i n S S") ("O O N") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 177
 - 2.2.10. The fundamental developments branch "Cognitive modeling in the global problems and international relations" ("CM in GP and IR") ("OGPMO") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 185
 - 2.2.11. The fundamental developments branch "Cognitive modeling in the historical-philological sciences" ("CM in H-PHS") ("OIFN") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 191
 - 2.2.12. The fundamental developments branch "Cognitive modeling in the sports sciences" ("C M i n S P S") ("O S N") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 193
 - 2.2.13. The fundamental developments branch "Cognitive modeling in the military sciences" ("C M i n M I L S") ("O V N") of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." 194

- 2.3. The divisions of applied developments (at the microscopic level) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 195
- 2.3.1. The applied developments direction “Cognitive modeling in the natural sciences” (“CM in NS”) (“NEN”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 198
- 2.3.2. The applied developments direction “Cognitive modeling in the applied technical sciences and technologies” (“CM in ATS and T”) (“NNT”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 218
- 2.3.3. The applied developments direction “Cognitive modeling in the geo-political sciences and researches” (“CM in G-PS and R”) (“NSGI”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 225
- 2.3.4. The applied developments direction “Cognitive modeling in the society steady development of post-industrial country” (“CM in SSDP-IC”) (“NURS”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 228
- 2.3.5. The applied developments direction “Cognitive modeling in the social-economic and jurisprudential sciences” (“CM in S-E and JS”) (“NSEPP”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 233
- 2.3.6. The applied developments direction “Cognitive modeling in the biological and medical sciences” (“CM in B and MS”) (“NBME”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 242
- 2.3.7. The applied developments direction “Cognitive modeling in the humanitarian sciences, art and creativity” (“CM in HSA and C”) (“NGNOT”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 246
- 2.3.8. The applied developments direction “Cognitive modeling in the physical training and sport” (“CM in PHT and S”) (“NFS”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 255
- 2.3.9. The applied developments direction “Cognitive modeling in the military sciences” (“CM in MILS”) (“NVN”) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 256
- 2.4. The local and international scientific newspapers and journals of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” 257

3. "The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A." 260
 - 3.1. The general details about "SF "SFA CMT" n. a. Prokopenko N.A." 263
 - 3.2. The fundamental researches financing divisions (at the microscopic level) of "SF "SFA CMT" n. a. Prokopenko N.A." 266
 - 3.2.1. The fundamental researches financing branch "Cognitive modeling in the mathematical sciences" ("C M i n M A T H S") ("O M N") of "SF "SFA CMT" n. a. Prokopenko N.A." 269
 - 3.2.2. The fundamental researches financing branch "Cognitive modeling in the physical sciences" ("C M i n P H S") ("O F N") of "SF "SFA CMT" n. a. Prokopenko N.A." 274
 - 3.2.3. The fundamental researches financing branch "Cognitive modeling in the nano-technologies and information technologies" ("CM in N-T and IT") ("ONIT") of "SF "SFA CMT" n. a. Prokopenko N.A." 277
 - 3.2.4. The fundamental researches financing branch "Cognitive modeling in the exact sciences" ("C M i n E S") ("O E M M P U") of "SF "SFA CMT" n. a. Prokopenko N.A." 284
 - 3.2.5. The fundamental researches financing branch "Cognitive modeling in the industry and chemical sciences" ("CM in I and CHS") ("OHNM") of "SF "SFA CMT" n. a. Prokopenko N.A." 289
 - 3.2.6. The fundamental researches financing branch "Cognitive modeling in the biological sciences" ("C M i n B S") ("O B N") of "SF "SFA CMT" n. a. Prokopenko N.A." 294
 - 3.2.7. The fundamental researches financing branch "Cognitive modeling in the physiology, fundamental medicine and public-health-services" ("CM in PHFM and P") ("OFFM") of "SF "SFA CMT" n. a. Prokopenko N.A." 296
 - 3.2.8. The fundamental researches financing branch "Cognitive modeling in the sciences about The Earth" ("CM in S about E") ("ONZ") of "SF "SFA CMT" n. a. Prokopenko N.A." 299
 - 3.2.9. The fundamental researches financing branch "Cognitive modeling in the social sciences" ("C M i n S S") ("O O N") of "SF "SFA CMT" n. a. Prokopenko N.A." 302
 - 3.2.10. The fundamental researches financing branch "Cognitive modeling in the global problems and international relations" ("CM in GP and IR") ("OGPMO") of "SF "SFA CMT" n. a. Prokopenko N.A." 310
 - 3.2.11. The fundamental researches financing branch "Cognitive modeling in the historical-philological sciences" ("CM in H-PHS") ("OIFN") of "SF "SFA CMT" n. a. Prokopenko N.A." 317
 - 3.2.12. The fundamental researches financing branch "Cognitive modeling in the sports sciences" ("C M i n S P S") ("O S N") of "SF "SFA CMT" n. a. Prokopenko N.A." 319
 - 3.2.13. The fundamental researches financing branch "Cognitive modeling in the military sciences" ("C M i n M I L S") ("O V N") of "SF "SFA CMT" n. a. Prokopenko N.A." 320

- 3.3. The applied researches financing divisions (at the microscopic level) of “SF "SFA CMT" n. a. Prokopenko N.A.” 321
- 3.3.1. The applied researches financing direction “Cognitive modeling in the natural sciences” (“CM in NS”) (“NEN”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 324
- 3.3.2. The applied researches financing direction “Cognitive modeling in the applied technical sciences and technologies” (“CM in ATS and T”) (“NNT”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 342
- 3.3.3. The applied researches financing direction “Cognitive modeling in the geo-political sciences and researches” (“CM in G-PS and R”) (“NSGI”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 349
- 3.3.4. The applied researches financing direction “Cognitive modeling in the society steady development of post-industrial country” (“CM in SSDP-IC”) (“NURS”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 352
- 3.3.5. The applied researches financing direction “Cognitive modeling in the social-economic and jurisprudential sciences” (“CM in S-E and JS”) (“NSEPP”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 357
- 3.3.6. The applied researches financing direction “Cognitive modeling in the biological and medical sciences” (“CM in B and MS”) (“NBME”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 366
- 3.3.7. The applied researches financing direction “Cognitive modeling in the humanitarian sciences, art and creativity” (“CM in HSA and C”) (“NGNOT”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 370
- 3.3.8. The applied researches financing direction “Cognitive modeling in the physical training and sport” (“CM in PHT and S”) (“NFS”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 378
- 3.3.9. The applied researches financing direction “Cognitive modeling in the military sciences” (“CM in MILS”) (“NVN”) of “SF "SFA CMT" n. a. Prokopenko N.A.” 379
- 3.4. The local and international scientific newspapers and journals of “SF "SFA CMT" n. a. Prokopenko N.A.” 380

4. "Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition achievements of science and technology named after Sobchak A.A." 383
- 4.1. The general details about "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 386
- 4.2. The fundamental researches (financing) exhibitions divisions (at the microscopic level) of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 389
 - 4.2.1. The fundamental researches exhibitions branch "Cognitive modeling in the mathematical sciences" ("CM in MATHS") ("OMN") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 392
 - 4.2.2. The fundamental researches exhibitions branch "Cognitive modeling in the physical sciences" ("CM in PHS") ("OFN") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 397
 - 4.2.3. The fundamental researches exhibitions branch "Cognitive modeling in the nano-technologies and information technologies" ("CM in N-T and IT") ("ONIT") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 399
 - 4.2.4. The fundamental researches exhibitions branch "Cognitive modeling in the exact sciences" ("CM in ES") ("OEMMPU") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 405
 - 4.2.5. The fundamental researches exhibitions branch "Cognitive modeling in the industry and chemical sciences" ("CM in I and CHS") ("OHNM") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 410
 - 4.2.6. The fundamental researches exhibitions branch "Cognitive modeling in the biological sciences" ("CM in BS") ("OBN") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 415
 - 4.2.7. The fundamental researches exhibitions branch "Cognitive modeling in the physiology, fundamental medicine and public-health-services" ("CM in PHFM and P") ("OFFM") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 417
 - 4.2.8. The fundamental researches exhibitions branch "Cognitive modeling in the sciences about The Earth" ("CM in S about E") ("ONZ") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 420
 - 4.2.9. The fundamental researches exhibitions branch "Cognitive modeling in the social sciences" ("CM in SS") ("OON") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 423
 - 4.2.10. The fundamental researches exhibitions branch "Cognitive modeling in the global problems and international relations" ("CM in GP and IR") ("OGPMO") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 431
 - 4.2.11. The fundamental researches exhibitions branch "Cognitive modeling in the historical-philological sciences" ("CM in H-PHS") ("OIFN") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 438
 - 4.2.12. The fundamental researches exhibitions branch "Cognitive modeling in the sports sciences" ("CM in SP S") ("OSN") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 440
 - 4.2.13. The fundamental researches exhibitions branch "Cognitive modeling in the military sciences" ("CM in MIL S") ("OVN") of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." 441

- 4.3. The applied researches (financing) exhibitions divisions (at the microscopic level) of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 442
- 4.3.1. The applied researches exhibitions direction "Cognitive modeling in the natural sciences" ("C M i n N S") ("N E N") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 445
- 4.3.2. The applied researches exhibitions direction "Cognitive modeling in the applied technical sciences and technologies" ("CM in ATS and T") ("NNT") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 465
- 4.3.3. The applied researches exhibitions direction "Cognitive modeling in the geo-political sciences and researches" ("CM in G-PS and R") ("NSGI") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 473
- 4.3.4. The applied researches exhibitions direction "Cognitive modeling in the society steady development of post-industrial country" ("CM in SSDP-IC") ("NURS") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 476
- 4.3.5. The applied researches exhibitions direction "Cognitive modeling in the social-economic and jurisprudential sciences" ("CM in S-E and JS") ("NSEPP") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 481
- 4.3.6. The applied researches exhibitions direction "Cognitive modeling in the biological and medical sciences" ("CM in B and MS") ("NBME") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 490
- 4.3.7. The applied researches exhibitions direction "Cognitive modeling in the humanitarian sciences, art and creativity" ("CM in HSA and C") ("NGNOT") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 494
- 4.3.8. The applied researches exhibitions direction "Cognitive modeling in the physical training and sport" ("CM in PHT and S") ("NFS") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 502
- 4.3.9. The applied researches exhibitions direction "Cognitive modeling in the military sciences" ("C M i n M I L S") ("N V N") of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 503
- 4.4. The local and international scientific newspapers and journals of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" 504

5. “The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after academician Burdenko N.N.” 507
 - 5.1. The general details about “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 511
 - 5.2. The divisions of fundamental scientific researches (at the microscopic level) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 514
 - 5.2.1. The fundamental scientific researches branch “Theory of preventive medicine” (“TPREVM”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 517
 - 5.2.2. The fundamental scientific researches branch “Theory of clinical medicine” (“TCLINM”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 522
 - 5.2.3. The fundamental scientific researches branch “Theory of pharmacology and pharmaceuticals” (“TPHARMAC and PHARMAC”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 537
 - 5.2.4. The fundamental scientific researches branch “Theory of sports medicine” (“TSPM”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 541
 - 5.2.5. The fundamental scientific researches branch “Theory of military medicine” (“TMILM”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 542
 - 5.2.6. The fundamental scientific researches branch “Theory of chemistry and chemical technologies in medicine” (“TCHEM and CHEMT in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 543
 - 5.2.7. The fundamental scientific researches branch “Theory of biology, physiology and bio-physiological technologies in medicine” (“TBIOLPHYS and B-PHYST in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 545
 - 5.2.8. The fundamental scientific researches branch “Theory of mathematics and mathematical technologies in medicine” (“TMATH and MATHT in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 548
 - 5.2.9. The fundamental scientific researches branch “Theory of nano-technologies and information technologies in medicine” (“TNANO-T and INFT in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 552
 - 5.2.10. The fundamental scientific researches branch “Theory of social-science and technologies of social sciences in medicine” (“TSOC-S and TSOCs in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” 561

5.3. The divisions of applied scientific researches (at the microscopic level) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	571
5.3.1. The applied scientific researches direction “Applications of preventive medicine” (“APPREVM”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	574
5.3.2. The applied scientific researches direction “Applications of clinical medicine” (“APCLINM”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	579
5.3.3. The applied scientific researches direction “Applications of pharmacology and pharmaceutics” (“APPHARMAC and PHARMAC”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	596
5.3.4. The applied scientific researches direction “Applications of sports medicine” (“APSPM”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	600
5.3.5. The applied scientific researches direction “Applications of military medicine” (“APMILM”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	601
5.3.6. The applied scientific researches direction “Applications of chemistry and chemical technologies in medicine” (“APCHEM and CHEMT in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	602
5.3.7. The applied scientific researches direction “Applications of biology, physiology and bio-physiological technologies in medicine” (“APBIOLPHYS and B-PHYST in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	604
5.3.8. The applied scientific researches direction “Applications of mathematics and mathematical technologies in medicine” (“APMATH and MATHT in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	607
5.3.9. The applied scientific researches direction “Applications of nano-technologies and information technologies in medicine” (“APNANO-T and INFT in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	611
5.3.10. The applied scientific researches direction “Applications of social-science and technologies of social sciences in medicine” (“TSOC-ST and TSOCs in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	620
5.4. The local and international scientific newspapers and journals of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”	630
The conclusion	633
The bibliographic section	634

The introduction

In the scientific monography on the rights of manuscript are presented directly "The state international organization "Academy of cognitive natural sciences"" ("SIO "ACNS""), "The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (natural) sciences" named after Veniaminov V.N." ("SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N."), the divisions of fundamental and applied scientific researches and developments (at the microscopic level) of "SIO "ACNS"" and "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.", the local and international scientific newspapers and journals of "SIO "ACNS"" and "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.", "The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A." ("SF "SFA CMT" n. a. Prokopenko N.A."), the fundamental researches financing divisions (at the microscopic level) of "SF "SFA CMT" n. a. Prokopenko N.A.", the applied researches financing divisions (at the microscopic level) of "SF "SFA CMT" n. a. Prokopenko N.A.", the local and international scientific newspapers and journals of "SF "SFA CMT" n. a. Prokopenko N.A.", "Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A." ("SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."), the fundamental researches (financing) exhibitions divisions (at the microscopic level) of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.", the applied researches (financing) exhibitions divisions (at the microscopic level) of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.", the local and international scientific newspapers and journals of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.", "The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (medical) sciences" named after academician Burdenko N.N." ("SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N."), the fundamental scientific researches exhibitions divisions (at the microscopic level) of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.", the applied scientific researches exhibitions divisions (at the microscopic level) of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." and the local and international scientific newspapers and journals of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N."

1. “The state international organization "Academy of cognitive natural sciences"”

1. The name of “SIO "ACNS"” as the organization (legal entity – LE):
 - 1.1) the full company name of LE in the national language (Russian) – « Некоммерческая организация (учреждение) «государственная международная организация "Академия когнитивных естественных наук"» »;
 - 1.2) the full company name of LE in the international language (English) – “The noncommercial organization (establishment) “state international organization "Academy of cognitive natural sciences"””;
 - 1.3) the reduced company name of LE in the national language (Russian) – «ГМО "АКЕН"»;
 - 1.4) the reduced company name of LE in the international language (English) – “SIO "ACNS"”.
2. The description of “SIO "ACNS"” as the organization (LE):
 - 2.1) it has the organizational-legal form – “The noncommercial organization (establishment)” – the mixed property of RF and “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., on the federal financing due to the monetary resources of the budget of RF and the foreign countries, LE and natural persons (NP) (non)residents;
 - 2.1.1) for the development of the basic and derivative fundamental and applied scientific results;
 - 2.1.2) for the support of reception of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N.;
 - 2.1.3) for the charge of payments (gifts) of the budget of RF and the foreign countries;
 - 2.1.4) for the charge of payments (gifts) of LE and NP (non)residents;
 - 2.1.5) for the charge of received sponsor's support and external financing;
 - 2.1.6) for the support of functioning of the organizational structures of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, “SF "SFA CMT" n. a. Prokopenko N.A.”, “"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.”” and “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”;
 - 2.2) it is “the noncommercial organization (establishment)” (with some commercial kinds of charges and incomes) with “the mixed form of ownership” (it is created and functioned due to the monetary resources of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., due to the monetary resources of RF and the foreign countries and due to the monetary resources of LE and NP (non)residents);

- 2.3) it acts in the civil circulation under its company name
 “The state international organization
 “Academy of cognitive natural sciences”” (“SIO “ACNS””),
 which is defined in its constituent documents (the charter and const. contract)
 and it is included into the unique state registry of LE
 at the state registration as the newly created (existing) LE
 for the implementation of the following kinds of activity according to
 “The All-Russian classifier of the kinds of economic activity” (“ACKEA” – «ОКБЭД»);
- 2.3.1) the learning-methodical activity and scientific activity;
- 80.3 – “Education, consulting, seminars and lectures” on the disciplines
 “Informatics and theory of information”, “Programming”,
 “The structures of data and databases”, “Discrete mathematics”,
 “Theoretical mechanics”, “The system analysis”, “The financial analysis”,
 “Financial markets”, “Accounting and audit” and others
 (some functions of the higher professional educational institutions,
 the average special educational institutions,
 the average common educational institutions and others);
 - 92.4 – “The activity of information agencies” (science and education);
- 2.3.2) the scientific - production activity;
- 91.1 – “The activity of commercial, entrepreneurial
 and professional organizations”
 (the scientific activity, the activity on interaction
 with the unions and associations of commercial workers,
 entrepreneurs, scientists, writers and others);
 - 67.13 – “The other auxiliary activity
 in the sphere of financial intermediary”
 (the information-consulting services of managing subjects,
 the information-auditor services of enterprises (organizations)
 and the information-auditor services of credit organizations);
- 2.3.3) the commercial (trading) activity;
- 51.15.4 – “The activity of agents on the wholesale
 trade of radio-, tele-instrumentation
 and the technical carriers of information (with records and without records)”;
 - 51.43.2 – “The wholesale trade of radio-, tele-instrumentation
 and the technical carriers of information (with records and without records)”;
 - 51.47.21 – “The wholesale trade of books”;
 - 51.47.22 – “The wholesale trade of newspapers and journals”;
 - 51.56.1 – “The wholesale trade of paper and cardboard”;
- 2.3.4) the production - publishing activity;
- 22 – “The publishing and polygraphic activity (production)
 and the duplicating of the written down carriers of information”
 (the production and duplicating of optical discs
 for the laser storages of information
 with computer programs, books, monographies,
 reports on the scientific-research work (SRW), textbooks,
 scientific articles, scientific reports and multimedia-presentations);
 - 30.02 – “The production of electronic calculating machines (ECM)
 and other equipment for the information processing”
 (the production of programs for ECM,
 multimedia-presentations and auxiliary materials).

3. The sphere of scientific interests of "SIO "ACNS"":
the (microscopic) system analysis and control, the information technologies, the information-educational environments, the automated (remote) training systems, the innovative architectures and algorithms in the basis of the automation means of training, (cognitive) informatics, psycho-physiology of perception, (cognitive) psychology, (cognitive) linguistics, the (microscopic) financial analysis, accounting and audit of the enterprises and (credit) organizations, the (microscopic) complex analysis, theoretical mechanics, physical chemistry, molecular biology and medicine.
4. The directions of scientific researches of "SIO "ACNS"":
 - 4.1) it is engaged in the (microscopic) system analysis and the increase of efficiency of functioning of the (adaptive) information-educational environments;
 - 4.1.1) it develops and modernizes the apparatus of the cognitive modeling technology for the (microscopic) system analysis of the (adaptive) information-educational environments;
 - 4.1.2) it creates and modernizes of the structures of the parametrical cognitive models of the subject of training and the means of training;
 - 4.1.3) it is engaged in the creation and modernization of the architecture of the (adaptive) automation means of training (at distance) based on the parametrical cognitive models block;
 - 4.2) it is engaged in the (microscopic) financial analysis and the increase of efficiency of functioning of the (credit) organization;
 - 4.2.1) it develops and modernizes the apparatus of the cognitive modeling technology for the (microscopic) financial analysis of the organization structures of the enterprises and (credit) organizations;
 - 4.2.2) it creates and modernizes the structures of the parametrical cognitive models for the vertical, horizontal and trend (microscopic) financial analysis of the (credit) organizations based on the primary registers of financial and accounting reporting-documents;
 - 4.2.3) it is engaged in the creation and modernization of the architecture of the means of automation of the financial analysis and audit based on the parametrical cognitive models block;
 - 4.3) it is engaged in the (microscopic) complex analysis and the increase of efficiency of functioning of the difficult objects, processes and phenomena;
 - 4.3.1) it develops and modernizes the apparatus of the cognitive modeling technology for the (microscopic) complex analysis of the difficult objects, processes and phenomena;
 - 4.3.2) it creates and modernizes the structures of the parametrical cognitive models for the (microscopic) complex analysis based on the (multidimensional) cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere;
 - 4.3.3) it is engaged in the creation and modernization of the architecture of the means of automation of the (microscopic) complex analysis based on the parametrical cognitive models block;
 - 4.3.4) it develops the fundamental and applied scientific results in the area of theoretical mechanics, physical chemistry, molecular biology and medicine (preventive and clinical).

1.1. The general details about “SIO "ACNS””

“SIO "Academy of cognitive natural sciences”” (“SIO "ACNS””) acts as the main component of the system of science and education of the country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology ([www.vetrovan.\(spb.\)ru](http://www.vetrovan.(spb.)ru)):

- 1) was executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the production of the fund. and applied scientific results (“The Nobel prize”);
- 3) includes the several various main divisions:
 - I. The administrative-scientific divisions of “SIO "ACNS”” [The President of “SIO "ACNS””, The Co- and Vice-Presidents of “SIO "ACNS”” ((non)residents), the secretary-reviewer of The President of “SIO "ACNS””, the assistants of The President of “SIO "ACNS”” on communications with the (int.) academies of (nat.) sciences ((non)residents), on communications with the scientific-res. institutes (centres) ((non)residents), on communications with the sci. funds ((non)residents) and on communications with the other org. ((non)residents), the members of The Presidium of “SIO "ACNS””, the full members of “SIO "ACNS””, the members-correspondents of “SIO "ACNS”” and the foreign members of “SIO "ACNS””].
 - II. The scientific-organizational divisions of “SIO "ACNS”” [The scientific council of “SIO "ACNS”” and the scientific schools of “SIO "ACNS”” on the phys.-math., tech., soc., econ., chem., biol., med., sport. and mil. sciences (* – together with “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” or “SRI”), the scientific archive of The scientific council and scientific schools of “SIO "ACNS”” (*), the dissertation councils of “SIO "ACNS”” (*) (the objects and subjects of research: the information-educational environments, the (credit) organizations and the objects of theoretical mechanics) on the physical-mathematical sciences (spec. 01.02.01 – “Theoretical mechanics” and others), on the technical sciences (spec. 05.13.10 – “Management in the social and economic systems”, 05.13.01 – “The system analysis, control and information processing” and others), on the social sciences (spec. 10.02.21 – “Applied and math. linguistics” and others), on the economic sciences (spec. 08.00.10 – “Finance, monetary circulation and credit” and others), on the chemical sciences (spec. 02.00.04 – “Physical chemistry” and others), on the biological sciences (spec. 03.00.03 – “Molecular biology” and others), on the medical sciences (spec. 14.01.07 – “Eye illnesses and ophthalmology”, 19.00.01 – “Cognitive psychology”, 19.00.02 – “Psychophysiology of perception”, 19.00.03 – “Psychology of work, engineering psychology and ergonomics” and others), the archive of diss. council of “SIO "ACNS”” (*) and the sci.-methodical dep. of “SIO "ACNS”” (*)].

III. The administrative-economy divisions of “SIO "ACNS”
[the deputy President of “SIO "ACNS”” on administrative-economy work (the administrative department of “SIO "ACNS””, the document circulation dep. of “SIO "ACNS””, the legal support department of “SIO "ACNS”” (*), the document-office of “SIO "ACNS””, the archive of documents of “SIO "ACNS”” (*), the inf.-analytical support dep. of “SIO "ACNS”” (*), the communication and correspondence (expedition) department of “SIO "ACNS”” (*), the deposition department of “SIO "ACNS”” (*), the certification, licensing and patenting department of “SIO "ACNS”” (*), the fire-prevention safety department of “SIO "ACNS”” (*), the construction and repair dep. of “SIO "ACNS”” (*), the automation dep. of “SIO "ACNS”” (*), the planning of deliveries and shipments of production department of “SIO "ACNS”” (*), the supply and purchases of production department of “SIO "ACNS”” (*) and the transport support department of “SIO "ACNS”” (*)), the chief accountant of “SIO "ACNS”” (the planning and econ. analysis dep. of “SIO "ACNS”” (*), the calculations department of “SIO "ACNS””, the delivery department of “SIO "ACNS””, the clearing of payment requirements and payment assignments dep. of “SIO "ACNS””, the accounting of commodity-material assets department of “SIO "ACNS”” and the inventory department of “SIO "ACNS””), the deputy President of “SIO "ACNS”” on personnel support (the professional (re)training and improvement of professional skills supervision dep. of “SIO "ACNS”” (*), the personnel registration dep. of “SIO "ACNS””, the electronic accounting of visitors and employees department of “SIO "ACNS”” (*), the labor safety dep. of “SIO "ACNS”” (*), the medicine dep. of “SIO "ACNS”” (*) and the professional union department of “SIO "ACNS”” (*)), the deputy President of “SIO "ACNS”” on library support (the purchase and sale of academic literature department of “SIO "ACNS”” (*), the academician library service department of “SIO "ACNS”” (*), the academician fundamental scientific literature department of “SIO "ACNS”” (*), the academician applied scientific literature department of “SIO "ACNS”” (*), the normative documentation department of “SIO "ACNS”” (*), the academician periodical scientific editions department of “SIO "ACNS”” (*), the el. library dep. of “SIO "ACNS”” (*) and the funds of library dep. of “SIO "ACNS”” (*)), the deputy President of “SIO "ACNS”” on publishing house (the publishing house dep. of “SIO "ACNS”” (*), the polygraphy dep. of “SIO "ACNS”” (*), the editing dep. of “SIO "ACNS”” (*), the printing house dep. of “SIO "ACNS”” (*) and the warehouse of book-printing production department of “SIO "ACNS”” (*)), the deputy President of “SIO "ACNS”” on security (the security dep. of “SIO "ACNS”” (*), the territory protection dep. of “SIO "ACNS”” (*) and the registration of electronic passports department of “SIO "ACNS”” (*)].

IV. The scientific researches and education management divisions of “SIO "ACNS"” (*) [the deputies President of “SIO "ACNS"” on scientific work – phys.-math., tech., soc., econ., chem., biol., med., sport. and mil. research directions, on databases and information warehouses (the departments of development of information storages for hardware, software and brainware support and integrated systems (*)), on hardware (the research laboratory on hardware (*)), on software (the research laboratory on software (*)), on brainware (the research laboratory on brainware (*)), on integrated systems (the research laboratory on integrated systems (*)), on quality management (the quality management research department of “SIO "ACNS"” (*)), on investments and innovations (the investments and innovations research department (*)), on financial planning (the financial planning and researches department of “SIO "ACNS"” (*)), on advertising and marketing (the marketing researches and advertising dep. of “SIO "ACNS"” (*)), on purchase and realizations of book-printing production (the book-printing production delivery (purchases and income flow) research dep. of “SIO "ACNS"” (*) and the book-printing production shipment (sales and outcome flow) research dep. of “SIO "ACNS"” (*)), on int. relations (the external communications and researches dep. of “SIO "ACNS"” (*)), the visas registration and researches department of “SIO "ACNS"” (*), the scientific international programs department of “SIO "ACNS"” (*), the educational programs department of “SIO "ACNS"” (*) and the translations department of “SIO "ACNS"” (*)), on basic and additional educational activity (the basic (remote) education supervision department of “SIO "ACNS"” (*), the prof. (re)training and improvement of professional skills supervision dep. of “SIO "ACNS"” (*) and the postgraduate study and doctoral studies supervision dep. of “SIO "ACNS"” (*)].

IV.A. The fund. sci. res. div. of “SIO "ACNS"” – branches and sections (departments) [see the branches and departments of fundamental developments of “SRI”, and also the branches and sections (departments) of the fund. scientific researches of “SIO "ACNS"”].

IV.B. The appl. sci. res. div. of “SIO "ACNS"” – directions and sections (departments) [see the directions of appl. developments and scientific-res. laboratories of “SRI”, and also directions and sections (departments) of the applied scientific researches of “SIO "ACNS"”].

V. The divisions of the scientific fund at “SIO "ACNS"” (additional).

VI. The scientific centre divisions of “SIO "ACNS"” (additional).

VII. The scientific-historical divisions of “SIO "ACNS"” (additional).

VIII. The scientific-public divisions of “SIO "ACNS"” (additional).

IX. The divisions of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” (add.).

“SIO "ACNS"” allows to create, distribute and use the algorithms, methods and technologies of the system, financial and difficult analysis, and also to increase the efficiency of funct. of the system of education and science based on CMT.

1.2. The divisions of fundamental scientific researches (at the microscopic level) of “SIO "ACNS””

The structure of “The state international organization "Academy of cognitive natural sciences”” (“SIO "ACNS””) (www.vetrovan.(spb.)ru) includes the various divisions of the process of receiving of the scientific results:

- A. The fundamental scientific researches (management) divisions of “SIO "ACNS”” for the microscopic system, financial and complex analysis – the 26 fundamental scientific researches sections (departments) (FSRS(DP)) on the 13 fundamental scientific researches branches (FSRB) of “SIO "ACNS”” corresponds to the 26 fundamental developments departments (FDDP) on the 13 fundamental developments branches (FDB) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, and also the 26 sections on the 13 branches of “The Russian academy of sciences”.
- A.1. FSRB [FDB] “Cognitive modeling in the mathematical sciences” (“CM in MATHS”) (“OMN”).
- A.1.1. FSRS(DP) [FDDP] “Theory of mathematics and the complex system analysis based on the cognitive modeling technology” (“TM and CSAB on CMT”) (“SM”) (*).
- A.1.2. FSRS(DP) [FDDP] “Theory of cybernetics and (cognitive) informatics” (“TC and (C)I”) (“SPMI”) (*).
- A.2. FSRB [FDB] “Cognitive modeling in the physical sciences” (“CM in PHS”) (“OFN”).
- A.2.1. FSRS(DP) [FDDP] “Theory of physics, astronomy and space researches” (“TPHA and SR”) (“SOFA”) (*).
- A.2.2. FSRS(DP) [FDDP] “Theory of nuclear physics and physics of atomic nucleus” (“TNPH and PHAN”) (“SYF”) (*).
- A.3. FSRB [FDB] “Cognitive modeling in the nano-technologies and information technologies” (“CM in N-T and IT”) (“ONIT”).
- A.3.1. FSRS(DP) [FDDP] “Theory of electronics, radio-engineering and connection” (“TER-E and C”) (“SVLTSEB”).
- A.3.2. FSRS(DP) [FDDP] “Theory of automatics, computer engineering and the system analysis based on the cognitive modeling technology” (“TACE and SAB on CMT”) (“SITA”) (*).
- A.3.3. FSRS(DP) [FDDP] “Theory of nano-technologies for the mechanics-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture and construction” (“TN-T for M-EI-MPR and PH-C-TE and FITA and C”) (“SNT”) (*).

- A.4.F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the exact sciences” (“CM in ES”) (“OEMMPU”).
- A.4.1.F S R S (D P) [F D D P] “ T h e o r y o f (t h e o r e t i c a l)
mechanics and gyrosopes” (“T(T)M and G”) (“SM”) (*).
- A.4.2.F S R S (D P) [F D D P] “ T h e o r y o f m e c h a n i c a l - e n g i n e e r i n g ,
instrument-making and metrology” (“TM-EI-M and M”) (“SPMPU”).
- A.4.3.F S R S (D P) [F D D P] “ T h e o r y o f p o w e r - e n g i n e e r i n g
and electrical-engineering” (“TP-E and E-E”) (“SE”).
- A.5.F S R B [F D B] “ C o g n i t i v e m o d e l i n g i n t h e i n d u s t r y
and chemical sciences” (“CM in I and CHS”) (“OHNM”).
- A.5.1.F S R S (D P) [F D D P] “ T h e o r y o f t h e l i g h t , f o o d , f o r e s t a n d w o o d -
processing industry, the architecture and construction,
the agricultural, forestry, water and fish economy and aqua-culture”
 (“TEFF and W-PIA and CAFW and FE and A-C”) (“SNM”) (*).
- A.5.2.F S R S (D P) [F D D P] “ T h e o r y o f c h e m i s t r y , c h e m i c a l t e c h n o l o g y
and chemical industry” (“TCHCHT and CHI”) (“SCHN”).
- A.6.F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the biological sciences” (“CM in BS”) (“OBN”).
- A.6.1.F S R S (D P) [F D D P] “ T h e o r y o f b i o l o g y a n d p h a r m a c o l o g y ” (“ T B a n d P H ”) (“ S O B ”) .
- A.6.2.F S R S (D P) [F D D P] “ T h e o r y o f p h y s i c a l - c h e m i c a l
bio-technology” (“TPH-CHB-T”) (“SFCHB”) (*).
- A.7.F S R B [F D B] “ C o g n i t i v e m o d e l i n g i n t h e p h y s i o l o g y , f u n d a m e n t a l
medicine and public-health-services” (“CM in PHFM and P-H-S”) (“OFFM”).
- A.7.1.F S R S (D P) [F D D P] “ T h e o r y o f p h y s i o l o g y , b i o - p h y s i o l o g y
and private physiology” (“TPHB-PH and PPH”) (“SF”) (*).
- A.7.2.F S R S (D P) [F D D P] “ T h e o r y o f m e d i c i n e , p u b l i c - h e a l t h - s e r v i c e s ,
labor safety, environment preservation
and ecology of person” (“TMP-H-SLSEP and EP”) (“SFM”) (*).
- A.8.F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the sciences about The Earth” (“CM in S about E”) (“ONZ”).
- A.8.1.F S R S (D P) [F D D P] “ T h e o r y o f g e o - p h y s i c s , g e o l o g y ,
mining and metallurgy” (“TG-PHGM and M”) (“SGGGGN”).
- A.8.2.F S R S (D P) [F D D P] “ T h e o r y o f o c e a n o l o g y , s t r u c t u r e
and physics of atmosphere, geodesy, cartography and geography
of The Earth and planets” (“TOS and PHAGC and GE and P”) (“SOFAG”).

- A.9. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the social sciences” (“CM in SS”) (“OON”).
- A.9.1. FSR(S)(DP) [FDDP] “Theory of social sciences, philosophy, science-study,
politics and political sciences, sociology, (cognitive) psychology,
state, law and jurisprudential sciences, patenting business,
i n v e n t i o n a n d r a t i o n a l i z a t i o n - w o r k ”
 (“TSSPHS-SP and PSS(C)PSL and JSPBI and R-W”) (“SFPSPP”) (*).
- A.9.2. FSR(S)(DP) [FDDP] “Theory of economics and economic sciences,
organization, management, statistics and the financial analysis
based on the cognitive modeling technology”
 (“TE and ESOMS and FAB on CMT”) (“SE”) (*).
- A.10. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the global problems and international
relations” (“CM in GP and IR”) (“OGPMO”).
- A.10.1. FSR(S)(DP) [FDDP] “Theory of demography, pedagogics
and national education, standardization,
the complex studying of separate countries and regions,
the general and complex problems of natural, exact, technical,
public and applied sciences and manufacture branches”
 (“TDP and NESCSSC and RG and CPNETP and AS and MB”) (“SGP”).
- A.10.2. FSR(S)(DP) [FDDP] “Theory of culture and cultural-science,
art and art-science, mass communications,
journalism and mass media means, religion,
internal trade and tourist-excursion service,
external trade, transport, housing-communal economy,
housekeeping and household services at the international level”
 (“TCandC-SAandA-SMCJandMMMRITandT-ESETTH-CEHandHSatIL”) (“SMO”).
- A.11. FSRB [FDB] “Cognitive modeling in the historical-
philological sciences” (“CM in H-PHS”) (“OIFN”).
- A.11.1. F S R S (D P) [F D D P] “ T h e o r y o f h i s t o r y
and historical sciences” (“TH and HS”) (“SI”).
- A.11.2. FSR(S)(DP) [FDDP] “Theory of science of language, (cognitive) linguistics,
literature, literary-science and oral national
creativity” (“TSL(C)LLL-S and ONC”) (“SYL”) (*).
- A.12. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the sports sciences” (“CM in SPS”) (“OSN”).
- A.12.1. FSR(S)(DP) [FDDP] “Theory of competitions, sport
and sports sciences” (“TCSP and SPS”) (“STSSSN”).
- A.13. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the military sciences” (“CM in MILS”) (“OVN”).
- A.13.1. FSR(S)(DP) [FDDP] “Theory of architecture, construction, technics,
history, education, politics and economics in the armed forces”
 (“TACTHEP and E in AF”) (“STASTIOPEVS”).

1.2.1. The fundamental scientific researches branch “Cognitive modeling in the mathematical sciences” (“CM in MATHS”) (“OMN”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the mathematical sciences”” (“OMN”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of mathematics and the complex system analysis based on the cognitive modeling technology”” (“SM”) (*) [*the fundamental scientific researches in the area “ T h e o r e t i c a l m a t h e m a t i c s ” (*)* – theory of mathematical logic, theoretical bases of mathematics, theory of numbers, theory of algebra, theory of topology, theory of geometry, theory of the mathematical analysis, theory of the functions of valid variables, theory of the functions of complex variables, theory of the ordinary differential equations, theory of the differential equations with private derivatives, theory of the integrated equations, theoretical mathematical models of the objects, processes and phenomena of the natural and technical sciences, theory of the equations of mathematical physics, theory of variational calculus, mathematical theory of optimum control, theory of the functional analysis, theory of calculation mathematics, theory of probability and mathematical statistics, theory of the combinatory analysis, theory of graphs, theoretical mathematical cybernetics, theory of the ways of representation of the structure of the cognitive models and problem environments, theoretical basis of the parametrical cognitive models block, theory of the cognitive modeling technology in the theoretical mathematics;

the fundamental scientific researches in the area
“The theoretical complex system analysis” ()* –
theory of the general questions of the complex system analysis,
theory of tendencies, dependences and laws
of the complex system analysis of the difficult objects, processes and phenomena,
theory of the cognitive modeling technology
with dynamic cloning, verification and subverification,
theory of the iterative cycle and the technique of use
of the cognitive modeling technology
for the complex system analysis of the difficult objects, processes and phenomena,
theory of the parametrical cognitive models block
for the complex system analysis and the increase of efficiency of functioning
of the difficult objects, processes and phenomena,
theory of the structure of the parametrical cognitive models of the 0th, 1st, 2nd and 3rd generations,
theory of the ways of representation of the structure of the cognitive models and problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the algorithms of formation of the structure
of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations,
theory of the techniques of research of parameters
of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations,

theory of the algorithms of processing of a posteriori data of the complex system analysis of the difficult problem spheres, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the difficult objects, processes and phenomena, theory of organization and plan of carrying out of the experiment, theory of research of the cognitive models parameters, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of the dynamics of resultativity of the difficult object, process and phenomena of research, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists, the theoretical complex system analysis of the basic rocket engine, the first, the second, the third and the fourth rocket engine of launch vehicle, the theoretical complex system analysis of the multivariate code device, the theoretical complex system analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis of the chemical element with 1, 2, 3, 4, 5 and more nucleuses, the theoretical complex system analysis of the difficult multidimensional hurricane and other difficult objects, processes and phenomena].

II. “The fundamental scientific researches department
“Theory of cybernetics and (cognitive) informatics” (“SPMI”) (*)
[*the fundamental scientific researches in the area
“ Theoretical cybernetics ”* –
theory of the automatic control systems, theory of modeling,
theory of the cybernetic control systems,
theory of information, theory of artificial intelligence,
theory of the discrete (final) automatic devices and formal languages,
theory of reliability, theory of the system analysis,
theory of the cognitive modeling technology
in the theoretical cybernetics ;
*the fundamental scientific researches in the area
“ Theoretical informatics ”* –
theory of informatics, theory of the organization of information work,
theory of the documentary information sources,
theory of the analytical-synthetical processing of documentary information sources,
theory of information search, theory of information service,
theory of the technical means of support of the information processes,
theory of the cognitive modeling technology
in the theoretical informatics ;
*the fundamental scientific researches in the area
“ Theoretical cognitive informatics ”* (*) –
theory of the modified stratified-step model
of perception (psycho-physiology of perception), processing (cognitive psychology)
and understanding (cognitive linguistics) of the content of information fragments,
theoretical bases of cognitive informatics and the cognitive modeling technology
in the technical, economic, physical-mathematical and other sciences,
theoretical bases of formation of the parametrical cognitive models block
for the system analysis of the information-educational environments
(the cognitive models of the subject of training and the means of training),

theoretical bases of formation of the parametrical cognitive models block for the financial analysis of the (credit) organizations (the cognitive models for the vertical, horizontal and trend financial analysis), theoretical bases of formation of the parametrical cognitive models block for the complex analysis of the objects, processes and phenomena of cognitive informatics, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), theory of the technical means of support of the financial analysis (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting, the automation means of formation of the accounting balance and the report about profits and losses of the (credit) organization and enterprise, the automation means of the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise based on the diverse analytical coefficients system), theory of the technical means of support of the complex analysis (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others)].

The fundamental scientific researches branches and departments of “SIO "ACNS”” allow to develop the main and derivative scientific results of CMT.

1.2.2. The fundamental scientific researches branch “Cognitive modeling in the physical sciences” (“CM in PHS”) (“OFN”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the physical sciences”” (“OFN”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of physics, astronomy and space researches”” (“SOFA”) [*the fundamental scientific researches in the area “ T h e o r e t i c a l p h y s i c s ” (*)* – theory of the questions and general problems of physical experiment, theory of physics of elementary particles, theory of fields, theory of physics of high energies, theory of nuclear physics, theory of physics of gases and liquids, theory of thermal-dynamics and statistical physics, theory of physics of firm bodies, theory of physics of plasma, theory of physics of atom and molecule, theory of optics, theory of laser physics, theory of radio-physics, theory of physical bases of electronics, theory of acoustics, theory of the cognitive modeling technology in the theoretical physics, theory of the cognitive models of the interaction between the elementary particles and firm bodies, fields, liquids and gases, theory of the cognitive model of the modified volumetric planetary model of atom n. a. Bohr N.H.D., theory of the cognitive models of the temperature areas of plasma of the atom and molecule, theory of the cognitive model of the optical environment of eye as the optical device, theory of the cognitive model of the acoustical environment of ear as the acoustical device, theory of the cognitive model of the distribution of waves in the environment of research;

the fundamental scientific researches in the area “Theoretical astronomy” ()* – theory of astronomy and heavenly mechanics, theory of astrometry and astro-physics of The Solar system, The Sun, stars, fogs, interstellar environment and star systems, theory of cosmology, theory of observatories, tools, devices and methods of astronomical supervisions, theory of the cognitive modeling technology in the theoretical astronomy, theory of the cognitive models of the relative positioning of 1, 2, 3, 4, 5 and more galaxies, planets, stars and satellites, The Earth, The Sun and others;

the fundamental scientific researches in the area “Theoretical space researches of The Earth, The Sun and planets” ()* – theory of the general questions of space researches of The Earth, The Sun and planets, theory of the devices and methods of the fundamental scientific researches of space environment, theory of the planning and realization of starts of the space vehicles and artificial heavenly bodies, theory of uncontrol movement of the space vehicles and artificial heavenly bodies, theory of the control of movement of the space vehicles and artificial heavenly bodies, theory of space technics and technology (the rocket engines of new generation), theory of safety and the medical-biological problems of space flights, theory of use of the space systems for the connection and navigation, theory and problems of extraterrestrial territories discovery and prospects of astronautics, theory of research of the astronomical objects by the space means, theory of the geo-physical fundamental researches by the space means, theory of research of The Earth from space (the means of research of new generation), theory of the cognitive modeling technology in the theoretical space researches of The Earth, The Sun and planets, theory of the cognitive models of the gravitational and other interactions between 1, 2, 3, 4, 5 and more artificial space objects, satellites, galaxies, planets, stars, The Earth and The Sun, theory of the cognitive models of the work of basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle and others].

II. “The fundamental scientific researches department “Theory of nuclear physics and physics of atomic nucleus” (“SYF”) (*)
[the fundamental scientific researches in the area “Theoretical nuclear physics” ()* – theory of the nuclear raw materials and fuel, theory of synthesis of isotopes, theory of isotopes and ionization radiations, theory of nuclear reactors, theory of thermal-nuclear reactors, theory of the action of radiations and protection against them, theory of nuclear explosions, theory of the processing of nuclear fuel and waste disposal, theory of the cognitive modeling technology in the theoretical nuclear physics, theory of the cognitive models of the structure of the chemical elements with 1, 2, 3, 4, 5 and more nucleuses (the nuclear polymers), theory of the cognitive model of the modified volumetric principle n. a. Pauli W.E. for the studying of electronic clouds within limits of power levels, theory of the cognitive model of the modified planetary model of atom n. a. Bohr N.H.D. and others].

The fundamental scientific researches branches and departments of “SIO "ACNS"” allow to develop the main and derivative scientific results of CMT.

1.2.3. The fundamental scientific researches branch “Cognitive modeling in the nano-technologies and information technologies” (“CM in N-T and IT”) (“ONIT”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the nano-technologies and information technologies”” (“ONIT”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI"” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of electronics, radio-engineering and communication”” (“SVLTSEB”) [*the fundamental scientific researches in the area “Theoretical electronics and radio-engineering”* – theoretical bases of electronic technics, theory of radio-engineering, theory of the materials for electronics and radio-engineering, theory of technology and equipment for the electronic and radio-engineering manufacture, theory of designing and constructing of the electronic devices and radio-electronic equipment, theory of the electrical-vacuum and gas-discharge devices and units, theory of the accelerators of charged particles and plasma, theory of solid-state devices, theoretical bases of quantum electronics, theory of holography, theoretical bases of crio-electronics, theory of radio-electronic circuits, theory of the distribution of radio-waves, theory of antennas, theory of wave-transport, theory of the elements of over-high-frequency techniques, theory of the radio-transmission and radio-receiving devices, theory of the radio-engineering systems of sounding, location and navigation, theory of television (TV) technics, theory of record and reproduction of signals, theory of electrical-acoustics, theory of ultra-sonic and infra-sonic technics, theory of infra-red technics, theory of the units, details and elements of radio-electronic equipment, theory of the devices for the radio-engineering measurements, theory of the systems and units of display of the information, theory of the cognitive modeling technology in the theoretical electronics and radio-engineering;

the fundamental scientific researches in the area “Theoretical communication” – theory of communication, theory of designing and constructing of the devices of communication, theory of technology and equipment for the assembly and adjustment of the equipment of communication, the systems of transfer and the lines of communication, theory of the multi-channel communication, theory of the networks and centres of communication, theory of the services and facilities of communication, theory of the telegraph (cable) communication and equipment, theory of the systems and equipment of data transmission, theory of the tele-information services and equipment, theory of the telephone communication and equipment, theory of the systems of transfer of the moving images and sound, theory of the facsimile communication and equipment, theory of radio-communication and radio-broadcasting, theory of the light-guiding communication and equipment, theory of television (TV), theory of the optical communication in the free environment and equipment, theory of the post communication, theory of the cognitive modeling technology in the theoretical communication and terminal equipment of data transmission].

II. “The fundamental scientific researches department “Theory of automatics, computer engineering and the system analysis based on the cognitive modeling technology”” (“SITA”) (*)

[*the fundamental scientific researches in the area “Theoretical automatics and computer engineering”* – theory of automatic control, theoretical bases of programming, theoretical bases of computer engineering, theory of the elements, units and devices of automatics and computer engineering, theory of the devices of input-output, theory of the memory devices, theory of technology and equipment for the manufacture of the means of automatics and computer engineering, theory of the keyboard and counting-perforating machines, theory of the analog calculating machines (ACM), theory of the digital calculating machines and calculating complexes (DCM), theory of the analog-digital (hybrid) calculating machines and calculating complexes, theory of calculating centres (CC), theory of calculating networks (CN), theory of the software of calculating machines, complexes and networks, theory of the systems of automatic measurement, regulation and control, theory of the systems of tele-control and tele-measurement, theory of the automated control systems of technological processes, theory of the automated systems of organizational management, theory of the automation of designing, theory of the automation of scientific researches, theory of the cognitive modeling technology in the theoretical automatics and computer engineering;

the fundamental scientific researches in the area "The theoretical system analysis" ()* – theory of tendencies, dependences and laws of the system analysis of the objects, processes and phenomena, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for the system analysis of the information-educational environments and the increase of efficiency of functioning of the automated training system with the properties of adaptation based on the cognitive models (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of knowledge formation in the information-educational environment and the efficiency of functioning of the objects, processes and phenomena, theory of organization and plan of carrying out of the experiment, theory of research of the cognitive models parameters, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of analysis of dynamics of the resultativity of objects, processes and phenomena, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists].

III. “The fundamental scientific researches department
“Theory of nano-technologies for the mechanical-engineering, instrument-making,
polygraphy, reprography and photo-cinema-technics,
the light and food-processing industry,
transport, architecture and construction” (“SNT”) (*)
[the fundamental scientific researches in the area
“Theoretical nano-technologies for mechanical-engineering” –
theory of nano-technologies for the machine-science and details of machines,
for the machine-building materials, for the technologies of mechanical-engineering,
for the foundry manufacture, for the forge-stamp manufacture,
for the assembly manufacture, for the cutting of materials,
for the electrical-physical-chemical processing,
for the thermal and strengthening powder materials,
for the manufacture of nonmetallic products, for the machine-tool-construction,
for the robotics, for the tool manufacture, for the mining mechanical-engineering,
for the metallurgical mechanical-engineering, for the reactor-construction,, for the turbine-construction,
for the special power-engineering installations, for the chemical and oil mechanical-engineering,
for the locomotive-construction and carriage-building, for the engine-construction, for the motor-car-industry,
for the ship-building, for the aircraft-building, for the space technics and rocket-building,
for the hoisting-transport mechanical-engineering (industry),
for the building and road mechanical-engineering, for the communal mechanical-engineering,
for the tractor and agricultural mechanical-engineering,
for the mechanical-engineering of light industry (by the kinds of production),
for the polygraphic mechanical-engineering, for the mechanical-engineering of food-processing industry,
for the mechanical-engineering of trade and public catering, for the household machines and devices,
for the manufacture of weapon, for the other branches of mechanical-engineering,
theory of the cognitive modeling technology
in the theoretical nano-technologies for mechanical-engineering;
the fundamental scientific researches in the area
“Theoretical nano-technologies for instrument-making” –
theory of nano-technologies for the theoretical bases of instrument-making,
for the general technology of production and equipment in instrument-making,
for the designing and constructing of devices,
for the devices of measurement of the electrical and magnetic sizes,
for the devices of measurement of the mechanical sizes,
for the devices of measurement of the time and frequency,
for the devices of measurement of the structure and physical-chemical properties of substances and materials,
for the devices of heating-technical and heating-physical measurements,
for the devices of measurement of the acoustical sizes and characteristics,
for the devices of measurement of the optical and lighting-technical sizes and characteristics,
for the devices of measurement of the ionization radiations,
for the devices of non-destroying control of the products and materials,
for the general structural elements,
the units of measuring devices and systems and the means of office equipment,
theory of the cognitive modeling technology
in the theoretical nano-technologies for instrument-making;

the fundamental scientific researches in the area “Theoretical nano-technologies for polygraphy, reprography and photo-cinema-technics” – theory of nano-technologies for polygraphy, reprography and photo-cinema-technics, theory of the cognitive modeling technology in the theoretical nano-technologies for polygraphy, reprography and photo-cinema-technics;

the fundamental scientific researches in the area “Theoretical nano-technologies for light industry” – theory of nano-technologies for the textile industry, for the knitted industry, for the clothing industry, for the tanning industry, for the fur industry, for the industry of artificial leather and film materials, for the shoe industry, for the leather-haberdashery industry, for the bristle-brush manufacture, for the manufacture of furniture, theory of the cognitive modeling technology in the theoretical nano-technologies for light industry;

the fundamental scientific researches in the area “Theoretical nano-technologies for the food-processing industry” – theory of nano-technologies for the food raw materials and auxiliary materials, for the processes and devices of food manufactures, for the (grain-)elevator and flour(-grinding)-sereals(croup) industry, for the mixed-fodder industry, for the baking of bread and macaroni industry, for the confectionery industry, for the sugar industry, for the starched-treacle industry, for the barmy industry, for the brewing industry, for the spirituous industry, for the industry of high-alcohol drinks, for the wine-making (vinous) industry, for the industry of without-alcohol (soft) drinks, for the canning, vegetable-drying and food-concentrate industry, for the food-gustatory industry, for the tobacco industry, for the meat and bird-fancier-processing industry, for the manufacture of eggs and egg products, for the dairy (milk) industry, for the butter-fatty (creamery) industry, theory of the cognitive modeling technology in the theoretical nano-technologies for the food-processing industry;

the fundamental scientific researches in the area “Theoretical nano-technologies for transport” – theory of nano-technologies for the railway transport, for the motor-car transport, for the water transport, for the air transport, for the pipeline transport, for the industrial transport, for the urban (municipal) transport, for the interaction of the different kinds (types) of transport, for the mixed transportations, for the other kinds (types) of transport, theory of the cognitive modeling technology in the theoretical nano-technologies for transport;

the fundamental scientific researches in the area “Theoretical nano-technologies for architecture and construction” ()* – the engineering-theoretical bases of construction, architecture, building materials, products and building constructions, theory of technology of building-installation works, theory of technology of production of the building materials and products, machines, mechanisms, equipment and tool, used in the construction and industry of building materials, theory of engineering researches in construction, theory of architectural-building designing, theory of district lay-out, theory of town-planning, theory of the objects of construction and engineering support of the objects of construction, theory of tendencies, dependences and laws in architecture and construction, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for the architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), theoretical bases of formation of the parametrical cognitive models block, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of the adaptive automation means of architecture and construction (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of construction of the buildings and constructions, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of construction, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists].

The fundamental scientific researches branches and departments of “SIO "ACNS"” allow to develop the main and derivative scientific results of CMT.

1.2.4. The fundamental scientific researches branch

“Cognitive modeling in the exact sciences” (“CM in ES”) (“OEMMPU”) of “SIO “ACNS””

The developed “The fundamental scientific researches branch “Cognitive modeling in the exact sciences”” (“OEMMPU”) treats to the fundamental scientific researches divisions of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO “ACNS””]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of (theoretical) mechanics and gyroscopes”” (“SM”) (*) [*the fundamental scientific researches in the area “Theoretical mechanics” (*)*] – theoretical bases, general problems and methods of theoretical mechanics, theory of general mechanics, theory of mechanics of liquid and gas, theory of mechanics of deformable firm body, theory of the complex and special sections of theoretical mechanics, theoretical bases of the cognitive modeling technology in theoretical mechanics, theoretical bases of formation of the parametrical cognitive models block for the complex system analysis of the objects, processes and phenomena of theoretical mechanics, theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs),

the nonformal new of the 0th generation (the multilevel structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of research of the objects, processes and phenomena of theoretical mechanics, theory of the technical means of support of the complex system analysis of the difficult objects, processes and phenomena of theoretical mechanics (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the objects, processes and phenomena of theoretical mechanics, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of functioning of the objects, processes and phenomena of theoretical mechanics, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the fundamental scientific researches in the area “ Theoretical mechatronics ”* – theoretical bases, general tasks and methods of theoretical mechatronics, theory of general theoretical mechatronics, theory of mechatronics of liquid, gas and deformable firm body, theory of the complex and special sections of theoretical mechatronics, theory of the automation means and devices of mechatronics, theory of the cognitive modeling technology in the theoretical mechatronics (theory of hygroscope-building)].

II. “The fundamental scientific researches department “Theory of mechanical-engineering, instrument-making and metrology”” (“SPMPU”)
[the fundamental scientific researches in the area “Theoretical mechanical-engineering” – theory of mechanical-engineering-science and details of machines, theory of machine-building materials, theory of technology of mechanical-engineering, theory of foundry manufacture, theory of forge-stamp manufacture, theory of assembly manufacture, theory of cutting of materials, theory of electrical-physical-chemical processing, theory of thermal and strengthening processing, theory of furnish of surfaces and drawing of coverings, theory of manufacture of products from powder materials, theory of manufacture of nonmetallic products, theory of machine-tool construction, theory of robotics, theory of tool manufacture, theory of mining mechanical-engineering, theory of metallurgical mechanical-engineering, theory of reactor-construction, theory of turbine-construction, theory of special power-engineering installations, theory of chemical and oil mechanical-engineering, theory of locomotive-construction and carriage-building, theory of engine-construction, theory of motor-car-building, theory of ship-building, theory of aircraft-building, theory of space technics and rocket-building, theory of hoisting-transport mechanical-engineering, theory of construction and road mechanical-engineering, theory of communal mechanical-engineering, theory of tractor and agricultural mechanical-engineering, theory of mechanical-engineering for the light industry, theory of polygraphic mechanical-engineering, theory of mechanical-engineering for the food-processing industry, theory of mechanical-engineering for the trade and public catering, theory of household machines and devices, theory of manufacture of weapon, theoretical bases of the other branches of mechanical-engineering, theory of the cognitive modeling technology in the theoretical mechanical-engineering;
the fundamental scientific researches in the area “Theoretical instrument-making” – theoretical bases of instrument-making, theory of general technology of production and equipment in instrument-making, theory of designing and constructing of devices, theory of the devices for the measurement of electrical and magnetic sizes, theory of the devices for the measurement of mechanical sizes, theory of the devices for the measurement of time and frequency, theory of the devices for the measurement of composition (structure) and physical-chemical properties of the substances and materials, theory of the devices for the heating-technical and heating-physical measurements, theory of the devices for the measurement of acoustical sizes and characteristics, theory of the devices for the measurement of optical and lighting-technical sizes and characteristics, theory of the devices for the measurement of ionization radiations, theory of the devices of the non-destroying control of products and materials, theoretical bases of the general structural elements, the units of measuring devices and systems, the devices of interface and the means of office equipment (periphery), theory of the cognitive modeling technology in the theoretical instrument-making;

the fundamental scientific researches in the area
“ Theoretical metrology ” – theory of the scientific bases and technical means of theoretical metrology and metrological support, theory of the state, national and international systems and services of metrology, theory of the measurement of separate sizes and characteristics, theory of the standard samples of composition (structure) and properties of the substances and materials, theory of the cognitive modeling technology in the theoretical metrology (theory of measurement)].

III. “The fundamental scientific researches department
“Theory of power-engineering and electrical-engineering” (“SE”)
[the fundamental scientific researches in the area
“ Theoretical power-engineering ” – theory of power-resources, theory of power-engineering (energetic) balance, theory of electrical-power-engineering (energetics) (industry), theory of heating-power-engineering (industry), theory of heating-technics, theory of atomic power-engineering (industry), theory of hydro-power-engineering (industry), theory of helium-power-engineering (industry), theory of wind-power-engineering (industry), theory of the direct transformation of energy, theory of the cognitive modeling technology in the theoretical power-engineering;
the fundamental scientific researches in the area
“ Theoretical electrical-engineering ” – theory of electrical-engineering, theory of electrical-technical materials, theory of electrical machines, theory of electrical devices, theory of transformers and electrical reactors, theory of power electrical condensers, theory of power converting technics, theory of electrical drive, theory of electrical-thermics, theory of electrical-welding equipment, theory of wire and cable, theory of electrical isolators, theory of light-engineering, theory of the electrical-technical equipment of special purpose, theory of the cognitive modeling technology in the theoretical electrical-engineering].

The fundamental scientific researches branches and departments of “SIO "ACNS”” allow to develop the main and derivative scientific results of CMT.

1.2.5. The fundamental scientific researches branch

“Cognitive modeling

in the industry and chemical sciences”

(“CM in I and CHS”) (“OHNM”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the industry and chemical sciences”” (“OHNM”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

1) it is executed by the principle of “the administrative-economy submission”;

2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);

3) includes the several various main divisions:

I. “The fundamental scientific researches department “Theory of the light, food, forestry and wood-processing industry, architecture and construction, the agriculture, forestry, water and fish economy and aqua-culture”” (“SNM”) (*)

[the fundamental scientific researches in the area “Theoretical light industry” – theory of textile industry, theory of knitted industry, theory of clothing industry, theory of tanning industry, theory of fur industry, theory of the industry of artificial leather and film materials, theory of shoe industry, theory of leather-haberdashery industry, theory of bristle-brush manufacture, theory of the manufacture of furniture, theory of the cognitive modeling technology in the theoretical light industry;

the fundamental scientific researches in the area
“Theoretical food-processing industry” –
theory of food raw materials and auxiliary materials,
theory of the processes and devices of food-processing manufactures,
theory of (grain-)elevator and flour(-grinding)-sereals(croup) industry,
t h e o r y o f m i x e d - f o d d e r i n d u s t r y ,
theory of baking of bread and macaroni industry,
theory of confectionery industry, theory of sugar industry,
t h e o r y o f s t a r c h e d - t r e a c l e i n d u s t r y ,
theory of barmy industry, theory of brewing industry,
t h e o r y o f s p i r i t u o u s i n d u s t r y ,
theory of the industry of high-alcohol drinks,
t h e o r y o f w i n e - m a k i n g (v i n o u s) i n d u s t r y ,
theory of the industry of without-alcohol (soft) drinks,
theory of canning, vegetable drying and food-concentrate industry,
theory of food-gustatory industry, theory of tobacco industry,
theory of meat and bird-fancier-processing industry,
theory of the manufacture of eggs and egg products,
theory of dairy (milk) industry, theory of butter-fatty (creamery) industry,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l f o o d - p r o c e s s i n g i n d u s t r y ;
the fundamental scientific researches in the area
“Theoretical forestry and wood-processing industry” –
theory of wood-science, theory of forestry-cutting works,
theory of the transportation of wood, theory of forestry-timber works,
theory of technology and equipment for the processing of wood,
theory of forestry-sawmill manufacture, theory of the manufacture of joiner-building products,
theory of the manufacture of plywood and plates, theory of the manufacture of furniture,
theory of the manufacture of matches, theory of the manufacture of wooden container,
t h e o r y o f t h e s p e c i a l w o o d - p r o c e s s i n g m a n u f a c t u r e s ,
t h e o r y o f p u l p - p a p e r i n d u s t r y ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l w o o d - p r o c e s s i n g i n d u s t r y ;

the fundamental scientific researches in the area “Theoretical architecture and construction” ()* – the engineering-theoretical bases of construction, theory of architecture, theory of building materials and products, theory of building constructions, theory of technology of construction-installation works, theory of the technology of production of the building materials and products, theory of machines and mechanisms, equipment and tools, used in the construction and the industry of building materials, theory of engineering researches in construction, theory of architectural-construction designing, theory of district lay-out, theory of town-planning, theory of the objects of construction, theory of the engineering support of the objects of construction, theory of tendencies, dependences and laws in architecture and construction, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori data of research, theory of the adaptive automation means of architecture and construction (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of construction of the buildings and constructions,

theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of construction, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the fundamental scientific researches in the area “Theoretical agriculture and forestry”* – theory of agricultural biology, theory of soil-science, theory of agriculture, theory of agricultural melioration, theory of agro-chemistry, theory of plant-growing-science, theory of the protection of agricultural plants, theory of live-stock-farming (animal-industry), theory of veterinary-science, theory of the preparation of agricultural production, theory of hunting and hunting economy, theory of forestry, theory of economics and organization of agriculture, theory of the mechanization and electrification of agriculture, theory of the cognitive modeling technology in the theoretical agriculture and forestry; *the fundamental scientific researches in the area “Theoretical water economy”* – the theoretical scientific bases of water economy, theory of water economy, theory of water-economy construction, theory of hydro-technical and hydro-ameliorative constructions, theory of irrigation and water-supply, theory of irrigating systems, theory of drying systems, theory of sewage waters, their clearing and use, theory of the quality of water, theory of tests, measurements, control in the water economy, theory of mechanization and automation in the water economy, theory of complex use of water resources, theory of the cognitive modeling technology in the theoretical water economy; *the fundamental scientific researches in the area “Theoretical fish economy and aqua-culture”* – theory of the biological resources of the world ocean and internal reservoirs, theory of aqua-culture, theory of fish-breeding (culture), theory of industrial fishery, theory of the technical operation of the fleet of fishing industry, theory of the technical operation of fish seaports, theory of the technology of processing of the raw materials of water origin, theory of the equipment for the fish-processing industry, theory of the cognitive modeling technology in the theoretical fish economy and aqua-culture].

II. “The fundamental scientific researches department “Theory of chemistry, chemical technology and chemical industry”” (“SCHN”)
[the fundamental scientific researches in the area “Theoretical chemistry” (*) –
 theory of the general-laboratory chemical equipment, theory of equipment, theory of physical chemistry, theory of nonorganic chemistry, theory of complex compounds, theory of analytical chemistry, theory of organic chemistry, theory of bio-organic chemistry, theory of the natural organic compounds and their synthetic analogues, theory of chemistry of high-molecular compounds, theory of biological chemistry, theory of the cognitive modeling technology in the theoretical chemistry, theory of modeling of the structure of the (non)organic chemical elements and the chemical elements with 1, 2, 3, 4, 5 and more nucleuses;
the fundamental scientific researches in the area “Theoretical chemical technology and chemical industry” –
 theory of the processes and devices of chemical technology, theory of chemical raw materials, theory of production of the nonorganic substances and products, theory of production of the fertilizers, theory of production of the silicate and refractory nonmetallic materials, theory of industrial organic synthesis, theory of the industrial synthesis of organic dyes and pigments, theory of the technology of production of the photographic materials, theory of the technology of production of the explosive substances and chemical protection means, theory of the technology of storage and destruction of the chemical weapon, theory of the technology of production of the chemical-pharmaceutical means, theory of the technology of production of the fragrant substances, theory of the technology of production of the pesticides and disinfectant substances, theory of the technology of processing of the natural gases, oil, gas condensate, their products and analogues, motor fuel and lubricant materials, theory of the technology of processing of the firm combustible minerals, theory of timber-chemical productions, theory of the technology of production of the natural high-molecular compounds, theory of the technology of production of the synthetic high-molecular compounds, theory of the technology of production of the plastics, theory of the technology of production of the rubbers and products from them, theory of the technology of production of the varnish-paint materials and organic coverings, theory of the technology of production of the chemical fibers and strings, theory of the technology of production of the chemical reactants and especially clean substances, theory of the technology of production of the household chemical (goods) products, theory of the technology of production of the auxiliary materials, theory of the cognitive modeling technology in the theoretical chemical technology and chemical industry].

The fundamental scientific researches branches and departments of “SIO “ACNS”” allow to develop the main and derivative scientific results of CMT.

1.2.6. The fundamental scientific researches branch “Cognitive modeling in the biological sciences” (“CM in BS”) (“OBN”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the biological sciences”” (“OBN”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI"” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of biology and pharmacology”” (“SOB”) [*the fundamental scientific researches in the area “ T h e o r e t i c a l b i o l o g y ”* – theory of biology, theory of the methods and equipment for the biological researches, theory of molecular biology, theory of bio-physics, theory of cytology, theory of embryology, theory of genetics, theory of virology, theory of micro-biology, theory of botany, theory of physiology of plants, theory of zoology, theory of ecology, theory of anthropology, theory of physiology of human and animals, theory of morphology of human and animals, theory of immunology, theory of pharmacology, theory of toxicology, theory of radiation biology, theory of space biology, theory of bionics, theory of bio-cybernetics, theory of bio-engineering, theory of the cognitive modeling technology in the theoretical biology, theory of modeling of the biological construct of organism of the organic individual;

the fundamental scientific researches in the area “ Theoretical pharmacology ” – theory of pharmacology, theory of the methods and equipment for the pharmacological researches, theory of the pharmaco-kinetics and pharmaco-dynamics of preparations and substances, theory of molecular pharmacology, theory of bio-pharmacology, theory of cytological pharmacology, theory of embryological pharmacology, theory of genetic pharmacology, theory of virological pharmacology, theory of micro-biological pharmacology, theory of botanical pharmacology, theory of physiological pharmacology of plants, theory of zoological pharmacology, theory of ecological pharmacology, theory of anthropology of pharmacology, theory of physiological pharmacology of human and animals, theory of immunological pharmacology, theory of toxicological pharmacology, theory of radiation pharmacology, theory of space pharmacology, theory of bio-engineering pharmacology, theory of the cognitive modeling technology in the theoretical pharmacology].

II. “The fundamental scientific researches department “Theory of physical-chemical bio-technology”” (“SFCHB”) (*)
[*the fundamental scientific researches in the area “ Theoretical bio-technology ” (*)* – theory of raw materials and products for the bio-technological manufacture, theory of bio-technological processes and devices, theory of cellular engineering, theory of technological bio-energetics, theory of applied genetic engineering, theory of engineering enzymology, theory of the immuno-bio-technological methods of analysis, the other theories and problems of bio-technology (genetic engineering), theory of the cognitive modeling technology in the theoretical physical-chemical bio-technology (theory of genetic engineering), theory of modeling of the structure of desoxyribonucleic acid based on the multidimensional cognitive cylinder].

The fundamental scientific researches branches and departments of “SIO “ACNS”” allow to develop the main and derivative scientific results of CMT.

1.2.7. The fundamental scientific researches branch “Cognitive modeling in the physiology, fundamental medicine and public-health-services” (“CM in PHFM and P”) (“OFFM”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch
" C o g n i t i v e m o d e l i n g i n t h e p h y s i o l o g y ,
fundamental medicine and public-health-services"” (“OFFM”)
treats to the fundamental scientific researches divisions
of “SIO "Academy of cognitive natural sciences"” (“SIO "ACNS"”)
as the main component of the system of science and education of the modern country
for the creation, distribution and use of the main and derivative
scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru)
[see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:
1) it is executed by the principle of “the administrative-economy submission”;
2) works in the several main directions, which allow to provide
the development of the fundamental main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU "LETI"” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The fundamental scientific researches department
"Theory of physiology, bio-physiology and private physiology"” (“SF”) (*)
[*the fundamental scientific researches in the area
“ T h e o r e t i c a l p h y s i o l o g y ” (*)* –
theory of general physiology, theory of the methods and equipment of physiological researches,
theory of physiology, theory of molecular physiology,
theory of physiological cytology, theory of physiological embryology,
theory of physiological genetics, theory of physiology of viruses,
theory of micro-physiology, theory of physiology of organic individuals,
theory of physiology of plants, theory of zoological physiology,
theory of ecological physiology, theory of anthropology of physiology,
theory of physiology of human and animals, theory of physiological immunology,
theory of physiological pharmacology and toxicology, theory of radiation physiology,
theory of space physiology, theory of physiological cybernetics,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l p h y s i o l o g y ;

the fundamental scientific researches in the area
“Theoretical bio-physiology and public-health-services” () –*
theory of bio-medical-physiological disciplines,
theory of private physiology of analyzers and sensory systems,
theory of bio-physiological materials, means and products,
theory of bio-physiological technics, theory of clinical physiology,
theory of physiological bio-pharmacology and bio-epidemiology,
theory of the other branches of bio-medicine and public-health-services,
theory of social physiology, theory of the organization and management of public-health-services,
theory of the modified model of reduced eye,
theory of the modified model of reduced ear,
theory of the software for the automation of research tasks
of the physiological, psychological and linguistic parameters
of the parametrical cognitive models block in medicine,
theory of the statistical substantiation of practical use of the received results,
theory of the physiological, psychological and linguistic factors influencing
to the efficiency of functioning of the information-educational environment
and the increase of resultativity of the automated training system
with the properties of adaptation based on the cognitive models,
theory of organization and plan of carrying out of the experiment,
theory of research of the physiological, psychological and linguistic
parameters of the cognitive models of the subject of training and the means of training,
theory of preliminary processing of a posteriori results of diagnostics,
theory of choice of the statistical analysis methods of the generated data sets,
theory of the analysis of dynamics of the resultativity of researches
in the area of bio-physiology and public-health-services,
theory of the dispersion, regression, discriminant, cluster analysis,
multidimensional scaling, factor analysis and bibliographic lists,
theory of the complex analysis of the modified model of reduced eye
for the research of acuity of vision, field of vision, color perception and others parameters
in the Descartes space of the 2 and 3 coordinates,
theory of the complex analysis of the modified model of reduced ear
for the research of absolute sensitivity and thresholds of sensitivity
in the Descartes space of the 2 and 3 coordinates].

II. “The fundamental scientific researches department
“Theory of medicine, public-health-services, labor safety,
environment preservation and ecology of person” (“SFM”) (*)
[the fundamental scientific researches in the area
“Theoretical medicine and public-health-services” –
theory of medical-biological disciplines,
theory of medical materials, means and products, theory of medical technics,
theory of clinical medicine, theory of pharmacology, theory of hygiene and epidemiology,
theories of the other branches of medicine and public-health-services, theory of social hygiene,
theory of the organization and management of public-health-services,
theory of the cognitive modeling technology
in the theoretical medicine and public-health-services;
the fundamental scientific researches in the area
“Theoretical labor safety” () –*
theory of the organization and management of labor safety,
working conditions, industrial sphere and safety precaution,
theory of professional illnesses and their preventive measures,
theory of accidents on manufacture and their prevention,
theory of work-capacity and the examination of work-capacity,
theory of labor safety by the categories of workers,
theory of labor safety on the manufactures of increased danger,
theory of the cognitive modeling technology
in the theoretical labor safety,
theory of the cognitive model of the subject of training;

the fundamental scientific researches in the area “Theoretical preservation of environment and ecology of person” – theory and methods of studying of the preservation of environment and person, theory of the ecological bases of use of the natural resources, theory of international cooperation, theory of contamination of environment, theory of pollution, theory of the pollution and protection of atmosphere, theory of the pollution and protection of the waters of land, seas and oceans, theory of the protection of soils, theory of the protection of bowels, theory of the ecological bases of ability-to-live of the person, theory of influence of the anthropogenic changes of environment on the health and social-labor potential of person, on the condition of natural ecosystems, populations and organisms of the vegetative and generative (fauna) world, theory of protection of the vegetative and generative (fauna) world, theory of the anthropogenic influence on landscape, theory of the protection and optimization of landscape, theory of reserved affair, theory of the protected natural territories and water-areas, theory of the acts of nature and the accidents of anthropogenic origin, theory of the ecological safety of person, theory of the rational use and reproduction of the natural resources by the person, theory of the preservation of environment and natural resources in the separate regions and countries, theory of waste management, theory of small-waste and without-waste technology, theory of the protection of person from the noise, vibration, electrical and magnetic fields and radiations, theory of the cognitive modeling technology in the theoretical preservation of environment and ecology of person].

The fundamental scientific researches branches and departments of “SIO "ACNS"” allow to develop the main and derivative scientific results of CMT.

1.2.8. The fundamental scientific researches branch “Cognitive modeling in the sciences about The Earth” (“CM in S about E”) (“ONZ”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the sciences about The Earth”” (“ONZ”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of geo-physics, geology, mining and metallurgy”” (“SGGGGN”) [*the fundamental scientific researches in the area “Theoretical geo-physics”* – theory of geo-magnetism and the high layers of atmosphere, theory of meteorology, theory of climatology, theory of oceanology, theory of hydrology of land, theory of glaciology, theory of physics of The Earth, theory of the cognitive modeling technology in the theoretical geo-physics; *the fundamental scientific researches in the area “Theoretical geology”* – theory of lithology, theory of tectonics, theory of the geological-geo-physical researches of the deep structure of The Earth, theory of regional geology, theory of planetology, theory of stratigraphy, theory of paleontology, theory of geo-chemistry, theory of mineralogy, theory of petrography, theory of experimental and technical mineralogy and petrography, theory and methods of the mineralogical-petrographical and geo-chemical laboratory researches (bench or field), theory of anthropogenic period, theory of neo-tectonics, theory of geo-morphology,

t h e o r y o f g e o l o g y o f o r e m i n e r a l s ,
t h e o r y o f g e o l o g y o f n o n m e t a l l i c m i n e r a l s ,
t h e o r y o f g e o l o g y o f t h e f i e l d s o f o i l , g a s a n d c o n d e n s a t e s ,
t h e o r y o f g e o l o g y o f t h e d e p o s i t s o f c o a l , b i t u m i n o u s b r e e d s a n d p e a t ,
t h e o r y o f t h e m e t h o d s o f s e a r c h a n d i n v e s t i g a t i o n o f t h e m i n e r a l s d e p o s i t s ,
t h e o r y o f t h e t e c h n i c s a n d t e c h n o l o g y o f g e o l o g i c a l - p r o s p e c t i n g w o r k s , t h e o r y o f h y d r o - g e o l o g y ,
t h e o r y o f e n g i n e e r i n g g e o l o g y , t h e o r y o f f r o z e n - c o n d i t i o n - o f - g r o u n d - s c i e n c e ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l g e o l o g y ;
t h e f u n d a m e n t a l s c i e n t i f i c r e s e a r c h e s i n t h e a r e a
“ T h e o r e t i c a l m i n i n g ” –
t h e o r y o f t h e t e c h n i c s a n d t e c h n o l o g y o f d e v e l o p m e n t
o f t h e d e p o s i t s o f f i r m m i n e r a l s ,
t h e o r y o f d e v e l o p m e n t o f t h e d e p o s i t s o f o r e s o f t h e f e r r o u s m e t a l s ,
t h e o r y o f d e v e l o p m e n t o f t h e d e p o s i t s o f o r e s a n d l o o s e s
o f t h e c o l o r a n d r a r e m e t a l s a n d d i a m o n d s ,
t h e o r y o f d e v e l o p m e n t o f t h e d e p o s i t s o f c o a l a n d c o m b u s t i b l e s l a t e s ,
t h e o r y o f d e v e l o p m e n t o f t h e d e p o s i t s o f p e a t ,
t h e o r y o f d e v e l o p m e n t o f t h e d e p o s i t s o f b u i l d i n g a n d r o a d m a t e r i a l s ,
f i r e - r e s i s t a n t , c e r a m i c , g l a s s a n d m i n e r a l t e c h n i c a l r a w m a t e r i a l s ,
t h e o r y o f d e v e l o p m e n t o f t h e d e p o s i t s o f c h e m i c a l a n d a g r i c u l t u r a l - c h e m i c a l r a w m a t e r i a l s a n d s a l t s ,
t h e o r y o f d e v e l o p m e n t o f t h e d e p o s i t s o f p r e c i o u s j e w e l s a n d o r n a m e n t a l s t o n e s ,
t h e o r y o f t h e e n r i c h m e n t o f m i n e r a l s ,
t h e o r y o f d e v e l o p m e n t o f t h e o i l a n d g a s d e p o s i t s ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l m i n i n g ;
t h e f u n d a m e n t a l s c i e n t i f i c r e s e a r c h e s i n t h e a r e a
“ T h e o r e t i c a l m e t a l l u r g y ” –
t h e o r y o f m e t a l l u r g i c a l p r o c e s s e s ,
t h e o r y o f m e t a l l u r g i c a l h e a t i n g - e n g i n e e r i n g ,
t h e o r y o f t h e p r o d u c t i o n o f f e r r o u s m e t a l s a n d a l l o y s ,
t h e o r y o f t h e p r o d u c t i o n o f c o l o r (n o n f e r r o u s) m e t a l s a n d a l l o y s ,
t h e o r y o f p o w d e r m e t a l l u r g y , t h e o r y o f t h e m e t a l l u r g y o f s e m i - c o n d u c t o r s ,
t h e o r y o f r o l l i n g p r o d u c t i o n ,
t h e o r y o f d r a w i n g a n d h a r d w a r e p r o d u c t i o n , t h e o r y o f t h e p r o d u c t i o n o f p i p e s ,
t h e o r y o f m e t a l l u r g i c a l - s c i e n c e , t h e o r y o f t h e t e c h n i c a l a n a l y s i s i n m e t a l l u r g y ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l m e t a l l u r g y] .

II. “The fundamental scientific researches department “Theory of oceanology, structure and physics of atmosphere, geodesy, cartography and geography of The Earth and planets”” (“SOFAG”)
[the fundamental scientific researches in the area “Theoretical oceanology” – theory of oceanology, theory of applied oceanology, theory of aero-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of oceanodesy, theory of mapping of the underwater world of The Earth and planets, theory of the cognitive modeling technology in the theoretical oceanology;
the fundamental scientific researches in the area “Theoretical structure of atmosphere” – theory of the structure of atmosphere, theory of aero-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of planetodesy of atmosphere, theory of mapping of the atmosphere of The Earth and planets, theory of the cognitive modeling technology in the theoretical structure of atmosphere;
the fundamental scientific researches in the area “Theoretical physics of atmosphere” – theory of the questions of the atmosphere of The Earth and planets, theory of the general problems of the physical experiment of atmosphere, theory of physics of elementary particles of atmosphere, theory of fields of atmosphere, theory of physics of gases and liquids of atmosphere, theory of thermal-dynamics and statistical physics of atmosphere, theory of physics of micro-disperse firm bodies of atmosphere, theory of physics of plasma of atmosphere, theory of physics of atom and molecule of atmosphere, theory of optics of atmosphere, theory of radio-physics of atmosphere, theory of acoustics of atmosphere, theory of the cognitive modeling technology in the theoretical physics of atmosphere;
the fundamental scientific researches in the area “Theoretical geodesy and cartography” – theory of higher geodesy, theory of applied geodesy, theory of aerial-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of selenodesy, theory of planetodesy, theory of mapping of The Moon and planets, theory of the cognitive modeling technology in the theoretical geodesy and cartography;
the fundamental scientific researches in the area “Theoretical geography” – theory of geography, theory of historical geography, theory of military geography, theory of physical geography, theory of economic and social geography, theory of regional-geography (country-science), theory of medical geography, theory of toponymics, theory of the cognitive modeling technology in the theoretical geography].

The fundamental scientific researches branches and departments of “SIO “ACNS”” allow to develop the main and derivative scientific results of CMT.

1.2.9. The fundamental scientific researches branch “Cognitive modeling in the social sciences” (“CM in SS”) (“OON”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the social sciences”” (“OON”) treats to the fundamental scientific researches divisions of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO “ACNS””]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of social sciences, philosophy, science-study, politics and political sciences, sociology, (cognitive) psychology, state, law and jurisprudential sciences, patenting business, invention and rationalization work”” (“SFPSPP”) (*)
[*the fundamental scientific researches in the area “Theoretical social sciences”* – theory and ideology of social sciences, theory of history of social sciences, theory of the modern condition of social sciences, theory of scientific societies, conventions, congresses, conferences and symposiums on the social sciences, theory of international cooperation in the area of social sciences, theory of the organization of scientific-research work in the area of social sciences, theory of information work in the social sciences, theory of the terminology of social sciences, theory of the propagation and popularization of social sciences, theory of the teaching of social sciences, theory of mathematical modeling in the social and humanitarian sciences, theory of the staff of social-scientists, theory of the cognitive modeling technology in the theoretical social sciences;

the fundamental scientific researches in the area
“ Theoretical philosophy ” – theory of the general problems of modern philosophy, theory of general-philosophical problems, theory of logic, theory of philosophy and methodology of science, theory of social philosophy, theory of ethics, theory of aesthetics, theory of philosophy of religion and atheism, theory of history of philosophy, theory of history of philosophy of science and society, theory of the cognitive modeling technology in the theoretical philosophy ;
the fundamental scientific researches in the area
“ Theoretical science - study ” – theory of the development of science, theory of science and society, theory of sociology of science, theory of scientific work and scientific creativity, theory of the organization of science, theory of politics in the area of science, theory of the technique and technics of scientific-research work, theory of economics of science, theory of scientific staff, theory of international cooperation in science, theory of science and scientific-research work in the separate countries, theory of the cognitive modeling technology in the theoretical science - study ;
the fundamental scientific researches in the area
“ Theoretical politics and political sciences ” – theory of the methodology of political researches, theory of history of political doctrines, theory of political systems, theory of internal policy, theory of international relations, theory of external (foreign) politics and diplomacy, theory of the cognitive modeling technology in the theoretical politics and political sciences ;
the fundamental scientific researches in the area
“ Theoretical sociology ” – theory of the general problems of modern sociology, theory of the methodology of sociology, theory of the technique and technics of sociological researches, theory of society as the system, theory of social relations and processes, theory of social classes, communities and groups, theory of sociology of the spheres of social life, theory of social phenomena and institutes, theory of sociology of personality and behavior, theory of historical and regional sociology, theory of applied sociology, theory of history of sociology, theory of the cognitive modeling technology in the theoretical sociology ;

the fundamental scientific researches in the area “Theoretical (cognitive) psychology” ()* – theory of general psychology, theory of psychology of development, theory of age psychology, theory of comparative psychology, theory of social psychology, theory of applied psychology, theory of the cognitive modeling technology in the theoretical (cognitive) psychology, theory of the modified stratified-step model of processing (cognitive psychology) of the content of information fragments, theoretical bases of cognitive psychology and the cognitive modeling technology, theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), theory of the technical means of support of the complex analysis (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others);

the fundamental scientific researches in the area “Theoretical state management, law and jurisprudential sciences” – theory of state and law, theory of history of state and law, theory of history of political and legal doctrines, theory of constitutional (state) law, theory of municipal law, theory of administrative law, theory of information law, theory of financial law, theory of entrepreneurial law, theory of civil law, theory of civil-procedural law (civil process), theory of arbitration-procedural law (arbitration process), theory of patent law, theory of the law of industrial property, theory of copyright and adjacent rights, theory of succession law, theory of family law, theory of agrarian law, theory of the legal problems of environment preservation, theory of ecological law, theory of land law, theory of forestry law, theory of water law, theory of air-protection law, theory of legislation about bowels, theory of legislation about the fauna world, theory of labor law, theory of the law of social welfare, theory of law-enforcement-authorities, theory of criminal law, theory of criminal-procedural law (criminal process), theory of criminology, theory of criminal-executive law, theory of penitentiary, theory of criminalistics, theory of judicial statistics, theory of international law, theory of international private law, theory of state and law of the separate countries, theory of the cognitive modeling technology in the theoretical state management, law and jurisprudential sciences; *the fundamental scientific researches in the area “Theoretical patent business, invention and rationalization”* – theory of patent-information activity, theory of invention and rationalization, theory of patent-license work, theory of the technical-economic analysis on patent materials, theory of invention law, theory of the cognitive modeling technology in the theoretical patent business, invention and rationalization].

II. “The fundamental scientific researches department
 ”Theory of economics and economic sciences,
 organization, management, statistics and the financial analysis
 based on the cognitive modeling technology” (“SE”) (*)
*[the fundamental scientific researches in the area
 “Theoretical economics and economic sciences”* –
 the economic theories, theory of history of economic idea,
 theory of accounting-economic sciences, theory of science of the management of economics,
 theory of economic history, theory of world economy,
 theory of international economic relations,
 theory of economic development and growth,
 theory of the prediction and planning of economics,
 theory of economic cycles and crises,
 theory of productive forces and scientific-technical progress,
 theory of the social-economic structure,
 theory of the reproduction structure of economics,
 theory of accumulation and consumption, theory of well-being,
 theory of the territorial structure of economics,
 theory of regional and city economics, theory of the branch structure of economics,
 theory of financial science, the monetary and tax theories,
 theory of the credit-financial institutes,
 theory of the cognitive modeling technology
 in the theoretical economics and economic sciences;
*the fundamental scientific researches in the area
 “Theoretical organization and management”* –
 theory and methodology of management,
 theory of the state and administrative management,
 theory of organization of the management of economics, theory of social management,
 theory of prediction, theory of futurology,
 theory of strategical management, theory of strategical planning,
 theory of the cognitive modeling technology
 in the theoretical organization and management;
*the fundamental scientific researches in the area
 “Theoretical statistics”* –
 theory of general statistics, theory of economic statistics,
 theory of branch statistics, theory of social statistics,
 theory of international statistics,
 theory of statistics of the separate countries and social-economic systems,
 theory of the organization and management of statistics,
 theory of the methods and means of data mining,
 processing and the analysis of statistical information,
 theory of the cognitive modeling technology
 in the theoretical statistics;

the fundamental scientific researches in the area “The theoretical financial analysis, monetary circulation and credit” ()* – theory of tendencies, dependences and laws of the financial analysis of the objects, processes and phenomena, theory of the system, information and cognitive approaches in economics, theory of the structure and dynamics of functioning of the financial market, theory of the global purposes of standardization of the accounting and the problems of unification of the financial and accounting reporting-documentation, theory of the institutional subjects regulating the creation, distribution and use of the international standards, theory of the principles of creation, distribution and use of the international standards of financial and accounting reporting-documentation, theory of the basic methods of transformation of the financial reporting-documentation, theory of formation of the accounting balance by the international standards of financial reporting-documentation, theory of qualifying tests of the professional participants of the financial market of the financial system of the country, theory of the administrative-legal forms of existence of the managing subject, theory of the features of procedure of the financial analysis of the managing subject, theory of the organizational structure of enterprise and its features (the educational establishment of the system of education and the information-educational environment), theory of the inflationary depreciation, discounting and compounding of monetary streams in the economic system of the country, theory of the indexes of dynamics of the financial market and tools, theory of dynamics and communications of the managing subject, theory of investment and innovative politics of the managing subject in the financial system of the modern country, theory of the organizational, technological, scientific, methodical, normative-legal, information, hardware, software, brainware, raw, warehouse, personnel and economic preparations of production and the bases of the financial analysis and estimation of quality of activity of the credit and other organization, theory of the requirements and structure of financial reporting-documentation of the (non)production organizational structures, theory of the additional elements of accounting and financial reporting-documentation of the credit organization, theory of the consumers of financial reporting-documentation,

theory of the elements of financial reporting-documentation connected with the changes of financial-economy activity, theory of the simple and consolidated accounting and financial reporting-documentation, theory of the methods of the financial analysis of the different forms of reporting-documentation, theory of the structure of accounts of the accounting and financial analysis, theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, theory of the scheme of carrying out of the auditor check-inspection, the financial analysis and audit, theory of the external and internal control of activity of the different organizations, theory of the kinds of bank operations of the (credit) organization and enterprise, theory of the structure of the accounting balance (form №1), theory of the structure of the explanatory note to the accounting balance, theory of the structure of the report about profits and losses (form №2), theory of the structure of the explanatory note to the report about profits and losses, theory of the structure of the report about the change of capital (form №3), theory of the structure of the report about the movement of monetary resources on accounts (form №4), theory of the structure of the explanatory note to the report about the movement of means, theory of the structure of the appendix to the accounting balance (form №5), theory of the structure of the report about the target use of received means (form №6), theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserved system of USA, theory of the analysis of stability of the credit organization and commercial bank, theory of the basic analytical coefficients of the financial analysis, theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the technique of formation of the normative-legal and information basis for the financial analysis of the (credit) organization and enterprise, theory of the technique of additional check of the information basis of the financial analysis of the (credit) organization and enterprise, theory of the technique of creation and modification of the working plan of accounts and the model of accounting, theory of the technique of carrying out of the financial analysis of the condition of organization, theory of the parametrical cognitive models block for the financial analysis and the increase of efficiency of functioning of the objects, processes and phenomena,

theory of the structure of the cognitive models for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of formation and calculating of the aggregates of accounting balance of the production and nonproduction organization, theory of the calculation of parameters of the cognitive models for the vertical, horizontal and trend static and dynamic financial analysis of the (credit) organization and enterprise in the conditions of definiteness and uncertainty, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the (credit) organization and enterprise in the economic system, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the cognitive models for the vertical, horizontal and trend financial analysis, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of financial-economy activity, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the fundamental scientific researches in the area "Theoretical other branches of economics"* – theory of the production of musical instruments, theory of the production of art products, theory of jeweler industry, theory of the production of toys, theory of the production of sports products, theory of the production of writing goods, theory of the cognitive modeling technology in the theoretical other branches of economics].

The fundamental scientific researches branches and departments of "SIO "ACNS"" allow to develop the main and derivative scientific results of CMT.

1.2.10. The fundamental scientific researches branch

“Cognitive modeling in the global problems and international relations”

“CM in GP and IR”) (“OGPMO”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the global problems and international relations”” (“OGPMO”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences"” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI"” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department "Theory of demography, pedagogics and national education, standardization, the complex studying of separate countries and regions, the general and complex problems of natural, exact, technical, public and applied sciences and branches of production”” (“SGP”) [*the fundamental scientific researches in the area “Theoretical demography”* – theory and methodology of demographical science, theory of the general problems of national-population, theory of statistics of population, theory of history of population, theory of historical demography, theory of the resettlement of population, theory of geographical demography, theory of population of the world, theory of the cognitive modeling technology in the theoretical demography;

the fundamental scientific researches in the area “Theoretical pedagogics and national education” – theory of general pedagogics, theory of history of education and pedagogics, theory of personnels, theory of the system of education, theory of preschool education, theory of preschool pedagogics, theory of general-educational (comprehensive) school, theory of the pedagogics of general-educational (comprehensive) school, theory of out-of-school (additional) education and training, theory of out-of-school pedagogics, theory of special (correctional) schools, theory of defectology, theory of primary professional-technical education, theory of the pedagogics of professional (vocational) school, theory of average professional (vocational) education, theory of the pedagogics of average professional (vocational) education, theory of higher professional (vocational) education, theory of the pedagogics of higher professional (vocational) school, theory of education of adults, theory of the improvement of professional skills, theory of self-education, theory of family training, theory of family pedagogics, theory of the specialized branches of education, theory of the technical means of training and training equipment, theory of national education and pedagogics in the separate countries, theory of the cognitive modeling technology in the theoretical pedagogics and national education;

the fundamental scientific researches in the area “Theoretical standardization” – theory of the systems and services of standardization, theory of the scientific-methodological support of the systems and services of standardization, theory of the cognitive modeling technology in the theoretical standardization;

the fundamental scientific researches in the area “Theoretical complex studying of the separate countries and regions” – theory of RF as a particular, theory of RF as a whole, theory of The North-Western federal district of RF, theory of The Central federal district of RF, theory of The Privolgsky federal district of RF, theory of The Southern federal district of RF, theory of The Uralian federal district of RF, theory of The Siberian federal district of RF, theory of The Far-Eastern federal district of RF, theory of the area and territory of the former USSR, theory of the countries of CIS of Eastern Europe, theory of the countries of CIS of Zacaucasia, theory of the countries of CIS of Central Asia, theory of the Baltic countries and Baltic, theory of Europe as a whole, theory of Western Europe, theory of Southern Europe, theory of Central Europe, theory of Eastern Europe as a whole,

theory of Scandinavia and the Scandinavian countries, theory of Asia as a whole, theory of Forward Asia, theory of Eastern Asia, theory of Southern Asia, theory of South-Eastern Asia, theory of Central Asia, theory of Near and Middle East, theory of Africa as a whole, theory of Northern Africa, theory of Eastern Africa, theory of Central Africa, theory of Western Africa, theory of Southern Africa, theory of America as a whole, theory of USA and Canada, theory of Central America, theory of Southern America, theory of Australia and the countries of Oceania, theory of the Arctic and Antarctic polar areas, theory of the surface of The Earth and land, ocean, sea and internal waters, theory of the other physical-geographical features of The Earth, theory of the cognitive modeling technology in the theoretical complex studying of the separate countries and regions; *the fundamental scientific researches in the area "Theoretical general and complex problems of natural and exact sciences"* – theory of the general and complex problems of natural and exact sciences, theory of the cognitive modeling technology in the theoretical general and complex problems of natural and exact sciences; *the fundamental scientific researches in the area "Theoretical general and complex problems of technical and applied sciences and branches of production"* – theory of materials-science, theory of the general technology of production, theory of designing, theory of constructing, theory of the flexible industrial systems (FIS), theory of vacuum technics, theory of cryogenic technics, theory of corrosion and protection against corrosion, theory of welding, theory of optical production, theory of staff, theory of the control and management of quality, theory of installation, theory of the operation and repair of industrial equipment, theory of material-technical supply, theory of logistics, theory of warehouse economy, theory of container and packing, theory of secondary raw materials, theory of fire safety, theory of safety, theory of salvage-rescue services, theory of technical esthetics, theory of ergonomics, theory of the protection of information, theory of the cognitive modeling technology in the theoretical general and complex problems of technical and applied sciences and the branches of production; *the fundamental scientific researches in the area "Theoretical complex problems of social sciences"* – theory of social-political idea, theory of global problems, theory of labor, theory of the cognitive modeling technology in the theoretical complex problems of social sciences].

II. “The fundamental scientific researches department
 “Theory of culture and cultural-science, art and art-science,
 mass communication, journalism and mass media means,
 religion, internal trade and tourist-excursion service,
 external trade, transport, housing-communal economy,
 housekeeping and household services at the international level” (“SMO”)
*[the fundamental scientific researches in the area
 “Theoretical culture and cultural-science”* –
 theory, methodology and philosophy of culture, theory of history of culture,
 theory of history of the studying of culture, theory of culture in the modern world,
 theory of organization and management in the area of culture,
 theory of international cooperation in the area of culture,
 theory of hardware of the establishments of culture,
 theory of social-cultural activity in the sphere of leisure,
 theory of library affair, theory of library-science,
 theory of bibliography, theory of bibliography-science,
 theory of museum affair, theory of museology (museum-science),
 theory of protection of the monuments of history and culture,
 theory of archival affair, theory of archival-science,
 theory of culture of the separate countries and peoples,
 theory of the cognitive modeling technology
 in the theoretical culture and cultural-science;
*the fundamental scientific researches in the area
 “Theoretical art and art-science”* –
 theory and methodology of art and the problems of art-science,
 theory of history and the modern condition of art,
 theory of art-science and art criticism,
 theory of art in the modern world,
 theory of organization and management in the area of art,
 theory of international cooperation in the area of art,
 theory of fine art, theory of music and musicology (music-science),
 theory of theatre and theater-science, theory of mass and theatrical holidays,
 theory of dance and choreography, theory of circus,
 theory of platform, theory of cinema and motion-picture-art,
 theory of national folk art, theory of art of the separate countries and peoples,
 theory of the cognitive modeling technology
 in the theoretical art and art-science;
*the fundamental scientific researches in the area
 “Theoretical mass communication,
 journalism and mass media means”* –
 theory of the mass communication means,
 theory of the open network information resources (“Internet” and “WWW”),
 theory of journalism, theory of the mass media means, theory of printing,
 theory of television (TV), theory of radio,
 theory of use of the technical means for the mass communication,
 theory of the cognitive modeling technology
 in the theoretical mass communication,
 journalism and the mass media means;

the fundamental scientific researches in the area "Theoretical religion" – theory of atheism and free-thinking, theory of separate religions, theory of church and cults, theory of the problems of religious consciousness, theory of philosophy and religion, theory of religion, theory of church and society, theory of the organizational-practical activity of churches, theory of history of atheism, theory of religions and churches, theory of the cognitive modeling technology in the theoretical religion;

the fundamental scientific researches in the area "Theoretical internal trade and tourist-excursion service" – theory of the general questions of internal trade and tourist-excursion service, theory of wholesale trade, theory of retail trade, theory of public catering, theory of hotel economy, theory of tourist-excursion service, theory of the cognitive modeling technology in the theoretical internal trade and tourist-excursion service;

the fundamental scientific researches in the area "Theoretical external trade" – theory of the kinds of external trade, theory of external-trade politics, theory of communication of the external trade with production, theory of the structure of external trade, theory of the calculations on the external-trade operations, theory of the external-trade transportations, theory of the world commodity markets, theory of the international agreements about trade, theory of international contracts, theory of the international trading organizations, theory of commodity agreements, theory of the organization and management of external trade, theory of the cognitive modeling technology in the theoretical external trade;

the fundamental scientific researches in the area "Theoretical transport" – theory of railway transport, theory of motor-car transport, theory of water transport, theory of air transport, theory of pipeline transport, theory of industrial transport, theory of urban (city) transport, theory of interaction of the different kinds (types) of transport, theory of mixed transportations, theory of the other kinds (types) of transport, theory of the cognitive modeling technology in the theoretical transport;

the fundamental scientific researches in the area "Theoretical housing-communal economy, housekeeping and household services" – theory of housing economy, theory of communal economy, theory of consumer services, theory of housekeeping, theory of the cognitive modeling technology in the theoretical housing-communal economy, housekeeping and household services].

The fundamental scientific researches branches and departments of "SIO "ACNS"" allow to develop the main and derivative scientific results of CMT.

1.2.11. The fundamental scientific researches branch

“Cognitive modeling

in the historical-philological sciences”

(“CM in H-PHS”) (“OIFN”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch "Cognitive modeling in the historical-philological sciences"” (“OIFN”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences"” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI"” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department "Theory of history and historical sciences"” (“SI”) [*the fundamental scientific researches in the area “Theoretical history and historical sciences”* – theory of general history, theory of history of Azerbaijan, theory of history of Armenia, theory of history of Belorussia, theory of history of Georgia, theory of history of Kazakhstan, theory of history of Kirghizia, theory of history of Moldova, theory of history of RF, theory of history of Tajikistan, theory of history of Turkmenia, theory of history of Uzbekistan, theory of history of Ukraine, theory of history of the separate processes, parties and phenomena of human activity, theory of archeology, theory of ethnography, theory of historical anthropology, theory of auxiliary historical disciplines, theory of history of the separate countries, theory of the cognitive modeling technology in the theoretical history and historical sciences].

II. “The fundamental scientific researches department “Theory of science of language, (cognitive) linguistics, literature, literary-science and oral national creativity”” (“SYL”) (*)
[*the fundamental scientific researches in the area “Theoretical science of language”* – theory of general science of language, theory of applied science of language, theory of languages of the world, theory of the cognitive modeling technology in the theoretical science of language; *the fundamental scientific researches in the area “Theoretical (cognitive) linguistics”* (*) – theory of the general questions of (cognitive) linguistics, theory of (cognitive) linguistics, theory of applied linguistics, theory of the cognitive modeling technology in the theoretical (cognitive) linguistics, theory of the modified stratified-step model of understanding (cognitive linguistics) of the content of information fragments, theoretical bases of cognitive linguistics and the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors); *the fundamental scientific researches in the area “Theoretical literature, literary-science and oral national creativity”* – theory of literature, theory of history of literature, theory of national creativity, theory of the auxiliary literary-science disciplines, theory of the products of fiction literature, theory of the cognitive modeling technology in the theoretical literature, literary-science and oral national creativity].

The fundamental scientific researches branches and departments of “SIO “ACNS”” allow to develop the main and derivative scientific results of CMT.

1.2.12. The fundamental scientific researches branch

“Cognitive modeling in the sports sciences”

(“CM in SPS”) (“OSN”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the sports sciences”” (“OSN”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of competitions, sport and sports sciences”” (“STSSSN”) [*the fundamental scientific researches in the area “Theoretical physical training and sport” – theory of physical training and sport, theory of the medical-biological bases of physical training and sport, theory of the material-technical base of physical training and sport, theory of the methodical bases of the kinds of sport, theory of sports competitions, theory of the cognitive modeling technology in the theoretical physical training and sport*].

The fundamental scientific researches branches and departments of “SIO "ACNS”” allow to develop the main and derivative scientific results of CMT.

1.2.13. The fundamental scientific researches branch

“Cognitive modeling in the military sciences”

(“CM in MILS”) (“OVN”) of “SIO "ACNS"”

The developed “The fundamental scientific researches branch “Cognitive modeling in the military sciences”” (“OVN”) treats to the fundamental scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental scientific researches department “Theory of architecture, construction, technics, history, education, politics and economics in the armed forces”” (“STASTIOPEVS”) [*the fundamental scientific researches in the area “Theoretical military science”* – theory of doctrines about war and army, theory of military history, theory of military education and professional training of staff, theory of military politics, theory of military doctrines, theory of military science, theory of military-applied science, theory of arms and military technics, theory of armed forces, theory of military economics, theory of the cognitive modeling technology in the theoretical military science].

The fundamental scientific researches branches and departments of “SIO "ACNS”” allow to develop the main and derivative scientific results of CMT.

1.3. The divisions of applied scientific researches (at the microscopic level) of "SIO "ACNS""

The structure of "The state international organization "Academy of cognitive natural sciences"" ("SIO "ACNS"") (www.vetrovan.spb.ru) includes the various divisions of the process of receiving of the scientific results:

B. The applied scientific researches (management) divisions of "SIO "ACNS" "

for the microscopic system, financial and complex analysis – the 27 applied scientific researches sections (departments) (ASRS(DP)) on the 9 applied scientific researches directions (ASRD) of "SIO "ACNS" corresponds to the 27 scientific-researches laboratories (SRL) on the 9 applied developments directions (ADD) of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.", and also the 27 sections on the 9 directions of "The Russian academy of natural sciences".

B.1. ASRD [ADD] "Cognitive modeling in the natural sciences" ("CM in NS") ("NEN").

B.1.1. ASRS(DP) [SRL] "Applications of (cognitive) informatics, cybernetics, automatics, computer engineering, data transmission and connection" ("AP(C)ICACEDT and C") ("SIC") (*).

B.1.2. ASRS(DP) [SRL] "Applications of mathematics, mathematical physics, mechanics, metrology, astronomy, space researches, the complex system analysis based on the cognitive modeling technology and the complex problems of natural sciences" ("APMMPHMMASRCSAB on CMT and CPNS") ("SMMF") (*).

B.1.3. ASRS(DP) [SRL] "Applications of geo-chemical ecology and preservation of environment" ("APG-CHE and PE") ("SNOS").

B.1.4. ASRS(DP) [SRL] "Applications of the models of The Earth and The Solar system planets in the geography, geology, geodesy, cartography, astronomy and other sciences" ("APME and SSP in GGGCA and OS") ("SNZ") (*).

B.1.5. ASRS(DP) [SRL] "Applications of the models, methods and technologies of the geology of oil and gas and the oil and gas industry" ("APMM and TGO and G and O and GI") ("SNG").

B.1.6. ASRS(DP) [SRL] "Applications of the system analysis based on the cognitive modeling technology, prediction, standardization, unification and the complex problems of exact technical sciences" ("APSAB on CMTPSU and CPETS") ("SSAP") (*).

B.1.7. ASRS(DP) [SRL] "Applications of theoretical and experimental physics, geo-physics, power-engineering, electrical-engineering, electronics and radio-engineering, nuclear physics, technics and instrument-making" ("APT and EPHG-PHP-EE-EE and R-ENPHT and I-M") ("SF") (*).

B.1.8. ASRS(DP) [SRL] "Applications of (non)organic chemistry, crystallography, mineralogy and chemical industry" ("AP(N)OCHCM and CHI") ("SH") (*).

- B.2. ASRD [ADD] “Cognitive modeling in the applied technical sciences and technologies” (“CM in ATS and T”) (“NNT”).
- B.2.1. ASRS(DP) [SRL] “Applications of mining and metallurgy” (“APM and M”) (“SGM”).
- B.2.2. ASRS(DP) [SRL] “Applications of the sciences about wood and wood processing” (“APS about W and WP”) (“SNL”).
- B.2.3. ASRS(DP) [SRL] “Applications of the noo-sphere knowledge and technologies: the (heavy) mechanical-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture, construction and other branches” (“APN-SK and T: (H)M-EI-MPR and PH-C-TE and FITAC and OB”) (“SNZT”)(*).
- B.2.4. ASRS(DP) [SRL] “Applications of the scientific problems of agro-industrial complex” (“APSPA-IC”) (“SNPAK”).
- B.3. ASRD [ADD] “Cognitive modeling in the geo-political sciences and researches” (“CM in G-PS and R”) (“NSGI”).
- B.3.1. ASRS(DP) [SRL] “Applications of geo-politics and safety” (“APG-P and S”) (“SGB”).
- B.3.2. ASRS(DP) [SRL] “Applications of classical and military history” (“APC and MH”) (“SVIT”).
- B.4. ASRD [ADD] “Cognitive modeling in the society steady development of post-industrial country” (“CM in SSDP-IC”) (“NURS”).
- B.4.1. ASRS(DP) [SRL] “Applications of the complex problems of country development” (“APCPCD”) (“SPUR”)(*).
- B.5. ASRD [ADD] “Cognitive modeling in the social-economic and jurisprudential sciences” (“CM in S-E and JS”) (“NSEPP”).
- B.5.1. ASRS(DP) [SRL] “Applications of the inter-branch jurisprudential and economic system researches of society and country” (“APIJ and ESRS and C”) (“SMEE SI”).
- B.5.2. ASRS(DP) [SRL] “Applications of the complex problems of micro-(macro-)economics, social sphere and market economy of the country” (“APCPM-(M-)ESS and MEC”) (“SPMSRH”).
- B.5.3. ASRS(DP) [SRL] “Applications of economics, management, sociology, statistics and their other branches” (“APEMSS and TOB”) (“SES”).
- B.5.4. ASRS(DP) [SRL] “Applications of the financial analysis, accounting and audit of the (credit) organization based on the cognitive modeling technology” (“APFAA and A(C)OB on CMT”) (“SFABUA”)(*).

- B.6. ASRD [ADD] “Cognitive modeling in the biological and medical sciences” (“CM in B and MS”) (“NBME”).
- B.6.1. ASRS(DP) [SRL] “Applications of biology, ecology and physiology of plants” (“APBE and PHP”) (“SBE”).
- B.6.2. ASRS(DP) [SRL] “Applications of bio-technology, bio-medicine, ergonomics and labor safety of organic individuals” (“APB-TB-ME and LSOI”) (“SB”) (*).
- B.7. ASRD [ADD] “Cognitive modeling in the humanitarian sciences, art and creativity” (“CM in HSA and C”) (“NGNOT”).
- B.7.1. ASRS(DP) [SRL] “Applications of (cognitive) linguistics, (national) creativity, culture, art and religion” (“AP(C)L(N)CCA and R”) (“SGNT”) (*).
- B.7.2. ASRS(DP) [SRL] “Applications of literature, science-study, philosophy, journalism and mass communication means” (“APLS-SPHJ and MCM”) (“SLPZ”).
- B.7.3. ASRS(DP) [SRL] “Applications of the problems of (cognitive) psychology, education, science and support of young scientists (the programs of grants and others)” (“APP(C)PES and SYS (PG and O)”) (“SPOPMU”) (*).
- B.7.4. ASRS(DP) [SRL] “Applications of innovations of the project “The Russian encyclopedias”, philosophy of science, technics and technology on the branches of knowledge” (“APIPREPHST and T on BK”) (“SRE”).
- B.8. ASRD [ADD] “Cognitive modeling in the physical training and sport” (“CM in PHT and S”) (“NFS”).
- B.8.1. ASRS(DP) [SRL] “Applications of sport, sports sciences and actions” (“APSSS and A”) (“SSSNM”).
- B.9. ASRD [ADD] “Cognitive modeling in the military sciences” (“CM in MILS”) (“NVN”).
- B.9.1. ASRS(DP) [SRL] “Applications of architecture, construction, technics, history, education, politics and economics in the armed forces” (“APACTHEP and E in AF”) (“SASTIOPEVC”).
- “SIO”ACNS” allow to develop the main and derivative scientific results, in particular the algorithms, methods and technologies of the system, financial and complex analysis for the increase of efficiency of the diverse (information) technologies of single, serial and mass (non)material production of the one or several assortment groups and nomenclature units of goods, works and services to the final consumer of the social-economic formation based on the cognitive modeling technology and the cognitive models.

1.3.1. The applied scientific researches direction

“Cognitive modeling in the natural sciences”

(“CM in NS”) (“NEN”) of “SIO "ACNS"”

The developed “The applied scientific researches direction “Cognitive modeling in the natural sciences”” (“NEN”) treats to the applied scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of (cognitive) informatics, cybernetics, automatics, computer engineering, data transmission and connection”” (“SIC”) (*)
[the applied scientific researches in the area “Applications of informatics (theory of information)” – usage of theory of informatics (theory of information), usage of theory of organization of information work, usage of theory of documentary information sources, usage of theory of analytical-synthetical processing of the documentary information sources, usage of theory of information search, usage of theory of information service, usage of theory of the technical means of support of information processes, usage of theory of the cognitive modeling technology in the applications of informatics (theory of information);

the applied scientific researches in the area “Applications of cognitive informatics” () – usage of theory of the modified stratified-step model of perception (psycho-physiology of perception), processing (cognitive psychology) and understanding (cognitive linguistics) of the information fragments content, usage of theory of the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, usage of theory of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the parametrical cognitive models block for the financial analysis of the (credit) organizations and enterprises (the cognitive models for the vertical, horizontal and trend financial analysis of the managing subjects of the economic system), usage of theory of the parametrical cognitive models block for the complex analysis of the difficult objects, processes and phenomena, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors),*

usage of theory of the technical means of support of the financial analysis (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting, the automation means of formation of the accounting balance and the report about profits and losses of the (credit) organization, the automation means of the vertical, horizontal and trend financial analysis based on the analytical coefficients system), usage of theory of the technical means of support of the complex analysis (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others); *the applied scientific researches in the area “ Applications of cybernetics ”* – usage of theory of automatic control systems, usage of theory of modeling, usage of theory of cybernetic control systems, usage of theory of information, usage of theory of artificial intelligence, usage of theory of final automatic-devices and formal languages, usage of theory of reliability of the objects, processes and systems, usage of theory of the system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology in the applications of cybernetics; *the applied scientific researches in the area “Applications of automatics and computer engineering”* – usage of theory of automatic control, usage of theoretical bases of programming, usage of theory of computer engineering, usage of theory of elements, units and devices of automatics and computer engineering, usage of theory of input-output devices, usage of theory of memory devices, usage of theory of technology and equipment for the manufacture of the means of automatics and computer engineering, usage of theory of keyboard and calculating-tabulating machines, usage of theory of analog calculating machines (ACM), usage of theory of digital calculating machines and calculating complexes (DCM),

usage of theory of analog-digital (hybrid) calculating machines and calculating complexes, usage of theory of calculating centres (CC), usage of theory of calculating networks (CN), usage of theory of software of calculating machines, complexes and networks, usage of theory of automatic measurement, regulation and control systems, usage of theory of the systems of tele-control and tele-measurement, usage of theory of the automated control systems of technological processes (technological stages), usage of theory of the automated systems of organizational management, usage of theory of automation of designing and scientific researches, usage of theory of the cognitive modeling technology in the applications of automatics and computer engineering; *the applied scientific researches in the area "Applications of data transmission and connection"* – usage of theory of data transmission and connection, usage of theory of designing and constructing of connection devices, usage of theory of technology and equipment for the assembly and adjustment of connection equipment, systems of data transmission, communication lines, multi-channel connection, networks and communication centres, services and facilities of connection, usage of theory of telegraph (cable) connection and equipment, usage of theory of the systems and equipment of data transmission, usage of theory of tele-information services and equipment, usage of theory of phone connection and equipment, usage of theory of the systems of transfer of moving images and sound, usage of theory of facsimile connection and equipment, usage of theory of radio-connection and radio-broadcasting, usage of theory of hyper-optic (LED) connection and equipment, usage of theory of television (TV), usage of theory of optical connection in the free space and equipment, usage of theory of post connection, usage of theory of the cognitive modeling technology in the applications of data transmission and connection].

II. “The applied scientific researches department
 “Applications of mathematics, mathematical physics, mechanics,
 metrology, astronomy, space researches,
 the complex system analysis based on the cognitive modeling technology
 and the complex problems of natural sciences” (“SMMF”) (*)
*[the applied scientific researches in the area
 “Applications of mathematics”* – usage of theory of mathematical logic and applied bases of mathematics,
 usage of theory of numbers, usage of theory of algebra, usage of theory of topology,
 usage of theory of geometry, usage of theory of the mathematical analysis,
 usage of theory of the functions of valid variables,
 usage of theory of the functions of complex variables,
 usage of theory of ordinary differential equations,
 usage of theory of differential equations with private derivatives,
 usage of theory of integrated equations,
 usage of theory of mathematical models of natural and technical sciences,
 usage of theory of the equations of mathematical physics,
 usage of theory of variation calculation,
 usage of mathematical theory of optimum control,
 usage of theory of the functional analysis,
 usage of theory of calculating mathematics,
 usage of theory of probability and mathematical statistics,
 usage of theory of the combinatory analysis, usage of theory of graphs,
 usage of theory of mathematical cybernetics,
 usage of theory of the cognitive modeling technology
 in the applications of mathematics;
*the applied scientific researches in the area
 “Applications of mathematical physics”* (*) – usage of theory of the general problems of mathematical physics,
 usage of theory of the mathematical models of physics of elementary particles,
 usage of theory of fields (united theory of field),
 usage of theory of the mathematical models of physics of high energies,
 usage of theory of nuclear physics, usage of theory of physics of gases and liquids,
 usage of theory of the mathematical models of thermo-dynamics and statistical physics,
 usage of theory of physics of firm bodies, usage of theory of physics of plasma,
 usage of theory of physics of atom and molecule,
 usage of theory of optics, usage of theory of physics of lasers,
 usage of theory of radio-physics,
 usage of theory of the mathematical models of physical bases of electronics,
 usage of theory of acoustics (theory of distribution of waves in the environment),
 usage of theory of the cognitive modeling technology
 in the applications of mathematical physics,
 usage of theory of the cognitive models of the interaction between
 the elementary particles and firm bodies, fields, liquids and gases,
 usage of theory of the cognitive model of the modified
 volumetric planetary model of atom n. a. Bohr N.H.D.,
 usage of theory of the cognitive models of the temperature areas of plasma of atom and molecule,
 usage of theory of the cognitive model of the optical environment of eye,
 usage of theory of the cognitive model of the acoustical environment of ear,
 usage of theory of the cognitive model of the waves distribution in the environment;

the applied scientific researches in the area “Applications of mechanics” (*) – usage of theory of the general tasks and methods of mechanics, usage of theory of mechanics of liquid and gas, usage of theory of mechanics of deformable firm body, usage of theory of the complex and special sections of mechanics, usage of theory of the cognitive modeling technology in the applications of mechanics, usage of theoretical bases of formation of the parametrical cognitive models block for the complex system analysis of the objects, processes and phenomena of mechanics, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and the 2nd generation and the hybrid of the 3rd generation), usage of theory of the adaptive automation means of research of the objects, processes and phenomena of mechanics, usage of theory of the technical means of support of research of the objects, processes and phenomena of mechanics, usage of theory of the technical means of support of the complex system analysis of the difficult objects, processes and phenomena of mechanics (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others);

the applied scientific researches in the area “Applications of mechatronics (theory of hygroscope-building)” – usage of theoretical bases, general tasks and methods of mechatronics, usage of theory of general mechatronics, usage of theory of mechatronics of liquid and gas, usage of theory of mechatronics of deformable firm body, usage of theory of the complex and special sections of mechatronics, usage of theory of the automation means and devices of mechatronics, usage of theory of the cognitive modeling technology in the applications of mechatronics (theory of hygroscope-building);

the applied scientific researches in the area “Applications of metrology (theory of measurement)” – usage of theory of the scientific bases and technical means of metrology and metrological support, usage of theory of the state, national and international systems and services of metrology, usage of theory of measurement of separate sizes and characteristics, usage of theory of standard samples of the structure and properties of substances and materials, usage of theory of the cognitive modeling technology in the applications of metrology (theory of measurement);

the applied scientific researches in the area
*“ Applications of astronomy ” (*)* –
usage of theory of astronomy, usage of theory of heavenly mechanics,
usage of theory of astrometry,
usage of theory of astrophysics of The Solar system, The Sun,
stars, fogs, interstellar environment and star systems,
usage of theory of cosmology,
usage of theory of observatories, tools,
devices and methods of astronomical supervisions,
usage of theory of the cognitive modeling technology
in the applications of astronomy,
usage of theory of the cognitive models of the relative positioning
of 1, 2, 3, 4, 5 and more planets and satellites, The Earth, The Sun and others);
the applied scientific researches in the area
“ Applications of space researches ” –
usage of theory of the devices and methods of applied
scientific researches of the space environment,
usage of theory of planning and realization of starts
of the space vehicles and artificial heavenly bodies,
usage of theory of uncontrol movement
of the space vehicles and artificial heavenly bodies,
usage of theory of control of movement
of the space vehicles and artificial heavenly bodies,
usage of theory of space technics and technology,
usage of theory of safety
and medical-biological problems of space flights,
usage of theory of the usage of space systems for the connection and navigation,
usage of theory of problems of development of extraterrestrial territories and prospects of astronautics,
usage of theory of applied scientific researches
of the astronomical objects by the space means,
usage of theory of geo-physical applied
scientific researches by the space means,
usage of theory of research of The Earth from the space,
usage of theory of the cognitive modeling technology
in the applications of space researches;

the applied scientific researches in the area “Applications of the complex system analysis” () – usage of theory of tendencies, dependences and laws of the complex system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology for the complex system analysis of the difficult objects, processes and phenomena, usage of theory of the parametrical cognitive models block for the complex system analysis and the increase of efficiency of functioning of the difficult objects, processes and phenomena, usage of theory of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and the 2nd generation and the hybrid of the 3rd generation), usage of theory of the algorithms of formation of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the techniques of research of parameters of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the algorithms of processing of a posteriori data of the complex system analysis of the problem spheres, usage of theory of software for the automation of research tasks, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of functioning of the difficult objects, processes and phenomena, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the cognitive models parameters, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the productivity of training, usage of theory of the dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the applied complex system analysis of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle, the multivariate code device, the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of 2 and 3 coordinates, the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of 2 and 3 coordinates, the chemical element with 1, 2, 3, 4, 5 and more nucleuses, the difficult multivariate hurricane].*

III. “The applied scientific researches department “Applications of geo-chemical ecology and preservation of environment”” (“SNOS”)
[the applied scientific researches in the area “Applications of preservation of environment and ecology” – usage of theory of the methods of studying of the preservation of environment of the person and animals, usage of theory of the ecological bases of use of the natural resources, usage of theory of international cooperation, usage of theory of studying of environmental contamination of the person and animals, usage of theory of the control of pollution and protection of atmosphere, waters of land, seas and oceans, usage of theory of the protection of soils and bowels, usage of theory of the ecological bases of ability-to-live of the organic individuals, usage of theory of influence of the anthropogenic changes of environment on the health and activity of organic individuals, on the condition of natural ecosystems, populations and organisms of the vegetative and generative (fauna) world, usage of theory of protection of the vegetative and generative world of the person and animals, usage of theory of the anthropogenic influence on landscape, usage of theory of the protection and optimization of landscape, usage of theory of nature reserve, usage of theory of protected natural territories and water-areas, usage of theory of nature acts and accidents of anthropogenic origin, usage of theory of ecological safety, usage of theory of the rational use and reproduction of natural resources, usage of theory of the preservation of environment and natural resources in the separate regions and countries, usage of theory of waste management, usage of theory of small waste and without waste technology, usage of theory of protection of organic individuals against noise, vibration, electric and magnetic fields and radiations, usage of theory of the cognitive modeling technology in the applications of preservation of environment and ecology].

IV. “The applied scientific researches department
 “Applications of the models of The Earth and The Solar system planets
 in geography, geology, geodesy, cartography,
 astronomy and other sciences” (“SNZ”) (*)
*[the applied scientific researches in the area
 “ Applications of geography ” –*
 usage of theory of geography, usage of theory of historical geography,
 usage of theory of military geography, usage of theory of physical geography,
 usage of theory of economic and social geography,
 usage of theory of regional-geography (country-science),
 usage of theory of medical geography, usage of theory of toponymics,
 usage of theory of the cognitive modeling technology
 in the applications of geography ;
*the applied scientific researches in the area
 “ Applications of geology ” –*
 usage of theory of lithology, usage of theory of tectonics,
 usage of theory of geological-geo-physical researches of the deep structure of The Earth,
 usage of theory of regional geology, usage of theory of planetology,
 usage of theory of stratigraphy, usage of theory of paleontology,
 usage of theory of geo-chemistry, usage of theory of mineralogy,
 usage of theory of petrography ,
 usage of theory of experimental and technical mineralogy and petrography,
 usage of theory of the methods of mineralogical-petrographical
 and geo-chemical laboratory researches ,
 usage of theory of anthropogenic period ,
 usage of theory of neo-tectonics, usage of theory of geo-morphology,
 usage of theory of geology of ore minerals ,
 usage of theory of geology of nonmetallic minerals,
 usage of theory of geology of the fields of oil, gas and its condensates,
 usage of theory of geology of the deposits of coal, bituminous breeds and peat,
 usage of theory of the methods of search and investigation of the deposits of minerals,
 usage of theory of technics and technology of geological-prospecting works,
 usage of theory of hydro-geology, usage of theory of engineering geology,
 usage of theory of frozen condition of ground ,
 usage of theory of the cognitive modeling technology
 in the applications of geology ;

the applied scientific researches in the area
“Applications of geodesy and cartography” –
usage of theory of supreme geodesy, usage of theory of geodesy,
usage of theory of aerial-survey and photogrammetry,
usage of theory of topography, usage of theory of photo-topography,
usage of theory of cartography, usage of theory of selenodesy,
usage of theory of planetodesy,
usage of theory of mapping of The Moon and planets,
usage of theory of the cognitive modeling technology
in the applications of geodesy and cartography;
the applied scientific researches in the area
“Applications of astronomy” (*) –
usage of theory of astronomy, usage of theory of heavenly mechanics,
usage of theory of astrometry,
usage of theory of astro-physics of The Solar system, The Earth, The Sun,
stars, fogs, interstellar environment and star systems,
usage of theory of cosmology,
usage of theory of observatories, tools,
devices and methods of astronomical supervisions,
usage of theory of the cognitive modeling technology
in the applications of astronomy,
usage of theory of the cognitive models of the gravitational and other interactions
between 1, 2, 3, 4, 5 - and more artificial
space objects, satellites, planets, The Earth and The Sun,
usage of theory of the cognitive models of the work of the basic rocket engine,
the first, the second, the third and the fourth rocket engine of the launch vehicle and others].

V. “The applied scientific researches department
“Applications of the models, methods and technologies of geology
of oil and gas and the oil and gas industry”” (“SNG”)
*[the applied scientific researches in the area
“Applications of geology of oil and gas”* –
usage of theory of lithology, usage of theory of tectonics,
usage of theory of geological-geo-physical researches of the deep structure of The Earth,
usage of theory of regional geology of deposits,
usage of theory of planetology, usage of theory of stratigraphy,
usage of theory of paleontology, usage of theory of geo-chemistry,
usage of theory of mineralogy, usage of theory of petrography,
usage of theory of experimental and technical mineralogy and petrography
of oil, natural and passing gas,
usage of theory of the methods of laboratory
of mineral-petrographical and geo-chemical researches,
usage of theory of anthropogenic period, usage theory of neo-technics,
usage of theory of geomorphology,
usage of theory of geology of the fields of oil, gas and its condensates,
usage of theory of the methods of search and investigation of the fields of oil and gas,
usage of theory of technics and technology of geological-prospecting works,
usage of theory of hydro-geology, usage of theory of engineering geology of oil and gas,
usage of theory of frozen condition of ground of deposits,
usage of theory of the cognitive modeling technology
in the applications of geology of oil and gas;

the applied scientific researches in the area “Applications of oil and gas industry” – usage of theory of processes and devices of oil and gas technology, usage of theory of oil and gas raw materials, usage of theory of technology of nonorganic substances and products of oil, natural and passing gas, usage of theory of technology of fertilizers production from oil and gas, usage of theory of technology of production of silicate and refractory nonmetallic materials from oil and gas, usage of theory of industrial organic synthesis, usage of theory of industrial synthesis of organic dyes and pigments from oil and gas, usage of theory of technology of production of photographic materials from oil and gas, usage of theory of technology of protection against explosions and the means of chemical protection of oil and gas technology, usage of theory of technology of production of the chemical-pharmaceutical means from oil, natural and passing gas, usage of theory of technology of production of fragrant substances from oil and gas, usage of theory of technology of production of pesticides and disinfectant substances from oil, natural and passing gas, usage of theory of technology of refining of oil, natural and passing gases and its condensates, its products and analogues, motor fuel and lubricants from oil and gas, usage of theory of technology of production of natural high-molecular compounds from oil, natural and passing gas, usage of theory of technology of production of synthetic high-molecular compounds from oil and gas, usage of theory of technology of production of plastics, rubbers and products from oil, natural and passing gas, usage of theory of technology of production of paint-varnish materials and organic coverings from oil and gas, usage of theory of technology of production of chemical fibers and strings from oil and gas, usage of theory of technology of production of chemical reactants and especially clean substances from oil and gas, usage of theory of technology of production of household chemical goods and auxiliary materials from oil, natural and passing gas, usage of theory of the cognitive modeling technology in the applications of oil and gas industry].

VI. “The applied scientific researches department
 ” Applications of the system analysis based on
 the cognitive modeling technology,
 prediction, standardization, unification
 and the complex problems of exact technical sciences” (“SSAP”) (*)
 [*the applied scientific researches in the area
 “Applications of the system analysis”* (*) –
 usage of theory of tendencies, dependences and laws
 of the system analysis of the objects, processes and phenomena,
 usage of theory of the cognitive modeling technology
 with dynamic cloning, verification and subverification,
 usage of theory of the iterative cycle and the technique of use
 of the cognitive modeling technology,
 usage of theory of the parametrical cognitive models block
 for the system analysis of the information-educational environments
 and the increase of efficiency of functioning of the automated training system
 with the properties of adaptation based on the cognitive models
 (the cognitive models of the subject of training and the means of training),
 usage of theory of the ways of representation of the structure
 of the cognitive models and difficult problem environments:
 the formal classical of the 0th generation (the logical and production models),
 the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
 the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
 and the innovative calculus of theory of sets and graphs),
 the nonformal new of the 0th generation (the multi-level structural scheme
 and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
 the flat of the 1st generation (the cognitive circle and the cognitive disc),
 the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
 the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
 cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
 the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithm of formation of the cognitive model structure,
usage of theory of the technique of research of the cognitive model parameters,
usage of theory of the algorithm of analysis of a posteriori results of research,
usage of theory of the adaptive automation means of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
usage of theory of the technical means of support of the adaptive information interaction
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
the linguistic processor and other processors),
usage of theory of the statistical substantiation
of practical use of the received results,
usage of theory of the factors influencing to the efficiency
of knowledge formation in the information-educational environment
and the increase of resultativity of functioning
of the difficult objects, processes and phenomena,
usage of theory of organization and plan of carrying out of the experiment
for the research of parameters of the parametrical cognitive models block,
usage of theory of preliminary processing of a posteriori results of diagnostics,
usage of theory of choice of the statistical analysis methods of the generated data sets,
usage of theory of the analysis of dynamics of the resultativity of training,
usage of theory of the dispersion, regression, discriminant, cluster analysis,
multivariate scaling, factor analysis and bibliographic lists;
the applied scientific researches in the area
“ Applications of standardization ” –
usage of theory of systems and services of standardization,
usage of theory of scientific-methodological support of systems and services of standardization,
usage of theory of the cognitive modeling technology
in the applications of standardization].

VII. “The applied scientific researches department
 “Applications of theoretical and experimental physics, geo-physics,
 power-engineering, electrical-engineering, electronics and radio-engineering,
 nuclear physics, technics and instrument-making” (“SF”) (*)
*[the applied scientific researches in the area
 “ Applications of physics ” (*) –*
 usage of theory of the general problems of physical experiment,
 usage of theory of physics of elementary particles,
 usage of theory of fields (united theory of field),
 usage of theory of physics of high energies, usage of theory of nuclear physics,
 usage of theory of physics of gases and liquids,
 usage of theory of thermal-dynamics and statistical physics,
 usage of theory of physics of firm bodies, usage of theory of physics of plasma,
 usage of theory of physics of atom and molecule,
 usage of theory of optics, usage of theory of laser physics,
 usage of theory of radio-physics,
 usage of theory of the physical bases of electronics, usage of theory of acoustics,
 usage of theory of the cognitive modeling technology
 in the applications of physics,
 usage of theory of the cognitive models of the interaction between
 the elementary particles and firm bodies, fields, liquids and gases,
 usage of theory of the cognitive model of the modified
 volumetric planetary model of atom n. a. Bohr N.H.D.,
 usage of theory of the cognitive models of the temperature areas of plasma of atom and molecule,
 usage of theory of the cognitive model of the optical environment of eye,
 usage of theory of the cognitive model of the acoustical environment of ear,
 usage of theory of the cognitive model of the waves distribution in the environment;

the applied scientific researches in the area “ Applications of geo-physics ” – usage of theory of geo-magnetism in the high layers of atmosphere, usage of theory of meteorology, usage of theory of climatology, usage of theory of oceanography, usage of theory of hydrology of land, usage of theory of glaciology, usage of theory of physics of The Earth, usage of theory of the cognitive modeling technology in the applications of geo-physics ;
the applied scientific researches in the area “ Applications of power-engineering ” – usage of theory of power-resources, usage of theory of power balance, usage of theory of electrical-power-engineering, usage of theory of heating-power-engineering, usage of theory heating-technics, usage of theory of atomic power-engineering, usage of theory of hydro-power-engineering, usage of theory of gelio-power-engineering, usage of theory of wind-power-engineering, usage of theory of direct transformation of energy, usage of theory of the cognitive modeling technology in the applications of power-engineering ;
the applied scientific researches in the area “ Applications of electrical-engineering ” – usage of theory of electrical-engineering, usage of theory of electrical-technical materials, usage of theory of electrical machines, usage of theory of electrical devices, usage of theory of transformers, usage of theory of electrical reactors, usage of theory of power electrical condensers, usage of theory of power converting technics, usage of theory of electrical-drive, usage of theory of electrical-thermics, usage of theory of electrical-welding equipment, usage of theory of wire and cable, usage of theory of electrical isolators, usage of theory of light-engineering, usage of theory of electrical-technical equipment of special purpose, usage of theory of the cognitive modeling technology in the applications of electrical-engineering ;

the applied scientific researches in the area “Applications of electronics and radio-engineering” – usage of the theoretical bases of electronic technics, usage of theory of radio-engineering, usage of theory of materials for electronics and radio-engineering, usage of theory of technology and equipment for the electronic and radio-technical manufacture, usage of theory of designing and constructing of electronic devices and radio-electronic equipment, usage of theory of electrical-vacuum and gas-discharge devices and units, usage of theory of accelerators of charged particles and plasma, usage of theory of solid-state devices, usage of theory of quantum electronics, usage of theory of holography, usage of theory of cryo-electronics, usage of theory of radio-electronic circuits, usage of theory of distribution of radio-waves, usage of theory of antennas, usage of theory of wave-transports, usage of theory of elements of micro-wave technics, usage of theory of radio-transmission and radio-receiving devices, usage of theory of the radio-technical systems of sounding, locations and navigation, usage of theory of television (TV) technics, usage of theory of record and reproduction of signals, usage of theory of electrical-acoustics (theory of waves distribution in the environment), usage of theory of ultra-sonic and infra-sonic technics, usage of theory of infra-red technics, usage of theory of units, details and elements of radio-electronic equipment, usage of theory of devices for the radio-technical measurements, usage of theory of the systems and units of information display, usage of theory of the cognitive modeling technology in the applications of electronics and radio-engineering;

the applied scientific researches in the area “Applications of nuclear technics and instrument-making” ()* – usage of theory of nuclear raw materials and fuel, usage of theory of synthesis of isotopes, usage of theory of isotopes and ionization radiations, usage of theory of nuclear reactors, usage of theory of thermal-nuclear reactors, usage of theory of action of radiations and protection against from them, usage of theory of nuclear explosions, usage of theory of processing of nuclear fuel and waste disposal, usage of theory of the cognitive modeling technology in the applications of nuclear technics and instrument-making, usage of theory of the cognitive models of the structure of the chemical elements with 1, 2, 3, 4, 5 and more nucleuses, usage of theory of the cognitive model of the modified volumetric principle n. a. Pauli W.E. for the studying of electronic clouds within limits of power levels, usage of theory of the cognitive model of the modified planetary model of atom n. a. Bohr N.H.D. and others].

VIII. “The applied scientific researches department “Applications of (non)organic chemistry, crystallography, mineralogy and chemical industry”” (“SH”) (*)
[the applied scientific researches in the area “Applications of chemistry” ()* – usage of theory of basic-laboratory chemical equipment and units, usage of theory of physical chemistry, usage of theory of nonorganic chemistry, usage of theory of complex compounds, usage of theory analytical chemistry, usage of theory of organic chemistry, usage of theory of bio-organic chemistry, usage of theory of natural organic compounds and their synthetic analogues, usage of theory of chemistry of high-molecular compounds, usage of theory of biological chemistry, usage of theory of the cognitive modeling technology in the applications of chemistry, usage of theory of modeling of the structure of (non)organic chemical elements and the chemical elements with 1, 2, 3, 4, 5 and more nucleuses, usage of theory of research of the molecular structure of (non)organic compounds;
the applied scientific researches in the area “Applications of chemical technology and chemical industry” – usage of theory of processes and devices of chemical technology, usage of theory of chemical raw materials, usage of theory of technology of production of nonorganic substances and products, usage of theory of production of fertilizers, usage of theory of technology of production of silicate and refractory nonmetallic materials, usage of theory of industrial organic synthesis, usage of theory of industrial synthesis of organic dyes and pigments,

usage of theory of technology of production of photographic materials,
usage of theory of technology of production
of explosive substances and means of chemical protection,
usage of theory of storage and destruction of chemical weapon,
usage of theory of technology of production of the chemical-pharmaceutical means,
usage of theory of technology of production of fragrant substances,
usage of theory of technology of production of pesticides and disinfectant substances,
usage of theory of processing of natural gases, oil, gas condensate,
their products and analogues, motor fuel and lubricants,
usage of theory of technology of processing of firm combustible minerals,
usage of theory of forestry-chemical manufactures,
usage of theory of technology of production
of natural high-molecular compounds,
usage of theory of technology of production
of synthetic high-molecular compounds,
usage of theory of technology of production of plastic,
usage of theory of technology of production of rubbers and products from them,
usage of theory of technology of production
of paint-varnish materials and organic coverings,
usage of theory of production of technology of chemical fibers and strings,
usage of theory of technology of production of chemical reactants and especially clean substances,
usage of theory of technology of production of household chemical goods products,
usage of theory of technology of production of auxiliary materials,
usage of theory of the cognitive modeling technology
in the applications of chemical technology and chemical industry].

The applied scientific researches directions and departments of "SIO "ACNS""
allow to develop the main and derivative scientific results of CMT.

1.3.2. The applied scientific researches direction “Cognitive modeling in the applied technical sciences and technologies” (“CM in ATS and T”) (“NNT”) of “SIO “ACNS””

The developed “The applied scientific researches direction “Cognitive modeling in the applied technical sciences and technologies”” (“NNT”) treats to the applied scientific researches divisions of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO “ACNS””]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of mining and metallurgy”” (“SGM”)
[*the applied scientific researches in the area “Applications of mining”* – usage of theory of technics and technology of development of the deposits of firm minerals, usage of theory of development of the deposits of ores and ferrous metals, usage of theory of development of the deposits of ores and looses of the color and rare metals and diamonds, usage of theory of development of the deposits of coal and combustible slates, usage of theory of development of the deposits of peat, usage of theory of development of the deposits of building and road materials, fire-resistant, ceramic, glass and mineral technical raw materials, usage of theory of development of the deposits of chemical and agricultural-chemical raw materials and salts, usage of theory of development of the deposits of precious and ornamental stones, usage of theory of enrichment of minerals, usage of theory of development of the oil and gas deposits, usage of theory of the cognitive modeling technology in the applications of mining;
the applied scientific researches in the area “Applications of metallurgy” – usage of theory of metallurgical processes, usage of theory of metallurgical heating-technics, usage of theory of manufacture of ferrous metals and alloys, usage of theory of manufacture of nonferrous metals and alloys, usage of theory of powder metallurgy, usage of theory of semiconductors metallurgy, usage of theory of rolling manufacture, usage of theory of drawing and hardware manufacture, usage of theory of pipes manufacture, usage of theory of metallurgical-science, usage of theory of the technical analysis in metallurgy, usage of theory of the cognitive modeling technology in the applications of metallurgy].

II. “The applied scientific researches department “Applications of the sciences about forestry and wood processing” (“SNL”) [the applied scientific researches in the area “Applications of forestry and wood-processing industry” – usage of theory of wood-science, usage of theory of forestry-cutting works, usage of theory of wood transportation, usage of theory of forestry-timber works, usage of theory of technology and equipment for wood processing, usage of theory of technology of forestry sawmill manufacture, usage of theory of technology of manufacture of joiner-building products, usage of theory of technology of manufacture of plywood and plates, usage of theory of technology of manufacture of blocks, usage of theory of technology of manufacture of furniture, usage of theory of technology of manufacture of matches, usage of theory of technology of manufacture of wooden container, usage of theory of technology of special wood-processing manufactures, usage of theory of technology of pulp-paper industry, usage of theory of the cognitive modeling technology in the applications of forestry and wood-processing industry; the applied scientific researches in the area “Applications of forestry economy” – usage of theory of forestry-economy biology, usage of theory of soil-science, usage of theory of agriculture, usage of theory of forestry-economy melioration, usage of theory of agro-chemistry, usage of theory of plant-science, usage of theory of protection of forestry-economy plants, usage of theory of animal-industry, usage of theory of veterinary-science, usage of theory of preparation of production of forestry economy, usage of theory of hunting and hunting economy, usage of theory of forestry economy, usage of theory of economics and organization of forestry economy, usage of theory of mechanization and electrification of forestry economy, usage of theory of the cognitive modeling technology in the applications of forestry economy].

III. “The applied scientific researches department
 ”Applications of the noo-sphere knowledge and technologies:
 the (heavy) mechanical-engineering, instrument-making, polygraphy,
 reprography and photo-cinema-technics, the light and food-processing industry,
 transport, architecture, construction and other branches” (“SNZT”) (*)
*[the applied scientific researches in the area
 “Applications of mechanical-engineering”* –
 usage of theory of machine-engineering-science and details of machines,
 usage of theory of mechanical-engineering materials,
 usage of theory of technology of mechanical-engineering,
 usage of theory of foundry production,
 usage of theory of forge-stamp manufacture,
 usage of theory of assembly manufacture, usage of theory of cutting of materials,
 usage of theory of electrical-physical-chemistry processing,
 usage of theory of thermal and strengthening powder materials,
 usage of theory of manufacture of nonmetallic products,
 usage of theory of machine-tool-construction, usage of theory of robotics,
 usage of theory of tool manufacture,
 usage of theory of mining mechanical-engineering,
 usage of theory of metallurgical mechanical-engineering,
 usage of theory of reactor-construction, usage of theory of turbine-construction,
 usage of theory of special power-engineering installations,
 usage of theory of chemical and oil mechanical-engineering,
 usage of theory of locomotive-construction and carriage-building,
 usage of theory of engine-construction, usage of theory of motor-car-industry,
 usage of theory of ship-building, usage of theory of aircraft-construction,
 usage of theory of space technics and rocket-production,
 usage of theory of hoisting-transport mechanical-engineering,
 usage of theory of building and road mechanical-engineering,
 usage of theory of municipal mechanical-engineering,
 usage of theory of tractor and agricultural mechanical-engineering,
 usage of theory of mechanical-engineering for the light industry,
 usage of theory of polygraphic mechanical-engineering,
 usage of theory of mechanical-engineering for the food-processing industry,
 usage of theory of mechanical-engineering for the trade and public catering,
 usage of theory of household machines and devices, usage of theory of manufacture of weapon,
 usage of theoretical bases of the other branches of mechanical-engineering,
 usage of theory of the cognitive modeling technology
 in the applications of mechanical-engineering;

the applied scientific researches in the area
“ Applications of instrument-making ” –
usage of theoretical bases of instrument-making,
usage of theory of general technology of production and equipment in instrument-making,
usage of theory of designing and constructing of devices,
usage of theory of devices for the measurement of electrical and magnetic sizes,
usage of theory of devices for the measurement of mechanical sizes,
usage of theory of devices for the measurement of time and frequency,
usage of theory of devices for the measurement
of the structure and physical-chemical properties of substances and materials,
usage of theory of devices for the heating-technical and heating-physical measurements,
usage of theory of devices for the measurement of acoustic sizes and characteristics,
usage of theory of devices for the measurement
of optical and lighting-technical sizes and characteristics,
usage of theory of devices for the measurement of ionization radiations,
usage of theory of devices of non-destroying control of products and materials,
usage of theoretical bases of the general structural elements,
units of measuring devices, systems and means of office-equipment,
usage of theory of the cognitive modeling technology
in the applications of instrument-making;
the applied scientific researches in the area
“Applications of polygraphy, reprography and photo-cinema-technics” –
usage of theory of polygraphy, reprography and photo-cinema-technics,
usage of theory of the cognitive modeling technology
in the applications of polygraphy, reprography and photo-cinema-technics;
the applied scientific researches in the area
“ Applications of light industry ” –
usage of theory of textile industry,
usage of theory of knitted industry,
usage of theory of clothing industry,
usage of theory of tanning industry,
usage of theory of fur industry,
usage of theory of industry of artificial leather and film materials,
usage of theory of shoe industry,
usage of theory of leather-haberdashery industry,
usage of theory of bristle-brush manufacture,
usage of theory of manufacture of accessories,
usage of theory of the cognitive modeling technology
in the applications of light industry;

the applied scientific researches in the area
“Applications of food-processing industry” – usage of theory of food raw materials and auxiliary materials, usage of theory of the processes and devices of food manufactures, usage of theory of (grain-)elevator and flour(-grinding)-sereals(croup) industry, usage of theory of mixed-fodder industry, usage of theory of baking and macaroni industry, usage of theory of confectionery industry, usage of theory of sugar industry, usage of theory of starched-treacle industry, usage of theory of barmy industry, usage of theory of brewing industry, usage of theory of spirituous industry, usage of theory of the industry of high-alcohol drinks, usage of theory of wine-making (vinous) industry, usage of theory of the industry of without-alcohol (soft) drinks, usage of theory of canning, vegetable-drying and food-concentrate industry, usage of theory of food-gustatory industry, usage of theory of tobacco industry, usage of theory of meat and bird-fancier-processing-industry, usage of theory of the manufacture of eggs and egg products, usage of theory of dairy (milk) industry, usage of theory of butter-fatty (creamery) industry, usage of theory of the cognitive modeling technology in the applications of food-processing industry;
the applied scientific researches in the area
“Applications of architecture and construction” (*) – usage of the engineering-theoretical bases of architecture and construction, usage of theory of building materials and products, usage of theory of building constructions, usage of theory of technology of building-installation works, usage of theory of technology of production of building materials and products, machines, mechanisms, equipment and tools, used in the construction and industry of building materials, usage of theory of engineering researches in construction, usage of theory of architectural-building designing, usage of theory of regional (district) lay-out, usage of theory of town-planning, usage of theory of objects of construction and engineering support of objects of construction, usage of theory of tendencies, dependences and laws in architecture and construction, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology,

usage of theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the algorithm of formation of the cognitive model structure, usage of theory of the technique of research of the cognitive model parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of the adaptive automation means of architecture and construction (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others), usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of construction of the buildings and constructions, usage of theory of organization and plan of carrying out of the experiment, usage of theory of the research of parameters of the parametrical cognitive models block, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of construction, usage of theory of the dispersion, regression, discriminant, cluster analysis, multivariate scale analysis, factor analysis and bibliographic lists; *the applied scientific researches in the area "Applications of transport"* – usage of theory of railway transport, usage of theory of motor-car transport, usage of theory of sea transport, usage of theory of air transport, usage of theory of pipeline transport, usage of theory of industrial transport, usage of theory of municipal transport, usage of theory of interaction of the different kinds (types) of transport, usage of theory of mixed transportations, usage of theory of the other kinds (types) of transport, usage of theory of the cognitive modeling technology in the applications of transport].

IV. “The applied scientific researches department “Applications of the scientific problems of agro-industrial complex” (“SNPAK”) [the applied scientific researches in the area “Applications of agriculture and hunting economy – usage of theory of agricultural biology, usage of theory of soil-science, usage of theory of agriculture, usage of theory of agricultural melioration, usage of theory of agro-chemistry, usage of theory of plant-growing, usage of theory of protection of agricultural plants, usage of theory of animal-industry, usage of theory of veterinary-science, usage of theory of preparation of the production of agriculture, usage of theory of hunting and hunting economy, usage of theory of forestry economy, usage of theory of economics and organization of agriculture, usage of theory of mechanization and electrification of agriculture, usage of theory of the cognitive modeling technology in the applications of agriculture and hunting economy; the applied scientific researches in the area “Applications of fish economy and aqua-culture” – usage of theory of biological resources of the world ocean and internal reservoirs, usage of theory of aqua-culture, usage of theory of fish-breeding, usage of theory of industrial fishery, usage of theory of technical operation of fleet of fishing industry, usage of theory of technical operation of fish seaports, usage of theory of technology of processing of the raw materials of water origin, usage of theory of equipment for the fish-processing industry, usage of theory of the cognitive modeling technology in the applications of fish economy and aqua-culture; the applied scientific researches in the area “Applications of water economy” – usage of theory of scientific bases of water economy, usage of theory of water-economy construction, usage of theory of hydro-technical and hydro-ameliorative constructions, usage of theory of irrigating and water supply, usage of theory of irrigating systems, usage of theory of drying systems, usage of theory of sewage water, their clearing and use, usage of theory of quality of water, usage of theory of test, measurement and control in the water economy, usage of theory of mechanization and automation in the water economy, usage of theory of complex use of water resources, usage of theory of the cognitive modeling technology in the applications of water economy].

The applied scientific researches directions and departments of “SIO “ACNS”” allow to develop the main and derivative scientific results of CMT.

1.3.3. The applied scientific researches direction “Cognitive modeling in the geo-political sciences and researches” (“CM in G-PS and R”) (“NSGI”) of “SIO "ACNS"”

The developed “The applied scientific researches direction “Cognitive modeling in the geo-political sciences and researches”” (“NSGI”) treats to the applied scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of geo-politics and safety”” (“SGB”)
[*the applied scientific researches in the area “Applications of demography”* – usage of theory and methodology of demographical science, usage of theory of the general problems of national-population, usage of theory of statistics of population, usage of theory of history of population, usage of theory of historical demography, usage of theory of moving of population, usage of theory of geographical demography, usage of theory of population of the world, usage of theory of the cognitive modeling technology in the applications of demography;
the applied scientific researches in the area “Applications of politics and political sciences” – usage of theory and methodology of political researches, usage of theory of history of political doctrines, usage of theory of political systems, usage of theory of internal politics, usage of theory of international relations, usage of theory of foreign (external) politics and diplomacy, usage of theory of the cognitive modeling technology in the applications of politics and political sciences;

the applied scientific researches in the area “Applications of complex studying of separate countries and regions” – usage of theory of researches of RF as a particular and RF as a whole, usage of theory of The North-Western federal district of RF, usage of theory of The Central federal district of RF, usage of theory of The Privolgsky federal district of RF, usage of theory of The Southern federal district of RF, usage of theory of The Uralian federal district of RF, usage of theory of The Siberian federal district of RF, usage of theory of The Far-Eastern federal district of RF, usage of theory of the areas and territories of the former USSR, usage of theory of the Baltic countries and Baltic, usage of theory of the countries of CIS of Eastern Europe, usage of theory of the countries of CIS of Zacaucasia, usage of theory of the countries of CIS of Central Asia, usage of theory of Europe as a whole, usage of theory of Western Europe, usage of theory of Southern Europe, usage of theory of Central Europe, usage of theory of Eastern Europe as a whole, usage of theory of Scandinavia and the Scandinavian countries, usage of theory of Asia as a whole, usage of theory of Forward Asia, usage of theory of Eastern Asia, usage of theory of Southern Asia, usage of theory of South-Eastern Asia, usage of theory of Central Asia, usage of theory of Near and Middle East, usage of theory of Africa as a whole, usage of theory of Northern Africa, usage of theory of Eastern Africa, usage of theory of Central Africa, usage of theory of Western Africa, usage of theory of Southern Africa, usage of theory of America as a whole, usage of theory of USA and Canada, usage of theory of Central America, usage of theory of Southern America, usage of theory of Australia and the countries of Oceania, usage of theory of the polar areas – the Arctic and Antarctic areas, usage of theory of surface of The Earth and land, oceans, seas and internal waters, usage of theory of the other physical-geographical features of The Earth, usage of theory of the cognitive modeling technology in the applications of complex studying of separate countries and regions; *the applied scientific researches in the area “Applications of problems of space flights”* – usage of theory of use of the space systems for connection and navigation, usage of theory of studying of extraterrestrial territories and prospects of astronautics, usage of theory of research of The Earth and astronomical objects by the space automation means from space, usage of theory of the cognitive modeling technology in the applications of problems of space flights].

II. “The applied scientific researches department “Applications of classical and military history”” (“SVIT”)
[the applied scientific researches in the area “Applications of history” – usage of theory of general history, usage of theory of history of Azerbaijan, usage of theory of history of Armenia, usage of theory of history of Belorussia, usage of theory of history of Georgia, usage of theory of history of Kazakhstan, usage of theory of history of Kirghizia, usage of theory of history of Moldova, usage of theory of history of RF, usage of theory of history of Tajikistan, usage of theory of history of Turkmenia, usage of theory of history of Uzbekistan, usage of theory of history of Ukraine, usage of theory of history of the separate processes, parties and phenomena of human activity, usage of theory of the cognitive modeling technology in the applications of history of RF and countries of near abroad;
the applied scientific researches in the area “Applications of history of Ancient world, Ancient Greece and Ancient Rome, history of Medieval Europe, history of USA, Australia and Oceania, history of Arctic and Antarctic, history of RF, modern history of USSR, newest history of RF, history of The Solar system and planets” – usage of theory of history of Ancient world, Ancient Greece and Ancient Rome, usage of theory of history of Medieval Europe, usage of theory of history of USA, Australia and Oceania, usage of theory of history of Arctic and Antarctic, usage of theory of history of RF, usage of theory of modern history of USSR, usage of theory of newest history of RF, usage of theory of history of The Solar system and planets, usage of theory of the cognitive modeling technology in the applications of history of RF and countries of far abroad].

The applied scientific researches directions and departments of “SIO “ACNS”” allow to develop the main and derivative scientific results of CMT.

1.3.4. The applied scientific researches direction

“Cognitive modeling in the society steady development of post-industrial country”

(“CM in SSDP-IC”) (“NURS”) of “SIO "ACNS"”

The developed “The applied scientific researches direction “Cognitive modeling in the society steady development of post-industrial country”” (“NURS”) treats to the applied scientific researches divisions of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO “ACNS””]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The applied scientific researches department “Applications of the complex problems of country development” (“SPUR”) (*)
[the applied scientific researches in the area “Applications of economic problems of national economy management” – usage of theory of self-financing, usage of theory of economic stimulation, usage of theory of manpower resources, usage of theory of the cognitive modeling technology in the applications of economic problems of national economy management;

the applied scientific researches in the area
“Applications of the global philosophical problems, philosophical and methodological problems of sciences and scientific knowledge as a whole” (*) – usage of theory of modern philosophy, usage of theory of dialectical logic, usage of theory of social sciences, usage of theory of modern social philosophy, usage of theory of modern sociology, usage of theory of demography and people-population, usage of theory of world economy and economics, usage of theory of grammar and applied science of language, usage of theory of art and art-science, usage of theory of artificial intelligence, usage of theory of biological chemistry, usage of theory of regional-geography (country-science), usage of theory of economic and social geography, usage of theory of toponymics, usage of theory of astro-physics, usage of theory of pharmacology and chemo-therapy, usage of theory of normal and pathological physiology, usage of theory of genetic engineering, usage of theory of bio-technology, usage of theory of agriculture, usage of theory of medicine and public-health-services, usage of theory of technical aesthetics and ergonomics, usage of theory of preservation of environment, usage of theory of the global-ethic and global-esthetic categories and problems, usage of theory of social activity and social problems, usage of theory of sociological problems of printing, television and radio-broadcasting, usage of theory of influences of anthropogenic changes of environment on the health and social-labor potential of population, usage of theory of the world economic development, usage of theory of activity of international economic organizations and associations, usage of theory of economic development and growth, usage of theory of prediction and planning of economics, usage of theory of economic cycles and crises, usage of theory of the social and economic problems of development of the advanced and less developed countries, usage of theory of economic problems of organization and management of the economy of the country, usage of theory of the problems of functioning of the market economy and the social-economic problems of labor,

usage of theory of legal problems of environment preservation and ecological law,
usage of theory of economic problems of politics,
usage of theory of general problems of political systems
at socialism in the advanced and less developed countries,
usage of theory of the foreign(external)-political aspects of global problems,
usage of theory of the problems of war and peace,
usage of theory of the means of sanction of international conflicts,
usage of theory of problems of disarmament and anti-war movement,
usage of theory of movement of non-alignment,
usage of theory of the international, federal, regional and local problems,
usage of theory of international terrorism,
usage of theory of the separate philosophical-theoretical problems of culture,
usage of theory of sociological problems of motion-picture-art,
usage of theory of religious consciousness,
usage of theory of relation of church and philosophical-theological schools
to the problem of war and peace,
usage of theory of philosophy of mutual-relations of religion and army,
usage of theory of relation of religions and churches
to the national-liberation movement, national and racial problems,
usage of theory of the general problems of physical experiment,
usage of theory of the physical problems of mechanics,
usage of theory of the bio-chemical problems,
usage of theory of the problems of safety of biological experiment,
usage of theory of micro-molecular associations
and problems of recognition in molecular biology,
usage of theory of the general problems of anthropogenesis in paleo-anthropology and archeology,
usage of theory of the general problems of researches of The Sun, The Earth,
stars, fogs and interstellar environment,
atmosphere, chromosphere, crown, near-star environments,
usage of theory of the problems of loss of weight of stars and star wind,
usage of theory of the general problems of researches of stars,
usage of theory of problematic rests,
usage of theory and problematics of programming for the computer networks,
usage of theory of the general problems of automation of designing,
usage of theory of the general problems of researches,
calculations and designing in the mining mechanical-engineering,

usage of theory of the general problems of household radio-electronic equipment, usage of theory of genetic engineering for the decision of problem of bio-degradation, usage of theory of the sociological, demographical and psychological problems in construction, usage of theory of the general problems of melioration of agricultural grounds, usage of theory of the social-economic problems in countryside, usage of theory of the medical problems of space flights, usage of theory of the political problems of sports and sports single-kind-combats, the game kinds of sport, the kinds of speed-involving-strength sport, the kinds of complicated-coordinated sport, the technical kinds of sport and the cyclical kinds of sport, usage of theory of the general problems of war, usage of theory of training of staff, usage of theory of the problems of material interest of workers, usage of theory of the problems of material-technical supply, usage of theory of the problems of fire safety, usage of theory of information about the centres on studying of the problems of management, usage of theory of the general problems of prediction, usage of theory of role of the separate areas of knowledge in the decision of problems of environment and use of natural resources, usage of theory of the general problems of international cooperation, usage of theory of the problems of sorption and auto-purification of waters, usage of theory of the complex and regional problems of protection of waters, bowels, landscape and waste management, usage of theory of materials describing the research of space environment as a whole and interrelation of this problem with the other sciences and spheres of activity, usage of theory of the general problems and prospects of development of the methods of space researches, safety and the medical-biological problems of space flights, usage of theory of the general problems and principles of work of the space connection systems, usage of theory of the problems of development of extraterrestrial territories and prospects of astronautics, usage of theory of the nonconventional problems of researches of space environment, usage of theory of the cognitive modeling technology in the applications of global-philosophical problems, philosophical and methodological problems of science and scientific knowledge as a whole;

the applied scientific researches in the area “Applications of the complex problems of social sciences” – usage of theory of social-political idea, usage of theory of the global problems and labor, usage of theory of the cognitive modeling technology in the applications of the complex problems of social sciences;

the applied scientific researches in the area “Applications of the general and complex problems of technical and applied sciences and national economy branches” – usage of theory of materiology (materials-science), usage of theory of general technology of production, usage of theory of designing, usage of theory of construction, usage of theory of the flexible industrial systems, usage of theory of vacuum technics, usage of theory of cryogenic technics, usage of theory of corrosion and protection against corrosion, usage of theory of welding, usage of theory of optical manufacture, usage of theory of staff, usage of theory of control and management of quality, usage of theory of installation, operation and repair of industrial equipment, usage of theory of material-technical supply, usage of theory of logistics, usage of theory of warehouse economy, usage of theory of container and packing, usage of theory of secondary raw materials, usage of theory of fire safety, usage of theory of safety, usage of theory of salvage-rescue services, usage of theory of technical aesthetics and ergonomics, usage of theory of protection of information, usage of theory of the cognitive modeling technology in the applications of the general and complex problems of technical and applied sciences and national economy branches;

the applied scientific researches in the area “Applications of the general and complex problems of natural and exact sciences” – usage of theory of the materials of general character, usage of theory of scientific and technical societies, conventions, congresses, conferences, symposiums, seminars and exhibitions, usage of theory of classical and modern terminology, usage of theory of reference books and educational literature, usage of theory of the cognitive modeling technology in the applications of the general and complex problems of natural and exact sciences].

The applied scientific researches directions and departments of “SIO "ACNS”” allow to develop the main and derivative scientific results of CMT.

1.3.5. The applied scientific researches direction

“Cognitive modeling

in the social-economic and jurisprudential sciences”

(“CM in S-E and JS”) (“NSEPP”) of “SIO "ACNS"”

The developed “The applied scientific researches direction “Cognitive modeling in the social-economic and jurisprudential sciences”” (“NSEPP”) treats to the applied scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The applied scientific researches department “Applications of the inter-branch jurisprudential and economic system researches of society and country”” (“SMEESI”) [*the applied scientific researches in the area “Applications of state, law and jurisprudential sciences”* – usage of theory of state and law, usage of theory of history of state and law, usage of theory of history of political and legal doctrines, usage of theory of constitutional (state) law, usage of theory of municipal law, usage of theory of administrative law, usage of theory of information law, usage of theory of financial law, usage of theory of enterprise law, usage of theory of civil law, usage of theory of civil-procedural law (civil process), usage of theory of arbitration-procedural law (arbitration process), usage of theory of patent law, usage of theory of industrial property law, usage of theory of copyright and adjacent rights, usage of theory of succession law, usage of theory of family law,

usage of theory of agrarian law, usage of theory of the legal problems of environment preservation, usage of theory of ecological law, usage of theory of ground law, usage of theory of forestry law, usage of theory of water law, usage of theory of aerial-protection law, usage of theory of legislation about bowels, usage of theory of legislation about the fauna world, usage of theory of labor law, usage of theory of law of social support, usage of theory of law-enforcement authorities, usage of theory of criminal law, usage of theory of criminal-procedural law (criminal process), usage of theory of criminology, usage of theory of criminal-executive law, usage of theory of penitentiary, usage of theory of criminalistics, usage of theory of judicial statistics, usage of theory of international law, usage of theory of international private law, usage of theory of state and law of separate countries, usage of theory of the cognitive modeling technology in the applications of state, law and jurisprudential sciences; *the applied scientific researches in the area "Applications of patent business, invention and rationalization work"* – usage of theory of patent-information work, usage of theory of invention and rationalization activity, usage of theory of patent-license work, usage of theory of the technical-economic analysis on patent materials, usage of theory of invention law, usage of theory of the cognitive modeling technology in the applications of patent business, invention and rationalization work; *the applied scientific researches in the area "Applications of international economic relations"* – usage of theory of prediction and planning, usage of theory of economic cycles and crises, usage of theory of productive forces and social-economic structure, usage of theory of reproductive structure of economics, usage of theory of accumulation and consumption, usage of theory of well-being, usage of theory of territorial (local), regional (subject of federation), state (federal) and branch structure of economics, usage of theory of the cognitive modeling technology in the applications of international economic relations].

II. “The applied scientific researches department
“Applications of the complex problems of micro-(macro-)economics,
social sphere and market economy of the country”” (“SPMSRH”)
*[the applied scientific researches in the area
“Applications of internal trade and tourist-excursion service”* –
usage of theory of wholesale trade and retail trade,
usage of theory of public catering, usage of theory of hotel economy,
usage of theory of tourist-excursion service,
usage of theory of the cognitive modeling technology
in the applications of internal trade and tourist-excursion service;
*the applied scientific researches in the area
“Applications of external trade”* –
usage of theory of communication of the external trade with manufacture,
usage of theory of the general questions of external trade,
usage of theory of the external-trade politics,
usage of theory of the kinds of external trade,
usage of theory of the structure of external trade,
usage of theory of calculations on the external-trade operations,
usage of theory of the external-trade transportations,
usage of theory of the world commodity markets,
usage of theory of international agreements about trade,
usage of theory of international contracts,
usage of theory of international trading organizations,
usage of theory of commodity agreements,
usage of theory of organization and management of external trade,
usage of theory of the cognitive modeling technology
in the applications of external trade;
*the applied scientific researches in the area
“Applications of housing-communal economy,
housekeeping and household services”* –
usage of theory of housing economy,
usage of theory of communal economy,
usage of theory of consumer services, usage of theory of housekeeping,
usage of theory of the cognitive modeling technology
in the applications of housing-communal economy,
housekeeping and household services;

the applied scientific researches in the area
“ Applications of insurance ” –
usage of theory of the state social insurance,
usage of theory of the funds of social support and social insurance,
usage of theory of the external-trade insurance,
usage of theory of statistics of social insurance,
usage of theory of the cognitive modeling technology
in the applications of insurance;
the applied scientific researches in the area
“Applications of investment and investment projects” –
usage of theory of concentration of capital,
usage of theory of the financial-industrial groups,
usage of theory of investment institutes,
usage of theory of the legal bases of investment activity,
usage of theory of the cognitive modeling technology
in the applications of investment and investment projects;
the applied scientific researches in the area
“ Applications of social transport ” –
usage of theory of social railway transport,
usage of theory of social motor-car transport,
usage of theory of social water transport,
usage of theory of social air transport,
usage of theory of social pipeline transport,
usage of theory of social industrial transport,
usage of theory of social municipal transport,
usage of theory of interactions of the different kinds (types) of social transport,
usage of theory of mixed social transportations,
usage of theory of the other kinds (types) of social transport,
usage of theory of the cognitive modeling technology
in the applications of social transport].

III. “The applied scientific researches department
“Applications of economics, management,
sociology, statistics and their other branches”” (“SES”)
*[the applied scientific researches in the area
“Applications of economics and economic sciences”* –
usage of economic theory, usage of theory of history of economic idea,
usage of theory of accounting-economic sciences,
usage of theory of the sciences of management of economics,
usage of theory of economic history,
usage of theory of world economy,
usage of theory of international economic relations,
usage of theory of economic development and growth,
usage of theory of prediction and planning of economics,
usage of theory of economic cycles and crises,
usage of theory of productive forces and scientific-technical progress,
usage of theory of social-economic structure,
usage of theory of the reproductive structure of economics,
usage of theory of accumulation and consumption, usage of theory of well-being,
usage of theory of the territorial structure of economics,
usage of theory of regional and municipal economics,
usage of theory of the branch structure of economics,
usage of theory of financial science, usage of monetary and tax theories,
usage of theory of credit-financial institutes (institutional intermediaries),
usage of theory of the economic problems
of organization and management of the economy of the country,
usage of theory of self-financing, usage of theory of economic incentives provision,
usage of theory of economics of labor, usage of theory of manpower resources,
usage of theory of economics and organization of enterprise,
usage of theory of management of enterprise,
usage of theory of economics of the separate countries,
usage of theory of the cognitive modeling technology
in the applications of economics and economic sciences;
*the applied scientific researches in the area
“Applications of organization and management”* –
usage of theory and methodology of management,
usage of theory of the state and administrative management,
usage of theory of organization of economics management,
usage of theory of social management,
usage of theory of prediction, usage of theory of futurology,
usage of theory of strategical management,
usage of theory of strategical planning,
usage of theory of the cognitive modeling technology
in the applications of organization and management;

the applied scientific researches in the area “Applications of the other branches of economics” – usage of theory of manufacture of musical instruments, usage of theory of manufacture of fine-art products, usage of theory of jeweler industry, usage of theory of manufacture of toys, usage of theory of manufacture of sports products, usage of theory of manufacture of writing goods, usage of theory of the cognitive modeling technology in the applications of the other branches of economics;

the applied scientific researches in the area “Applications of sociology” – usage of theory of the general problems of modern sociology, usage of theory of methodology of sociology, usage of theory of technique and technics of sociological researches, usage of theory of society as the system, usage of theory of social relations and processes, usage of theory of social classes, usage of theory of communities and groups, usage of theory of sociology of the spheres of social life, usage of theory of social phenomena and institutes, usage of theory of sociology of personality and behavior, usage of theory of historical and regional sociology, usage of theory of (applied) sociology, usage of theory of history of sociology, usage of theory of the cognitive modeling technology in the applications of sociology;

the applied scientific researches in the area “Applications of statistics” – usage of theory of general statistics, usage of theory of economic statistics, usage of theory of branch statistics, usage of theory of social statistics, usage of theory of international statistics, usage of theory of statistics of the separate countries and social-economic systems, usage of theory of organization and management of statistics, usage of theory of the methods and technical means of gathering, processing and analysis of the statistical information, usage of theory of the cognitive modeling technology in the applications of statistics].

IV. “The applied scientific researches department
“Applications of the financial analysis,
accounting and audit of the (credit) organization
based on the cognitive modeling technology”” (“SFABUA”) (*)
*[the applied scientific researches in the area
“Applications of the financial analysis, accounting and audit”* (*) –
usage of theory of the general questions of the financial analysis, accounting and audit,
usage of theory of tendencies, dependences and laws
of the financial analysis of the objects, processes and phenomena,
usage of theory of the system, information and cognitive approaches in economics,
usage of theory of the structure and dynamics of functioning
of the financial market of the economic system of the country,
usage of theory of the global purposes of standardization of the accounting
and the problems of unification of the accounting reporting-documentation (the primary registers),
usage of theory of the institutional subjects regulating
the creation, distribution and use of the international standards,
usage of theory of the principles of creation, distribution and use
of the international standards of the financial and accounting reporting-documentation,
usage of theory of the basic methods of transformation of the financial reporting-documentation
prepared by the national standards into the reporting-documentation by the international standards,
usage of theory of formation of the accounting balance
by the international standards of the financial reporting-documentation,
usage of theory of the qualifying tests of the professional participants
of the financial system of the (developed) country,
usage of theory of the administrative-legal forms of existence of the managing subject,
usage of theory of the features of procedure of the financial analysis of the managing subject,
usage of theory of the organizational structure of enterprise and its features
(the educational establishment of the system of education and the information-educational environment),
usage of theory of inflationary depreciation,
usage of theory of discounting and compounding
of the monetary streams in the economic system of the country,
usage of theory of the indexes of dynamics of the financial market and tools,
usage of theory of dynamics and communications of the managing subjects,
usage of theory of investment and innovative politics
of the managing subject in the financial system of the country,
usage of theory of the organizational, technological, scientific, methodical,
normative-legal, information, hardware, software, brainware,
raw, warehouse, personnel and economic preparations of manufacture
and the bases of the financial analysis and the quality estimation
of activity of the credit and other organization,

usage of theory of requirements and the structure of financial documents of the (non)industrial organizational structures, usage of theory of the additional elements of the accounting and the financial reporting-documentation of the credit organization, usage of theory of the consumers of the financial reporting-documentation, usage of theory of the elements of the financial reporting-documentation connected with the changes of financial and economic activity, usage of theory of the simple and consolidated accounting and financial reporting-documentation, usage of theory of the methods of the financial analysis of the different forms of reporting-documentation, usage of theory of the structure of accounts of the accounting and financial analysis, usage of theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, usage of theory of the scheme of carrying out of the auditor check, the financial analysis and audit, usage of theory of the external and internal control of activity of the different organizations, usage of theory of the kinds of bank operations, usage of theory of the structure of the accounting balance (form №1), usage of theory of the structure of the explanatory note to the accounting balance, usage of theory of the structure of the report about profits and losses (form №2), usage of theory of the structure of the explanatory note to the report about profits and losses, usage of theory of the structure of the report about the change of capital (form №3), usage of theory of the structure of the report about the movement of monetary resources on accounts (form №4), usage of theory of the structure of the explanatory note to the report about the movement of means, usage of theory of the structure of the appendices to the accounting balance (form №5), usage of theory of the structure of the report about the target use of received means (form №6), usage of theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserve system of USA, usage of theory of the analysis of stability of the credit organization and commercial bank, usage of theory of the basic analytical coefficients of the financial analysis, usage of theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology, usage of theory of the technique of formation of the normative-legal and the information basis for the financial analysis of the organization, usage of theory of the technique of additional check of the information basis of the financial analysis, usage of theory of the technique of creation and updating of the working plan of accounts and the model of accounting, usage of theory of the technique of carrying out of the financial analysis of the organization condition,

usage of theory of the parametrical cognitive models block for the financial analysis and the increase of efficiency of functioning of the objects, processes and phenomena, usage of theory of the cognitive models structure for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the algorithm of formation of the cognitive model structure, usage of theory of the technique of research of the cognitive model parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of formation and calculation of the units of the accounting balance of the industrial and nonproductive organization, usage of theory of calculation of the cognitive models parameters for the vertical, horizontal and trends static and dynamic financial analysis of the (credit) organization in the conditions of definiteness and uncertainty, usage of theory of software for the automation of research tasks, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of functioning of the (credit) organization in the economic system, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the cognitive models parameters for the vertical, horizontal and trend financial analysis, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the financial analysis of the dynamics of resultativity of the financial-economy activity of the (credit) organization, usage of theory of the dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists].

The applied scientific researches directions and departments of "SIO "ACNS"" allow to develop the main and derivative scientific results of CMT.

1.3.6. The applied scientific researches direction “Cognitive modeling in the biological and medical sciences” (“CM in B and MS”) (“NBME”) of “SIO "ACNS"”

The developed “The applied scientific researches direction “Cognitive modeling in the biological and medical sciences”” (“NBME”) treats to the applied scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI"” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The applied scientific researches department “Applications of biology, ecology and physiology of plants”” (“SBE”)
[the applied scientific researches in the area “ Applications of biology ” – usage of theory of the methods and equipment of biological researches, usage of theory of biology of plants, usage of theory of molecular biology of plants, usage of theory of bio-physics of plants, usage of theory of cytology of plants, usage of theory of embryology of plants, usage of theory of genetics of plants, usage of theory of virology of plants, usage of theory of micro-biology of plants, usage of theory of botany of plants, usage of theory of physiology of plants, usage of theory of zoology of plants, usage of theory of ecology of plants, usage of theory of anthropology of plants, usage of theory of communication of physiology of plants, person and animals, usage of theory of communication of morphology of plants, person and animals, usage of theory of immunology of plants, usage of theory of pharmacology of plants, usage of theory of toxicology of plants, usage of theory of radiation biology of plants, usage of theory of space biology of plants, usage of theory of bionics of plants, usage of theory of bio-cybernetics of plants, usage of theory of bio-engineering of plants, usage of theory of the cognitive modeling technology in the applications of biology ;

the applied scientific researches in the area “Applications of environment preservation and ecology of plants” – usage of theory and methods of studying and preservation of environment, usage of theory of the ecological bases of use of the natural resources, usage of theory of international cooperation, usage of theory of contamination of environment, usage of theory of control of pollution, usage of theory of pollution and protection of atmosphere, usage of theory of pollution, usage of theory of protection of waters of land, seas and oceans, usage of theory of protection of soils, usage of theory of protection of bowels, usage of theory of the ecological bases of live-ability of plants, usage of theory of influence of the anthropogenic changes of environment on the health and vegetative potential of plants, on the condition of natural ecosystems, populations and organisms of the flora world, usage of theory of protection of the flora world, usage of theory of the anthropogenic influence on landscape, usage of theory of protection and optimization of landscape, usage of theory of reserved affair, usage of theory of protected natural territories and water-areas, usage of theory of acts of nature and accidents of anthropogenic origin, usage of theory of ecological safety, usage of theory of rational use of natural resources, usage of theory of reproduction of natural resources, usage of theory of preservation of environment and natural resources in the separate regions and countries, usage of theory of management of wastes, usage of theory of small-waste and without-waste technology, usage of theory of protection against from the noise, vibration, electrical and magnetic fields and radiations, usage of theory of the cognitive modeling technology in the applications of environment preservation and ecology of plants; *the applied scientific researches in the area “Applications of medicine and public-health-services”* – usage of theory of medical-biological disciplines, usage of theory of medical materials, means and products, usage of theory of medical technics, usage of theory of clinical medicine, usage of theory of pharmacology, usage of theory of hygiene, usage of theory of epidemiology, usage of theory of the other branches of medicine and public-health-services, usage of theory of social hygiene, usage of theory of organization and management of public-health-services, usage of theory of the cognitive modeling technology in the applications of medicine and public-health-services].

II. “The applied scientific researches department “Applications of bio-technology, bio-medicine, ergonomics and labor safety of organic individuals”” (“SB”) (*)
[the applied scientific researches in the area “Applications of bio-technology” ()* – usage of theory of raw materials and producents for the bio-technological manufacture, usage of theory of bio-technological processes and devices, usage of theory of cellular engineering, usage of theory of technological bio-energetics, usage of theory of genetic engineering, usage of theory of enzymological engineering, usage of theory of the immuno-bio-technological methods of analysis, usage of theory of the other problems of bio-technology, usage of theory of the cognitive modeling technology in the applications of physical-chemical bio-technology and genetic engineering, usage of theory of modeling of the structure of desoxyribonucleic acid based on the multidimensional cognitive cylinder;
the applied scientific researches in the area “Applications of bio-medicine and public-health-services” ()* – usage of theory of medical-biological disciplines, usage of theory of bio-medical materials, means and products, usage of theory of bio-medical technics, usage of theory of clinical bio-medicine, usage of theory of bio-pharmacology, usage of theory of bio-hygiene and bio-epidemiology, usage of theory of the other branches of bio-medicine and public-health-services, usage of theory of social bio-hygiene, usage of theory of organization and management of public-health-services, usage of theory of the modified model of reduced eye, usage of theory of the modified model of reduced ear, usage of theory of software for the automation of research tasks of the physiological, psychological and linguistic parameters of the parametrical cognitive models block,

usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the physiological, psychological and linguistic factors influencing to the efficiency of functioning of the information-educational environment and the increase of resultativity of the automated training system with the properties of adaptation based on the cognitive models, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the physiological, psychological and linguistic parameters of the cognitive models of the subject of training and the means of training, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of bio-medicine and public-health-services, usage of theory of the dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the complex analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, usage of theory of the complex analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates; *the applied scientific researches in the area “ Applications of labor safety ”* – usage of theory of organization and management of labor safety and working conditions, usage of theory of industrial sphere, usage of theory of safety precaution, usage of theory of professional illnesses and their preventive-support, usage of theory of accidents on manufacture and their prevention, usage of theory of work-capacity, usage of theory of examination of work-capacity, usage of theory of labor safety on the categories of workers, usage of theory of work safety on the manufactures of increased danger, usage of theory of the cognitive modeling technology in the applications of labor safety] .

The applied scientific researches directions and departments of “SIO "ACNS"” allow to develop the main and derivative scientific results of CMT.

1.3.7. The applied scientific researches direction

“Cognitive modeling

in the humanitarian sciences, art and creativity”

(“CM in HSA and C”) (“NGNOT”) of “SIO "ACNS"”

The developed “The applied scientific researches direction “Cognitive modeling in the humanitarian sciences, art and creativity”” (“NGNOT”) treats to the applied scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The applied scientific researches department “Applications of (cognitive) linguistics, (national) creativity, culture, art and religion”” (“SGNT”) (*)
[the applied scientific researches in the area “Applications of science of language” – usage of theory of general science of language, usage of theory of applied science of language, usage of theory of languages of the world, usage of theory of the cognitive modeling technology in the applications of science of language;

the applied scientific researches in the area “Applications of (cognitive) linguistics” ()* – usage of theory of the general questions of languages, usage of theory of (cognitive) linguistics, usage of theory of applied linguistics, usage of theory of the cognitive modeling technology in the applications of (cognitive) linguistics, usage of theory of the modified of stratified-step model of understanding (cognitive linguistics) of the content of information fragments, usage of theoretical bases of (cognitive) linguistics and the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, usage of theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and others processors);

the applied scientific researches in the area “Applications of culture and cultural-science” – usage of theory, methodology and philosophy of culture, usage of theory of history of culture, usage of theory of history of the study of culture, usage of theory of culture in the modern world, usage of theory of organization and management in the area of culture, usage of theory of international cooperation in the area of culture, usage of theory of hardware of the establishments of culture, usage of theory of social-cultural activity in the sphere of leisure, usage of theory of library affair, usage of theory of library-science, usage of theory of bibliography, usage of theory of librarygraphy-science, usage of theory of museum affair, usage of theory of museology, usage of theory of protection of the monuments of history and culture, usage of theory of archival affair, usage of theory of archival-science, usage of theory of culture and cultural-science of the separate countries and peoples, usage of theory of the cognitive modeling technology in the applications of culture and cultural-science;

the applied scientific researches in the area “Applications of art and art-science” – usage of theory and methodology of art, usage of theory of the problems of art-science, usage of theory of history of art and the modern condition of art, usage of theory of art-science and fine-art criticism, usage of theory of art in the modern world, usage of theory of organization and management in the area of art, usage of theory of international cooperation in the area of art, usage of theory of fine-art, usage of theory of music, usage of theory of musicology, usage of theory of theatre, usage of theory of theater-science, usage of theory of mass shows and theatrical holidays, usage of theory of dance, usage of theory of choreography, usage of theory of circus, usage of theory of platform, usage of theory of cinema, usage of theory of motion-picture-art, usage of theory of national folk art, usage of theory of art of the separate countries and peoples, usage of theory of the cognitive modeling technology in the applications of art and art-science;

the applied scientific researches in the area “Applications of religion and atheism” – usage of theory of atheism and free-thinking, usage of theory of separate religions, usage of theory of church, usage of theory of cults, usage of theory of the problems of religious consciousness, usage of theory of philosophy and religion, usage of theory of religion, usage of theory of church and society, usage of theory of the organizational-practical activity of churches, usage of theory of history of atheism, usage of theory of religions and churches, usage of theory of the cognitive modeling technology in the applications of religion and atheism].

II. “The applied scientific researches department
 “Applications of literature, science-study, philosophy,
 journalism and mass communication means” (“SLPZ”)
 [*the applied scientific researches in the area
 “Applications of literature, literary-science
 and oral national creativity*” –
 usage of theory of literature, usage of theory of history of literature,
 usage of theory of oral national creativity,
 usage of theory of the auxiliary literary-science disciplines,
 usage of theory of the products of fiction literature,
 usage of theory of the cognitive modeling technology
 in the applications of literature, literary-science
 and oral national creativity;
*the applied scientific researches in the area
 “Applications of science-study*” –
 usage of theory of the general questions of science-study,
 usage of theory of the development of science, usage of theory of science and society,
 usage of theory of sociology of science, usage of theory of scientific work,
 usage of theory of scientific creativity, usage of theory of the organization of science,
 usage of theory of politics in the area of science,
 usage of theory of the technique and technics of research work,
 usage of theory of economics of science, usage of theory of scientific staff,
 usage of theory of the international cooperation in science,
 usage of theory of science and scientific-research work in the separate countries,
 usage of theory of the cognitive modeling technology
 in the applications of science-study;
*the applied scientific researches in the area
 “Applications of mass communication,
 journalism and mass media means*” –
 usage of theory of the mass communication means,
 usage of theory of the open network information resources (“Internet” and “WWW”),
 usage of theory of journalism, usage of theory of the mass media means,
 usage of theory of printing, usage of theory of television (TV), usage of theory of radio,
 usage of theory of use of the technical means for mass communication,
 usage of theory of the cognitive modeling technology
 in the applications of mass communication,
 journalism and mass media means].

III. "The applied scientific researches department
"Applications of the problems of (cognitive) psychology,
education, science and support of young scientists
(the programs of grants and others)"" ("SPOPMU") (*)
*[the applied scientific researches in the area
"Applications of national education and pedagogics"* –
usage of theory of general pedagogics,
usage of theory of history of education and pedagogics,
usage of theory of personnels, usage of theory of the systems of education,
usage of theory of preschool education,
usage of theory of preschool pedagogics,
usage of theory of general-educational (comprehensive) school,
usage of theory of pedagogics of general-educational (comprehensive) school,
usage of theory of out-of-school (additional) education and training,
usage of theory of out-of-school pedagogics,
usage of theory of special (correctional) schools,
usage of theory of defectology,
usage of theory of primary professional-technical education,
usage of theory of pedagogics of professional school,
usage of theory of average professional education,
usage of theory of pedagogics of average professional education,
usage of theory of higher professional education,
usage of theory of pedagogics of higher professional school,
usage of theory of education of adults, usage of theory of improvement of professional skills,
usage of theory of self-education,
usage of theory of family training, usage of theory of family pedagogics,
usage of theory of the specialized branches of pedagogics,
usage of theory of the technical means of training and learning equipment,
usage of theory of national education and pedagogics in the separate countries,
usage of theory of the cognitive modeling technology
in the applications of national education and pedagogics;

the applied scientific researches in the area “Applications of (cognitive) psychology” ()* – usage of theory of general psychology, usage of theory of psychology of development, usage of theory of age psychology, usage of theory of comparative psychology, usage of theory of social psychology, usage of theory of cognitive psychology, usage of theory of applied psychology, usage of theory of the cognitive modeling technology in the applications of (cognitive) psychology, usage of theory of the modified of stratified-step model of processing (cognitive psychology) of the content of information fragments, usage of theoretical bases of cognitive psychology and the cognitive modeling technology, usage of theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), usage of theory of the technical means of support of the complex analysis (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others); *the applied scientific researches in the area “Applications of the grants of “RFBR”, “RHSF” and other organizations”* – usage of theory of the general details of the grants of “The Russian fund of basic researches”, “The Russian humanitarian scientific fund” and other organizations, usage of the theoretical-methodological basis of grants, usage of theory of reception, distribution and use of the grants of “RFBR”, “RHSF” and other grant-formation organizations, usage of theory of the cognitive modeling technology in the applications of the grants of “RFBR”, “RHSF” and other organizations].

IV. “The applied scientific researches department
“Applications of the innovations of the project “The Russian encyclopedias”,
philosophy of science, technics and technology on the branches of knowledge” (“SRE”)
[the applied scientific researches in the area
“Applications of encyclopedias on natural and exact sciences” –
usage of theory of encyclopedias on mathematics, cybernetics, physics, mechanics,
chemistry, biology, geodesy, cartography, geo-physics, geology, geography, astronomy,
usage of theory of the general and complex problems of natural and exact sciences,
usage of theory of the cognitive modeling technology
in the applications of encyclopedias on natural and exact sciences;
the applied scientific researches in the area
“Applications of encyclopedias on social sciences” –
usage of theory of encyclopedias on social sciences as a whole,
usage of theory of encyclopedias on philosophy, history and historical sciences,
sociology, demography, economics and economic sciences,
state, law and jurisprudential sciences, politics and political sciences,
science-study, culture and cultural-science, national education and pedagogics,
psychology, science of language, literature and literary-science,
oral national creativity, art and art-science,
mass communication and journalism, the mass media means,
informatics, religion and atheism,
the complex studying of the separate countries and regions,
the complex problems of social sciences,
usage of theory of the cognitive modeling technology
in the applications of encyclopedias on social sciences;

the applied scientific researches in the area “Applications of encyclopedias on technical, applied and economic sciences” – usage of theory of encyclopedias on power-engineering, electrical-engineering, electronics, radio-engineering, connection, automatics, computer engineering, mining, metallurgy, mechanical-engineering, nuclear technics, instrument-making, polygraphy, reprography, photo-cinema-technics, chemical technology and chemical industry, bio-technology, light industry, food-processing industry, forest and wood-processing industry, construction and architecture, agriculture and forestry economy, fish economy and aqua-culture, water economy, internal trade, tourist-excursion service, external trade, transport, housing-communal economy, housekeeping, consumer services, medicine and public-health-services, physical training and sport, military science, the other branches of economics, usage of theory of the cognitive modeling technology in the applications of encyclopedias on technical, applied and economic sciences;

the applied scientific researches in the area “Applications of encyclopedias on the general and complex problems of technical and applied sciences and the branches of national economy” – usage of theory of encyclopedias on organization and management, statistics, standardization, patent business, invention and rationalization, labor safety, environment preservation and ecology of person, space researches, metrology, usage of theory of the cognitive modeling technology in the applications of encyclopedias on the general and complex problems of technical and applied sciences and the branches of national economy;

the applied scientific researches in the area “Applications of philosophy of science, technics and technology” – usage of theory of the general problems of modern philosophy of science, technics and technology, usage of theory of the general-philosophical problems, usage of theory of logic of philosophy and methodology of science, usage of theory of social philosophy, usage of theory of ethics, usage of theory of aesthetics, usage of theory of philosophy of religion and atheism, usage of theory of history of philosophy, usage of theory of the cognitive modeling technology in the applications of philosophy of science, technics and technology].

The applied scientific researches directions and departments of “SIO "ACNS"” allow to develop the main and derivative scientific results of CMT.

1.3.8. The applied scientific researches direction

“Cognitive modeling

in the physical training and sport”

(“CM in PHT and S”) (“NFS”) of “SIO "ACNS"”

The developed “The applied scientific researches direction “Cognitive modeling in the physical training and sport”” (“NFS”) treats to the applied scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI"” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The applied scientific researches department “Applications of sport, sports sciences and actions”” (“SSSNM”) [*the applied scientific researches in the area “Applications of physical training and sport” – usage of theory of physical training and sport, usage of theory of the methodological and medical-biological bases of physical training and sport, usage of theory of the material-technical base of physical training and sport, usage of theory of the methodical bases of the kinds of sport and sports competitions, usage of theory of the cognitive modeling technology in the applications of physical training and sport*].

The applied scientific researches directions and departments of “SIO "ACNS"” allow to develop the main and derivative scientific results of CMT.

1.3.9. The applied scientific researches direction “Cognitive modeling in the military sciences” (“CM in MILS”) (“NVN”) of “SIO "ACNS"”

The developed “The applied scientific researches direction “Cognitive modeling in the military sciences”” (“NVN”) treats to the applied scientific researches divisions of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS"”) as the main component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SIO "ACNS"”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI"” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of architecture, construction, technics, history, education, politics and economics in the armed forces”” (“SASTIOPEVC”)
[*the applied scientific researches in area “Applications of military sciences”* – usage of theory of the doctrine about war and army, usage of theory of military history, usage of theory of military education, usage of theory of training of staff, usage of theory of military politics, usage of theory of military doctrines, usage of theory of military science, usage of theory of military-applied sciences, usage of theory of arms and military technics, usage of theory of armed forces, usage of theory of military economics, usage of theory of the cognitive modeling technology in the applications of military sciences].

The applied scientific researches directions and departments of “SIO "ACNS"” allow to develop the main and derivative scientific results of CMT.

1.4. The local and international scientific newspapers and journals of “SIO "ACNS"”

“The state international organization "Academy of cognitive natural sciences"” (“SIO "ACNS"”) (www.vetrovan.spb.ru) includes the various scientific newspapers and journals with the scientific results.

The scientific newspapers and journals of “SIO "ACNS"” are intended for the promotion of the main and derivative scientific results of the microscopic system, financial and complex analysis – the 26 fundamental scientific researches sections (departments) on the 13 fundamental scientific researches branches of “SIO "ACNS"” correspond to the 26 fundamental development departments on the 13 fundamental development branches of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, and also the 26 sections on the 13 branches of “The Russian academy of sciences”; the 27 applied scientific researches sections (departments) on the 9 applied scientific researches directions of “SIO "ACNS"” correspond to the 27 scientific-researches laboratories on the 9 applied developments directions of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, and also the 27 sections on the 9 directions of “The Russian academy of natural sciences”:

I. The local scientific newspapers (SN) and scientific journals (SJ) of “SIO "ACNS"” (1 SN and 1 SJ).

1.1. SN “News of SIO "ACNS"” (in the national language).

1.2. SJ “Proceedings of SIO "ACNS"” (in the national language).

II. The international scientific journals (ISJ) of “SIO "ACNS"” (5 ISJ).

2.1. ISJ “Bulletin of SIO "ACNS"” (in the national and international language).

2.2. ISJ “Cognitive sciences” (in the national and international language) (* – together with “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”).

2.3. ISJ “Cognitive modeling technology for the microscopic system analysis” (in the national and international language) (*).

2.4. ISJ “Cognitive modeling technology for the microscopic financial analysis” (in the national and international language) (*).

2.5. ISJ “Cognitive modeling technology for the microscopic complex analysis” (in the national and international language) (*).

III. The regional (RFSJ) and international fundamental scientific journals (IFSJ) of "SIO "ACNS"" (the 13 branch (R)IFSJ).

- 3.1. (R)IFSJ "The microscopic cognitive modeling (MCM) in the fundamental scientific researches" ("The mathematical sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.2. (R)IFSJ "MCM in the fundamental scientific researches" ("The physical sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.3. (R)IFSJ "MCM in the fund. scientific res." ("The nano-technologies and inf. technologies"), (the multi-section – the 3 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.4. (R)IFSJ "MCM in the fundamental scientific researches" ("The exact sciences"), (the multi-section – the 3 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.5. (R)IFSJ "MCM in the fund. scientific res." ("The industry and chemical sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.6. (R)IFSJ "MCM in the fundamental scientific researches" ("The biological sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.7. (R)IFSJ "MCM in the fund. scientific res." ("The physiology, fund. medicine and health care"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.8. (R)IFSJ "MCM in the fundamental scientific researches" ("The sciences about The Earth"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.9. (R)IFSJ "MCM in the fundamental scientific researches" ("The social sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.10. (R)IFSJ "MCM in the fund. scientific researches" ("The glob. problems and int. relations"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.11. (R)IFSJ "MCM in the fund. scientific researches" ("The historical-philological sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.12. (R)IFSJ "MCM in the fund. scientific researches" ("The sports sciences"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.13. (R)IFSJ "MCM in the fundamental scientific researches" ("The military sciences"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).

IV. The regional (RASJ) and international applied scientific journals (IASJ) of "SIO "ACNS"" (the 9 branch (R)IASJ).

- 4.1. (R)IASJ "MCM in the appl. scientific researches" ("The natural sciences"), (the multi-section – the 8 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.2. (R)IASJ "MCM in the appl. scientific res." ("The appl. tech. sciences and technologies"), (the multi-section – the 4 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.3. (R)IASJ "MCM in the appl. scientific res." ("The geo-political sciences and res."), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.4. (R)IASJ "MCM in the applied scientific researches" ("The steady development of society of the post-industrial country"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.5. (R)IASJ "MCM in the applied scientific researches" ("The social-economic and jurisprudential sciences"), (the multi-section – the 4 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.6. (R)IASJ "MCM in the applied scientific researches" ("The biol. and med. sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.7. (R)IASJ "MCM in the applied scientific res." ("The hum. sciences, art and creativity"), (the multi-section – the 4 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.8. (R)IASJ "MCM in the applied scientific res." ("The physical training and sport"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.9. (R)IASJ "MCM in the applied scientific researches" ("The military sciences"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).

V. The local scientific newspapers (SN) and scientific journals (SJ) of "SRI" (1 SN and 1 SJ).

- 5.1. SN "News of SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." (in the nat. lang.).
- 5.2. SJ "Bulletin of SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." (in the nat. lang.).

VI. The international scientific journals (ISJ) of "SRI" (4 ISJ).

- 6.1. ISJ "Cognitive informatics" (in the nat. and int. language) (*).
- 6.2. ISJ "CMT for the microscopic system analysis" (in the nat. and int. language) (*).
- 6.3. ISJ "CMT for the microscopic financial analysis" (in the nat. and int. language) (*).
- 6.4. ISJ "CMT for the microscopic complex analysis" (in the nat. and int. language) (*).

The scientific newspapers and journals allow directly to propagandize the main and derivative fundamental and applied scientific results of CMT.

2. “The scientific-educational institute "System and financial analysis based on cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N.”

1. The name of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” as the organization (legal entity – LE):
 - 1.1) the full company name of LE in the national language (Russian) – « Некоммерческая организация (учреждение) «научно-исследовательский институт "Системного и финансового анализа на основе технологии когнитивного моделирования" "РА(Е)Н" имени Вениаминова В.Н.» »;
 - 1.2) the full company name of LE in the international language (English) – “The noncommercial organization (establishment) “scientific-research institute "System and financial analysis based on cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N.””;
 - 1.3) the reduced company name of LE in the national language (Russian) – «НИИ "СФА ТКМ" "РА(Е)Н" им. Вениаминова В.Н.»;
 - 1.4) the reduced company name of LE in international language (English) – “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”.
2. The description of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” as the organization (LE):
 - 2.1) it has the organizational-legal form – “The noncommercial organization (establishment)” – the mixed property of RF and “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., on the federal financing due to the monetary resources of the budget of RF and the foreign countries, LE and natural persons (NP) (non)residents;
 - 2.1.1) for the research of the basic and derivative fundamental and applied scientific results;
 - 2.1.2) for the support of reception of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N.;
 - 2.1.3) for the charge of payments (gifts) of the budget of RF and the foreign countries;
 - 2.1.4) for the charge of payments (gifts) of LE and NP (non)residents;
 - 2.1.5) for the charge of received sponsor's support and external financing;
 - 2.1.6) for the support of functioning of the organizational structures of “SIO "ACNS"”, “SF "SFA CMT" n. a. Prokopenko N.A.”, “"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.”” and “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”;
 - 2.2) it is “the noncommercial organization (establishment)” (with some commercial kinds of charges and incomes) with “the mixed form of ownership” (it is created and functioned due to the monetary resources of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., due to the monetary resources of RF and the foreign countries and due to the monetary resources of LE and NP (non)residents);

- 2.3) it acts in the civil circulation under the company name “The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N.” (“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”), which is defined in its constituent documents (the charter and const. contract) and it is included into the unique state registry of LE at the state registration as the newly created (existing) LE for the implementation of the following kinds of activity according to “The All-Russian classifier of the kinds of economic activity” (“ACKEA” – «ОКВЭД»);
- 2.3.1) the learning-methodical activity and scientific activity;
- 80.3 – “Education, consulting, seminars and lectures” on the disciplines “Informatics and theory of information”, “Programming”, “The structures of data and databases”, “Discrete mathematics”, “Theoretical mechanics”, “The system analysis”, “The financial analysis”, “Financial markets”, “Accounting and audit“ and others (some functions of the higher professional educational institutions, the average special educational institutions, the average common educational institutions and others);
 - 92.4 – “The activity of information agencies” (science and education);
- 2.3.2) the scientific - production activity;
- 91.1 – “The activity of commercial, entrepreneurial and professional organizations” (the scientific activity, the activity on interaction with the unions and associations of commercial workers, entrepreneurs, scientists, writers and others);
 - 67.13 – “The other auxiliary activity in the sphere of financial intermediary” (the information-consulting services of managing subjects, the information-auditor services of enterprises (organizations) and the information-auditor services of credit organizations);
- 2.3.3) the commercial (trading) activity;
- 51.15.4 – “The activity of agents on the wholesale trade of radio-, tele-instrumentation and the technical carriers of information (with records and without records)”;
 - 51.43.2 – “The wholesale trade of radio-, tele-instrumentation and the technical carriers of information (with records and without records)”;
 - 51.47.21 – “The wholesale trade of books”;
 - 51.47.22 – “The wholesale trade of newspapers and journals”;
 - 51.56.1 – “The wholesale trade of paper and cardboard”;
- 2.3.4) the production - publishing activity;
- 22 – “The publishing and polygraphic activity (production) and the duplicating of the written down carriers of information” (the production and duplicating of optical discs for the laser storages of information with computer programs, books, monographies, reports on the scientific-research work (SRW), textbooks, scientific articles, scientific reports and multimedia-presentations);
 - 30.02 – “The production of electronic calculating machines (ECM) and other equipment for the information processing” (the production of programs for ECM, multimedia-presentations and auxiliary materials).

3. The sphere of scientific interests of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.":
the (microscopic) system analysis and control, the information technologies, the information-educational environments, the automated (remote) training systems, the innovative architectures and algorithms in the basis of the automation means of training, (cognitive) informatics, psycho-physiology of perception, (cognitive) psychology, (cognitive) linguistics, the (microscopic) financial analysis, accounting and audit of the enterprises and (credit) organizations, the (microscopic) complex analysis, theoretical mechanics, physical chemistry, molecular biology and medicine.
4. The directions of scientific researches of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.":
 - 4.1) it is engaged in the (microscopic) system analysis and the increase of efficiency of functioning of the (adaptive) information-educational environments;
 - 4.1.1) it researches and modernizes the apparatus of the cognitive modeling technology for the (microscopic) system analysis of the (adaptive) information-educational environments;
 - 4.1.2) it researches and modernizes the structures of the parametrical cognitive models of the subject of training and the means of training;
 - 4.1.3) it is engaged in the researching and modernization of the architecture of the (adaptive) automation means of training (at distance) based on the parametrical cognitive models block;
 - 4.2) it is engaged in the (microscopic) financial analysis and the increase of efficiency of functioning of the (credit) organizations;
 - 4.2.1) it researches and modernizes the apparatus of the cognitive modeling technology for the (microscopic) financial analysis of the organization structures of the enterprises and (credit) organizations;
 - 4.2.2) it researches and modernizes the structures of the parametrical cognitive models for the vertical, horizontal and trend (microscopic) financial analysis of the (credit) organizations based on the primary registers of financial and accounting reporting-documents;
 - 4.2.3) it is engaged in the researching and modernization of the architecture of the means of automation of the financial analysis and audit based on the parametrical cognitive models block;
 - 4.3) it is engaged in the (microscopic) complex analysis and the increase of efficiency of functioning of the difficult objects, processes and phenomena;
 - 4.3.1) it researches and modernizes the apparatus of the cognitive modeling technology for the (microscopic) complex analysis of the difficult objects, processes and phenomena;
 - 4.3.2) it researches and modernizes the structure of the parametrical cognitive models for the (microscopic) complex analysis based on the (multidimensional) cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere;
 - 4.3.3) it is engaged in the researching and modernization of the architecture of the means of automation of the (microscopic) complex analysis based on the parametrical cognitive models block;
 - 4.3.4) it researches the fundamental and applied scientific results in the area of theoretical mechanics, physical chemistry, molecular biology and medicine (preventive and clinical).

2.1. The general details

about “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

“The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (natural) sciences" named after Veniaminov V.N.” (“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – “SRI”) acts as the first SRI in the structure of “SIO "Academy of cognitive natural sciences” (“SIO "ACNS””), the additional component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (www.vetrovan.spb.ru):

- 1) it was executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental and applied scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. The administrative-scientific divisions of “SRI” [the director of “SRI”, the secretary-reviewer of director of “SRI”, the assistant of director of “SRI” on communications with the scientific (educ.) organizations and on public relations].
II. The scientific-organizational divisions of “SRI” [The sci. council of “SRI” and the sci. schools of “SRI” (* – together with “SIO "ACNS””) on phys.-math., tech., soc., econ., chem., biol., med., sport. and mil. sciences, the sci. archive of The sci. council and the sci. schools of “SRI” (*), the diss. councils of “SRI” (*) (the objects and subjects of research: the information-education environments, the (credit) organizations and the objects of theoretical mechanics) on the physical-mathematical sciences (spec. 01.02.01 – “Theoretical mechanics” and others), on the technical sciences (spec. 05.13.10 – “Management in social and economic systems”, 05.13.01 – “The system analysis, control and information processing” and others), on the social sciences (spec. 10.02.21 – “Applied and math. linguistics” and others), on the economic sciences (spec. 08.00.10 – “Finance, monetary circulation and credit” and others), on the chemical sciences (spec. 02.00.04 – “Physical chemistry” and others), on the biological sciences (spec. 03.00.03 – “Molecular biology” and others), on the medical sciences (spec. 14.01.07 – “Eye illnesses and ophthalmology”, 19.00.01 – “Cognitive psychology”, 19.00.02 – “Psychology of perception”, 19.00.03 – “Psychology of work, engineering psychology and ergonomics” and others), the archive of dissertation council of “SRI” (*) and the scientific-methodical department of “SRI” (*)].

III. The administrative-economy divisions of “SRI”
[the deputy director of “SRI” on administrative-economy work (the administrative department of “SRI”, the document circulation department of “SRI”, the legal support department of “SRI” (*), the document-office of “SRI”, the archive of documents of “SRI” (*), the inf.-analytical support dep. of “SRI” (*), the communication and corresp. (expedition) dep. of “SRI” (*), the deposition dep. of “SRI” (*), the certification, licensing and patenting department of “SRI” (*), the fire-prevention safety department of “SRI” (*), the construction and repair dep. of “SRI” (*), the automation dep. of “SRI” (*), the planning of deliveries and shipments of production department of “SRI” (*), the supply and purchases of production department of “SRI” (*) and the transport support department of “SRI” (*)), the chief accountant of “SRI” (the planning and economic analysis dep. of “SRI” (*), the calculations department of “SRI”, the delivery department of “SRI”, the clearing of payment requirements and payment assignments (orders) dep. of “SRI”, the accounting commodity-material assets department of “SRI” and the inventory department of “SRI”), the deputy director of “SRI” on personnel support (the vocational training, retraining and improvement of professional skills dep. of “SRI” (*), the personnel registration department of “SRI”, the electronic account of visitors and employees department of “SRI” (*), the labor safety department of “SRI” (*), the medicine department of “SRI” (*) and the professional union department of “SRI” (*)), the deputy director of “SRI” on library support (the purchase and sale of scientific literature department of “SRI” (*), the library service department of “SRI” (*), the fundamental scientific literature department of “SRI” (*), the applied scientific literature department of “SRI” (*), the norm. documentation dep. of “SRI” (*), the scientific periodicals editions dep. of “SRI” (*), the electronic library department of “SRI” (*) and the funds of library department of “SRI” (*)), the deputy director of “SRI” on publishing house (the publishing house department of “SRI” (*), the polygraphy department of “SRI” (*), the editing department of “SRI” (*), the printing house department of “SRI” (*) and the warehouse of printing production department of “SRI” (*)), the deputy director of “SRI” on security (the security department of “SRI” (*), the territory protection department of “SRI” (*) and the electronic passports registration department of “SRI” (*)].

IV. The scientific-research and educational divisions of “SRI” (*) [the deputy of director of “SRI” on scientific work – phys.-math., tech., soc., econ., chem., biol., med., sport. and mil. research directions (the fund. development departments – see the list IV.A and the sci.-res. laboratories – see the list IV.B), the deputy director of “SRI” on databases and information storehouses, on hardware, software and brainware support and on integrated systems (the development department of information warehouses, hardware, software and brainware support and integrated systems – see the list IV.A, and also the scientific-research laboratories of hardware, software and brainware support and integrated systems – see the list IV.B), the deputy director of “SRI” on quality management (the quality management res. department), on investments and innovations (the investments and innovations research department) and on financial planning (the financial planning and research department of “SRI” (*)), the deputy director of “SRI” on advertising and marketing (the marketing res. and advertising dep. of “SRI” (*)), the deputy director of “SRI” on purchase and realizations of printing production (the printing production delivery (purchases and income flow) research dep. of “SRI” (*) and the printing production shipment (sales and outcome flow) research dep. of “SRI” (*)), the deputy director of “SRI” on int. relations (the ext. communications and res. dep. of “SRI” (*), the visas registration and res. dep. of “SRI” (*), the sci. int. programs dep. of “SRI” (*), the educational programs dep. of “SRI” (*) and translations dep. of “SRI” (*)), the deputy director of “SRI” on basic and additional educational activity (the basic education department of “SRI” (*), the remote education department of “SRI” (*), the professional retraining and improvement of professional skill department of “SRI” (*) and the postgraduate study and doctoral studies department of “SRI” (*)].

IV.A. The fundamental developments divisions of “SRI” – the fundamental developments branches and departments [see the fundamental developments branches and departments of “SRI”, and also the fund. scientific researches branches and sections (departments) of “SIO "ACNS""].

IV.B. The applied scientific researches divisions of “SRI” – the applied researches directions and the scientific-research laboratories [see the appl. researches directions and the sci.-res. laboratories of “SRI”, and also the applied scientific researches directions and sections (departments) of “SIO "ACNS""].

V. The scientific centre divisions at “SRI” (additional).

VI. The scientific-historical departments of “SRI” (additional).

VII. The scientific-public divisions of “SRI” (additional).

VIII. The divisions of “SIO "Academy of cognitive natural sciences"” (the main reduction – “SIO "ACNS"” and the add. reduction – “SIO "IACNS"”) (add.).

“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” allows to develop the main and derivative scientific results of CMT.

2.2. The divisions of fundamental developments (at the microscopic level)

of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The structure of “The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (natural) sciences" named after Veniaminov V.N.” (“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO "ACNS"” (www.vetrovan.spb.ru) includes the various divisions of the process of receiving of the scientific results:

- A. The fundamental developments (management) divisions of “SRI”**
for the microscopic system, financial and complex analysis – the 26 fundamental scientific researches sections (departments) (FSRS(DP)) on the 13 fundamental scientific researches branches (FSRB) of “SIO "ACNS"” corresponds to the 26 fundamental developments departments (FDDP) on the 13 fundamental developments branches (FDB) of “SRI”, and also the 26 sections on the 13 branches of “The Russian academy of sciences”.
- A.1. FSRB [FDB] “Cognitive modeling in the mathematical sciences” (“CM in MATHS”) (“OMN”).**
- A.1.1. FSRS(DP) [FDDP] “Theory of mathematics and the complex system analysis based on the cognitive modeling technology” (“TM and CSAB on CMT”) (“SM”) (*).**
- A.1.2. FSRS(DP) [FDDP] “Theory of cybernetics and (cognitive) informatics” (“TC and (C)I”) (“SPMI”) (*).**
- A.2. FSRB [FDB] “Cognitive modeling in the physical sciences” (“CM in PHS”) (“OFN”).**
- A.2.1. FSRS(DP) [FDDP] “Theory of physics, astronomy and space researches” (“TPHA and SR”) (“SOFA”) (*).**
- A.2.2. FSRS(DP) [FDDP] “Theory of nuclear physics and physics of atomic nucleus” (“TNPH and PHAN”) (“SYF”) (*).**
- A.3. FSRB [FDB] “Cognitive modeling in the nano-technologies and information technologies” (“CM in N-T and IT”) (“ONIT”).**
- A.3.1. FSRS(DP) [FDDP] “Theory of electronics, radio-engineering and connection” (“TER-E and C”) (“SVLTSEB”).**
- A.3.2. FSRS(DP) [FDDP] “Theory of automatics, computer engineering and the system analysis based on the cognitive modeling technology” (“TACE and SAB on CMT”) (“SITA”) (*).**
- A.3.3. FSRS(DP) [FDDP] “Theory of nano-technologies for the mechanics-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture and construction” (“TN-T for M-EI-MPR and PH-C-TE and FITA and C”) (“SNT”) (*).**

- A.4.F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the exact sciences” (“CM in ES”) (“OEMMPU”).
- A.4.1.F S R S (D P) [F D D P] “ T h e o r y o f (t h e o r e t i c a l)
mechanics and gyroscopes” (“T(T)M and G”) (“SM”) (*).
- A.4.2.F S R S (D P) [F D D P] “ T h e o r y o f m e c h a n i c a l - e n g i n e e r i n g ,
instrument-making and metrology” (“TM-EI-M and M”) (“SPMPU”).
- A.4.3.F S R S (D P) [F D D P] “ T h e o r y o f p o w e r - e n g i n e e r i n g
and electrical-engineering” (“TP-E and E-E”) (“SE”).
- A.5.F S R B [F D B] “ C o g n i t i v e m o d e l i n g i n t h e i n d u s t r y
and chemical sciences” (“CM in I and CHS”) (“OHNM”).
- A.5.1.F S R S (D P) [F D D P] “ T h e o r y o f t h e l i g h t , f o o d , f o r e s t a n d w o o d -
processing industry, the architecture and construction,
the agricultural, forestry, water and fish economy and aqua-culture”
 (“TEFF and W-PIA and CAFW and FE and A-C”) (“SNM”) (*).
- A.5.2.F S R S (D P) [F D D P] “ T h e o r y o f c h e m i s t r y , c h e m i c a l t e c h n o l o g y
and chemical industry” (“TCHCHT and CHI”) (“SCHN”).
- A.6.F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the biological sciences” (“CM in BS”) (“OBN”).
- A.6.1.F S R S (D P) [F D D P] “ T h e o r y o f b i o l o g y a n d p h a r m a c o l o g y ” (“ T B a n d P H ”) (“ S O B ”) .
- A.6.2.F S R S (D P) [F D D P] “ T h e o r y o f p h y s i c a l - c h e m i c a l
bio-technology” (“TPH-CHB-T”) (“SFCHB”) (*).
- A.7.F S R B [F D B] “ C o g n i t i v e m o d e l i n g i n t h e p h y s i o l o g y , f u n d a m e n t a l
medicine and public-health-services” (“CM in PHFM and P-H-S”) (“OFFM”).
- A.7.1.F S R S (D P) [F D D P] “ T h e o r y o f p h y s i o l o g y , b i o - p h y s i o l o g y
and private physiology” (“TPHB-PH and PPH”) (“SF”) (*).
- A.7.2.F S R S (D P) [F D D P] “ T h e o r y o f m e d i c i n e , p u b l i c - h e a l t h - s e r v i c e s ,
labor safety, environment preservation
and ecology of person” (“TMP-H-SLSEP and EP”) (“SFM”) (*).
- A.8.F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the sciences about The Earth” (“CM in S about E”) (“ONZ”).
- A.8.1.F S R S (D P) [F D D P] “ T h e o r y o f g e o - p h y s i c s , g e o l o g y ,
mining and metallurgy” (“TG-PHGM and M”) (“SGGGGN”).
- A.8.2.F S R S (D P) [F D D P] “ T h e o r y o f o c e a n o l o g y , s t r u c t u r e
and physics of atmosphere, geodesy, cartography and geography
of The Earth and planets” (“TOS and PHAGC and GE and P”) (“SOFAG”).

- A.9. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the social sciences” (“CM in SS”) (“OON”).
- A.9.1. FSR(S)(DP) [FDDP] “Theory of social sciences, philosophy, science-study,
politics and political sciences, sociology, (cognitive) psychology,
state, law and jurisprudential sciences, patenting business,
i n v e n t i o n a n d r a t i o n a l i z a t i o n - w o r k ”
 (“TSSPHS-SP and PSS(C)PSL and JSPBI and R-W”) (“SFPSPP”) (*).
- A.9.2. FSR(S)(DP) [FDDP] “Theory of economics and economic sciences,
organization, management, statistics and the financial analysis
based on the cognitive modeling technology”
 (“TE and ESOMS and FAB on CMT”) (“SE”) (*).
- A.10. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the global problems and international
relations” (“CM in GP and IR”) (“OGPMO”).
- A.10.1. FSR(S)(DP) [FDDP] “Theory of demography, pedagogics
and national education, standardization,
the complex studying of separate countries and regions,
the general and complex problems of natural, exact, technical,
public and applied sciences and manufacture branches”
 (“TDP and NESCSSC and RG and CPNETP and AS and MB”) (“SGP”).
- A.10.2. FSR(S)(DP) [FDDP] “Theory of culture and cultural-science,
art and art-science, mass communications,
journalism and mass media means, religion,
internal trade and tourist-excursion service,
external trade, transport, housing-communal economy,
housekeeping and household services at the international level”
 (“TCandC-SAandA-SMCJandMMMRITandT-ESETTH-CEHandHSatIL”) (“SMO”).
- A.11. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the historical-
philological sciences” (“CM in H-PHS”) (“OIFN”).
- A.11.1. F S R S (D P) [F D D P] “ T h e o r y o f h i s t o r y
and historical sciences” (“TH and HS”) (“SI”).
- A.11.2. FSR(S)(DP) [FDDP] “Theory of science of language, (cognitive) linguistics,
literature, literary-science and oral national
creativity” (“TSL(C)LLL-S and ONC”) (“SYL”) (*).
- A.12. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the sports sciences” (“CM in SPS”) (“OSN”).
- A.12.1. FSR(S)(DP) [FDDP] “Theory of competitions, sport
and sports sciences” (“TCSP and SPS”) (“STSSSN”).
- A.13. F S R B [F D B] “ C o g n i t i v e m o d e l i n g
in the military sciences” (“CM in MILS”) (“OVN”).
- A.13.1. FSR(S)(DP) [FDDP] “Theory of architecture, construction, technics,
history, education, politics and economics in the armed forces”
 (“TACTHEP and E in AF”) (“STASTIOPEVS”).

2.2.1. The fundamental developments branch
“Cognitive modeling in the mathematical sciences”
(“CM in MATHS”) (“OMN”)
of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the mathematical sciences”” (“OMN”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental developments department “Theory of mathematics and the complex system analysis based on the cognitive modeling technology”” (“SM”) (*) [*the fundamental developments in the area “Theoretical mathematics” (*)*] – theory of mathematical logic, theoretical bases of mathematics, theory of numbers, theory of algebra, theory of topology, theory of geometry, theory of the mathematical analysis, theory of the functions of valid variables, theory of the functions of complex variables, theory of the ordinary differential equations, theory of the differential equations with private derivatives, theory of the integrated equations, theoretical mathematical models of the objects, processes and phenomena of the natural and technical sciences, theory of the equations of mathematical physics, theory of variational calculus, mathematical theory of optimum control, theory of the functional analysis, theory of calculation mathematics, theory of probability and mathematical statistics, theory of the combinatory analysis, theory of graphs, theoretical mathematical cybernetics, theory of the ways of representation of the structure of the cognitive models and problem environments, theoretical basis of the parametrical cognitive models block, theory of the cognitive modeling technology in the theoretical mathematics;

the fundamental developments in the area
“The theoretical complex system analysis” ()* –
theory of the general questions of the complex system analysis,
theory of tendencies, dependences and laws
of the complex system analysis of the difficult objects, processes and phenomena,
theory of the cognitive modeling technology
with dynamic cloning, verification and subverification,
theory of the iterative cycle and the technique of use
of the cognitive modeling technology
for the complex system analysis of the difficult objects, processes and phenomena,
theory of the parametrical cognitive models block
for the complex system analysis and the increase of efficiency of functioning
of the difficult objects, processes and phenomena,
theory of the structure of the parametrical cognitive models of the 0th, 1st, 2nd and 3rd generations,
theory of the ways of representation of the structure of the cognitive models and problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the algorithms of formation of the structure
of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations,
theory of the techniques of research of parameters
of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations,

theory of the algorithms of processing of a posteriori data of the complex system analysis of the difficult problem spheres, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the difficult objects, processes and phenomena, theory of organization and plan of carrying out of the experiment, theory of research of the cognitive models parameters, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of the dynamics of resultativity of the difficult object, process and phenomena of research, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists, the theoretical complex system analysis of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle, the theoretical complex system analysis of the multivariate code device, the theoretical complex system analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis of the chemical element with 1, 2, 3, 4, 5 and more nucleuses, the theoretical complex system analysis of the difficult multidimensional hurricane and other difficult objects, processes and phenomena].

II. “The fundamental developments department
“Theory of cybernetics and (cognitive) informatics” (“SPMI”) (*)
*[the fundamental developments in the area
“Theoretical cybernetics”* –
theory of the automatic control systems, theory of modeling,
theory of the cybernetic control systems,
theory of information, theory of artificial intelligence,
theory of the discrete (final) automatic devices and formal languages,
theory of reliability, theory of the system analysis,
theory of the cognitive modeling technology
in the theoretical cybernetics;
*the fundamental developments in the area
“Theoretical informatics”* –
theory of informatics, theory of the organization of information work,
theory of the documentary information sources,
theory of the analytical-synthetical processing of documentary information sources,
theory of information search, theory of information service,
theory of the technical means of support of the information processes,
theory of the cognitive modeling technology
in the theoretical informatics;
*the fundamental developments in the area
“Theoretical cognitive informatics”* (*) –
theory of the modified stratified-step model
of perception (psycho-physiology of perception), processing (cognitive psychology)
and understanding (cognitive linguistics) of the content of information fragments,
theoretical bases of cognitive informatics and the cognitive modeling technology
in the technical, economic, physical-mathematical and other sciences,

theoretical bases of formation of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), theoretical bases of formation of the parametrical cognitive models block for the financial analysis of the (credit) organizations (the cognitive models for the vertical, horizontal and trend financial analysis), theoretical bases of formation of the parametrical cognitive models block for the complex analysis of the objects, processes and phenomena in cognitive informatics, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), theory of the technical means of support of the financial analysis (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting; the automation means of formation of the accounting balance and the report about profits and losses of the (credit) organization and enterprise, the automation means of the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise based on the diverse analytical coefficients system), theory of the technical means of support of the complex analysis (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others)].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.2. The fundamental developments branch

“Cognitive modeling in the physical sciences”

(“CM in PHS”) (“OFN”)

of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the physical sciences”” (“OFN”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental developments department “Theory of physics, astronomy and space researches”” (“SOFA”) (*)
[the fundamental developments in the area “Theoretical physics” ()* – theory of the questions and general problems of physical experiment, theory of physics of elementary particles, theory of fields, theory of physics of high energies, theory of nuclear physics, theory of physics of gases and liquids, theory of thermal-dynamics and statistical physics, theory of physics of firm bodies, theory of physics of plasma, theory of physics of atom and molecule,

theory of optics, theory of laser physics, theory of radio-physics, theory of physical bases of electronics, theory of acoustics, theory of the cognitive modeling technology in the theoretical physics, theory of the cognitive models of the interaction between elementary particles and firm bodies, fields, liquids and gases, theory of the cognitive model of the modified volumetric planetary model of atom n. a. Bohr N.H.D., theory of the cognitive models of the temperature areas of plasma of the atom and molecule, theory of the cognitive model of the optical environment of eye as the optical device, theory of the cognitive model of the acoustical environment of ear as the acoustical device, theory of the cognitive model of the distribution of waves in the environment of research;

the fundamental developments in the area “Theoretical astronomy” ()* – theory of astronomy and heavenly mechanics, theory of astrometry and astro-physics of The Solar system, The Sun, stars, fogs, interstellar environment and star systems, theory of cosmology, theory of observatories, tools, devices and methods of astronomical supervision, theory of the cognitive modeling technology in the theoretical astronomy, theory of the cognitive models of the relative positioning of 1, 2, 3, 4, 5 and more galaxies, planets, stars and satellites, The Earth, The Sun and others;

“Theoretical space researches of The Earth, The Sun and planets” ()* – theory of the general questions of space researches of The Earth, The Sun and planets, theory of the devices and methods of the fundamental scientific researches of space environment, theory of the planning and realization of starts of the space vehicles and artificial heavenly bodies, theory of uncontrol movement of the space vehicles and artificial heavenly bodies, theory of the control of movement of the space vehicles and artificial heavenly bodies, theory of space technics and technology (the rocket engines of new generation),

theory of safety and the medical-biological problems of space flights, theory of use of the space systems for the connection and navigation, theory and problems of extraterrestrial territories discovery and prospects of astronautics, theory of research of the astronomical objects by the space means, theory of the geo-physical fundamental researches by the space means, theory of research of The Earth from space (the means of research of new generation), theory of the cognitive modeling technology in the theoretical space researches of The Earth, The Sun and planets, theory of the cognitive models of the gravitational and other interactions between 1, 2, 3, 4, 5 and more artificial space objects, satellites, galaxies, planets, stars, The Earth and The Sun, theory of the cognitive models of the work of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle and others].

II. “The fundamental developments department “Theory of nuclear physics and physics of atomic nucleus”” (“SYF”) (*)

[the fundamental developments in the area “Theoretical nuclear physics” () – theory of the nuclear raw materials and fuel, theory of synthesis of isotopes, theory of isotopes and ionization radiations, theory of nuclear reactors, theory of thermal-nuclear reactors, theory of the action of radiations and protection against them, theory of nuclear explosions, theory of the processing of nuclear fuel and waste disposal, theory of the cognitive modeling technology in the theoretical nuclear physics, theory of the cognitive models of the structure of the chemical elements with 1, 2, 3, 4, 5 and more nucleuses (the nuclear polymers), theory of the cognitive model of the modified volumetric principle n. a. Pauli W.E. for the studying of electronic clouds within limits of power levels, theory of the cognitive model of the modified planetary model of atom n. a. Bohr N.H.D. and others].*

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.3. The fundamental developments branch “Cognitive modeling in the nano-technologies and information technologies” (“CM in N-T and IT”) (“ONIT”) of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the nano-technologies and information technologies”” (“ONIT”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental developments department “Theory of electronics, radio-engineering and communication”” (“SVLTSEB”)
[*the fundamental developments in the area “Theoretical electronics and radio-engineering”* – theoretical bases of electronic technics, theory of radio-engineering, theory of the materials for electronics and radio-engineering, theory of technology and equipment for the electronic and radio-engineering manufacture, theory of designing and constructing of the electronic devices and radio-electronic equipment, theory of the electrical-vacuum and gas-discharge devices and units, theory of the accelerators of charged particles and plasma, theory of solid-state devices, theoretical bases of quantum electronics, theory of holography, theoretical bases of crio-electronics, theory of radio-electronic circuits, theory of the distribution of radio-waves, theory of antennas, theory of wave-transports, theory of the elements of over-high-frequency techniques, theory of the radio-transmission and radio-receiving devices, theory of the radio-engineering systems of sounding, location and navigation, theory of television (TV) technics, theory of record and reproduction of signals, theory of electrical-acoustics, theory of ultra-sonic and infra-sonic technics, theory of infra-red technics, theory of the units, details and elements of radio-electronic equipment, theory of the devices for the radio-engineering measurements, theory of the systems and units of display of the information, theory of the cognitive modeling technology in the theoretical electronics and radio-engineering;

the fundamental developments in the area “Theoretical communication” – theory of communication, theory of designing and constructing of the devices of communication, theory of technology and equipment for the assembly and adjustment of the equipment of communication, the systems of transfer and the lines of communication, theory of the multi-channel communication, theory of the networks and centres of communication, theory of the services and facilities of communication, theory of the telegraph (cable) communication and equipment, theory of the systems and equipment of data transmission, theory of the tele-information services and equipment, theory of the telephone communication and equipment, theory of the systems of transfer of the moving images and sound, theory of the facsimile communication and equipment, theory of radio-communication and radio-broadcasting, theory of the light-guiding communication and equipment, theory of television (TV), theory of the optical communication in the free environment and equipment, theory of the post communication, theory of the cognitive modeling technology in the theoretical communication and terminal equipment of data transmission].

II. “The fundamental developments department “Theory of automatics, computer engineering and the system analysis based on the cognitive modeling technology”” (“SITA”) (*)

[*the fundamental developments in the area “Theoretical automatics and computer engineering”* – theory of automatic control, theoretical bases of programming, theoretical bases of computer engineering, theory of the elements, units and devices of automatics and computer engineering, theory of the devices of input-output, theory of the memory devices, theory of technology and equipment for the manufacture of the means of automatics and computer engineering, theory of the keyboard and counting-perforating machines, theory of the analog calculating machines (ACM), theory of the digital calculating machines and calculating complexes (DCM), theory of the analog-digital (hybrid) calculating machines and calculating complexes, theory of calculating centres (CC), theory of calculating networks (CN), theory of the software of calculating machines, complexes and networks, theory of the systems of automatic measurement, regulation and control, theory of the systems of tele-control and tele-measurement, theory of the automated control systems of technological processes, theory of the automated systems of organizational management, theory of the automation of designing, theory of the automation of scientific researches, theory of the cognitive modeling technology in the theoretical automatics and computer engineering;

the fundamental developments in the area “The theoretical system analysis” ()* – theory of tendencies, dependences and laws of the system analysis of the objects, processes and phenomena, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for the system analysis of the information-educational environments and the increase of efficiency of functioning of the automated training system with the properties of adaptation based on the cognitive models (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of knowledge formation in the information-educational environment and the efficiency of functioning of the objects, processes and phenomena, theory of organization and plan of carrying out of the experiment, theory of research of the cognitive models parameters, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of objects, processes and phenomena, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists].

III. “The fundamental developments department
“Theory of nano-technologies for the mechanical-engineering, instrument-making,
polygraphy, reprography and photo-cinema-technics,
the light and food-processing industry,
transport, architecture and construction” (“SNT”) (*)
[the fundamental developments in the area
“Theoretical nano-technologies for mechanical-engineering” –
 theory of nano-technologies for the machine-science and details of machines,
 for the machine-building materials, for the technologies of mechanical-engineering,
 for the foundry manufacture, for the forge-stamp manufacture,
 for the assembly manufacture, for the cutting of materials,
 for the electrical-physical-chemical processing,
 for the thermal and strengthening powder materials,
 for the manufacture of nonmetallic products, for the machine-tool-construction,
 for the robotics, for the tool manufacture, for the mining mechanical-engineering,
 for the metallurgical mechanical-engineering, for the reactor-construction, for the turbine-construction,
 for the special power-engineering installations, for the chemical and oil mechanical-engineering,
 for the locomotive-construction and carriage-building, for the engine-construction, for the motor-car-industry,
 for the ship-building, for the aircraft-building, for the space technics and rocket-building,
 for the hoisting-transport mechanical-engineering (industry),
 for the building and road mechanical-engineering, for the municipal mechanical-engineering,
 for the tractor and agricultural mechanical-engineering,
 for the mechanical-engineering of light industry (by the kinds of production),
 for the polygraphic mechanical-engineering, for the mechanical-engineering of food-processing industry,
 for the mechanical-engineering of trade and public catering, for the household machines and devices,
 for the manufacture of weapon, for the other branches of mechanical-engineering,
 theory of the cognitive modeling technology
 in the theoretical nano-technologies for mechanical-engineering;
the fundamental developments in the area
“Theoretical nano-technologies for instrument-making” –
 theory of nano-technologies for the theoretical bases of instrument-making,
 for the general technology of production and equipment in instrument-making,
 for the designing and constructing of devices,
 for the devices of measurement of the electrical and magnetic sizes,
 for the devices of measurement of the mechanical sizes,
 for the devices of measurement of the time and frequency,
 for the devices of measurement of the structure and physical-chemical properties of substances and materials,
 for the devices of heating-technical and heating-physical measurements,
 for the devices of measurement of the acoustical sizes and characteristics,
 for the devices of measurement of the optical and lighting-technical sizes and characteristics,
 for the devices of measurement of the ionization radiations,
 for the devices of non-destroying control of the products and materials,
 for the general structural elements,
 the units of measuring devices, the systems and means of office equipment,
 theory of the cognitive modeling technology
 in the theoretical nano-technologies for instrument-making;

the fundamental developments in the area
“Theoretical nano-technologies
for polygraphy, reprography and photo-cinema-technics” –
theory of nano-technologies for polygraphy, reprography and photo-cinema-technics,
theory of the cognitive modeling technology
in the theoretical nano-technologies for polygraphy, reprography and photo-cinema-technics;
the fundamental developments in the area
“Theoretical nano-technologies for light industry” –
theory of nano-technologies for the textile industry,
for the knitted industry, for the clothing industry,
for the tanning industry, for the fur industry,
for the industry of artificial leather and film materials,
for the shoe industry, for the leather-haberdashery industry,
for the bristle-brush manufacture, for the manufacture of furniture,
theory of the cognitive modeling technology
in the theoretical nano-technologies for light industry;
the fundamental developments in the area
“Theoretical nano-technologies for the food-processing industry” –
theory of nano-technologies for the food raw materials and auxiliary materials,
for the processes and devices of food manufactures,
for the (grain-)elevator and flour(-grinding)-sereals(croup) industry,
for the mixed-fodder industry,
for the baking of bread and macaroni industry,
for the confectionery industry, for the sugar industry,
for the starched-treacle industry,
for the barmy industry, for the brewing industry,
for the spirituous industry, for the industry of high-alcohol drinks,
for the wine-making (vinous) industry, for the industry of without-alcohol (soft) drinks,
for the canning, vegetable-drying and food-concentrate industry,
for the food-gustatory industry, for the tobacco industry,
for the meat and bird-fancier-processing industry,
for the manufacture of eggs and egg products,
for the dairy (milk) industry, for the butter-fatty (creamery) industry,
theory of the cognitive modeling technology
in the theoretical nano-technologies for the food-processing industry;
the fundamental developments in the area
“Theoretical nano-technologies for transport” –
theory of nano-technologies for the railway transport,
for the motor-car transport, for the water transport,
for the air transport, for the pipeline transport,
for the industrial transport, for the urban (municipal) transport,
for the interaction of the different kinds (types) of transport,
for the mixed transportations, for the other kinds (types) of transport,
theory of the cognitive modeling technology
in the theoretical nano-technologies for transport;

t h e f u n d a m e n t a l d e v e l o p m e n t s i n t h e a r e a
“Theoretical nano-technologies for architecture and construction” ()* –
the engineering-theoretical bases of construction, architecture,
building materials, products and building constructions,
theory of technology of building-installation works,
theory of technology of production of the building materials and products,
m a c h i n e s , m e c h a n i s m s , e q u i p m e n t a n d t o o l ,
used in the construction and industry of building materials,
theory of engineering researches in construction,
theory of architectural-building designing,
theory of district lay-out, theory of town-planning,
theory of the objects of construction and engineering support of the objects of construction,
theory of tendencies, dependences and laws in architecture and construction,
theory of the cognitive modeling technology
with dynamic cloning, verification and subverification,
theory of the iterative cycle and the technique of use
o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y ,
theory of the parametrical cognitive models block
f o r a r c h i t e c t u r e a n d c o n s t r u c t i o n
(the buildings and constructions based on the cognitive circle, cognitive disc,
cognitive cylinder, cognitive cone and cognitive sphere),
theoretical bases of formation of the parametrical cognitive models block,
theory of the ways of representation of the structure of the cognitive models and problem environments
(the formal and nonformal classical and new of 0th generation,
the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation),
theory of the algorithm of formation of the cognitive model structure,
theory of the technique of research of the cognitive model parameters,
theory of the algorithm of analysis of a posteriori results of research,
theory of the adaptive automation means of architecture and construction
(the automation means of formation and research of the cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere,
one-, two-, three-, fore-, five- and more cognitive sphere and others),
theory of the statistical substantiation of practical use of the received results,
theory of the factors influencing to the efficiency of construction of the buildings and constructions,
theory of organization and plan of carrying out of the experiment,
theory of the research of parameters of the parametrical cognitive models block,
theory of preliminary processing of a posteriori results of diagnostics,
theory of choice of the statistical analysis methods of the generated data sets,
theory of the analysis of dynamics of the resultativity of construction,
theory of the dispersion, regression, discriminant, cluster analysis,
multidimensional scaling, factor analysis and bibliographic lists].

The fundamental developments branches and departments of “SRI”
allow to develop the main and derivative scientific results of CMT.

2.2.4. The fundamental developments branch

“Cognitive modeling in the exact sciences”

(“CM in ES”) (“OEMMPU”)

of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the exact sciences”” (“OEMMPU”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental developments department “Theory of (theoretical) mechanics and gyroscopes”” (“SM”) (*)
[the fundamental developments in the area “Theoretical mechanics” ()* – theoretical bases, general problems and methods of theoretical mechanics, theory of general mechanics, theory of mechanics of liquid and gas, theory of mechanics of deformable firm body, theory of the complex and special sections of theoretical mechanics, theoretical bases of the cognitive modeling technology in theoretical mechanics, theoretical bases of formation of the parametrical cognitive models block for the complex system analysis of the objects, processes and phenomena of theoretical mechanics,

theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of research of the objects, processes and phenomena of theoretical mechanics, theory of the technical means of support of the complex system analysis of the difficult objects, processes and phenomena of theoretical mechanics (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the objects, processes and phenomena of theoretical mechanics, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of functioning of the objects, processes and phenomena of theoretical mechanics, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *t h e f u n d a m e n t a l d e v e l o p m e n t s i n t h e a r e a* “ *T h e o r e t i c a l m e c h a t r o n i c s* ” – theoretical bases, general tasks and methods of theoretical mechatronics, t h e o r y o f g e n e r a l t h e o r e t i c a l m e c h a t r o n i c s , theory of mechatronics of liquid, gas and deformable firm body, theory of the complex and special sections of theoretical mechatronics, theory of the automation means and devices of mechatronics, t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y in the theoretical mechatronics (theory of hygroscope-building)].

II. “The fundamental developments department
 “Theory of mechanical-engineering, instrument-making and metrology” (“SPMPU”)
 [*the fundamental developments in the area
 “Theoretical mechanical-engineering”* –
 theory of mechanical-engineering-science and details of machines,
 theory of machine-building materials, theory of technology of mechanical-engineering,
 theory of foundry manufacture, theory of forge-stamp manufacture,
 theory of assembly manufacture, theory of cutting of materials,
 theory of electrical-physical-chemistry processing,
 theory of thermal and strengthening processing,
 theory of furnish of surfaces and drawings of coverings,
 theory of manufacture of products from powder materials,
 theory of manufacture of nonmetallic products,
 theory of machine-tool construction, theory of robotics,
 theory of tool manufacture, theory of mining mechanical-engineering,
 theory of metallurgical mechanical-engineering,
 theory of reactor-construction, theory of turbine-construction,
 theory of special power-engineering installations,
 theory of chemical and oil mechanical-engineering,
 theory of locomotive-construction and carriage-building, theory of engine-construction,
 theory of motor-car-building, theory of ship-building, theory of aircraft-building,
 theory of space technics and rocket-building,
 theory of hoisting-transport mechanical-engineering,
 theory of building and road mechanical-engineering,
 theory of communal mechanical-engineering,
 theory of tractor and agricultural mechanical-engineering,
 theory of mechanical-engineering for the light industry,
 theory of polygraphic mechanical-engineering,
 theory of mechanical-engineering for the food-processing industry,
 theory of mechanical-engineering for the trade and public catering,
 theory of household machines and devices, theory of manufacture of weapon,
 theoretical bases of the other branches of mechanical-engineering,
 theory of the cognitive modeling technology
 in the theoretical mechanical-engineering;
*the fundamental developments in the area
 “Theoretical instrument-making”* –
 theoretical bases of instrument-making,
 theory of general technology of production and equipment in instrument-making,
 theory of designing and constructing of devices,
 theory of the devices for the measurement of electrical and magnetic sizes,
 theory of the devices for the measurement of mechanical sizes,
 theory of the devices for the measurement of time and frequency,
 theory of the devices for the measurement of composition (structure)
 and physical-chemical properties of the substances and materials,
 theory of the devices for the heating-technical and heating-physical measurements,
 theory of the devices for the measurement of acoustical sizes and characteristics,
 theory of the devices for the measurement of optical
 and lighting-technical sizes and characteristics,
 theory of the devices for the measurement of ionization radiations,
 theory of the devices of the non-destroying control of products and materials,
 theoretical bases of the general structural elements,
 the units of measuring devices and systems,
 the devices of interface and the means of office equipment (periphery),
 theory of the cognitive modeling technology
 in the theoretical instrument-making;

the fundamental developments in the area “Theoretical metrology” – theory of the scientific bases and technical means of theoretical metrology and metrological support, theory of the state, national and international systems and services of metrology, theory of the measurement of separate sizes and characteristics, theory of the standard samples of composition (structure) and properties of the substances and materials, theory of the cognitive modeling technology in the theoretical metrology (theory of measurement)].

III. “The fundamental developments department “Theory of power-engineering and electrical-engineering” (“SE”) [*the fundamental developments in the area “Theoretical power-engineering”* – theory of power-resources, theory of power-engineering (energetic) balance, theory of electrical-power-engineering (energetics) (industry), theory of heating-power-engineering (industry), theory of heating-technics, theory of atomic power-engineering (industry), theory of hydro-power-engineering (industry), theory of helium-power-engineering (industry), theory of wind-power-engineering (industry), theory of the direct transformation of energy, theory of the cognitive modeling technology in the theoretical power-engineering; *the fundamental developments in the area “Theoretical electrical-engineering”* – theory of electrical-engineering, theory of electrical-technical materials, theory of electrical machines, theory of electrical devices, theory of transformers and electrical reactors, theory of power electrical condensers, theory of power converting technics, theory of electrical drive, theory of electrical-thermics, theory of electrical-welding equipment, theory of wire and cable, theory of electrical isolators, theory of light-engineering, theory of the electrical-technical equipment of special purpose, theory of the cognitive modeling technology in the theoretical electrical-engineering].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.5. The fundamental developments branch

“Cognitive modeling

in the industry and chemical sciences”

(“CM in I and CHS”) (“OHNM”)

of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the industry and chemical sciences”” (“OHNM”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental developments department “Theory of the light, food, forestry and wood-processing industry, architecture and construction, the agriculture, forestry, water and fish economy and aqua-culture”” (“SNM”) (*)
[the fundamental developments in the area “Theoretical light industry” – theory of textile industry, theory of knitted industry, theory of clothing industry, theory of tanning industry, theory of fur industry, theory of the industry of artificial leather and film materials, theory of shoe industry, theory of leather-haberdashery industry, theory of bristle-brush manufacture, theory of the manufacture of furniture, theory of the cognitive modeling technology in the theoretical light industry;

the fundamental developments in the area
“Theoretical food-processing industry” –
theory of food raw materials and auxiliary materials,
theory of the processes and devices of food-processing manufactures,
theory of (grain-)elevator and flour(-grinding)-sereals(croup) industry,
t h e o r y o f m i x e d - f o d d e r i n d u s t r y ,
theory of baking of bread and macaroni industry,
theory of confectionery industry, theory of sugar industry,
t h e o r y o f s t a r c h e d - t r e a c l e i n d u s t r y ,
theory of barmy industry, theory of brewing industry,
t h e o r y o f s p i r i t u o u s i n d u s t r y ,
theory of the industry of high-alcohol drinks,
t h e o r y o f w i n e - m a k i n g (v i n o u s) i n d u s t r y ,
theory of the industry of without-alcohol (soft) drinks,
theory of canning, vegetable drying and food-concentrate industry,
theory of food-gustatory industry, theory of tobacco industry,
theory of meat and bird-fancier-processing industry,
theory of the manufacture of eggs and egg products,
theory of dairy (milk) industry, theory of butter-fatty (creamery) industry,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l f o o d - p r o c e s s i n g i n d u s t r y ;
the fundamental developments in the area
“Theoretical forestry and wood-processing industry” –
theory of wood-science, theory of forestry-cutting works,
theory of the transportation of wood, theory of forestry-timber works,
theory of technology and equipment for the processing of wood,
theory of forestry-sawmill manufacture, theory of the manufacture of joiner-building products,
theory of the manufacture of plywood and plates, theory of the manufacture of furniture,
theory of the manufacture of matches, theory of the manufacture of wooden container,
t h e o r y o f t h e s p e c i a l w o o d - p r o c e s s i n g m a n u f a c t u r e s ,
t h e o r y o f p u l p - p a p e r i n d u s t r y ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l w o o d - p r o c e s s i n g i n d u s t r y ;

the fundamental developments in the area “Theoretical architecture and construction” ()* – the engineering-theoretical bases of construction, theory of architecture, theory of building materials and products, theory of building constructions, theory of the technology of construction-installation works, theory of the technology of production of the building materials and products, theory of machines and mechanisms, equipment and tools, used in the construction and the industry of building materials, theory of engineering researches in construction, theory of architectural-construction designing, theory of district lay-out, theory of town-planning, theory of the objects of construction, theory of the engineering support of the objects of construction, theory of tendencies, dependences and laws in architecture and construction, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of the adaptive automation means of architecture and construction (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of construction of the buildings and constructions, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of construction, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists;

the fundamental developments in the area
“Theoretical agriculture and forestry” –
theory of agricultural biology, theory of soil-science,
theory of agriculture, theory of agricultural melioration,
theory of agro-chemistry, theory of plant-growing-science,
theory of the protection of agricultural plants, theory of live-stock-farming (animal-industry),
theory of veterinary-science, theory of the preparation of agricultural production,
theory of hunting and hunting economy, theory of forestry,
theory of economics and organization of agriculture,
theory of the mechanization and electrification of agriculture,
theory of the cognitive modeling technology
in the theoretical agriculture and forestry;
the fundamental developments in the area
“Theoretical water economy” –
the theoretical scientific bases of water economy,
theory of water economy, theory of water-economy construction,
theory of hydro-technical and hydro-ameliorative constructions,
theory of irrigation and water-supply, theory of irrigating systems,
theory of drying systems, theory of sewage waters, their clearing and use,
theory of the quality of water, theory of tests, measurements, control in the water economy,
theory of mechanization and automation in the water economy,
theory of complex use of water resources,
theory of the cognitive modeling technology
in the theoretical water economy;
the fundamental developments in the area
“Theoretical fish economy and aqua-culture” –
theory of the biological resources of the world ocean and internal reservoirs,
theory of aqua-culture, theory of fish-breeding (culture), theory of industrial fishery,
theory of the technical operation of the fleet of fishing industry,
theory of the technical operation of fish seaports,
theory of the technology of processing of the raw materials of water origin,
theory of the equipment for the fish-processing industry,
theory of the cognitive modeling technology
in the theoretical fish economy and aqua-culture].

II. “The fundamental developments department “Theory of chemistry, chemical technology and chemical industry”” (“SCHN”) [*the fundamental developments in the area “Theoretical chemistry”* (*) – theory of the general-laboratory chemical equipment, theory of equipment, theory of physical chemistry, theory of nonorganic chemistry, theory of complex compounds, theory of analytical chemistry, theory of organic chemistry, theory of bio-organic chemistry, theory of the natural organic compounds and their synthetic analogues, theory of chemistry of high-molecular compounds, theory of biological chemistry, theory of the cognitive modeling technology in the theoretical chemistry, theory of modeling of the structure of the (non)organic chemical elements and the chemical elements with 1, 2, 3, 4, 5 and more nucleuses; *the fundamental developments in the area “Theoretical chemical technology and chemical industry”* – theory of the processes and devices of chemical technology, theory of chemical raw materials, theory of production of the nonorganic substances and products, theory of production of the fertilizers, theory of production of the silicate and refractory nonmetallic materials, theory of industrial organic synthesis, theory of the industrial synthesis of organic dyes and pigments, theory of the technology of production of the photographic materials, theory of the technology of production of the explosive substances and chemical protection means, theory of the technology of storage and destruction of the chemical weapon, theory of the technology of production of the chemical-pharmaceutical means, theory of the technology of production of the fragrant substances, theory of the technology of production of the pesticides and disinfectant substances, theory of the technology of processing of the natural gases, oil, gas condensate, their products and analogues, motor fuel and lubricant materials, theory of the technology of processing of the firm combustible minerals, theory of timber-chemical productions, theory of the technology of production of the natural high-molecular compounds, theory of the technology of production of the synthetic high-molecular compounds, theory of the technology of production of the plastics, theory of the technology of production of the rubbers and products from them, theory of the technology of production of the varnish-paint materials and organic coverings, theory of the technology of production of the chemical fibers and strings, theory of the technology of production of the chemical reactants and especially clean substances, theory of the technology of production of the household chemical (goods) products, theory of the technology of production of the auxiliary materials, theory of the cognitive modeling technology in the theoretical chemical technology and chemical industry].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.6. The fundamental developments branch
“Cognitive modeling in the biological sciences”
(“CM in BS”) (“OBN”)
of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The fundamental developments branch "Cognitive modeling in the biological sciences"” (“OBN”) treats to the fundamental developments divisions of “The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N.” (“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental developments department "Theory of biology and pharmacology”” (“SOB”)
[the fundamental developments in the area “Theoretical biology” – theory of biology, theory of the methods and equipment for the biological researches, theory of molecular biology, theory of bio-physics, theory of cytology, theory of embryology, theory of genetics, theory of virology, theory of micro-biology, theory of botany, theory of physiology of plants, theory of zoology, theory of ecology, theory of anthropology, theory of physiology of human and animals, theory of morphology of human and animals, theory of immunology, theory of pharmacology, theory of toxicology, theory of radiation biology, theory of space biology, theory of bionics, theory of bio-cybernetics, theory of bio-engineering, theory of the cognitive modeling technology in the theoretical biology, theory of modeling of the biological construct of organism of the organic individual;

the fundamental developments in the area “ Theoretical pharmacology ” – theory of pharmacology, theory of the methods and equipment for the pharmacological researches, theory of the pharmaco-kinetics and pharmaco-dynamics of preparations and substances, theory of molecular pharmacology, theory of bio-pharmacology, theory of cytological pharmacology, theory of embryological pharmacology, theory of genetic pharmacology, theory of virological pharmacology, theory of micro-biological pharmacology, theory of botanical pharmacology, theory of physiological pharmacology of plants, theory of zoological pharmacology, theory of ecological pharmacology, theory of anthropology of pharmacology, theory of physiological pharmacology of human and animals, theory of immunological pharmacology, theory of toxicological pharmacology, theory of radiation pharmacology, theory of space pharmacology, theory of bio-engineering pharmacology, theory of the cognitive modeling technology in the theoretical pharmacology].

II. “The fundamental developments department “Theory of physical-chemical bio-technology”” (“SFCHB”) (*)

[*the fundamental developments in area “ Theoretical bio-technology ”* (*) – theory of raw materials and products for the bio-technological manufacture, theory of bio-technological processes and devices, theory of cellular engineering, theory of technological bio-energetics, theory of applied genetic engineering, theory of engineering enzymology, theory of the immuno-bio-technological methods of analysis, the other theories and problems of bio-technology (genetic engineering), theory of the cognitive modeling technology in the theoretical physical-chemical bio-technology (theory of genetic engineering), theory of modeling of the structure of desoxyribonucleic acid based on the multidimensional cognitive cylinder].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

**2.2.7. The fundamental developments branch
“Cognitive modeling in the physiology,
fundamental medicine and public-health-services”
 (“CM in PHFM and P”) (“OFFM”)
of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”**

The developed “The fundamental developments branch
" Cognitive modeling in the physiology,
fundamental medicine and public-health-services"” (“OFFM”)
treats to the fundamental developments divisions
of “The scientific-research institute "System and financial analysis based on
cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N.”
 (“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – “SRI”) as the first SRI
in the structure of “SIO "Academy of cognitive natural sciences"” (“SIO "ACNS"”)
and the add. component of the system of science and education of the modern country
for the creation, distribution and use of the main and derivative
scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru)
[see the fundamental developments branches and departments of “SRI”]:
1) it is executed by the principle of “the administrative-economy submission”;
2) works in the several main directions, which allow to provide
the development of the fundamental main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU "LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The fundamental developments department
"Theory of physiology, bio-physiology and private physiology"” (“SF”) (*)
*[the fundamental developments in the area
“ Theoretical physiology ” (*) –*
theory of general physiology, theory of the methods and equipment of physiological researches,
theory of physiology, theory of molecular physiology,
theory of physiological cytology, theory of physiological embryology,
theory of physiological genetics, theory of physiology of viruses,
theory of micro-physiology, theory of physiology of organic individuals,
theory of physiology of plants, theory of zoological physiology,
theory of ecological physiology, theory of anthropology of physiology,
theory of physiology of human and animals, theory of physiological immunology,
theory of physiological pharmacology and toxicology, theory of radiation physiology,
theory of space physiology, theory of physiological cybernetics,
theory of the cognitive modeling technology
in the theoretical physiology ;

t h e f u n d a m e n t a l d e v e l o p m e n t s i n t h e a r e a
“Theoretical bio-physiology and public-health-services” () –*
theory of bio-medical-physiological disciplines,
theory of private physiology of analyzers and sensory systems,
theory of bio-physiological materials, means and products,
theory of bio-physiological technics, theory of clinical physiology,
theory of physiological bio-pharmacology and bio-epidemiology,
theory of the other branches of bio-medicine and public-health-services,
theory of social physiology, theory of the organization and management of public-health-services,
t h e o r y o f t h e m o d i f i e d m o d e l o f r e d u c e d e y e ,
t h e o r y o f t h e m o d i f i e d m o d e l o f r e d u c e d e a r ,
theory of the software for the automation of research tasks
of the physiological, psychological and linguistic parameters
of the parametrical cognitive models block in medicine,
theory of the statistical substantiation of practical use of the received results,
theory of the physiological, psychological and linguistic factors influencing
to the efficiency of functioning of the information-educational environment
and the increase of resultativity of the automated training system
with the properties of adaptation based on the cognitive models,
theory of organization and plan of carrying out of the experiment,
theory of research of the physiological, psychological and linguistic
parameters of the cognitive models of the subject of training and the means of training,
theory of preliminary processing of a posteriori results of diagnostics,
theory of choice of the statistical analysis methods of the generated data sets,
theory of the analysis of dynamics of the resultativity of researches
in the area of bio-physiology and public-health-services,
theory of the dispersion, regression, discriminant, cluster analysis,
multidimensional scaling, factor analysis and bibliographic lists,
theory of the complex analysis of the modified model of reduced eye
for the research of acuity of vision, field of vision, color perception and others parameters
i n t h e D e s c a r t e s s p a c e o f t h e 2 a n d 3 c o o r d i n a t e s ,
theory of the complex analysis of the modified model of reduced ear
for the research of absolute sensitivity and thresholds of sensitivity
i n t h e D e s c a r t e s s p a c e o f t h e 2 a n d 3 c o o r d i n a t e s] .

II. “The fundamental developments department
“Theory of medicine, public-health-services, labor safety,
environment preservation and ecology of person” (“SFM”) (*)
[the fundamental developments in the area
“Theoretical medicine and public-health-services” –
theory of medical-biological disciplines,
theory of medical materials, means and products, theory of medical technics,
theory of clinical medicine, theory of pharmacology, theory of hygiene and epidemiology,
theories of the other branches of medicine and public-health-services, theory of social hygiene,
theory of the organization and management of public-health-services,
theory of the cognitive modeling technology
in the theoretical medicine and public-health-services;
the fundamental developments in the area
“Theoretical labor safety” () –*
theory of the organization and management of labor safety,
working conditions, industrial sphere and safety precaution,
theory of professional illnesses and their preventive measures,
theory of accidents on manufacture and their prevention,
theory of work-capacity and the examination of work-capacity,
theory of labor safety by the categories of workers,
theory of labor safety on the manufactures of increased danger,
theory of the cognitive modeling technology
in the theoretical labor safety,
theory of the cognitive model of the subject of training;

t h e f u n d a m e n t a l d e v e l o p m e n t s i n t h e a r e a
“Theoretical preservation of environment and ecology of person” –
theory and methods of studying of the preservation of environment and person,
theory of the ecological bases of use of the natural resources,
theory of international cooperation, theory of contamination of environment,
theory of pollution, theory of the pollution and protection of atmosphere,
theory of the pollution and protection of the waters of land, seas and oceans,
theory of the protection of soils, theory of the protection of bowels,
theory of the ecological bases of ability-to-live of the person,
theory of influence of the anthropogenic changes of environment
o n t h e h e a l t h a n d s o c i a l - l a b o r p o t e n t i a l o f p e r s o n ,
o n t h e c o n d i t i o n o f n a t u r a l e c o s y s t e m s ,
populations and organisms of the vegetative and generative (fauna) world,
theory of protection of the vegetative and generative (fauna) world,
theory of the anthropogenic influence on landscape,
theory of the protection and optimization of landscape, theory of reserved affair,
theory of the protected natural territories and water-areas,
theory of the acts of nature and the accidents of anthropogenic origin,
t h e o r y o f t h e e c o l o g i c a l s a f e t y o f p e r s o n ,
theory of the rational use and reproduction of natural resources by the person,
theory of the preservation of environment and natural resources in the separate regions and countries,
theory of waste management, theory of small-waste and without waste technology,
theory of the protection of person from the noise, vibration,
e l e c t r i c a l a n d m a g n e t i c f i e l d s a n d r a d i a t i o n s ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
in the theoretical preservation of environment and ecology of person].

The fundamental developments branches and departments of “SRI”
allow to develop the main and derivative scientific results of CMT.

2.2.8. The fundamental developments branch

“Cognitive modeling in the sciences about The Earth”

(“CM in S about E”) (“ONZ”)

of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the sciences about The Earth”” (“ONZ”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental developments department “Theory of geo-physics, geology, mining and metallurgy”” (“SGGGGN”) [*the fundamental developments in the area “Theoretical geo-physics”* – theory of geo-magnetism and the high layers of atmosphere, theory of meteorology, theory of climatology, theory of oceanology, theory of hydrology of land, theory of glaciology, theory of physics of The Earth, theory of the cognitive modeling technology in the theoretical geo-physics;

the fundamental developments in the area "Theoretical geology" – theory of lithology, theory of tectonics, theory of the geological-geo-physical researches of the deep structure of The Earth, theory of regional geology, theory of planetology, theory of stratigraphy, theory of paleontology, theory of geo-chemistry, theory of mineralogy, theory of petrography, theory of experimental and technical mineralogy and petrography, theory and methods of the mineralogical-petrographical and geo-chemical laboratory researches (bench or field), theory of anthropogenic period, theory of neo-tectonics, theory of geo-morphology, theory of geology of ore minerals, theory of geology of nonmetallic minerals, theory of geology of the fields of oil, gas and condensates, theory of geology of the deposits of coal, bituminous breeds and peat, theory of the methods of search and investigation of the minerals deposits, theory of the technics and technology of geological-prospecting works, theory of hydro-geology, theory of engineering geology, theory of frozen-condition-of-ground-science, theory of the cognitive modeling technology in the theoretical geology;

the fundamental developments in the area "Theoretical mining" – theory of the technics and technology of development of the deposits of firm minerals, theory of development of the deposits of ores of the ferrous metals, theory of development of the deposits of ores and looses of the color and rare metals and diamonds, theory of development of the deposits of coal and combustible slates, theory of development of the deposits of peat, theory of development of the deposits of building and road materials, fire-resistant, ceramic, glass and mineral technical raw materials, theory of development of the deposits of chemical and agricultural-chemical raw materials and salts, theory of development of the deposits of precious jewels and ornamental stones, theory of the enrichment of minerals, theory of development of the oil and gas deposits, theory of the cognitive modeling technology in the theoretical mining;

the fundamental developments in the area "Theoretical metallurgy" – theory of metallurgical processes, theory of metallurgical heating-engineering, theory of the production of ferrous metals and alloys, theory of the production of color (nonferrous) metals and alloys, theory of powder metallurgy, theory of the metallurgy of semi-conductors, theory of rolling production, theory of drawing and hardware production, theory of the production of pipes, theory of metallurgical-science, theory of the technical analysis in metallurgy, theory of the cognitive modeling technology in the theoretical metallurgy].

II. “The fundamental developments department “Theory of oceanology, structure and physics of atmosphere, geodesy, cartography and geography of The Earth and planets”” (“SOFAG”)
[the fundamental developments in the area “Theoretical oceanology” – theory of oceanology, theory of applied oceanology, theory of aero-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of oceanodesy, theory of mapping of the underwater world of The Earth and planets, theory of the cognitive modeling technology in the theoretical oceanology;
the fundamental developments in the area “Theoretical structure of atmosphere” – theory of the structure of atmosphere, theory of aero-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of planetodesy of atmosphere, theory of mapping of the atmosphere of The Earth and planets, theory of the cognitive modeling technology in the theoretical structure of atmosphere;
the fundamental developments in the area “Theoretical physics of atmosphere” – theory of the questions of the atmosphere of The Earth and planets, theory of the general problems of the physical experiment of atmosphere, theory of physics of elementary particles of atmosphere, theory of fields of atmosphere, theory of physics of gases and liquids of atmosphere, theory of thermal-dynamics and statistical physics of atmosphere, theory of physics of micro-disperse firm bodies of atmosphere, theory of physics of plasma of atmosphere, theory of physics of atom and molecule of atmosphere, theory of optics of atmosphere, theory of radio-physics of atmosphere, theory of acoustics of atmosphere, theory of the cognitive modeling technology in the theoretical physics of atmosphere;
the fundamental developments in the area “Theoretical geodesy and cartography” – theory of higher geodesy, theory of applied geodesy, theory of aerial-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of selenodesy, theory of planetodesy, theory of mapping of The Moon and planets, theory of the cognitive modeling technology in the theoretical geodesy and cartography;
the fundamental developments in the area “Theoretical geography” – theory of geography, theory of historical geography, theory of military geography, theory of physical geography, theory of economic and social geography, theory of regional-geography (country-science), theory of medical geography, theory of toponymics, theory of the cognitive modeling technology in the theoretical geography].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.9. The fundamental developments branch
“Cognitive modeling in the social sciences”
(“CM in SS”) (“OON”)
of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the social sciences”” (“OON”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental developments department “Theory of social sciences, philosophy, science-study, politics and political sciences, sociology, (cognitive) psychology, state, law and jurisprudential sciences, patenting business, invention and rationalization work”” (“SFPSPP”) (*)
[the fundamental developments in the area “Theoretical social sciences” – theory and ideology of social sciences, theory of history of social sciences, theory of the modern condition of social sciences, theory of scientific societies, conventions, congresses, conferences and symposiums on the social sciences, theory of international cooperation in the area of social sciences, theory of the organization of scientific-research work in the area of social sciences, theory of information work in the social sciences, theory of the terminology of social sciences, theory of the propagation and popularization of social sciences, theory of the teaching of social sciences, theory of mathematical modeling in the social and humanitarian sciences, theory of the staff of social-scientists, theory of the cognitive modeling technology in the theoretical social sciences;

the fundamental developments in the area
“ Theoretical philosophy ” – theory of the general problems of modern philosophy, theory of general-philosophical problems, theory of logic, theory of philosophy and methodology of science, theory of social philosophy, theory of ethics, theory of aesthetics, theory of philosophy of religion and atheism, theory of history of philosophy, theory of history of philosophy of science and society, theory of the cognitive modeling technology in the theoretical philosophy ;
the fundamental developments in the area
“ Theoretical science - study ” – theory of the development of science, theory of science and society, theory of sociology of science, theory of scientific work and scientific creativity, theory of the organization of science, theory of politics in the area of science, theory of the technique and technics of scientific-research work, theory of economics of science, theory of scientific staff, theory of international cooperation in science, theory of science and scientific-research work in the separate countries, theory of the cognitive modeling technology in the theoretical science - study ;
the fundamental developments in the area
“ Theoretical politics and political sciences ” – theory of the methodology of political researches, theory of history of political doctrines, theory of political systems, theory of internal policy, theory of international relations, theory of external (foreign) politics and diplomacy, theory of the cognitive modeling technology in the theoretical politics and political sciences ;
the fundamental developments in the area
“ Theoretical sociology ” – theory of the general problems of modern sociology, theory of the methodology of sociology, theory of the technique and technics of sociological researches, theory of society as the system, theory of social relations and processes, theory of social classes, communities and groups, theory of sociology of the spheres of social life, theory of social phenomena and institutes, theory of sociology of personality and behavior, theory of historical and regional sociology, theory of applied sociology, theory of history of sociology, theory of the cognitive modeling technology in the theoretical sociology ;

the fundamental developments in the area
“Theoretical (cognitive) psychology” ()* –
theory of general psychology, theory of psychology of development,
theory of age psychology, theory of comparative psychology,
theory of social psychology, theory of applied psychology,
theory of the cognitive modeling technology
in the theoretical (cognitive) psychology,
theory of the modified stratified-step model
of processing (cognitive psychology) of the content of information fragments,
theoretical bases of cognitive psychology and the cognitive modeling technology,
theoretical bases of the parametrical cognitive models block
for the system analysis of the information-educational environments
(the cognitive models of the subject of training and the means of training),
theory of the ways of representation of the structure of the cognitive models and problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the adaptive automation means of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
theory of the technical means of support of the adaptive information interaction
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
the linguistic processor and other processors),
theory of the technical means of support of the complex analysis
(the automation means of formation and research
of the psychological parameters of the cognitive model in the view of the cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere,
one-, two-, three-, four-, five- and more cognitive sphere and others);

the fundamental developments in the area
“Theoretical state management, law and jurisprudential sciences” –
theory of state and law, theory of history of state and law,
theory of history of political and legal doctrines,
theory of constitutional (state) law, theory of municipal law,
theory of administrative law, theory of information law,
theory of financial law, theory of entrepreneurial law,
t h e o r y o f c i v i l l a w ,
theory of civil-procedural law (civil process),
theory of arbitration-procedural law (arbitration process),
theory of patent law, theory of the law of industrial property,
t h e o r y o f c o p y r i g h t a n d a d j a c e n t r i g h t s ,
theory of succession law, theory of family law, theory of agrarian law,
theory of the legal problems of environment preservation,
theory of ecological law, theory of land law, theory of forestry law,
theory of water law, theory of air-protection law,
theory of legislation about bowels, theory of legislation about the fauna world,
theory of labor law, theory of the law of social welfare,
theory of law-enforcement-authorities, theory of criminal law,
theory of criminal-procedural law (criminal process),
theory of criminology, theory of criminal-executive law,
theory of penitentiary, theory of criminalistics, theory of judicial statistics,
theory of international law, theory of international private law,
theory of state and law of the separate countries,
theory of the cognitive modeling technology
in the theoretical state management, law and jurisprudential sciences;
the fundamental developments in the area
“Theoretical patent business, invention and rationalization” –
t h e o r y o f p a t e n t - i n f o r m a t i o n a c t i v i t y ,
t h e o r y o f i n v e n t i o n a n d r a t i o n a l i z a t i o n ,
t h e o r y o f p a t e n t - l i c e n s e w o r k ,
theory of the technical-economic analysis on patent materials,
t h e o r y o f i n v e n t i o n l a w ,
theory of the cognitive modeling technology
in the theoretical patent business, invention and rationalization].

II. “The fundamental developments department
 Theory of economics and economic sciences,
 organization, management, statistics and the financial analysis
 based on the cognitive modeling technology” (“SE”) (*)
*[the fundamental developments in the area
 “Theoretical economics and economic sciences”* –
 the economic theories, theory of history of economic idea,
 theory of accounting-economic sciences, theory of science of the management of economics,
 theory of economic history, theory of world economy,
 theory of international economic relations,
 theory of economic development and growth,
 theory of the prediction and planning of economics,
 theory of economic cycles and crises,
 theory of productive forces and scientific-technical progress,
 theory of the social-economic structure,
 theory of the reproduction structure of economics,
 theory of accumulation and consumption, theory of well-being,
 theory of the territorial structure of economics,
 theory of regional and city economics, theory of the branch structure of economics,
 theory of financial science, the monetary and tax theories,
 theory of the credit-financial institutes,
 theory of the cognitive modeling technology
 in the theoretical economics and economic sciences;
*the fundamental developments in the area
 “Theoretical organization and management”* –
 theory and methodology of management,
 theory of the state and administrative management,
 theory of organization of the management of economics, theory of social management,
 theory of prediction, theory of futurology,
 theory of strategical management, theory of strategical planning,
 theory of the cognitive modeling technology
 in the theoretical organization and management;
*the fundamental developments in the area
 “Theoretical statistics”* –
 theory of general statistics, theory of economic statistics,
 theory of branch statistics, theory of social statistics,
 theory of international statistics,
 theory of statistics of the separate countries and social-economic systems,
 theory of the organization and management of statistics,
 theory of the methods and means of data mining,
 processing and the analysis of statistical information,
 theory of the cognitive modeling technology
 in the theoretical statistics;

t h e f u n d a m e n t a l d e v e l o p m e n t s i n t h e a r e a
“The theoretical financial analysis, monetary circulation and credit” ()* –
t h e o r y o f t e n d e n c i e s , d e p e n d e n c e s a n d l a w s
of the financial analysis of the objects, processes and phenomena,
theory of the system, information and cognitive approaches in economics,
theory of the structure and dynamics of functioning of the financial market,
theory of the global purposes of standardization of the accounting
and the problems of unification of the financial and accounting reporting-documentation,
t h e o r y o f t h e i n s t i t u t i o n a l s u b j e c t s r e g u l a t i n g
the creation, distribution and use of the international standards,
theory of the principles of creation, distribution and use
of the international standards of financial and accounting reporting-documentation,
theory of the basic methods of transformation of the financial reporting-documentation,
t h e o r y o f f o r m a t i o n o f t h e a c c o u n t i n g b a l a n c e
by the international standards of financial reporting-documentation,
theory of qualifying tests of the professional participants
of the financial market of the financial system of the country,
theory of the administrative-legal forms of existence of the managing subject,
theory of the features of procedure of the financial analysis of the managing subject,
theory of the organizational structure of enterprise and its features
(the educational establishment of the system of education
a n d t h e i n f o r m a t i o n - e d u c a t i o n a l e n v i r o n m e n t),
theory of the inflationary depreciation, discounting and compounding
of monetary streams in the economic system of the country,
theory of the indexes of dynamics of the financial market and tools,
theory of dynamics and communications of the managing subject,
theory of investment and innovative politics of the managing subject
i n t h e f i n a n c i a l s y s t e m o f t h e m o d e r n c o u n t r y,
theory of the organizational, technological, scientific, methodical,
normative-legal, information, hardware, software, brainware,
raw, warehouse, personnel and economic preparations of production
and the bases of the financial analysis and estimation of quality of activity
o f t h e c r e d i t a n d o t h e r o r g a n i z a t i o n,
theory of the requirements and structure of financial reporting-documentation
o f t h e (n o n) p r o d u c t i o n o r g a n i z a t i o n a l s t r u c t u r e s,
theory of the additional elements of accounting
and financial reporting-documentation of the credit organization,
theory of the consumers of financial reporting-documentation,

theory of the elements of financial reporting-documentation connected with the changes of financial-economy activity, theory of the simple and consolidated accounting and financial reporting-documentation, theory of the methods of the financial analysis of the different forms of reporting-documentation, theory of the structure of accounts of the accounting and financial analysis, theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, theory of the scheme of carrying out of the auditor check-inspection, the financial analysis and audit, theory of the external and internal control of activity of the different organizations, theory of the kinds of bank operations of the (credit) organization and enterprise, theory of the structure of the accounting balance (form №1), theory of the structure of the explanatory note to the accounting balance, theory of the structure of the report about profits and losses (form №2), theory of the structure of the explanatory note to the report about profits and losses, theory of the structure of the report about the change of capital (form №3), theory of the structure of the report about the movement of monetary resources on accounts (form №4), theory of the structure of the explanatory note to the report about the movement of means, theory of the structure of the appendix to the accounting balance (form №5), theory of the structure of the report about the target use of received means (form №6), theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserved system of USA, theory of the analysis of stability of the credit organization and commercial bank, theory of the basic analytical coefficients of the financial analysis, theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the technique of formation of the normative-legal and information basis for the financial analysis of the (credit) organization and enterprise, theory of the technique of additional check of the information basis of the financial analysis of the (credit) organization and enterprise, theory of the technique of creation and modification of the working plan of accounts and the model of accounting, theory of the technique of carrying out of the financial analysis of the condition of organization, theory of the parametrical cognitive models block for the financial analysis and the increase of efficiency of functioning of the objects, processes and phenomena,

theory of the structure of the cognitive models for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of formation and calculating of the aggregates of accounting balance of the production and nonproduction organization, theory of the calculation of parameters of the cognitive models for the vertical, horizontal and trend static and dynamic financial analysis of the (credit) organization and enterprise in the conditions of definiteness and uncertainty, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the (credit) organization and enterprise in the economic system, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the cognitive models for the vertical, horizontal and trend financial analysis, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of financial-economy activity, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the fundamental developments in the area “Theoretical other branches of economics”* – theory of the production of musical instruments, theory of the production of art products, theory of jeweler industry, theory of the production of toys, theory of the production of sports products, theory of the production of writing goods, theory of the cognitive modeling technology in the theoretical other branches of economics].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.10. The fundamental developments branch “Cognitive modeling in the global problems and international relations”

(“CM in GP and IR”) (“OGPMO”)

of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The fundamental developments branch
“Cognitive modeling in the global problems
and international relations”” (“OGPMO”)
treats to the fundamental developments divisions
of “The scientific-research institute "System and financial analysis based on
cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N.”
 (“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – “SRI”) as the first SRI
in the structure of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS””)
and the add. component of the system of science and education of the modern country
for the creation, distribution and use of the main and derivative
scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru)
[see the fundamental developments branches and departments of “SRI”]:
1) it is executed by the principle of “the administrative-economy submission”;
2) works in the several main directions, which allow to provide
the development of the fundamental main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU "LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The fundamental developments department
"Theory of demography, pedagogics and national education,
standardization, the complex studying of separate countries and regions,
the general and complex problems of natural, exact, technical,
public and applied sciences and branches of production” (“SGP”)
*[the fundamental developments in the area
“Theoretical demography”* –
theory and methodology of demographical science,
theory of the general problems of national-population, theory of statistics of population,
theory of history of population, theory of historical demography,
theory of the resettlement of population, theory of geographical demography,
theory of population of the world,
theory of the cognitive modeling technology
in the theoretical demography;

the fundamental developments in the area “Theoretical pedagogics and national education” – theory of general pedagogics, theory of history of education and pedagogics, theory of personnels, theory of the system of education, theory of preschool education, theory of preschool pedagogics, theory of general-educational (comprehensive) school, theory of the pedagogics of general-educational (comprehensive) school, theory of out-of-school (additional) education and training, theory of out-of-school pedagogics, theory of special (correctional) schools, theory of defectology, theory of primary professional-technical education, theory of the pedagogics of professional (vocational) school, theory of average professional (vocational) education, theory of the pedagogics of average professional (vocational) education, theory of higher professional (vocational) education, theory of the pedagogics of higher professional (vocational) school, theory of education of adults, theory of the improvement of professional skills, theory of self-education, theory of family education, theory of family pedagogics, theory of the specialized branches of education, theory of the technical means of training and training equipment, theory of national education and pedagogics in the separate countries, theory of the cognitive modeling technology in the theoretical pedagogics and national education;

the fundamental developments in the area “Theoretical standardization” – theory of the systems and services of standardization, theory of the scientific-methodological support of the systems and services of standardization, theory of the cognitive modeling technology in the theoretical standardization;

the fundamental developments in the area “Theoretical complex studying of the separate countries and regions” – theory of RF as a particular, theory of RF as a whole, theory of The North-Western federal district of RF, theory of The Central federal district of RF, theory of The Privolgsky federal district of RF, theory of The Southern federal district of RF, theory of The Uralian federal district of RF, theory of The Siberian federal district of RF, theory of The Far-Eastern federal district of RF, theory of the area and territory of the former USSR, theory of the countries of CIS of Eastern Europe, theory of the countries of CIS of Zacaucasia, theory of the countries of CIS of Central Asia, theory of the Baltic countries and Baltic, theory of Europe as a whole, theory of Western Europe, theory of Southern Europe, theory of Central Europe, theory of Eastern Europe as a whole,

theory of Scandinavia and the Scandinavian countries, theory of Asia as a whole, theory of Forward Asia, theory of Eastern Asia, theory of Southern Asia, theory of South-Eastern Asia, theory of Central Asia, theory of Near and Middle East, theory of Africa as a whole, theory of Northern Africa, theory of East Africa, theory of Central Africa, theory of Western Africa, theory of Southern Africa, theory of America as a whole, theory of USA and Canada, theory of Central America, theory of Southern America, theory of Australia and the countries of Oceania, theory of the Arctic and Antarctic polar areas, theory of the surface of The Earth and land, ocean, sea and internal waters, theory of the other political-geographical features of The Earth, theory of the cognitive modeling technology in the theoretical complex studying of the separate countries and regions; *the fundamental developments in the area "Theoretical general and complex problems of natural and exact sciences"* – theory of the general and complex problems of natural and exact sciences, theory of the cognitive modeling technology in the theoretical general and complex problems of natural and exact sciences; *the fundamental developments in the area "Theoretical general and complex problems of technical and applied sciences and branches of production"* – theory of materials-science, theory of the general technology of production, theory of designing, theory of constructing, theory of the flexible industrial systems (FIS), theory of vacuum technics, theory of cryogenic technics, theory of corrosion and protection against corrosion, theory of welding, theory of optical production, theory of staff, theory of the control and management of quality, theory of installation, theory of the operation and repair of industrial equipment, theory of material-technical supply. theory of logistics, theory of warehouse economy, theory of container and packing, theory of secondary raw materials, theory of fire safety, theory of safety, theory of salvage-rescue services, theory of technical aesthetics, theory of ergonomics, theory of the protection of information, theory of the cognitive modeling technology in the theoretical general and complex problems of technical and applied sciences and the branches of production; *the fundamental developments in the area "Theoretical complex problems of social sciences"* – theory of social-political idea, theory of global problems, theory of labor, theory of the cognitive modeling technology in the theoretical complex problems of social sciences].

II. “The fundamental developments department
“Theory of culture and cultural-science, art and art-science,
mass communication, journalism and mass media means,
religion, internal trade and tourist-excursion service,
external trade, transport, housing-communal economy,
housekeeping and household services at the international level” (“SMO”)
[the fundamental developments in the area
“Theoretical culture and cultural-science” –
 theory, methodology and philosophy of culture, theory of history of culture,
 theory of history of the studying of culture, theory of culture in the modern world,
 theory of organization and management in the area of culture,
 theory of international cooperation in the area of culture,
 theory of hardware of the establishments of culture,
 theory of social-cultural activity in the sphere of leisure,
 theory of library affair, theory of library-science,
 theory of bibliography, theory of bibliography-science,
 theory of museum affair, theory of museology (museum-science),
 theory of protection of the monuments of history and culture,
 theory of archival affair, theory of archival-science,
 theory of culture of the separate countries and peoples,
 theory of the cognitive modeling technology
 in the theoretical culture and cultural-science;
the fundamental developments in the area
“Theoretical art and art-science” –
 theory and methodology of art and the problems of art-science,
 theory of history and the modern condition of art,
 theory of art-science and art criticism,
 theory of art in the modern world,
 theory of organization and management in the area of art,
 theory of international cooperation in the area of art,
 theory of fine art,
 theory of music and musicology (music-science), theory of theatre and theater-science,
 theory of mass and theatrical holidays, theory of dance and choreography,
 theory of circus, theory of platform, theory of cinema and motion-picture-art,
 theory of national folk art, theory of art of the separate countries and peoples,
 theory of the cognitive modeling technology
 in the theoretical art and art-science;

the fundamental developments in the area
“ Theoretical mass communication ,
journalism and mass media means ” –
theory of the mass communication means ,
theory of the open network information resources (“Internet” and “WWW”),
theory of journalism, theory of the mass media means,
theory of printing, theory of television (TV), theory of radio,
theory of use of the technical means for the mass communication,
theory of the cognitive modeling technology
in the theoretical mass communication ,
journalism and the mass media means ;
the fundamental developments in the area
“ Theoretical religion ” –
theory of atheism and free-thinking, theory of separate religions, theory of church and cults,
theory of the problems of religious consciousness, theory of philosophy and religion,
theory of religion, theory of church and society,
theory of the organizational-practical activity of churches,
theory of history of atheism, theory of religions and churches,
theory of the cognitive modeling technology
in the theoretical religion ;
the fundamental developments in the area
“Theoretical internal trade and tourist-excursion service” –
theory of the general questions of internal trade and tourist-excursion service,
theory of wholesale trade, theory of retail trade,
theory of public catering, theory of hotel economy,
theory of tourist - excursion service ,
theory of the cognitive modeling technology
in the theoretical internal trade and tourist-excursion service;

the fundamental developments in the area “ Theoretical external trade ” – theory of the kinds of external trade, theory of external-trade politics, theory of communication of the external trade with production, theory of the structure of external trade, theory of the calculations on the external-trade operations, theory of the external-trade transportations, theory of the world commodity markets, theory of the international agreements about trade, theory of international contracts, theory of the international trading organizations, theory of commodity agreements, theory of the organization and management of external trade, theory of the cognitive modeling technology in the theoretical external trade ;

the fundamental developments in the area “ Theoretical transport ” – theory of railway transport, theory of motor-car transport, theory of water transport, theory of air transport, theory of pipeline transport, theory of industrial transport, theory of urban (city) transport, theory of interaction of the different kinds (types) of transport, theory of mixed transportations, theory of the other kinds (types) of transport, theory of the cognitive modeling technology in the theoretical transport ;

the fundamental developments in the area “ Theoretical housing-communal economy, housekeeping and household services ” – theory of housing economy, theory of communal economy, theory of consumer services, theory of housekeeping, theory of the cognitive modeling technology in the theoretical housing-communal economy, housekeeping and household services] .

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.11. The fundamental developments branch

“Cognitive modeling

in the historical-philological sciences”

(“CM in H-PHS”) (“OIFN”)

of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the historical-philological sciences”” (“OIFN”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental developments department “Theory of history and historical sciences”” (“SI”) [*the fundamental developments in the area “Theoretical history and historical sciences”* – theory of general history, theory of history of Azerbaijan, theory of history of Armenia, theory of history of Belorussia, theory of history of Georgia, theory of history of Kazakhstan, theory of history of Kirghizia, theory of history of Moldova, theory of history of RF, theory of history of Tajikistan, theory of history of Turkmenia, theory of history of Uzbekistan, theory of history of Ukraine, theory of history of the separate processes, parties and phenomena of human activity, theory of archeology, theory of ethnography, theory of historical anthropology, theory of auxiliary historical disciplines, theory of history of the separate countries, theory of the cognitive modeling technology in the theoretical history and historical sciences].

II. “The fundamental developments department “Theory of science of language, (cognitive) linguistics, literature, literary-science and oral national creativity”” (“SYL”) (*)
[the fundamental developments in the area “Theoretical science of language” –
 theory of general science of language, theory of applied science of language, theory of languages of the world, theory of the cognitive modeling technology in the theoretical science of language;
the fundamental developments in the area “Theoretical (cognitive) linguistics” (*) –
 theory of the general questions of theoretical (cognitive) linguistics, theory of (cognitive) linguistics, theory of applied linguistics, theory of the cognitive modeling technology in the theoretical (cognitive) linguistics, theory of the modified stratified-step model of understanding (cognitive linguistics) of the content of information fragments, theoretical bases of cognitive linguistics and the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors);
the fundamental developments in the area “Theoretical literature, literary-science and oral national creativity” –
 theory of literature, theory of history of literature, theory of national creativity, theory of the auxiliary literary-science disciplines, theory of the products of fiction literature, theory of the cognitive modeling technology in the theoretical literature, literary-science and oral national creativity].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.12. The fundamental developments branch

“Cognitive modeling in the sports sciences”

(“CM in SPS”) (“OSN”)

of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the sports sciences”” (“OSN”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental developments department “Theory of competitions, sport and sports sciences”” (“STSSSN”) [*the fundamental developments in the area “Theoretical physical training and sport” – theory of physical training and sport, theory of the medical-biological bases of physical training and sport, theory of the material-technical base of physical training and sport, theory of the methodical bases of the kinds of sport, theory of sports competitions, theory of the cognitive modeling technology in the theoretical physical training and sport*].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.2.13. The fundamental developments branch
“Cognitive modeling in the military sciences”
(“CM in MILS”) (“OVN”)
of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The fundamental developments branch “Cognitive modeling in the military sciences”” (“OVN”) treats to the fundamental developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental developments branches and departments of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental developments department “Theory of architecture, construction, technics, history, education, politics and economics in the armed forces”” (“STASTIOPEVS”)
[the fundamental developments in the area “Theoretical military science” – theory of doctrines about war and army, theory of military history, theory of military education and professional training of staff, theory of military politics, theory of military doctrines, theory of military science, theory of military-applied science, theory of arms and military technics, theory of armed forces, theory of military economics, theory of the cognitive modeling technology in the theoretical military science].

The fundamental developments branches and departments of “SRI” allow to develop the main and derivative scientific results of CMT.

2.3. The divisions of applied developments (at the microscopic level) of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N."

The structure of "The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (natural) sciences" named after Veniaminov V.N." ("SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." – "SRI") as the first SRI in the structure of "SIO "ACNS"" (www.vetrovan.spb.ru) includes the various divisions of the process of receiving of the scientific results:

- B. The applied developments (management) divisions of "SRI"**
for the microscopic system, financial and complex analysis – the 27 applied scientific researches sections (departments) (ASRS(DP)) on the 9 applied scientific researches directions (ASRD) of "SIO "ACNS"" corresponds to the 27 scientific-researches laboratories (SRL) on the 9 applied developments directions (ADD) of "SRI", and also the 27 sections on the 9 directions of "The Russian academy of natural sciences".
- B.1. A S R D [A D D] " C o g n i t i v e m o d e l i n g i n t h e n a t u r a l s c i e n c e s " (" C M i n N S ") (" N E N ") .**
- B.1.1. ASRS(DP) [SRL] "Applications of (cognitive) informatics, cybernetics, automatics, computer engineering, data transmission and connection" ("AP(C)ICACEDT and C") ("SIC") (*).**
- B.1.2. ASRS(DP) [SRL] "Applications of mathematics, mathematical physics, mechanics, metrology, astronomy, space researches, the complex system analysis based on the cognitive modeling technology and the complex problems of natural sciences" ("APMMPHMMASRCSAB on CMT and CPNS") ("SMMF") (*).**
- B.1.3. ASRS(DP) [SRL] "Applications of geo-chemical ecology and preservation of environment" ("APG-CHE and PE") ("SNOS").**
- B.1.4. ASRS(DP) [SRL] "Applications of the models of The Earth and The Solar system planets in the geography, geology, geodesy, cartography, astronomy and other sciences" ("APME and SSP in GGGCA and OS") ("SNZ") (*).**
- B.1.5. ASRS(DP) [SRL] "Applications of the models, methods and technologies of the geology of oil and gas and the oil and gas industry" ("APMM and TGO and G and O and GI") ("SNG").**
- B.1.6. ASRS(DP) [SRL] "Applications of the system analysis based on the cognitive modeling technology, prediction, standardization, unification and the complex problems of exact technical sciences" ("APSAB on CMTPSU and CPETS") ("SSAP") (*).**
- B.1.7. ASRS(DP) [SRL] "Applications of theoretical and experimental physics, geo-physics, power-engineering, electrical-engineering, electronics and radio-engineering, nuclear physics, technics and instrument-making" ("APT and EPHG-PHP-EE-EE and R-ENPHT and I-M") ("SF") (*).**
- B.1.8. ASRS(DP) [SRL] "Applications of (non)organic chemistry, crystallography, mineralogy and chemical industry" ("AP(N)OCHCM and CHI") ("SH") (*).**

- B.2. ASRD [ADD] “Cognitive modeling in the applied technical sciences and technologies” (“CM in ATS and T”) (“NNT”).
- B.2.1. ASRS(DP) [SRL] “Applications of mining and metallurgy” (“APM and M”) (“SGM”).
- B.2.2. ASRS(DP) [SRL] “Applications of the sciences about wood and wood processing” (“APS about W and WP”) (“SNL”).
- B.2.3. ASRS(DP) [SRL] “Applications of the noo-sphere knowledge and technologies: the (heavy) mechanical-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture, construction and other branches” (“APN-SK and T: (H)M-EI-MPR and PH-C-TE and FITAC and OB”) (“SNZT”)(*).
- B.2.4. ASRS(DP) [SRL] “Applications of the scientific problems of agro-industrial complex” (“APSPA-IC”) (“SNPAK”).
- B.3. ASRD [ADD] “Cognitive modeling in the geo-political sciences and researches” (“CM in G-PS and R”) (“NSGI”).
- B.3.1. ASRS(DP) [SRL] “Applications of geo-politics and safety” (“APG-P and S”) (“SGB”).
- B.3.2. ASRS(DP) [SRL] “Applications of classical and military history” (“APC and MH”) (“SVIT”).
- B.4. ASRD [ADD] “Cognitive modeling in the society steady development of post-industrial country” (“CM in SSDP-IC”) (“NURS”).
- B.4.1. ASRS(DP) [SRL] “Applications of the complex problems of country development” (“APCPCD”) (“SPUR”)(*).
- B.5. ASRD [ADD] “Cognitive modeling in the social-economic and jurisprudential sciences” (“CM in S-E and JS”) (“NSEPP”).
- B.5.1. ASRS(DP) [SRL] “Applications of the inter-branch jurisprudential and economic system researches of society and country” (“APIJ and ESRS and C”) (“SMEE SI”).
- B.5.2. ASRS(DP) [SRL] “Applications of the complex problems of micro-(macro-)economics, social sphere and market economy of the country” (“APCPM-(M-)ESS and MEC”) (“SPMSRH”).
- B.5.3. ASRS(DP) [SRL] “Applications of economics, management, sociology, statistics and their other branches” (“APEMSS and TOB”) (“SES”).
- B.5.4. ASRS(DP) [SRL] “Applications of the financial analysis, accounting and audit of the (credit) organization based on the cognitive modeling technology” (“APFAA and A(C)OB on CMT”) (“SFABUA”)(*).

- B.6. ASRD [ADD] “Cognitive modeling in the biological and medical sciences” (“CM in B and MS”) (“NBME”).
- B.6.1. ASRS(DP) [SRL] “Applications of biology, ecology and physiology of plants” (“APBE and PHP”) (“SBE”).
- B.6.2. ASRS(DP) [SRL] “Applications of bio-technology, bio-medicine, ergonomics and labor safety of organic individuals” (“APB-TB-ME and LSOI”) (“SB”) (*).
- B.7. ASRD [ADD] “Cognitive modeling in the humanitarian sciences, art and creativity” (“CM in HSA and C”) (“NGNOT”).
- B.7.1. ASRS(DP) [SRL] “Applications of (cognitive) linguistics, (national) creativity, culture, art and religion” (“AP(C)L(N)CCA and R”) (“SGNT”) (*).
- B.7.2. ASRS(DP) [SRL] “Applications of literature, science-study, philosophy, journalism and mass communication means” (“APLS-SPHJ and MCM”) (“SLPZ”).
- B.7.3. ASRS(DP) [SRL] “Applications of the problems of (cognitive) psychology, education, science and support of young scientists (the programs of grants and others)” (“APP(C)PES and SYS (PG and O)”) (“SPOPMU”) (*).
- B.7.4. ASRS(DP) [SRL] “Applications of innovations of the project "The Russian encyclopedias", philosophy of science, technics and technology on the branches of knowledge” (“APIPREPHST and T on BK”) (“SRE”).
- B.8. ASRD [ADD] “Cognitive modeling in the physical training and sport” (“CM in PHT and S”) (“NFS”).
- B.8.1. ASRS(DP) [SRL] “Applications of sport, sports sciences and actions” (“APSSS and A”) (“SSSNM”).
- B.9. ASRD [ADD] “Cognitive modeling in the military sciences” (“CM in MILS”) (“NVN”).
- B.9.1. ASRS(DP) [SRL] “Applications of architecture, construction, technics, history, education, politics and economics in the armed forces” (“APACTHEP and E in AF”) (“SASTIOPEVC”).
- “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” allows to develop the main and derivative scientific results, in particular the algorithms, methods and technologies of the system, financial and complex analysis for the increase of efficiency of the diverse (information) technologies of single, serial and mass (non)material production of the one or several assortment groups and nomenclature units of goods, works and services to the final consumer of the social-economic formation based on the cognitive modeling technology and the cognitive models.

2.3.1. The applied developments direction

“Cognitive modeling in the natural sciences”

(“CM in NS”) (“NEN”)

of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The applied developments direction “Cognitive modeling in the natural sciences”” (“NEN”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of (cognitive) informatics, cybernetics, automatics, computer engineering, data transmission and connection”” (“SIC”) (*)
[the applied developments in the area “Applications of informatics (theory of information)” – usage of theory of informatics (theory of information), usage of theory of organization of information work, usage of theory of documentary information sources, usage of theory of analytical-synthetic processing of the documentary information sources, usage of theory of information search, usage of theory of information service, usage of theory of the technical means of support of information processes, usage of theory of the cognitive modeling technology in the applications of informatics (theory of information);

t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
*“ Applications of cognitive informatics ” (*) –*
usage of theory of the modified stratified-step model
of perception (psycho-physiology of perception), processing (cognitive psychology)
and understanding (cognitive linguistics) of the information fragments content,
usage of theory of the cognitive modeling technology
in the technical, economic, physical-mathematical and other sciences,
usage of theory of the parametrical cognitive models block
for the system analysis of the information-educational environments
(the cognitive models of the subject of training and the means of training),
usage of theory of the parametrical cognitive models block
for the financial analysis of the (credit) organizations and enterprises
(the cognitive models for the vertical, horizontal and trend
financial analysis of the managing subjects of the economic system),
usage of theory of the parametrical cognitive models block
for the complex analysis of the difficult objects, processes and phenomena,
usage of theory of the ways of representation of the structure
of the cognitive models and difficult problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
usage of theory of the adaptive automation means of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
usage of theory of the technical means of support
o f t h e a d a p t i v e i n f o r m a t i o n i n t e r a c t i o n
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
t h e l i n g u i s t i c p r o c e s s o r a n d o t h e r p r o c e s s o r s) ,

usage of theory of the technical means of support of the financial analysis (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting, the automation means of formation of the accounting balance and the report about profits and losses of the (credit) organization, the automation means of the vertical, horizontal and trend financial analysis based on the analytical coefficients system), usage of theory of the technical means of support of the complex analysis (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others);

the applied developments in the area “Applications of cybernetics” – usage of theory of automatic control systems, usage of theory of modeling, usage of theory of cybernetic control systems, usage of theory of information, usage of theory of artificial intelligence, usage of theory of final automatic-devices and formal languages, usage of theory of reliability of the objects, processes and systems, usage of theory of the system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology in the applications of cybernetics;

the applied developments in the area “Applications of automatics and computer engineering” – usage of theory of automatic control, usage of theoretical bases of programming, usage of theory of computer engineering, usage of theory of elements, units and devices of automatics and computer engineering, usage of theory of input-output devices, usage of theory of memory devices, usage of theory of technology and equipment for the manufacture of the means of automatics and computer engineering, usage of theory of keyboard and calculation-tabulating machines, usage of theory of analog calculating machines (ACM), usage of theory of digital calculating machines and calculating complexes (DCM),

usage of theory of analog-digital (hybrid) calculating machines and calculating complexes, usage of theory of calculating centres (CC), usage of theory of calculating networks (CN), usage of theory of software of calculating machines, complexes and networks, usage of theory of automatic measurement, regulation and control systems, usage of theory of the systems of tele-control and tele-measurement, usage of theory of the automated control systems of technological processes (technological stages), usage of theory of the automated systems of organizational management, usage of theory of automation of designing and scientific researches, usage of theory of the cognitive modeling technology in the applications of automatics and computer engineering; *the applied developments in the area “Applications of data transmission and connection”* – usage of theory of data transmission and connection, usage of theory of designing and constructing of connection devices, usage of theory of technology and equipment for the assembly and adjustments of connection equipment, systems of data transmission, communication lines, multi-channel connection, networks and communication centres, services and facilities of connection, usage of theory of telegraph (cable) connection and equipment, usage of theory of the systems and equipment of data transmission, usage of theory of tele-information services and equipment, usage of theory of phone connection and equipment, usage of theory of the systems of transfer of moving images and sound, usage of theory of facsimile connection and equipment, usage of theory of radio-connection and radio-broadcasting, usage of theory of hyper-optic (LED) connection and equipment, usage of theory of television (TV), usage of theory of optical connection in the free space and equipment, usage of theory of post connection, usage of theory of the cognitive modeling technology in the applications of data transmission and connection].

II. “The scientific-researches laboratory
 “Applications of mathematics, mathematical physics,
 mechanics, metrology, astronomy, space researches,
 the complex system analysis based on the cognitive modeling technology
 and the complex problems of natural sciences” (“SMMF”) (*)
*[the applied developments in the area
 “ Applications of mathematics ” –*
 usage of theory of mathematical logic and applied bases of mathematics,
 usage of theory of numbers, usage of theory of algebra, usage of theory of topology,
 usage of theory of geometry, usage of the mathematical analysis,
 usage of theory of the functions of valid variables,
 usage of theory of the functions of complex variables,
 usage of theory of ordinary differential equations,
 usage of theory of differential equations with private derivatives,
 usage of theory of integrated equations,
 usage of theory of mathematical models of natural and technical sciences,
 usage of theory of the equations of mathematical physics,
 usage of theory of variation calculation,
 usage of mathematical theory of optimum control,
 usage of theory of the functional analysis,
 usage of theory of calculus mathematics,
 usage of theory of probability and mathematical statistics,
 usage of theory of the combinatory analysis, usage of theory of graphs,
 usage of theory of mathematical cybernetics,
 usage of theory of the cognitive modeling technology
 in the applications of mathematics;
*the applied developments in the area
 “ Applications of mathematical physics ” (*) –*
 usage of theory of the general problems of mathematical physics,
 usage of theory of the mathematical models of physics of elementary particles,
 usage of theory of fields (united theory of field),
 usage of theory of the mathematical models of physics of high energies,
 usage of theory of nuclear physics, usage of theory physics of gases and liquids,
 usage of theory of the mathematical models of thermo-dynamics and statistical physics,
 usage of theory of physics of firm bodies, usage of theory of physics of plasma,
 usage of theory of physics of atom and molecule,
 usage of theory of optics, usage of theory of physics of lasers,
 usage of theory of radio-physics,
 usage of theory of the mathematical models of physical bases of electronics,
 usage of theory of acoustics (theory of distribution of waves in the environment),
 usage of theory of the cognitive modeling technology
 in the applications of mathematical physics,
 usage of theory of the cognitive models of the interaction between
 the elementary particles and firm bodies, fields, liquids and gases,
 usage of theory of the cognitive model of the modified
 volumetric planetary model of atom n. a. Bohr N.H.D.,
 usage of theory of the cognitive model of the temperature areas of plasma of atom and molecule,
 usage of theory of the cognitive model of the optical environment of eye,
 usage of theory of the cognitive model of the acoustical environment of ear,
 usage of theory of the cognitive model of the waves distribution in the environment;

the applied developments in the area “Applications of mechanics” (*) – usage of theory of the general tasks and methods of mechanics, usage of theory of mechanics of liquid and gas, usage of theory of mechanics of deformable firm body, usage of theory of the complex and special sections of mechanics, usage of theory of the cognitive modeling technology in the applications of mechanics, usage of theoretical bases of formation of the parametrical cognitive models block for the complex system analysis of the objects, processes and phenomena of mechanics, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and the 2nd generation and the hybrid of the 3rd generation), usage of theory of the adaptive automation means of research of the objects, processes and phenomena of mechanics, usage of theory of the technical means of support of research of the objects, processes and phenomena of mechanics, usage of theory of the technical means of support of the complex system analysis of the difficult objects, processes and phenomena of mechanics (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others);

the applied developments in the area “Applications of mechatronics (theory of hygroscope-building)” – usage of theoretical bases, general tasks and methods of mechatronics, usage of theory of general mechatronics, usage of theory of mechatronics of liquid and gas, usage of theory of mechatronics of deformable firm body, usage of theory of the complex and special sections of mechatronics, usage of theory of the automation means and devices of mechatronics, usage of theory of the cognitive modeling technology in the applications of mechatronics (theory of hygroscope-building);

the applied developments in the area “Applications of metrology (theory of measurement)” – usage of theory of the scientific bases and technical means of metrology and metrological support, usage of theory of the state, national and international systems and services of metrology, usage of theory of measurement of separate sizes and characteristics, usage of theory of standard samples of the structure and properties of substances and materials, usage of theory of the cognitive modeling technology in the applications of metrology (theory of measurement);

the applied developments in the area
*“ Applications of astronomy ” (*)* –
usage of theory of astronomy, usage of theory of heavenly mechanics,
usage of theory of astrometry,
usage of theory of astro-physics of The Solar system, The Sun,
stars, fogs, interstellar environment and star systems,
usage of theory of cosmology,
usage of theory of observatories, tools,
devices and methods of astronomical supervisions,
usage of theory of the cognitive modeling technology
in the applications of astronomy,
usage of theory of the cognitive models of the relative positioning
of 1, 2, 3, 4, 5 and more planets and satellites, The Earth, The Sun and others;
the applied developments in the area
“ Applications of space researches ” –
usage of theory of the devices and methods of applied
scientific researches of the space environment,
usage of theory of planning and realization of starts
of the space vehicles and artificial heavenly bodies,
usage of theory of uncontrol movement
of the space vehicles and artificial heavenly bodies,
usage of theory of control of movement
of the space vehicles and artificial heavenly bodies,
usage of theory of space technics and technology,
usage of theory of safety and medical-biological problems of space flights,
usage of theory of use of space systems for the connection and navigation,
usage of theory of the practical problems
of development of extraterrestrial territories and prospects of astronautics,
usage of theory of applied scientific researches
of the astronomical objects by the space means,
usage of theory of geo-physical applied
scientific researches by the space means,
usage of theory of research of The Earth from the space,
usage of theory of the cognitive modeling technology
in the applications of space researches;

the applied developments in the area “Applications of the complex system analysis” () – usage of theory of tendencies, dependences and laws of the complex system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology for the complex system analysis of the difficult objects, processes and phenomena, usage of theory of the parametrical cognitive models block for the complex analysis and the increase of efficiency of functioning of the difficult objects, processes and phenomena, usage of theory of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and the 2nd generation and the hybrid of the 3rd generation), usage of theory of the algorithms of formation of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the techniques of research of parameters of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of algorithms of processing of a posteriori data of the complex system analysis of the problem spheres, usage of theory of software for the automation of research tasks, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of functioning of the objects, processes and phenomena, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the cognitive models parameters, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the productivity of training, usage of theory of the dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the complex system analysis of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle, the multivariate code device, the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of 2 and 3 coordinates, the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of 2 and 3 coordinates, the chemical element with 1, 2, 3, 4, 5 and more nucleuses, the difficult multivariate hurricane].*

III. “The scientific-researches laboratory
“Applications of geo-chemical ecology and preservation of environment” (“SNOS”)
[the applied developments in the area
“Applications of preservation of environment and ecology” –
usage of theory of the methods of studying of the preservation of environment of the person and animals,
usage of theory of the ecological bases of use of the natural resources,
usage of theory of international cooperation,
usage of theory of environmental contamination of the person and animals,
usage of theory of the control of pollution and protection
of atmosphere, waters of land, seas and oceans,
usage of theory of the protection of soils and bowels,
usage of theory of the ecological bases of ability-to-live of the organic individuals,
usage of theory of influence of anthropogenic changes of environment
on health and activity of organic individuals, on the condition of natural ecosystems,
populations and organisms of the vegetative and generative (fauna) world,
usage of theory of protection of the vegetative and generative world of the person and animals,
usage of theory of anthropogenic influence on landscape,
usage of theory of the protection and optimization of landscape,
usage of theory of nature reserve,
usage of theory of protected natural territories and water-areas,
usage of theory of nature acts and accidents of anthropogenic origin,
usage of theory of ecological safety,
usage of theory of the rational use and reproduction of natural resources,
usage of theory of the preservation of environment and natural resources
in the separate regions and countries,
usage of theory of waste management,
usage of theory of small waste and without waste technology,
usage of theory of protection of organic individuals
against noise, vibration, electric and magnetic fields and radiations,
usage of theory of the cognitive modeling technology
in the applications of preservation of environment and ecology].

I V . “ T h e s c i e n t i f i c - r e s e a r c h e s l a b o r a t o r y
"Applications of the models of The Earth and The Solar system planets
in geography, geology, geodesy, cartography, astronomy and other sciences" ("SNZ") (*)
[t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
“ A p p l i c a t i o n s o f g e o g r a p h y ” –
usage of theory of geography, usage of theory of historical geography,
usage of theory of military geography, usage of theory of physical geography,
usage of theory of economic and social geography,
usage of theory of regional-geography (country-science),
usage of theory of medical geography and toponymics,
usage of theory of the cognitive modeling technology
i n t h e a p p l i c a t i o n s o f g e o g r a p h y ;
t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
“ A p p l i c a t i o n s o f g e o l o g y ” –
usage of theory of lithology, usage of theory of tectonics,
usage of theory of geological-geo-physical researches of the deep structure of The Earth,
usage of theory of regional geology, usage of theory of planetology,
usage of theory of stratigraphy, usage of theory of paleontology,
usage of theory of geo-chemistry, usage of theory of mineralogy,
u s a g e o f t h e o r y o f p e t r o g r a p h y ,
usage of theory of experimental and technical mineralogy and petrography,
usage of theory of the methods of mineralogical-petrographical
a n d g e o - c h e m i c a l l a b o r a t o r y r e s e a r c h e s ,
usage of theory of anthropogenic period,
usage of theory of neo-tectonics, usage of theory of geo-morphology,
u s a g e o f t h e o r y o f g e o l o g y o f o r e m i n e r a l s ,
usage of theory of geology of nonmetallic minerals,
usage of theory of geology of the fields of oil, gas and its condensates,
usage of theory of geology of the deposits of coal, bituminous breeds and peat,
usage of theory of the methods of search and investigation of the deposits of minerals,
usage of theory of technics and technology of geological-prospecting works,
usage of theory of hydro-geology, usage of theory of engineering geology,
u s a g e o f t h e o r y o f f r o z e n c o n d i t i o n o f g r o u n d ,
usage of theory of the cognitive modeling technology
i n t h e a p p l i c a t i o n s o f g e o l o g y ;

the applied developments in the area
“Applications of geodesy and cartography” –
usage of theory of supreme geodesy, usage of theory of geodesy,
usage of theory of aerial-survey and photogrammetry,
usage of theory of topography, usage of theory of photo-topography,
usage of theory of cartography, usage of theory of selenodesy,
usage of theory of planetodesy,
usage of theory of mappings of The Moon and planets,
usage of theory of the cognitive modeling technology
in the applications of geodesy and cartography;
the applied developments in the area
“Applications of astronomy” (*) –
usage of theory of astronomy, usage of theory of heavenly mechanics,
usage of theory of astrometry,
usage of theory of astro-physics of The Solar system, The Earth, The Sun,
stars, fogs, interstellar environment and star systems,
usage of theory of cosmology,
usage of theory of observatories, tools,
devices and methods of astronomical supervisions,
usage of theory of the cognitive modeling technology
in the applications of astronomy,
usage of theory of the cognitive models of the gravitational and other interactions
between 1, 2, 3, 4, 5 and more artificial
space objects, satellites, planets, The Earth and The Sun,
usage of theory of the cognitive models of the work of the basic rocket engine,
the first, the second, the third and the fourth rocket engine of the launch vehicle and others].

V . “The scientific-researches laboratory
“Applications of the models, methods and technologies of geology
of oil and gas and the oil and gas industry”” (“SNG”)
*[the applied developments in the area
“Applications of geology of oil and gas” –*
usage of theory of lithology, usage of theory of tectonics,
usage of theory of geological-geo-physical researches of the deep structure of The Earth,
usage of theory of regional geology of deposits,
usage of theory of planetology, usage of theory of stratigraphy,
usage of theory of paleontology, usage of theory of geo-chemistry,
usage of theory of mineralogy, usage of theory of petrography,
usage of theory of experimental and technical
mineralogy and petrography of oil, natural and passing gas,
usage of theory of the methods of mineral-petrographical
and geochemical laboratory researches ,
usage of theory of anthropogenic period ,
usage of theory of neo-technics, theory of geo-morphology,
usage of theory of geology of the fields of oil, gas and its condensates,
usage of theory of the methods of search and investigation of the fields of oil and gas,
usage of theory of technics and technology of geological-prospecting works,
usage of theory of hydro-geology, usage of theory of engineering geology of oil and gas,
usage of theory of frozen condition of ground of deposits,
usage of theory of the cognitive modeling technology
in the applications of geology of oil and gas ;

the applied developments in the area “Applications of oil and gas industry” – usage of theory of processes and devices of oil and gas technology, usage of theory of oil and gas raw materials, usage of theory of technology of nonorganic substances and products of oil, natural and passing gas, usage of theory of technology of production of fertilizers from oil and gas, usage of theory of technology of production of silicate and refractory nonmetallic materials from oil and gas, usage of theory of industrial organic synthesis, usage of theory of industrial synthesis of organic dyes and pigments from oil and gas, usage of theory of technology of production of photographic materials from oil and gas, usage of theory of technology of protection against explosions and the means of chemical protection of oil and gas technology, usage of theory of technology of production of the chemical-pharmaceutical means from oil, natural and passing gas, usage of theory of technology of production of fragrant substances from oil and gas, usage of theory of technology of production of pesticides and disinfectant substances from oil, natural and passing gas, usage of theory of technology of refining of oil, natural and passing gases and their condensates, their products and analogues, motor fuel and lubricants from oil and gas, usage of theory of technology of production of natural high-molecular compounds from oil, natural and passing gas, usage of theory of technology of production of synthetic high-molecular compounds from oil and gas, usage of theory of technology of production of plastics, rubbers and products from oil, natural and passing gas, usage of theory of technology of production of paint-varnish materials and organic coverings from oil and gas, usage of theory of technology of production of chemical fibers and strings from oil and gas, usage of theory of technology of production of chemical reactants and especially clean substances from oil and gas, usage of theory of technology of production of household chemical goods and auxiliary materials from oil, natural and passing gas, usage of theory of the cognitive modeling technology in the applications of oil and gas industry].

VI. “The scientific-researches laboratory “Applications of the system analysis based on the cognitive modeling technology, prediction, standardization, unification and the complex problems of exact technical sciences”” (“SSAP”) (*)
[the applied developments in the area “Applications of the system analysis” ()* – usage of theory of tendencies, dependences and laws of the system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology, usage of theory of the parametrical cognitive models block for the system analysis of the information-educational environments and the increase of efficiency of functioning of the automated training system with the properties of adaptation based on the cognitive models (the cognitive models of the subject of training and the means of training), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithm of formation of the cognitive model structure,
usage of theory of the technique of research of the cognitive model parameters,
usage of theory of the algorithm of analysis of a posteriori results of research,
usage of theory of the adaptive automation means of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
usage of theory of the technical means of support
of the adaptive information interaction
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
the linguistic processor and other processors),
usage of theory of the statistical substantiation
of practical use of the received results,
usage of theory of the factors influencing to the efficiency
of knowledge formation in the information-educational environment
and the increase of resultativity of functioning
of the difficult objects, processes and phenomena,
usage of theory of organization and plan of carrying out of the experiment
for the research of parameters of the parametrical cognitive models block,
usage of theory of preliminary processing of a posteriori results of diagnostics,
usage of theory of choice of the statistical analysis methods of the generated data sets,
usage of theory of the analysis of dynamics of the resultativity of training,
usage of theory of the dispersion, regression, discriminant, cluster analysis,
multivariate scaling, factor analysis and bibliographic lists;
the applied developments in the area
“ Applications of standardization ” –
usage of theory of systems and services of standardization,
usage of theory of scientific-methodological support of systems and services of standardization,
usage of theory of the cognitive modeling technology
in the applications of standardization].

VII. “The scientific-researches laboratory
“Applications of theoretical and experimental physics, geo-physics,
power-engineering, electrical-engineering, electronics and radio-engineering,
nuclear physics, technics and instrument making” (“SF”) (*)
[the applied developments in the area
“ Applications of physics ” () –*
 usage of theory of the general problems of physical experiment,
 usage of theory of physics of elementary particles,
 usage of theory of fields (united theory of field),
 usage of theory of physics of high energies, usage of theory of nuclear physics,
 usage of theory of physics of gases and liquids,
 usage of theory of thermal-dynamics and statistical physics,
 usage of theory of physics of firm bodies, usage of theory of physics of plasma,
 usage of theory of physics of atom and molecule,
 usage of theory of optics, usage of theory of laser physics,
 usage of theory of radio-physics,
 usage of theory of the physical bases of electronics, usage of theory of acoustics,
 usage of theory of the cognitive modeling technology
 in the applications of physics,
 usage of theory of the cognitive models of the interaction between
 the elementary particles and firm bodies, fields, liquids and gases,
 usage of theory of the cognitive model of the modified
 volumetric planetary model of atom n. a. Bohr N.H.D.,
 usage of theory of the cognitive models of the temperature areas of plasma of atom and molecule,
 usage of theory of the cognitive model of the optical environment of eye,
 usage of theory of the cognitive model of the acoustical environment of ear,
 usage of theory of the cognitive model of the waves distribution in the environment;
the applied developments in the area
“ Applications of geo-physics ” –
 usage of theory of geo-magnetism in the high layers of atmosphere,
 usage of theory of meteorology, usage of theory of climatology,
 usage of theory of oceanography, usage of theory of hydrology of land,
 usage of theory of glaciology, usage of theory of physics of The Earth,
 usage of theory of the cognitive modeling technology
 in the applications of geo-physics ;

the applied developments in the area
“Applications of power-engineering” –
usage of theory of power-resources, usage of theory of power balance,
usage of theory of electrical-power-engineering, usage of theory of heating-power-engineering,
usage of theory heating-technics, usage of theory of atomic power-engineering,
usage of theory of hydro-power-engineering, usage of theory of gelio-power-engineering,
usage of theory of wind-power-engineering, usage of theory of direct transformation of energy,
usage of theory of the cognitive modeling technology
in the applications of power-engineering;
the applied developments in the area
“Applications of electrical-engineering” –
usage of theory of electrical-engineering,
usage of theory of electrical-technical materials,
usage of theory of electrical machines, usage of theory of electrical devices,
usage of theory of transformers, usage of theory of electrical reactors,
usage of theory of power electrical condensers,
usage of theory of power converting technics,
usage of theory of electrical-drive, usage of theory of electrical-thermics,
usage of theory of electrical-welding equipment,
usage of theory of wire and cable, usage of theory of electrical isolators,
usage of theory of light-engineering,
usage of theory of electrical-technical equipment of special purpose,
usage of theory of the cognitive modeling technology
in the applications of electrical-engineering;

the applied developments in the area “Applications of electronics and radio-engineering” – usage of theory of the theoretical bases of electronic technics, usage of theory of radio-engineering, usage of theory of materials for electronics and radio-engineering, usage of theory of technology and equipment for the electronic and radio-technical manufacture, usage of theory of designing and constructing of electronic devices and radio-electronic equipment, usage of theory of electrical-vacuum and gas-discharge devices and units, usage of theory of accelerators of charged particles and plasma, usage of theory of solid-state devices, usage of theory of quantum electronics, usage of theory of holography, usage of theory of crio-electronics, usage of theory of radio-electronic circuits, usage of theory of distribution of radio-waves, usage of theory of antennas, usage of theory of wave-transports, usage of theory of elements of micro-wave technics, usage of theory of radio-transmission and radio-receiving devices, usage of theory of the radio-technical systems of sounding, location and navigation, usage of theory of television (TV) technics, usage of theory of record and reproduction of signals, usage of theory of electrical-acoustics (theory of waves distribution in the environment), usage of theory of ultra-sonic and infra-sonic technics, usage of theory of infra-red technics, usage of theory of units, details and elements of radio-electronic equipment, usage of theory of devices for the radio-technical measurements, usage of theory of the systems and units of information display, usage of theory of the cognitive modeling technology in the applications of electronics and radio-engineering;

the applied developments in the area “Applications of nuclear technics and instrument-making” ()* – usage of theory of nuclear raw materials and fuel, usage of theory of synthesis of isotopes, usage of theory of isotopes and ionization radiations, usage of theory of nuclear reactors, usage of theory of thermal-nuclear reactors, usage of theory of action of radiations and protection against them, usage of theory of nuclear explosions, usage of theory of processing of nuclear fuel and waste disposal, usage of theory of the cognitive modeling technology in the applications of nuclear technics and instrument-making, usage of theory of the cognitive models of the structure of the chemical elements with 1, 2, 3, 4, 5 and more nucleuses, usage of theory of the cognitive model of the modified of volumetric principle n. a. Pauli W.E. for the studying of electronic clouds within limits of power levels, usage of theory of the cognitive model of the modified planetary model of atom n. a. Bohr N.H.D. and others].

VIII. “The scientific-researches laboratory
 “Applications of (non)organic chemistry, crystallography,
 mineralogy and chemical industry”” (“SH”) (*)
*[the applied developments in the area
 “Applications of chemistry” (*)* –
 usage of theory of basic-laboratory chemical equipment and units,
 usage of theory of physical chemistry, usage of theory of nonorganic chemistry,
 usage of theory of complex compounds, usage of theory of analytical chemistry,
 usage of theory of organic chemistry, usage of theory of bio-organic chemistry,
 usage of theory of natural organic compounds and their synthetic analogues,
 usage of theory of chemistry of high-molecular compounds,
 usage of theory of biological chemistry,
 usage of theory of the cognitive modeling technology
 in the applications of chemistry,
 usage of theory of modeling of the structure of the (non)organic chemical elements
 and the chemical elements with 1, 2, 3, 4, 5 and more nucleuses,
 usage of theory of research of the molecular structure of (non)organic compounds;
*the applied developments in the area
 “Applications of chemical technology and chemical industry”* –
 usage of theory of processes and devices of chemical technology,
 usage of theory of chemical raw materials,
 usage of theory of technology of production of nonorganic substances and products,
 usage of theory of production of fertilizers,
 usage of theory of technology of production
 of silicate and refractory nonmetallic materials,
 usage of theory of industrial organic synthesis,
 usage of theory of industrial synthesis of organic dyes and pigments,

usage of theory of technology of production of photographic materials, usage of theory of technology of production of explosive substances and means of chemical protection, usage of theory storage and destruction of chemical weapon, usage of theory of technology of production of the chemical-pharmaceutical means, usage of theory of technology of production of fragrant substances, usage of theory of technology of production of pesticides and disinfectant substances, usage of theory of processing of natural gases, oil, gas condensate, their products and analogues, motor fuel and lubricant materials, usage of theory of technology of processing of firm combustible minerals, usage of theory of forestry-chemical manufactures, usage of theory of technology of production of natural high-molecular compounds, usage of theory of technology of production of synthetic high-molecular compounds, usage of theory of technology of production of plastics, usage of theory of technology of production of rubbers and products from them, usage of theory of technology of production of paint-varnish materials and organic coverings, usage of theory of technology of production of chemical fibers and strings, usage of theory of technology of production of chemical reactants and especially clean substances, usage of theory of technology of production of household chemical products, usage of theory of technology of production of auxiliary materials, usage of theory of the cognitive modeling technology in the applications of chemical technology and chemical industry].

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

2.3.2. The applied developments direction “Cognitive modeling in the applied technical sciences and technologies” (“CM in ATS and T”) (“NNT”) of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The applied developments direction “Cognitive modeling in the applied technical sciences and technologies”” (“NNT”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.etrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of mining and metallurgy”” (“SGM”)
[*the applied developments in the area “Applications of mining”* – usage of theory of technics and technology of development of the deposits of firm minerals, usage of theory of development of the deposits of ores and ferrous metals, usage of theory of development of the deposits of ores and looses of the color and rare metals and diamonds, usage of theory of development of the deposits of coal and combustible slates, usage of theory of development of the peat deposits, usage of theory of development of the deposits of building and road materials, fire-resistant, ceramic, glass and mineral technical raw materials, usage of theory of development of the deposits of chemical and agricultural-chemical raw materials and salts, usage of theory of development of the deposits of precious and ornamental stones, usage of theory of enrichment of minerals, usage of theory of development of the oil and gas deposits, usage of theory of the cognitive modeling technology in the applications of mining; *the applied developments in the area “Applications of metallurgy”* – usage of theory of metallurgical processes, usage of theory of metallurgical heating-technics, usage of theory of manufacture of ferrous metals and alloys, usage of theory of manufacture of nonferrous metals and alloys, usage of theory of powder metallurgy, usage of theory of semi-conductors metallurgy, usage of theory of rolling manufacture, usage of theory of drawing and hardware manufacture, usage of theory of pipes manufactures, usage of theory of metallurgical-science, usage of theory of the technical analysis in metallurgy, usage of theory of the cognitive modeling technology in the applications of metallurgy].

II. “The scientific-researches laboratory
“Applications of the sciences about forestry and wood processing” (“SNL”)
[the applied developments in the area
“Applications of forestry and wood-processing industry” –
usage of theory of wood-science, usage of theory of forestry-cutting works,
usage of theory of forestry transportation, usage of theory of forestry-timber works,
usage of theory of technology and equipment for wood processing,
usage of theory of technology of forestry sawmill manufacture,
usage of theory of technology of manufacture of joiner-building products,
usage of theory of technology of manufacture of plywood and plates,
usage of theory of technology of manufacture of blocks,
usage of theory of technology of manufacture of furniture,
usage of theory of technology of manufacture of matches,
usage of theory of technology of manufacture of wooden container,
usage of theory of technology of special wood-processing manufactures,
usage of theory of technology of pulp-paper industry,
usage of theory of the cognitive modeling technology
in the applications of forestry and wood-processing industry;
the applied developments in the area
“ Applications of forestry economy ” –
usage of theory of forestry-economy biology, usage of theory of soil-science,
usage of theory of agriculture, usage of theory of forestry-economy melioration,
usage of theory of agro-chemistry, usage of theory of plant-science,
usage of theory of protection of forestry-economy plants,
usage of theory of animal-industry, usage of theory of veterinary-science,
usage of theory of preparation of production of forestry economy,
usage of theory of hunting and hunting economy, usage of theory of forestry economy,
usage of theory of economics and organization of forestry economy,
usage of theory of mechanization and electrification of forestry economy,
usage of theory of the cognitive modeling technology
in the applications of forestry economy] .

III. “The scientific-researches laboratory
“Applications of the noo-sphere knowledge and technologies:
the (heavy) mechanical-engineering, instrument-making,
polygraphy, reprography and photo-cinema-technics, the light and food-processing industry,
transport, architecture, construction and other branches” (“SNZT”) (*)
*[the applied developments in the area
“Applications of mechanical-engineering”* –
usage of theory of machine-engineering-science and details of machines,
usage of theory of mechanical-engineering materials,
usage of theory of technology of mechanical-engineering,
usage of theory of foundry production,
usage of theory of forge-stamp manufacture,
usage of theory of assembly manufacture, usage of theory of cutting of materials,
usage of theory of electrical-physical-chemistry processing,
usage of theory of thermal and strengthening powder materials,
usage of theory of nonmetallic products manufacture,
usage of theory of machine-tool-construction, usage of theory of robotics,
usage of theory of tool manufacture,
usage of theory of mining mechanical-engineering,
usage of theory of metallurgical mechanical-engineering,
usage of theory of reactor-construction, usage of theory of turbine-construction,
usage of theory of special power-engineering installations,
usage of theory of chemical and oil mechanical-engineering,
usage of theory of locomotive-construction and carriage-building,
usage of theory of engine-construction, usage of theory of motor-car-industry,
usage of theory of ship-building, usage of theory of aircraft-construction,
usage of theory of space technics and rocket-production,
usage of theory of hoisting-transport mechanical-engineering,
usage of theory of building and road mechanical-engineering,
usage of theory of municipal mechanical-engineering,
usage of theory of tractor and agricultural mechanical-engineering,
usage of theory of mechanical-engineering for the light industry,
usage of theory of polygraphic mechanical-engineering,
usage of theory of mechanical-engineering for the food-processing industry,
usage of theory of mechanical-engineering for the trade and public catering,
usage of theory of household machines and devices,
usage of theory of manufacture of weapon,
usage of theory of the other branches of mechanical-engineering,
usage of theory of the cognitive modeling technology
in the applications of mechanical-engineering;

the applied developments in the area
“Applications of instrument-making” – usage of theory of theoretical bases of instrument-making, usage of theory of general technology of production and equipment in instrument-making, usage of theory of designing and constructing of devices, usage of theory of devices for the measurement of electrical and magnetic sizes, usage of theory of devices for the measurement of mechanical sizes, usage of theory of devices for the measurement of time and frequency, usage of theory of devices for the measurement of structure and physical-chemical properties of substances and materials, usage of theory of devices for the heating-technical and heating-physical measurements, usage of theory of devices for the measurement of acoustic sizes and characteristics, usage of theory of devices for the measurement of optical and lighting-technical sizes and characteristics, usage of theory of devices for the measurement of ionization radiations, usage of theory of devices of non-destroying control of products and materials, usage of theory of the general structural elements, units of measuring devices, systems and means of office-equipment, usage of theory of the cognitive modeling technology in the applications of instrument-making;
the applied developments in the area
“Applications of polygraphy, reprography and photo-cinema-technics” – usage of theory of polygraphy, reprography and photo-cinema-technics, usage of theory of the cognitive modeling technology in the applications of polygraphy, reprography and photo-cinema-technics;
the applied developments in the area
“Applications of light industry” – usage of theory of textile industry, usage of theory of knitted industry, usage of theory of clothing industry, usage of theory of tanning industry, usage of theory of fur industry, usage of theory of industry of artificial leather and film materials, usage of theory of shoe industry, usage of theory of leather-haberdashery industry, usage of theory of bristle-brush manufacture, usage of theory of manufacture of accessories, usage of theory of the cognitive modeling technology in the applications of light industry;

the applied developments in the area “Applications of food-processing industry” – usage of theory of food raw materials and auxiliary materials, usage of theory of the processes and devices of food manufactures, usage of theory of (grain-)elevator and flour(-grinding)-sereals(croup) industry, usage of theory of mixed fodder industry, usage of theory of baking and macaroni industry, usage of theory of confectionery industry, usage of theory of sugar industry, usage of theory of starched-treacle industry, usage of theory of barmy industry, usage of theory of brewing industry, usage of theory of spirituous industry, usage of theory of the industry of high-alcohol drinks, usage of theory of wine-making (vinous) industry, usage of theory of the industry of without-alcohol (soft) drinks, usage of theory of canning, vegetable-drying and food-concentrate industry, usage of theory of food-gustatory industry, usage of theory of tobacco industry, usage of theory of meat and bird-fancier-processing industry, usage of theory of the manufacture of eggs and egg products, usage of theory of dairy (milk) industry, usage of theory of butter-fatty (creamery) industry, usage of theory of the cognitive modeling technology in the applications of food-processing industry;

the applied developments in the area “Applications of architecture and construction” ()* – usage of theory of engineering-theoretical bases of architecture and construction, usage of theory of building materials and products, usage of theory of building constructions, usage of theory of technology of construction-installation works, usage of theory of technology of production of building materials and products, machines, mechanisms, equipment and tool, used in the construction and industry of building materials, usage of theory of engineering researches in construction, usage of theory of architectural-building designing, usage of theory of regional (district) lay-out, usage of theory of town-planning, usage of theory of objects of construction and engineering support of objects of construction, usage of theory of tendencies, dependences and laws in architecture and construction, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology, usage of theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),

usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the algorithm of formation of the cognitive model structure, usage of theory of the technique of research of the cognitive model parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of the adaptive automation means of architecture and construction (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others), usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of construction of the buildings and constructions, usage of theory of organization and plan of carrying out of the experiment, usage of theory of the research of parameters of the parametrical cognitive models block, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of construction, usage of theory of the dispersion, regression, discriminant, cluster analysis, multivariate scale, factor analysis and bibliographic lists; *the applied developments in the area “ Applications of transport ”* – usage of theory of railway transport, usage of theory of motor-car transport, usage of theory of sea transport, usage of theory of air transport, usage of theory of pipeline transport, usage of theory of industrial transport, usage of theory of municipal transport, usage of theory of interaction of the different kinds (types) of transport, usage of theory of mixed transportations, usage of theory of the other kinds (types) of transport, usage of theory of the cognitive modeling technology in the applications of transport].

I V . “ T h e s c i e n t i f i c - r e s e a r c h e s l a b o r a t o r y
"Applications of the scientific problems of agro-industrial complex"” (“SNPAK”)
*[t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
“Applications of agriculture and hunting economy” –*
usage of theory of agricultural biology,
usage of theory of soil-science, usage of theory of agriculture,
usage of theory of agricultural melioration,
usage of theory of agro-chemistry, usage of theory of plant-growing,
usage of theory of protection of agricultural plants,
usage of theory of animal-industry, usage of theory of veterinary-science,
usage of theory of preparation of production of agriculture,
usage of theory of hunting and hunting economy,
usage of theory of forestry economy,
usage of theory of economics and organization of agriculture,
usage of theory of mechanization and electrification of agriculture,
usage of theory of the cognitive modeling technology
in the applications of agriculture and hunting economy;
*t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
“Applications of fish economy and aqua-culture” –*
usage of theory of biological resources of the world ocean and internal reservoirs,
usage of theory of aqua-culture, usage of theory of fish-breeding,
usage of theory of industrial fishery,
usage of theory of technical operation of fleet of fishing industry,
usage of theory of technical operation of fish seaports,
usage of theory of technology of processing of raw materials of water origin,
usage of theory of equipment for the fish-processing industry,
usage of theory of the cognitive modeling technology
in the applications of fish economy and aqua-culture;
*t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
“ Applications of water economy ” –*
usage of theory of scientific bases of water economy,
usage of theory of water-economy construction,
usage of theory of hydro-technical and hydro-ameliorative constructions,
usage of theory of irrigating and water supply,
usage of theory of irrigating systems, usage of theory of drying systems,
usage of theory of sewage waters, their clearing and use,
usage of theory of quality of water,
usage of theory of test, measurement and control in the water economy,
usage of theory of mechanization and automation in the water economy,
usage of theory of complex use of water resources,
usage of theory of the cognitive modeling technology
in the applications of water economy] .

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

**2.3.3. The applied developments direction
“Cognitive modeling
in the geo-political sciences and researches”
 (“CM in G-PS and R”) (“NSGI”)
of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”**

The developed “The applied developments direction “Cognitive modeling in the geo-political sciences and researches”” (“NSGI”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of geo-politics and safety”” (“SGB”) [*the applied developments in the area “Applications of demography”* – usage of theory and methodology of demographical science, usage of theory of general problems of national-population, usage of theory statistics of population, usage of theory of history of population, usage of theory of historical demography, usage of theory of moving of population, usage of theory of geographical demography, usage of theory of population of the world, usage of theory of the cognitive modeling technology in the applications of demography; *the applied developments in the area “Applications of politics and political sciences”* – usage of theory and methodology of political researches, usage of theory of history of political doctrines, usage of theory of political systems, usage of theory of internal politics, usage of theory of international relations, usage of theory of foreign (external) politics and diplomacy, usage of theory of the cognitive modeling technology in the applications of politics and political sciences;

the applied developments in the area
“Applications of complex studying of separate countries and regions” – usage of theory of researches of RF as a particular and RF as a whole, usage of theory of The North-Western federal district of RF, usage of theory of The Central federal district of RF, usage of theory of The Privolzhsky federal district of RF, usage of theory of The Southern federal district of RF, usage of theory of The Uralian federal district of RF, usage of theory of The Siberian federal district of RF, usage of theory of The Far-East federal district of RF, usage of theory of the areas and territories of the former USSR, usage of theory of the countries of CIS of Eastern Europe, usage of theory of the countries of CIS of Zacaucasia, usage of theory of the countries of CIS of Central Asia, usage of theory of the Baltic countries and Baltic, usage of theory of Europe as a whole, usage of theory of Western Europe, usage of theory of Southern Europe, usage of theory of Central Europe, usage of theory of Eastern Europe as a whole, usage of theory of Scandinavia and the Scandinavian countries, usage of theory of Asia as a whole, usage of theory of Forward Asia, usage of theory of Eastern Asia, usage of theory of Southern Asia, usage of theory of South-Eastern Asia, usage of theory of Central Asia, usage of theory of Near and Middle East, usage of theory of Africa as a whole, usage of theory of Northern Africa, usage of theory of Eastern Africa, usage of theory of Central Africa, usage of theory of Western Africa, usage of theory of Southern Africa, usage of theory of America as a whole, usage of theory of USA and Canada, usage of theory of Central America, usage of theory of South America, usage of theory of Australia and the countries of Oceania, usage of theory of the polar areas – the Arctic and Antarctic areas, usage of theory of surfaces of The Earth and land, oceans, seas and internal waters, usage of theory of the other physical-geographical features of The Earth, usage of theory of the cognitive modeling technology in the applications of complex studying of separate countries and regions;
the applied developments in the area
“Applications of problems of space flights” – usage of theory of use of space systems for connection and navigation, usage of theory of studying of extraterrestrial territories and prospects of astronautics, usage of theory of research of The Earth and astronomical objects by the space automation means from space, usage of theory of the cognitive modeling technology in the applications of problems of space flights].

II. “The scientific-researches laboratory “Applications of classical and military history”” (“SVIT”) [*the applied developments in the area “Applications of history”* – usage of theory of general history, usage of theory of history of Azerbaijan, usage of theory of history of Armenia, usage of theory of history of Belorussia, usage of theory of history of Georgia, usage of theory of history of Kazakhstan, usage of theory of history of Kirghizia, usage of theory of history of Moldova, usage of theory of history of RF, usage of theory of history of Tajikistan, usage of theory of history of Turkmenia, usage of theory of history of Uzbekistan, usage of theory of history of Ukraine, usage of theory of history of the separate processes, parties and phenomena of human activity, usage of theory of the cognitive modeling technology in the applications of history of RF and countries of near abroad; *the applied developments in the area “Applications of history of Ancient world, Ancient Greece and Ancient Rome, history of Medieval Europe, history of USA, Australia and Oceania, history of Arctic and Antarctic, history of RF, modern history of USSR, newest history of RF, history of The Solar system and planets”* – usage of theory of history of Ancient world, Ancient Greece and Ancient Rome, usage of theory of history of Medieval Europe, usage of theory of history of USA, Australia and Oceania, usage of theory of history of Arctic and Antarctic, usage of theory of history of RF, usage of theory of modern history of USSR, usage of theory of newest history of RF, usage of theory history of The Solar system and planets, usage of theory of the cognitive modeling technology in the applications of history of RF and countries of far abroad].

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

2.3.4. The applied developments direction

“Cognitive modeling in the society steady development of post-industrial country”

(“CM in SSDP-IC”) (“NURS”)

of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The applied developments direction “Cognitive modeling in the society steady development of post-industrial country”” (“NURS”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of the complex problems of country development”” (“SPUR”) (*)
[the applied developments in the area “Applications of economic problems of national economy management” – usage of theory of self-financing, usage of theory of economic stimulation, usage of theory of manpower resources, usage of theory of the cognitive modeling technology in the applications of economic problems of national economy management;

the applied developments in the area
“Applications of the global philosophical problems, philosophical and methodological problems of sciences and scientific knowledge as a whole” (*) –

usage of theory of modern philosophy, usage of theory of dialectical logic, usage of theory of social sciences, usage of theory of modern social philosophy, usage of theory of modern sociology, usage of theory of demography and people-population, usage of theory of world economy and economics, usage of theory of grammar and applied study of language, usage of theory of art and art-science, usage of theory of artificial intelligence, usage of theory of biological chemistry, usage of theory of regional-geography (country-science), usage of theory of economic and social geography, usage of theory of toponymics, usage of theory of astro-physics, usage of theory of pharmacology and chemo-therapy, usage of theory of normal and pathological physiology, usage of theory of genetic engineering, usage of theory of bio-technology, usage of theory of agriculture, usage of theory of medicine and public-health-services, usage of theory of technical aesthetics and ergonomics, usage of theory of preservation of environment, usage of theory of the global ethic and global esthetic categories and problems, usage of theory of social activity and social problems, usage of theory of sociological problems of printing, television and radio-broadcasting, usage of theory of influences of anthropogenic changes of environment on the health and social-labor potential of population, usage of theory of the world economic development, usage of theory of activity of international economic organizations and associations, usage of theory of economic development and growth, usage of theory of prediction and planning of economics, usage of theory of economic cycles and crises, usage of theory of the social and economic problems of development of the advanced and less developed countries, usage of theory of the economic problems of organization and management of the economy of the country, usage of theory of the problems of functioning of market economy and the social-economic problems of labor,

usage of theory of the legal problems of environment preservation and ecological law,
usage of theory of the economic problems of politics,
usage of theory of the general problems of political systems
at socialism in the advanced and less developed countries,
usage of theory of the foreign(external)-political aspects of global problems,
usage of theory of problems of war and peace,
usage of theory of the means of sanction of international conflicts,
usage of theory of the problems of disarmament and anti-war movement,
usage of theory of movement of non-alignment,
usage of theory of the international, federal, regional and local problems,
usage of theory of international terrorism,
usage of theory of the separate philosophical-theoretical problems of culture,
usage of theory of the sociological problems of motion-picture-art,
usage of theory of religious consciousness,
usage of theory of relation of church and philosophical-theological schools
to the problem of war and peace,
usage of theory of philosophy of mutual-relations of religion and army,
usage of theory of relation of religions and churches
to the national-liberation movement, national and racial problems,
usage of theory of the general problems of physical experiment,
usage of theory of the physical problems of mechanics,
usage of theory of the bio-chemical problems,
usage of theory of the problems of safety of biological experiment,
usage of theory of micro-molecular associations
and the problems of recognition in molecular biology,
usage of theory of the general problems of antropogenes in paleontology and archeology,
usage of theory of the general problems of researches of The Sun, The Earth,
stars, fogs and interstellar environment,
atmosphere, chromosphere, crown, near-star environments,
usage of theory of the problems of loss of weight of stars and star wind,
usage of theory of the general problems of researches of stars,
usage of theory of problematic rests,
usage of theory and problematics of programming for the computer networks,
usage of theory of the general problems of automation of designing,
usage of theory of the general problems of researches, calculations and designing
in the mining mechanical-engineering,

usage of theory of the general problems of household radio-electronic equipment, usage of theory of genetic engineering for the decision of problem of bio-degradation, usage of theory of the sociological, demographical and psychological problems in construction, usage of theory of the general problems of melioration of agricultural grounds, usage of theory of the social-economic problems in countryside, usage of theory of the medical problems of space flights, usage of theory of the political problems of sport and sport single-kind-combats, the game kinds of sport, the speed-involving-strength kinds of sport, the complicated-coordinated kinds of sport, the technical kinds of sport and the cyclical kinds of sport, usage of theory of the general problems of war, usage of theory of training of staff, usage of theory of the problems of material interest of workers, usage of theory of the problems of material-technical supply, usage of theory of the problems of fire safety, usage of theory of information about the centres on studying of the problems of management, usage of theory of the general problems of prediction, usage of theory of role of the separate areas of knowledge in the decision of problems of environment and use of natural resources, usage of theory of the general problems of international cooperation, usage of theory of the problems of sorption and auto-purification of waters, usage of theory of the complex and regional problems of protection of waters, bowels, landscape and waste management, usage of theory of innovative materials, describing the research of space environment as a whole and interrelation of this problem with the other sciences and spheres of activity, usage of theory of the general problems and prospects of development of the methods of space researches, usage of theory of safety and the medical-biological problems of space flights, usage of theory of the general problems and principles of work of the space connection systems, usage of theory of the problems of development of extraterrestrial territories and prospects of astronautics, usage of theory of the nonconventional problems of researches of space environment, usage of theory of the cognitive modeling technology in the applications of global philosophical problems, philosophical and methodological problems of science and scientific knowledge as a whole;

the applied developments in the area “Applications of the complex problems of social sciences” – usage of theory of social-political idea, usage of theory of the global problems and labor, usage of theory of the cognitive modeling technology in the applications of complex problems of social sciences;

the applied developments in the area “Applications of the general and complex problems of technical and applied sciences and national economy branches” – usage of theory of materiology (materials-science), usage of theory of general technology of production, usage of theory of designing, usage of theory of construction, usage of theory of the flexible industrial systems, usage of theory of vacuum technics, usage of theory of cryogenic technics, usage of theory of corrosion and protection against corrosion, usage of theory of welding, usage of theory of optical manufacture, usage of theory of staff, usage of theory of control and management of quality, usage of theory of installation, operation and repair of industrial equipment, usage of theory of material-technical supply, usage of theory of logistic, usage of theory of warehouse economy, usage of theory of container and packing, usage of theory of secondary raw materials, usage of theory of fire safety, usage of theory of safety, usage of theory of salvage-rescue services, usage of theory of technical aesthetics and ergonomics, usage of theory of protection of information, usage of theory of the cognitive modeling technology in the applications of the general and complex problems of technical and applied sciences and national economy branches;

the applied developments in the area “Applications of the general and complex problems of natural and exact sciences” – usage of theory of the materials of general character, usage of theory of scientific and technical societies, conventions, congresses, conferences, symposiums, seminars and exhibitions, usage of theory of terminology, usage of theory of reference books and educational literature, usage of theory of the cognitive modeling technology in the applications of the general and complex problems natural and exact sciences].

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

**2.3.5. The applied developments direction
“Cognitive modeling
in the social-economic and jurisprudential sciences”
 (“CM in S-E and JS”) (“NSEPP”)
of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”**

The developed “The applied developments direction “Cognitive modeling in the social-economic and jurisprudential sciences”” (“NSEPP”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of inter-branch jurisprudential and economic system researches of society and country”” (“SMEESI”) [*the applied developments in the area “Applications of state, law and jurisprudential sciences”* – usage of theory of state and law, usage of theory of history of state and law, usage of theory of history of political and legal doctrines, usage of theory of constitutional (state) law, usage of theory of municipal law, usage of theory of administrative law, usage of theory of information law, usage of theory of financial law, usage of theory of enterprise law, usage of theory of civil law, usage of theory of civil-procedural law (civil process), usage of theory of arbitration-procedural law (arbitration process), usage of theory of patent law, usage of theory of industrial property law, usage of theory of copyright and adjacent rights, usage of theory of succession law, usage of theory of family law,

usage of theory of agrarian law, usage of theory of the legal problems of environment preservation, usage of theory of ecological law, usage of theory of ground law, usage of theory of forestry law, usage of theory of water law, usage of theory of aerial-protection law, usage of theory of legislation about bowels, usage of theory of legislation about the fauna world, usage of theory of labor law, usage of theory of law of social support, usage of theory of law-enforcement authorities, usage of theory of criminal law, usage of theory of criminal-procedural law (criminal process), usage of theory of criminology, usage of theory of criminal-executive law, usage of theory of penitentiary, usage of theory of criminalistics, usage of theory of judicial statistics, usage of theory of international law, usage of theory of international private law, usage of theory of state and law of separate countries, usage of theory of the cognitive modeling technology in the applications of state, law and jurisprudential sciences; *the applied developments in the area “Applications of patent business, invention and rationalization work”* – usage of theory of patent-information work, usage of theory of invention and rationalization activity, usage of theory of patent-license work, usage of theory of the technical-economic analysis on patent materials, usage of theory of invention law, usage of theory of the cognitive modeling technology in the applications of patent business, invention and rationalization work; *the applied developments in the area “Applications of international economic relations”* – usage of theory of prediction and planning, usage of theory of economic cycles and crisis, usage of theory of productive forces and social-economic structure, usage of theory of reproductive structure of economics, usage of theory of accumulation and consumption, usage of theory of well-being, usage of theory of territorial (local), regional (subject of federation), city (federal) and branch structure of economics, usage of theory of the cognitive modeling technology in the applications of international economic relations].

II. “The scientific-researches laboratory
“Applications of the complex problems of micro-(macro-)economics,
social sphere and market economy of the country”” (“SPMSRH”)
[the applied developments in the area
“Applications of internal trade and tourist-excursion service” –
usage of theory of wholesale trade and retail trade,
usage of theory of public catering, usage of theory of hotel economy,
usage of theory of tourist-excursion service,
usage of theory of the cognitive modeling technology
in the applications of internal trade and tourist-excursion service;
the applied developments in the area
“ Applications of external trade ” –
usage of theory of communication of the external trade with manufacture,
usage of theory of the general questions of external trade,
usage of theory of the external-trade politics,
usage of theory of the kinds of external trade,
usage of theory of the structure of external trade,
usage of theory of calculations on the external-trade operations,
usage of theory of the external-trade transportations,
usage of theory of the world commodity markets,
usage of theory of international agreements about trade,
usage of theory of international contracts,
usage of theory of international trading organizations,
usage of theory of commodity agreements,
usage of theory of organization and management of external trade,
usage of theory of the cognitive modeling technology
in the applications of external trade;
the applied developments in the area
“Applications of housing-communal economy,
housekeeping and household services ” –
usage of theory of housing economy,
usage of theory of communal economy,
usage of theory of consumer services, usage of theory of housekeeping,
usage of theory of the cognitive modeling technology
in the applications of housing-communal economy,
housekeeping and household services;

the applied developments in the area
“ Applications of insurance ” –
usage of theory of the state social insurance,
usage of theory of the funds of social support and social insurance,
usage of theory of the external-trade insurance,
usage of theory of statistics of social insurance,
usage of theory of the cognitive modeling technology
in the applications of insurance;
the applied developments in the area
“Applications of investment and investment projects” –
usage of theory of concentration of capital,
usage of theory of the financial-industrial groups,
usage of theory of investment institutes,
usage of theory of the legal bases of investment activity,
usage of theory of the cognitive modeling technology
in the applications of investment and investment projects;
the applied developments in the area
“ Applications of social transport ” –
usage of theory of social railway transport,
usage of theory of social motor-car transport,
usage of theory of social water transport,
usage of theory of social air transport,
usage of theory of social pipeline transport,
usage of theory of social industrial transport,
usage of theory of social municipal transport,
usage of theory of interaction of the different kinds (types) of social transport,
usage of theory of mixed social transportations,
usage of theory of the other kinds (types) of social transport,
usage of theory of the cognitive modeling technology
in the applications of social transport].

III. “The scientific-researches laboratory
 Applications of economics, management,
 sociology, statistics and their other branches” (“SES”)
*[the applied developments in the area
 “Applications of economics and economic sciences”* –
 usage of economic theory, usage of theory of history of economic idea,
 usage of theory of accounting-economic sciences,
 usage of theory of the sciences of management of economics,
 usage of theory of economic history, usage of theory of world economy,
 usage of theory of international economic relations,
 usage of theory of economic development and growth,
 usage of theory of prediction and planning of economics,
 usage of theory of economic cycles and crises,
 usage of theory of productive forces and scientific-technical progress,
 usage of theory of social-economic structure,
 usage of theory of the reproductive structure of economics,
 usage of theory of accumulation and consumption, usage of theory of well-being,
 usage of theory of the territorial structure of economics,
 usage of theory of regional and municipal economics,
 usage of theory of the branch structure of economics,
 usage of theory of financial science, usage of monetary and tax theories,
 usage of theory of credit-financial institutes (institutional intermediaries),
 usage of theory of the economic problems of organization and management of the economy of the country,
 usage of theory of self-financing, usage of theory of economic incentive provision,
 usage of theory of economics of labor, usage of theory of manpower resources,
 usage of theory of economics and organization of enterprise,
 usage of theory of management of enterprise,
 usage of theory of economics of the separate countries,
 usage of theory of the cognitive modeling technology
 in the applications of economics and economic sciences;
*the applied developments in the area
 “Applications of organization and management”* –
 usage of theory and methodology of management,
 usage of theory of the state and administrative management,
 usage of theory of organization of economics management,
 usage of theory of social management,
 usage of theory of prediction, usage of theory of futurology,
 usage of theory of strategical management,
 usage of theory of strategical planning,
 usage of theory of the cognitive modeling technology
 in the applications of organization and management;

the applied developments in the area “Applications of the other branches of economics” – usage of theory of manufacture of musical instruments, usage of theory of manufacture of fine-art products, usage of theory of jeweler industry, usage of theory of manufacture of toys, usage of theory of manufacture of sport products, usage of theory of manufacture of writing goods, usage of theory of the cognitive modeling technology in the applications of the other branches of economics;

the applied developments in the area “Applications of sociology” – usage of theory of the general problems of modern sociology, usage of theory of methodology of sociology, usage of theory of technique and technics of sociological researches, usage of theory of society as the system, usage of theory of social relations and processes, usage of theory of social classes, usage of theory of communities and groups, usage of theory of sociology of the spheres of social life, usage of theory of social phenomena and institutes, usage of theory of sociology of personality and behavior, usage of theory of historical and regional sociology, usage of theory of sociology, usage of theory of history of sociology, usage of theory of the cognitive modeling technology in the applications of sociology;

the applied developments in the area “Applications of statistics” – usage of theory of general statistics, usage of theory of economic statistics, usage of theory of branch statistics, usage of theory of social statistics, usage of theory of international statistics, usage of theory of statistics of the separate countries and social-economic systems, usage of theory of organization and management of statistics, usage of theory of the methods and technical means of gathering, processing and analysis of the statistical information, usage of theory of the cognitive modeling technology in the applications of statistics].

IV. “The scientific-researches laboratory
Applications of the financial analysis,
accounting and audit of the (credit) organization
based on the cognitive modeling technology” (“SFABUA”) (*)
*[the applied developments in the area
“Applications of the financial analysis, accounting and audit”* (*) –
usage of theory of the general questions of the financial analysis, accounting and audit,
usage of theory of tendencies, dependences and laws
of the financial analysis of the objects, processes and phenomena,
usage of theory of the system, information and cognitive approaches in economics,
usage of theory of the structure and dynamics of functioning
of the financial market of the economic system of the country,
usage of theory of the global purposes of standardization of the accounting
and the problems of unification of the accounting reporting-documentation (the primary registers),
usage of theory of the institutional subjects regulating
the creation, distribution and use of the international standards,
usage of theory of the principles of creation, distribution and use
of the international standards of the financial and accounting reporting-documentation,
usage of theory of the basic methods of transformation of the financial reporting-documentation
prepared by the national standards into the reporting-documentation by the international standards,
usage of theory of formation of the accounting balance
by the international standards of the financial reporting-documentation,
usage of theory of the qualifying tests of the professional participants
of the financial system of the (developed) country,
usage of theory of the administrative-legal forms of existence of the managing subject,
usage of theory of the features of procedure of the financial analysis of the managing subject,
usage of theory of the organizational structure of enterprise and its features
(the educational establishment of the system of education and the information-educational environment),
usage of theory of inflationary depreciation,
usage of theory of discounting and compounding
of the monetary streams in the economic system of the country,
usage of theory of the indexes of dynamics of the financial market and tools,
usage of theory of dynamics and communications of the managing subjects,
usage of theory of investment and innovative politics
of the managing subject in the financial system of the country,
usage of theory of the organizational, technological, scientific, methodical,
normative-legal, information, hardware, software, brainware,
raw, warehouse, personnel and economic preparations of manufacture
and the bases of the financial analysis and the quality estimation
of activity of the credit and other organization,
usage of theory of requirements and the structure of financial reporting-documentation
of the (non)industrial organizational structures,

usage of theory of the additional elements of the accounting and the financial reporting-documentation of the credit organization, usage of theory of the consumers of the financial reporting-documentation, usage of theory of the elements of the financial reporting-documentation connected with the changes of financial-economy activity, usage of theory of the simple and consolidated accounting and financial reporting-documentation, usage of theory of the methods of the financial analysis of the different forms of reporting-documentation, usage of theory of the structure of accounts of the accounting and financial analysis, usage of theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, usage of theory of the scheme of carrying out of the auditor check, the financial analysis and audit, usage of theory of the external and internal control of activity of the different organizations, usage of theory of the kinds of bank operations, usage of theory of the structure of the accounting balance (form №1), usage of theory of the structure of the explanatory note to the accounting balance, usage of theory of the structure of the report about profits and losses (form №2), usage of theory of the structure of the explanatory note to the report about profits and losses, usage of theory of the structure of the report about the change of capital (form №3), usage of theory of the structure of the report about the movement of monetary resources on accounts (form №4), usage of theory of the structure of the explanatory note to the report about the movement of means, usage of theory of the structure of the appendices to the accounting balance (form №5), usage of theory of the structure of the report about the target use of received means (form №6), usage of theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserve system of USA, usage of theory of the analysis of stability of the credit organization and commercial bank, usage of theory of the basic analytical coefficients of the financial analysis, usage of theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology, usage of theory of the technique of formation of the normative-legal and the information basis for the financial analysis of the organization, usage of theory of the technique of additional check of the information basis of the financial analysis, usage of theory of the technique of creation and modification of the working plan of accounts and the model of accounting, usage of theory of the technique of carrying out of the financial analysis of the organization condition, usage of theory of the parametrical cognitive models block for the financial analysis and the increases of efficiency of functioning of the objects, processes and phenomena,

usage of theory of the cognitive models structure for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the algorithm of formation of the cognitive model structure, usage of theory of the technique of research of the cognitive model parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of formation and calculation of the units of the accounting balance of the industrial and nonproductive organization, usage of theory of calculation of the cognitive models parameters for the vertical, horizontal and trend static and dynamic financial analysis of the (credit) organization in the conditions of definiteness and uncertainty, usage of theory of software for the automation of research tasks, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of functioning of the (credit) organization in the economic system, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the cognitive models parameters for the vertical, horizontal and trend financial analysis, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the financial analysis of the dynamics of resultativity of the financial-economy activity of the (credit) organization, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling analysis, factor analysis and bibliographic lists].

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

**2.3.6. The applied developments direction
“Cognitive modeling
in the biological and medical sciences”
 (“CM in B and MS”) (“NBME”)
of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”**

The developed “The applied developments direction “Cognitive modeling in the biological and medical sciences”” (“NBME”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of biology, ecology and physiology of plants”” (“SBE”)
[the applied developments in the area “Applications of biology” – usage of theory of the methods and equipment of biological researches, usage of theory of biology of plants, usage of theory of molecular biology of plants, usage of theory of bio-physics of plants, usage of theory of cytology of plants, usage of theory of embryology of plants, usage of theory of genetics of plants, usage of theory of virology of plants, usage of theory of micro-biology of plants, usage of theory of botany of plants, usage of theory of physiology of plants, usage of theory of zoology of plants, usage of theory of ecology of plants, usage of theory of anthropology of plants, usage of theory of communication of physiology of plants, person and animals, usage of theory of communication of morphology of plants, person and animals, usage of theory of immunology of plants, usage of theory of pharmacology of plants, usage of theory of toxicology of plants, usage of theory of radiation biology of plants, usage of theory of space biology of plants, usage theory of bionics of plants, usage of theory of bio-cybernetics of plants, usage of theory of bio-engineering of plants, usage of theory of the cognitive modeling technology in the applications of biology;

the applied developments in the area
“Applications of environment preservation and ecology of plants” – usage of theory and methods of studying and preservation of environment, usage of theory of the ecological bases of use of the natural resources, usage of theory of international cooperation, usage of theory of contamination of environment, usage of theory of control of pollution, usage of theory of pollution and protection of atmosphere, usage of theory of pollution, usage of theory of protection of waters of land, seas and oceans, usage of theory of protection of soils, usage of theory of protection of bowels, usage of theory of the ecological bases of live-ability of plants, usage of theory of influence of the anthropogenic changes of environment on the health and vegetative potential of plants, on the condition of natural ecosystems, populations and organisms of the flora world, usage of theory of protection of the flora world, usage of theory of the anthropogenic influence on landscape, usage of theory of protection and optimization of landscape, usage of theory of reserved affair, usage of theory of protected natural territories and water-areas, usage of theory of acts of nature and accidents of anthropogenic origin, usage of theory of ecological safety, usage of theory of rational use of natural resources, usage of theory of reproduction of natural resources, usage of theory of preservation of environment and natural resources in the separate regions and countries, usage of theory of management of wastes, usage of theory of small-waste and without-waste technology, usage of theory of protection against from the noise, vibration, electrical and magnetic fields and radiations, usage of theory of the cognitive modeling technology in the applications of environment preservation and ecology of plants;
the applied developments in the area
“Applications of medicine and public-health-services” – usage of theory of medical-biological disciplines, usage of theory of medical materials, means and products, usage of theory of medical technics, usage of theory of clinical medicine, usage of theory of pharmacology, usage of theory of hygiene, usage of theory of epidemiology, usage of theory of the other branches of medicine and public-health-services, usage of theory of social hygiene, usage of theory of organization and management of public-health-services, usage of theory of the cognitive modeling technology in the applications of medicine and public-health-services].

II. “The scientific-researches laboratory
 ”Applications of bio-technology, bio-medicine,
 ergonomics and labor safety of organic individuals” (“SB”) (*)
*[the applied developments in area
 “Applications of bio-technology” (*)* –
 usage of theory of raw materials and producents for the bio-technological manufacture,
 usage of theory of bio-technological processes and devices,
 usage of theory of cellular engineering,
 usage of theory of technological bio-energetics,
 usage of theory of genetic engineering,
 usage of theory of enzymological engineering,
 usage of theory of the immuno-bio-technological methods of analysis,
 usage of theory of the other problems of bio-technology,
 usage of theory of the cognitive modeling technology
 in the applications of physical-chemical bio-technology and genetic engineering,
 usage of theory of modeling of the structure of desoxyribonucleic acid
 based on the multidimensional cognitive cylinder;
*the applied developments in the area
 “Applications of bio-medicine and public-health-services” (*)* –
 usage of theory of medical-biological disciplines,
 usage of theory of bio-medical materials, means and products,
 usage of theory of bio-medical technics,
 usage of theory of clinical bio-medicine, usage of theory of bio-pharmacology,
 usage of theory of bio-hygiene and bio-epidemiology,
 usage of theory of the other branches of bio-medicine and public-health-services,
 usage of theory of social bio-hygiene,
 usage of theory of organization and management of public-health-services,
 usage of theory of the modified model of reduced eye,
 usage of theory of the modified model of reduced ear,
 usage of theory of software for the automation of research tasks
 of the physiological, psychological and linguistic parameters
 of the parametrical cognitive models block,
 usage of theory of the statistical substantiation
 of practical use of the received results,

usage of theory of the physiological, psychological and linguistic factors influencing to the efficiency of functioning of the information-educational environment and the increase of resultativity of the automated training system with the properties of adaptation based on the cognitive models, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the physiological, psychological and linguistic parameters of the cognitive models of the subject of training and the means of training, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of bio-medicine and public-health-services, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the complex analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, usage of theory of the complex analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates; *t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a “ A p p l i c a t i o n s o f l a b o r s a f e t y ”* – usage of theory of organization and management of labor safety and working conditions, u s a g e o f t h e o r y o f i n d u s t r i a l s p h e r e , u s a g e o f t h e o r y o f s a f e t y p r e c a u t i o n , usage of theory of professional illnesses and their preventive-support, usage of theory of accidents on manufacture and their prevention, usage of theory of work-capacity, usage of theory of examination of work-capacity, usage of theory of labor safety on the categories of workers, usage of theory of work safety on the manufactures of increased danger, usage of theory of the cognitive modeling technology in the applications of labor safety] .

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

2.3.7. The applied developments direction

“Cognitive modeling

in the humanitarian sciences, art and creativity”

(“CM in HSA and C”) (“NGNOT”)

of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The applied developments direction “Cognitive modeling in the humanitarian sciences, art and creativity”” (“NGNOT”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of (cognitive) linguistics, (national) creativity, culture, art and religion”” (“SGNT”) (*)
[the applied developments in the area “Applications of science of language” – usage of theory of general science of language, usage of theory of applied science of language, usage of theory of languages of the world, usage of theory of the cognitive modeling technology in the applications of science of language;

the applied developments in the area
“Applications of (cognitive) linguistics” ()* –
usage of theory of the general questions of languages,
usage of theory of (cognitive) linguistics,
usage of theory of applied linguistics,
usage of theory of the cognitive modeling technology
in the applications of (cognitive) linguistics,
usage of theory of the modified stratified-step model
of understanding (cognitive linguistics) of the content of information fragments,
usage of theoretical bases of (cognitive) linguistics
and the cognitive modeling technology
in the technical, economic, physical-mathematical and other sciences,
usage of theoretical bases of the parametrical cognitive models block
for the system analysis of the information-educational environments
(the cognitive models of the subject of training and the means of training),
usage of theory of the ways of representation of the structure
of the cognitive models and difficult problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
usage of theory of the adaptive automation means
of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
usage of theory of the technical means of support
of the adaptive information interaction
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
the linguistic processor and other processors);

the applied developments in the area “Applications of culture and cultural-science” – usage of theory, methodology and philosophy of culture, usage of theory of history of culture, usage of theory of history of the study of culture, usage of theory of culture in the modern world, usage of theory of organization and management in the area of culture, usage of theory of international cooperation in the area of culture, usage of theory of hardware of the establishments of culture, usage of theory of social-cultural activity in the sphere of leisure, usage of theory of library affair, usage of theory of library-science, usage of theory of bibliography, usage of theory of librarygraphy-science, usage of theory of museum affair, usage of theory of museology, usage of theory of protection of the monuments of history and culture, usage of theory of archival affair, usage of theory of archival-science, usage of theory of culture and cultural-science of the separate countries and peoples, usage of theory of the cognitive modeling technology in the applications of culture and cultural-science;

the applied developments in the area “Applications of art and art-science” – usage of theory and methodology of art, usage of theory of the problems of art-science, usage of theory of history of art and the modern condition of art, usage of theory of art-science and fine-art criticism, usage of theory of art in the modern world, usage of theory of organization and management in the area of art, usage of theory of international cooperation in the area of art, usage of theory of fine-art, usage of theory of music, usage of theory of musicology, usage of theory of theatre, usage of theory of theater-science, usage of theory of mass shows and theatrical holidays, usage of theory of dance, usage of theory of choreography, usage of theory of circus, usage of theory of platform, usage of theory of cinema, usage of theory of motion-picture-art, usage of theory of national folk art, usage of theory of art of the separate countries and peoples, usage of theory of the cognitive modeling technology in the applications of art and art-science;

the applied developments in the area “Applications of religion and atheism” – usage of theory of atheism and free-thinking, usage of theory of separate religions, usage of theory of church, usage of theory of cults, usage of theory of the problems of religious consciousness, usage of theory of philosophy and religion, usage of theory of religion, usage of theory of church and society, usage of theory of the organizational-practical activity of churches, usage of theory of history of atheism, usage of theory of religions and churches, usage of theory of the cognitive modeling technology in the applications of religion and atheism].

II. “The scientific-researches laboratory
 “Applications of literature, science-study, philosophy,
 journalism and mass communication means”” (“SLPZ”)
*[the applied developments in the area
 “Applications of literature, literary-science
 and oral national creativity ” –*
 usage of theory of literature, usage of theory of history of literature,
 usage of theory of oral national creativity,
 usage of theory of the auxiliary literary-science disciplines,
 usage of theory of the products of fiction literature,
 usage of theory of the cognitive modeling technology
 in the applications of literature, literary-science and oral national creativity;
*the applied developments in the area
 “ Applications of science - study ” –*
 usage of theory of the general questions of science-study,
 usage of theory of the development of science, usage of theory of science and society,
 usage of theory of sociology of science, usage of theory of scientific work,
 usage of theory of scientific creativity, usage of theory of the organization of science,
 usage of theory of politics in the area of science,
 usage of theory of the technique and technics of research work,
 usage of theory of economics of science, usage of theory of scientific staff,
 usage of theory of the international cooperation in science,
 usage of theory of science and scientific-research work in the separate countries,
 usage of theory of the cognitive modeling technology
 in the applications of science - study ;
*the applied developments in the area
 “ Applications of mass communication ,
 journalism and mass media means ” –*
 usage of theory of the mass communication means,
 usage of theory of the open network information resources (“Internet” and “WWW”),
 usage of theory of journalism, usage of theory of the mass media means,
 usage of theory of printing, usage of theory of television (TV), usage of theory of radio,
 usage of theory of use of the technical means for mass communication,
 usage of theory of the cognitive modeling technology
 in the applications of mass communication ,
 journalism and mass media means] .

III. "The scientific-researches laboratory
"Applications of the problems of (cognitive) psychology,
education, science and support of young scientists
(the programs of grants and others)"" ("SPOPMU") (*)
*[the applied developments in the area
"Applications of national education and pedagogics" –*
usage of theory of general pedagogics,
usage of theory of history of education and pedagogics,
usage of theory of personnels, usage of theory of the systems of education,
usage of theory of preschool education,
usage of theory of preschool pedagogics,
usage of theory of general-educational (comprehensive) school,
usage of theory of pedagogics of general-educational (comprehensive) school,
usage of theory of out-of-school (additional) education and training,
usage of theory of out-of-school pedagogics,
usage of theory of special (correctional) schools,
usage of theory of defectology,
usage of theory of primary professional-technical education,
usage of theory of pedagogics of professional school,
usage of theory of average professional education,
usage of theory of pedagogics of average professional education,
usage of theory of higher professional education,
usage of theory of pedagogics of higher professional school,
usage of theory of education of adults, usage of theory of improvement of professional skills,
usage of theory of self-education,
usage of theory of family training, theory of family pedagogics,
usage of theory of the specialized branches of pedagogics,
usage of theory of the technical means of training and learning equipment,
usage of theory of national education and pedagogics in the separate countries,
usage of theory of the cognitive modeling technology
in the applications of national education and pedagogics;

t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
“ Applications of (cognitive) psychology ” () –*
usage of theory of general psychology, usage of theory of psychology of development,
usage of theory of age psychology, usage of theory of comparative psychology,
usage of theory of social psychology, usage of theory of applied psychology,
usage of theory of the cognitive modeling technology
i n t h e a p p l i c a t i o n s o f (c o g n i t i v e) p s y c h o l o g y ,
usage of theory of the modified stratified-step model
of processing (cognitive psychology) of the content of information fragments,
usage of theoretical bases of cognitive psychology
a n d t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y ,
usage of theoretical bases of the parametrical cognitive models block
for the system analysis of the information-educational environments
(the cognitive models of the subject of training and the means of training),
usage of theory of the ways of representation of the structure
of the cognitive models and difficult problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), usage of theory of the technical means of support of the complex analysis (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others); *the applied developments in the area "Applications of the grants of "RFBR", "RHSF" and other organizations"* – usage of theory of the general details of the grants of “The Russian fund of basic researches”, “The Russian humanitarian scientific fund” and other organizations, usage of the theoretical-methodological basis of grants, usage of theory of reception, distribution and use of the grants of “RFBR”, “RHSF” and other grant-formation organizations, usage of theory of the cognitive modeling technology in the applications of the grants of “RFBR”, “RHSF” and other organizations].

I V . “ T h e s c i e n t i f i c - r e s e a r c h e s l a b o r a t o r y
"Applications of the innovations of the project "The Russian encyclopedias",
philosophy of science, technics and technology on the branches of knowledge"” (“SRE”)
[t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
“Applications of encyclopedias on natural and exact sciences” –
usage of theory of encyclopedias on mathematics, cybernetics, physics, mechanics,
chemistry, biology, geodesy, cartography, geo-physics, geology, geography, astronomy,
usage of theory of the general and complex problems of natural and exact sciences,
usage of theory of the cognitive modeling technology
in the applications of encyclopedias on natural and exact sciences;
t h e a p p l i e d d e v e l o p m e n t s i n t h e a r e a
“Applications of encyclopedias on social sciences” –
usage of theory of encyclopedias on social sciences as a whole,
usage of theory of encyclopedias on philosophy, history and historical sciences,
sociology, demography, economics and economic sciences,
state, law and jurisprudential sciences, politics and political sciences,
science - study, culture and cultural - science,
national education and pedagogics, psychology,
science of language, literature and literary - science,
oral national creativity, art and art - science,
mass communication and journalism,
the mass media means, informatics, religion and atheism,
the complex studying of the separate countries and regions,
the complex problems of social sciences,
usage of theory of the cognitive modeling technology
in the encyclopedias on social sciences;

the applied developments in the area “Applications of encyclopedias on technical, applied and economic sciences” – usage of theory of encyclopedias on power-engineering, electrical-engineering, electronics, radio-engineering, connection, automatics, computer engineering, mining, metallurgy, mechanical-engineering, nuclear technics, instrument-making, polygraphy, reprography, photo-cinema-technics, chemical technology and chemical industry, bio-technology, light industry, food-processing industry, forest and wood-processing industry, construction and architecture, agriculture and forestry economy, fish economy and aqua-culture, water economy, internal trade, tourist-excursion service, external trade, transport, housing-communal economy, housekeeping, consumer services, medicine and public-health-services, physical training and sport, military science, the other branches of economics, usage of theory of the cognitive modeling technology in the applications of encyclopedias on technical, applied and economic sciences;

the applied developments in the area “Applications of encyclopedias on the general and complex problems of technical and applied sciences and the branches of national economy” – usage of theory of encyclopedias on organization and management, statistics, standardization, patent business, invention and rationalization, labor safety, environment preservation and ecology of person, space researches, metrology, usage of theory of the cognitive modeling technology in the applications of encyclopedias on the general and complex problems of technical and applied sciences and the branches of national economy;

the applied developments in the area “Applications of philosophy of science, technics and technology” – usage of theory of the general problems of modern philosophy of science, technics and technology, usage of theory of the general-philosophical problems, usage of theory of logic of philosophy and methodology of science, usage of theory of social philosophy, usage of theory of ethics, usage of theory of aesthetics, usage of theory of philosophy of religion and atheism, usage of theory of history of philosophy, usage of theory of the cognitive modeling technology in the applications of philosophy of science, technics and technology].

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

2.3.8. The applied developments direction

“Cognitive modeling

in the physical training and sport”

(“CM in PHT and S”) (“NFS”)

of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”

The developed “The applied developments direction “Cognitive modeling in the physical training and sport” (“NFS”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of sport, sports sciences and actions” (“SSSNM”) [*the applied developments in the area “Applications of physical training and sport”* – usage of theory of physical training and sport, usage of theory of the methodological and medical-biological bases of physical training and sport, usage of theory of the material-technical base of physical training and sport, usage of theory of the methodical bases of the kinds of sport and sports competitions, usage of theory of the cognitive modeling technology in the applications of physical training and sport].

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

2.3.9. The applied developments direction

“Cognitive modeling in the military sciences”

(“CM in MILS”) (“NVN”)

of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

The developed “The applied developments direction “Cognitive modeling in the military sciences”” (“NVN”) treats to the applied developments divisions of “The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N.” (“SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied developments directions and scientific-researches laboratories of “SRI”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The scientific-researches laboratory “Applications of architecture, construction, technics, history, education, politics and economics in the armed forces” (“SASTIOPEVC”) [*the applied developments in the area “Applications of military sciences”* – usage of theory of the doctrine about war and army, usage of theory of military history, usage of theory of military education, usage of theory of training of staff, usage of theory of military politics, usage of theory of military doctrines, usage of theory of military science, usage of theory of military-applied sciences, usage of theory of arms and military technics, usage of theory of armed forces, usage of theory of military economics, usage of theory of the cognitive modeling technology in the applications of military sciences].

The applied developments directions and scientific-researches laboratories of “SRI” allow to develop the main and derivative scientific results of CMT.

2.4. The local and international scientific newspapers and journals of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”

“The state international organization "Academy of cognitive natural sciences"” (“SIO "ACNS"”) and “The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (natural) sciences" named after Veniaminov V.N.” (“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – “SRI”) as the first SRI in the structure of “SIO "ACNS"” (www.vetrovan.(spb.)ru) includes the various scientific newspapers and journals with the scientific results.

The scientific newspapers and journals of “SIO "ACNS"” (“SRI”) are intended for the promotion of the main and derivative scientific results of the microscopic system, financial and complex analysis – the 26 fundamental scientific researches sections (departments) on the 13 fundamental scientific researches branches of “SIO "ACNS"” correspond to the 26 fundamental development departments on the 13 fundamental development branches of “SRI”, and also the 26 sections on the 13 branches of “The Russian academy of sciences”; the 27 applied scientific researches sections (departments) on the 9 applied scientific researches directions of “SIO "ACNS"” correspond to the 27 scientific-researches laboratories on the 9 applied developments directions of “SRI”, and also the 27 sections on the 9 directions of “The Russian academy of natural sciences”:

- I. The local scientific newspapers (SN) and scientific journals (SJ) of “SIO "ACNS"” (1 SN and 1 SJ).
 - 1.1. SN “News of SIO "ACNS"” (in the national language).
 - 1.2. SJ “Proceedings of SIO "ACNS"” (in the national language).
- II. The international scientific journals (ISJ) of “SIO "ACNS"” (5 ISJ).
 - 2.1. ISJ “Bulletin of SIO "ACNS"” (in the national and international language).
 - 2.2. ISJ “Cognitive sciences” (in the national and international language) (* – together with “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”).
 - 2.3. ISJ “Cognitive modeling technology for the microscopic system analysis” (in the national and international language) (*).
 - 2.4. ISJ “Cognitive modeling technology for the microscopic financial analysis” (in the national and international language) (*).
 - 2.5. ISJ “Cognitive modeling technology for the microscopic complex analysis” (in the national and international language) (*).

III. The regional (RFSJ) and international fundamental scientific journals (IFSJ) of "SIO "ACNS"" (the 13 branch (R)IFSJ).

- 3.1. (R)IFSJ "The microscopic cognitive modeling (MCM) in the fundamental scientific researches" ("The mathematical sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.2. (R)IFSJ "MCM in the fundamental scientific researches" ("The physical sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.3. (R)IFSJ "MCM in the fund. scientific res." ("The nano-technologies and inf. technologies"), (the multi-section – the 3 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.4. (R)IFSJ "MCM in the fundamental scientific researches" ("The exact sciences"), (the multi-section – the 3 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.5. (R)IFSJ "MCM in the fund. scientific res." ("The industry and chemical sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.6. (R)IFSJ "MCM in the fundamental scientific researches" ("The biological sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.7. (R)IFSJ "MCM in the fund. scientific res." ("The physiology, fund. medicine and health care"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.8. (R)IFSJ "MCM in the fundamental scientific researches" ("The sciences about The Earth"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.9. (R)IFSJ "MCM in the fundamental scientific researches" ("The social sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.10. (R)IFSJ "MCM in the fund. scientific researches" ("The glob. problems and int. relations"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.11. (R)IFSJ "MCM in the fund. scientific researches" ("The historical-philological sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.12. (R)IFSJ "MCM in the fund. scientific researches" ("The sports sciences"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.13. (R)IFSJ "MCM in the fundamental scientific researches" ("The military sciences"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).

IV. The regional (RASJ) and international applied scientific journals (IASJ) of "SIO "ACNS"" (the 9 branch (R)IASJ).

- 4.1. (R)IASJ "MCM in the appl. scientific researches" ("The natural sciences"), (the multi-section – the 8 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.2. (R)IASJ "MCM in the appl. scientific res." ("The appl. tech. sciences and technologies"), (the multi-section – the 4 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.3. (R)IASJ "MCM in the appl. scientific res." ("The geo-political sciences and res."), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.4. (R)IASJ "MCM in the applied scientific researches" ("The steady development of society of the post-industrial country"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.5. (R)IASJ "MCM in the applied scientific researches" ("The social-economic and jurisprudential sciences"), (the multi-section – the 4 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.6. (R)IASJ "MCM in the applied scientific researches" ("The biol. and med. sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.7. (R)IASJ "MCM in the applied scientific res." ("The hum. sciences, art and creativity"), (the multi-section – the 4 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.8. (R)IASJ "MCM in the applied scientific res." ("The physical training and sport"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.9. (R)IASJ "MCM in the applied scientific researches" ("The military sciences"), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).

V. The local scientific newspapers (SN) and scientific journals (SJ) of "SRI" (1 SN and 1 SJ).

- 5.1. SN "News of SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." (in the nat. lang.).
- 5.2. SJ "Bulletin of SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." (in the nat. lang.).

VI. The international scientific journals (ISJ) of "SRI" (4 ISJ).

- 6.1. ISJ "Cognitive informatics" (in the nat. and int. language) (*).
- 6.2. ISJ "CMT for the microscopic system analysis" (in the nat. and int. language) (*).
- 6.3. ISJ "CMT for the microscopic financial analysis" (in the nat. and int. language) (*).
- 6.4. ISJ "CMT for the microscopic complex analysis" (in the nat. and int. language) (*).

The scientific newspapers and journals allow directly to propagandize the main and derivative fundamental and applied scientific results of CMT.

3. “The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.”

1. The name of “SF "SFA CMT" n. a. Prokopenko N.A.” as the organization (legal entity – LE):
 - 1.1) the full company name of LE in the national language (Russian) – « Некоммерческая организация (учреждение) «научный фонд "Системного и финансового анализа на основе технологии когнитивного моделирования" имени Прокопенко Н.А.»»;
 - 1.2) the full company name of LE in the international language (English) – “The noncommercial organization (establishment) “scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.””;
 - 1.3) the reduced company name of LE in the national language (Russian) – « Н Ф " С Ф А Т К М " и м . П р о к о п е н к о Н . А . » ;
 - 1.4) the reduced company name of LE in the international language (English) – “ S F " S F A C M T " n . a . P r o k o p e n k o N . A . ” .
2. The description of “SF "SFA CMT" n. a. Prokopenko N.A.” as the organization (LE):
 - 2.1) it has the organizational-legal form – “The noncommercial organization (establishment) "scientific fund” – the mixed property of RF and “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., on the federal financing due to the monetary resources of the budget of RF and the foreign countries, LE and natural persons (NP) (non)residents;
 - 2.1.1) for the financing of production of the basic and derivative fundamental and applied scientific results;
 - 2.1.2) for the support of reception of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N.;
 - 2.1.3) for the reception of payments (gifts) of the budget of RF and foreign countries;
 - 2.1.4) for the reception of payments (gifts) of LE and NP (non)residents;
 - 2.1.5) for the reception of sponsor's support and external financing;
 - 2.1.6) for the support of functioning of the organizational structures of “SIO "ACNS"”, “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, “"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.”” and “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”;
 - 2.2) it is “the noncommercial organization (establishment) scientific fund” (with some commercial kinds of charges and incomes) with “the mixed form of ownership” (it is created and functioned due to the monetary resources of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., due to the monetary resources of RF and the foreign countries and due to the monetary resources of LE and NP (non)residents);

- 2.3) it acts in the civil circulation under its company name
 “The scientific fund "System and financial analysis based on
 cognitive modeling technology" named after Prokopenko N.A.”
 (“ S F " S F A C M T " n . a . P r o k o p e n k o N . A . ”),
 which is defined in its constituent documents (the charter and const. contract)
 and it is included into the unique state registry of LE
 at the state registration as the newly created (existing) LE
 for the implementation of the following kinds of activity according to
 “The All-Russian classifier of the kinds of economic activity” (“ACKEA” – «ОКВЭД»);
- 2.3.1) the information activity and scientific activity;
- 92.4 – “The activity of information agencies” (science and education);
- 2.3.2) the scientific - production activity;
- 91.1 – “The activity of commercial, entrepreneurial
 and professional organizations”
 (the scientific activity, the activity on interaction
 with the unions and associations of commercial workers,
 entrepreneurs, scientists, writers and others);
 - 67.13 – “The other auxiliary activity
 in the sphere of financial intermediary”
 (the information-consulting services of managing subjects,
 the information-auditor services of enterprises (organizations)
 and the information-auditor services of credit organizations);
- 2.3.3) the commercial (trading) activity;
- 51.12 – “The other retail trade in unspecialized shops”
 (51.15.4 – “The activity of agents on the wholesale
 trade of radio-, tele-instrumentation
 and the technical carriers of information (with records and without records)”);
 - 52.4 – “The other retail trade in specialized shops”
 (51.43.2 – “The wholesale trade of radio-, tele-instrumentation
 and the technical carriers of information (with records and without records)”);
 - 52.45 – “The retail trade of household
 electric-equipment, radio- and tele-instrumentation”;
 - 52.47 – “The retail trade of books, journals,
 newspapers, food-paper and writing goods”
 (51.47.21 – “The wholesale trade of books”;
 51.47.22 – “The wholesale trade of newspapers and journals”;
 51.56.1 – “The wholesale trade of paper and cardboard”);
- 2.3.4) the production - publishing activity;
- 22 – “The publishing and polygraphic activity (production)
 and the duplicating of the written down carriers of information”
 (the production and duplicating of optical discs
 for the laser storages of information
 with computer programs, books, monographies,
 reports on the scientific-research work (SRW), textbooks,
 scientific articles, scientific reports and multimedia-presentations);
 - 30.02 – “The production of electronic calculating machines (ECM)
 and other equipment for the information processing”
 (the production of programs for ECM,
 multimedia-presentations and auxiliary materials).

3. The sphere of scientific (financial) interests of “SF "SFA CMT" n. a. Prokopenko N.A.”:
the (microscopic) system analysis and control, the information technologies, the information-educational environments, the automated (remote) training systems, the innovative architectures and algorithms in the basis of the automation means of training, (cognitive) informatics, psycho-physiology of perception, (cognitive) psychology, (cognitive) linguistics, the (microscopic) financial analysis, accounting and audit of the enterprises and (credit) organizations, the (microscopic) complex analysis, theoretical mechanics, physical chemistry, molecular biology and medicine.
4. The directions of scientific (financial) researches of “SF "SFA CMT" n. a. Prokopenko N.A.”:
 - 4.1) it is engaged in the financing of the (microscopic) system analysis and the increase of efficiency of functioning of the (adaptive) information-educational environments;
 - 4.1.1) it finances the development and modernization of the apparatus of the cognitive modeling technology for the (microscopic) system analysis of the (adaptive) information-educational environments;
 - 4.1.2) it finances the creation and modernization of the structure of the parametrical cognitive models of the subject of training and the means of training;
 - 4.1.3) it is engaged in the financing of creation and modernization of the architecture of the (adaptive) automation means of training (at distance) based on the parametrical cognitive models block;
 - 4.2) it is engaged in the financing of the (microscopic) financial analysis and the increase of efficiency of functioning of the (credit) organizations;
 - 4.2.1) it finances the development and modernization of the apparatus of the cognitive modeling technology for the (microscopic) financial analysis of the organizational structures of the enterprises and (credit) organizations;
 - 4.2.2) it finances the creation and modernization of the structure of the parametrical cognitive models for the vertical, horizontal and trend (microscopic) financial analysis of the (credit) organizations based on the primary registers of financial and accounting reporting-documents;
 - 4.2.3) it is engaged in the financing of creation and modernization of the architecture of the means of automation of the financial analysis and audit based on the parametrical cognitive models block;
 - 4.3) it is engaged in the financing of the (microscopic) complex analysis and the increase of efficiency of functioning of the difficult objects, processes and phenomena;
 - 4.3.1) it finances the development and modernization the apparatus of the cognitive modeling technology for the (microscopic) complex analysis of the difficult objects, processes and phenomena;
 - 4.3.2) it finances the creation and modernization of the structure of the parametrical cognitive models for the (microscopic) complex analysis based on the (multidimensional) cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere;
 - 4.3.3) it is engaged in the financing of creation and modernization of the architecture of the means of automation of the (microscopic) complex analysis based on the parametrical cognitive models block;
 - 4.3.4) it finances the development of the fundamental and applied scientific results in the area of theoretical mechanics, physical chemistry, molecular biology and medicine (preventive and clinical).

3.1. The general details about “SF "SFA CMT" n. a. Prokopenko N.A.”

“The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.” (“SF "SFA CMT" n. a. Prokopenko N.A.”) acts as the main component of the system of science and education of the country for the support of financing of the creation, distribution and use of the main and derivative fundamental and applied diverse scientific results of the cognitive modeling technology ([www.vetrovan.\(spb.\)ru](http://www.vetrovan.(spb.)ru) and [www.sfacmtfund.\(spb.\)ru](http://www.sfacmtfund.(spb.)ru)):

- 1) it was executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions of financing, which allows to provide support of production of fundamental and applied scientific results (“The Nobel prize” in Norway and Sweden);
- 3) includes the several main divisions of organizational structure:

I. The administrative-scientific divisions of “SF "SFA CMT" n. a. Prokopenko N.A.” [the director of “SF "SFA CMT" n. a. Prokopenko N.A.” (at “SIO "ACNS”” or “*”), the secretary of the director of “SF "SFA CMT" n. a. Prokopenko N.A.” (*), the head of the scientific-cons. centre of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) on the different available scientific schools of the specified “SIO "ACNS””, the deputy head of the scientific-cons. centre of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) on physical-mathematical, technical, social, economic, chemical, biological, medical, sports and military sciences].

II. The scientific-organizational divisions of “SF "SFA CMT" n. a. Prokopenko N.A.” [the expert council of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) on phys.-math., tech., soc., econ., chem., biol., med., sport. and mil. sciences, the expert councils of “SIO "ACNS”” on the directions (branches) of financing (*) (the objects and subjects of research: the information-educational environments, the (credit) organizations, the objects of theoretical mechanics), in particular on the physical-mathematical sciences (spec. 01.02.01 – “Theoretical mechanics” and others), on the technical sciences (spec. 05.13.10 – “Management in social and economic systems”, 05.13.01 – “The system analysis, control and information processing” and others), on the social sciences (spec. 10.02.21 – “Applied and math. linguistics” and others), on the economic sciences (spec. 08.00.10 – “Finance, monetary circulation and credit” and others), on the chemical sciences (spec. 02.00.04 – “Physical chemistry” and others), on the biological sciences (spec. 03.00.03 – “Molecular biology” and others), on the medical sciences (spec. 14.01.07 – “Eye illnesses and ophthalmology”, 19.00.01 – “Cognitive psychology”, 19.00.02 – “Psychophysiology of perception”, 19.00.03 – “Psychology of work, engineering psychology and ergonomics” and others), the archive of the scientific-consulting council of “SF "SFA CMT" n. a. Prokopenko N.A.” (*), the archive of the expert council of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) and the scientific-methodical department of “SF "SFA CMT" n. a. Prokopenko N.A.” (*)].

III. The administrative-economy divisions of “SF "SFA CMT" n. a. Prokopenko N.A.”
[the deputy director of “SF "SFA CMT" n. a. Prokopenko N.A.” (*),
on administrative-economy work (the administrative department (*),
the document-circulation department (*), the legal support department (*),
the document-office (*), the archive of documents (*), the inf.-analytical support department (*),
the communication and correspondence (expedition) department (*), the deposition department (*),
the certification, licensing and patenting department (*),
the fire-prevention safety dep. (*), the construction and repair department (*),
the automation department (*), the planning of deliveries and shipments of production department (*),
the supply and purchases of production department (*) and the transport support department (*)),
the chief accountant of “SF "SFA CMT" n. a. Prokopenko N.A.” (*)
(the planning and econ. analysis department (*), the calculations department (*), the delivery department (*),
the clearing of payment requirements and payment assignments department (*),
the accounting of commodity-material assets department (*) and the inventory department (*)),
the deputy director of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) on personnel support
(the vocational training, retraining and improvement of professional skills department (*),
the personnel registration department (*), the el. accounting of visitors and employees department (*),
the labor safety department (*), the medicine department (*) and the professional union department (*)),
the deputy director of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) on library supp.
(the purchase and sale of literature department (*), the library service department (*),
the fundamental literature department (*), the applied literature department (*),
the normative documentation department (*), the periodical editions department (*),
the electronic library department (*) and the funds of library department (*)),
the deputy director of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) on publishing house
(the publishing house department (*), the polygraphy department (*), the editing department (*),
the printing house department (*) and the warehouse of book-printing production department (*)),
the deputy director of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) on security
(the security dep. (*), the territory protection dep. (*) and the el. passports registration dep. (*))];
[see the list of scientific newspapers and journals of “SF "SFA CMT" n. a. Prokopenko N.A.”].

IV. The scientific-research and educational activity financing divisions of “SF "SFA CMT" n. a. Prokopenko N.A.” [the deputy director of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) on scientific work – the financing of phys.-math., tech., soc., econ., chem., biol., med., sport. and mil. directions of researches (the fundamental and applied researches financing departments), on databases and information storages (the departments and scientific-research laboratories of introduction and support of information warehouses for hardware, software and brainware support and integrated systems (*)), on quality management (the quality management research department), on investments and innovations (the investments and innovations research department), on financial planning (the financial planning and researches department), on advertising and marketing (the marketing researches and advertising department), on purchase and realizations of book-printing production (the delivery (shipment) res. dep.), on international relations (the department of external communications and researches, the visas registration and researches financing department, the scientific international programs financing department, the educational programs financing department and the translations department), on basic and additional educational activity financing (the basic (remote) education, postgraduate study and doctoral studies financing departments and the professional retraining and improvement of professional skill financing department)].

IV.A. The fundamental researches financing divisions of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – branches and departments [see the fundamental developments branches and departments of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, and also the fund. scientific researches branches and sections (departments) of “SIO "ACNS”].

IV.B. The applied researches financing divisions of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.” – direction and departments [see the applied developments directions and scientific-research laboratories of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, and also the applied scientific researches directions and sections (departments) of “SIO "ACNS”].

V. The scientific centre divisions of the scientific fund at “SIO "ACNS”” (add.).

VI. The scientific-historical div. of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) (add.).

VII. The scientific-public div. of “SF "SFA CMT" n. a. Prokopenko N.A.” (*) (add.).

VIII. The divisions of “SIO "Academy of cognitive natural sciences”” (add.).

“SF "SFA CMT" n. a. Prokopenko N.A.” allows to purposefully finance of the creation, distribution and use of the algorithms, methods and technologies of the system, financial and complex analysis, and also to increase the resultativity of functioning of the system of education and science of the country based on CMT and CM.

3.2. The fundamental researches financing divisions (at the microscopic level) of “SF "SFA CMT" n. a. Prokopenko N.A.”

The structure of “The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.” (www.sfacmtfund.(spb.)ru) (“SF "SFA CMT" n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO "ACNS”” (www.acns.(spb.)ru) of the author (www.vetrovan.(spb.)ru) includes the different divisions for the financing of receiving of the scientific results:

A. The fundamental researches (management) financing divisions of “SF "SFA CMT" n. a. Prokopenko N.A.” (“SIO "ACNS”” and “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”) for the microscopic system, financial and complex analysis – the 26 fundamental researches financing departments (FRFDP) on the 13 fundamental researches financing branches (FRFB) of “SF "SFA CMT" n. a. Prokopenko N.A.” correspond to the 26 fundamental scientific researches sections (departments) (FSRS(DP)) on the 13 fundamental scientific researches branches (FSRB) of “SIO "ACNS””, and also correspond to the 26 fundamental developments departments (FDDP) on the 13 fundamental developments branches (FDB) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, besides, correspond to the 26 sections on the 13 branches of “The Russian academy of sciences”.

A.1. FRFB [FSRB (FDB)] “Cognitive modeling in the mathematical sciences” (“CM in MATHS”) (“OMN”).

A.1.1. FRFDP [FSRS(DP) (FDDP)] “Theory of mathematics and the complex system analysis based on the cognitive modeling technology” (“TM and CSAB on CMT”) (“SM”) (*).

A.1.2. FRFDP [FSRS(DP) (FDDP)] “Theory of cybernetics and (cognitive) informatics” (“TC and (C)I”) (“SPMI”) (*).

A.2. FRFB [FSRB (FDB)] “Cognitive modeling in the physical sciences” (“CM in PHS”) (“OFN”).

A.2.1. FRFDP [FSRS(DP) (FDDP)] “Theory of physics, astronomy and space researches” (“TPHA and SR”) (“SOFA”) (*).

A.2.2. FRFDP [FSRS(DP) (FDDP)] “Theory of nuclear physics and physics of atomic nucleus” (“TNPH and PHAN”) (“SYF”) (*).

- A.3. FRFB [FSRB (FDB)] “Cognitive modeling in the nano-technologies and information technologies” (“CM in N-T and IT”) (“ONIT”).
- A.3.1. FRFDP [FSRS(DP) (FDDP)] “Theory of electronics, radio-engineering and connection” (“TER-E and C”) (“SVLTSEB”).
- A.3.2. FRFDP [FSRS(DP) (FDDP)] “Theory of automatics, computer engineering and the system analysis based on the cognitive modeling technology” (“TACE and SAB on CMT”) (“SITA”) (*).
- A.3.3. FRFDP [FSRS(DP) (FDDP)] “Theory of nano-technologies for the mechanical-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture and construction” (“TN-T for M-EI-MPR and PH-C-TE and FITA and C”) (“SNT”) (*).
- A.4. FRFB [FSRB (FDB)] “Cognitive modeling in the exact sciences” (“CM in ES”) (“OEMMPU”).
- A.4.1. FRFDP [FSRS(DP) (FDDP)] “Theory of (theoretical) mechanics and gyroscopes” (“T(T)M and G”) (“SM”) (*).
- A.4.2. FRFDP [FSRS(DP) (FDDP)] “Theory of mechanical-engineering, instrument-making and metrology” (“TM-EI-M and M”) (“SPMPU”).
- A.4.3. FRFDP [FSRS(DP) (FDDP)] “Theory of power-engineering and electrical-engineering” (“TP-E and E-E”) (“SE”).
- A.5. FRFB [FSRB (FDB)] “Cognitive modeling in the industry and chemical sciences” (“CM in I and CHS”) (“OHNM”).
- A.5.1. FRFDP [FSRS(DP) (FDDP)] “Theory of the light, food, forest and wood-processing industry, the architecture and construction, the agricultural, forestry, water and fish economy and aqua-culture” (“TEFF and W-PIA and CAFW and FE and A-C”) (“SNM”) (*).
- A.5.2. FRFDP [FSRS(DP) (FDDP)] “Theory of chemistry, chemical technology and chemical industry” (“TCHCHT and CHI”) (“SCHN”).
- A.6. FRFB [FSRB (FDB)] “Cognitive modeling in the biological sciences” (“CM in BS”) (“OBN”).
- A.6.1. FRFDP [FSRS(DP) (FDDP)] “Theory of biology and pharmacology” (“TB and PH”) (“SOB”).
- A.6.2. FRFDP [FSRS(DP) (FDDP)] “Theory of physical-chemical bio-technology” (“TPH-CHB-T”) (“SFCHB”) (*).
- A.7. FRFB [FSRB (FDB)] “Cognitive modeling in the physiology, fundamental medicine and public-health-services” (“CM in PHFM and P-H-S”) (“OFFM”).
- A.7.1. FRFDP [FSRS(DP) (FDDP)] “Theory of physiology, bio-physiology and private physiology” (“TPHB-PH and PPH”) (“SF”) (*).
- A.7.2. FRFDP [FSRS(DP) (FDDP)] “Theory of medicine, public-health-services, labor safety, environment preservation and ecology of person” (“TMP-H-SLSEP and EP”) (“SFM”) (*).
- A.8. FRFB [FSRB (FDB)] “Cognitive modeling in the sciences about The Earth” (“CM in S about E”) (“ONZ”).
- A.8.1. FRFDP [FSRS(DP) (FDDP)] “Theory of geo-physics, geology, mining and metallurgy” (“TG-PHGM and M”) (“SGGGGN”).
- A.8.2. FRFDP [FSRS(DP) (FDDP)] “Theory of oceanology, structure and physics of atmosphere, geodesy, cartography and geography of The Earth and planets” (“TOS and PHAGC and GE and P”) (“SOFAG”).

- A.9. FRFB [FSRB (FDB)] “Cognitive modeling in the social sciences” (“CM in SS”) (“OON”).
- A.9.1. FRFDP [FSRS(DP) (FDDP)] “Theory of social sciences, philosophy, science-study, politics and political sciences, sociology, (cognitive) psychology, state, law and jurisprudential sciences, patenting business, invention and rationalization-work” (“TSSPHS-SP and PSS(C)PSL and JSPBI and R-W”) (“SFPSPP”) (*).
- A.9.2. FRFDP [FSRS(DP) (FDDP)] “Theory of economics and economic sciences, organization, management, statistics and the financial analysis based on the cognitive modeling technology” (“TE and ESOMS and FAB on CMT”) (“SE”) (*).
- A.10. FRFB [FSRB (FDB)] “Cognitive modeling in the global problems and international relations” (“CM in GP and IR”) (“OGPMO”).
- A.10.1. FRFDP [FSRS(DP) (FDDP)] “Theory of demography, pedagogics and national education, standardization, the complex studying of separate countries and regions, the general and complex problems of natural, exact, technical, public and applied sciences and manufacture branches” (“TDP and NESCSSC and RG and CPNETP and AS and MB”) (“SGP”).
- A.10.2. FRFDP [FSRS(DP) (FDDP)] “Theory of culture and cultural-science, art and art-science, mass communication, journalism and mass media means, religion, internal trade and tourist-excursion service, external trade, transport, housing-communal economy, housekeeping and household services at the international level” (“TCandC-SAandA-SMCJandMMMRITandT-ESETTH-CEHandHSatIL”) (“SMO”).
- A.11. FRFB [FSRB (FDB)] “Cognitive modeling in the historical-philological sciences” (“CM in H-PHS”) (“OIFN”).
- A.11.1. FRFDP [FSRS(DP) (FDDP)] “Theory of history and historical sciences” (“TH and HS”) (“SI”).
- A.11.2. FRFDP [FSRS(DP) (FDDP)] “Theory of science of language, (cognitive) linguistics, literature, literary-science and oral national creativity” (“TSL(C)LLL-S and ONC”) (“SYL”) (*).
- A.12. FRFB [FSRB (FDB)] “Cognitive modeling in the sports sciences” (“CM in SPS”) (“OSN”).
- A.12.1. FRFDP [FSRS(DP) (FDDP)] “Theory of competitions, sport and sports sciences” (“TCSP and SPS”) (“STSSSN”).
- A.13. FRFB [FSRB (FDB)] “Cognitive modeling in the military sciences” (“CM in MILS”) (“OVN”).
- A.13.1. FRFDP [FSRS(DP) (FDDP)] “Theory of architecture, construction, technics, history, education, politics and economics in the armed forces” (“TACTHEP and E in AF”) (“STASTIOPEVS”).

3.2.1. The fundamental researches financing branch “Cognitive modeling in the mathematical sciences” (“CM in MATHS”) (“OMN”) of “SF “SFA CMT” n. a. Prokopenko N.A.”

The developed “The fundamental researches financing branch “Cognitive modeling in the mathematical sciences”” (“OMN”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches financing department “Theory of mathematics and the complex system analysis based on the cognitive modeling technology”” (“SM”) (*) [*the financing of fundamental researches and developments in the area “ T h e o r e t i c a l m a t h e m a t i c s ” (*)* – theory of mathematical logic and theoretical bases of mathematics, theory of numbers, theory of algebra, theory of topology, theory of geometry, theory of the mathematical analysis, theory of the functions of valid variables, theory of the functions of complex variables, theory of the ordinary differential equations, theory of the differential equations with private derivatives, theory of the integrated equations, theoretical mathematical models of the objects, processes and phenomena of the natural and technical sciences, theory of the equations of mathematical physics, theory of variation calculus, mathematical theory of optimum control, theory of the functional analysis, theory of calculation mathematics, theory of probability and mathematical statistics, theory of the combinatory analysis, theory of graphs, theory of mathematical cybernetics, theory of the ways of representation of the structure of the cognitive models and problem environments, theoretical basis of the parametrical cognitive models block, theory of the cognitive modeling technology in the theoretical mathematics;

the financing of fundamental researches and developments in the area
“The theoretical complex system analysis” ()* –
theory of the general questions of the complex system analysis,
theory of tendencies, dependences and laws
of the complex system analysis of the objects, processes and phenomena,
theory of the cognitive modeling technology
with dynamic cloning, verification and subverification,
theory of the iterative cycle and the technique of use
of the cognitive modeling technology for the complex system analysis
of the difficult objects, processes and phenomena,
theory of the parametrical cognitive models block
for the complex system analysis and the increase of efficiency of functioning
of the difficult objects, processes and phenomena,
theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd generation,
theory of the ways of representation of the structure of the cognitive models and problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the algorithms of formation of the structure
of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations,
theory of the techniques of research of parameters
of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations,

theory of the algorithms of processing of a posteriori data of the complex system analysis of the difficult problem spheres, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the difficult objects, processes and phenomena, theory of organization and plan of carrying out of the experiment, theory of research of the cognitive models parameters, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of the dynamics of resultativity of the difficult system analysis, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scale, factor analysis and bibliographic lists, the theoretical complex system analysis of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle, the theoretical complex system analysis of the multivariate code device, the theoretical complex system analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis of the chemical element with 1, 2, 3, 4, 5 and more nucleuses, the theoretical complex system analysis of the difficult multivariate hurricane and others].

II. “The fundamental researches financing department “Theory of cybernetics and (cognitive) informatics” (“SPMI”) (*)
[the financing of fundamental researches and developments in the area “ T h e o r e t i c a l c y b e r n e t i c s ” –
theory of the automatic control systems,
theory of modeling, theory of the cybernetic control systems,
theory of information, theory of artificial intelligence,
theory of the discrete (final) automatic devices and formal languages,
theory of reliability, theory of the applied system analysis,
theory of the cognitive modeling technology
i n t h e t h e o r e t i c a l c y b e r n e t i c s ;
the financing of fundamental researches and developments in the area
“ T h e o r e t i c a l i n f o r m a t i c s ” –
theory of informatics, theory of the organization of information work,
theory of the documentary information sources,
theory of the analytical-synthetic processing of documentary information sources,
theory of information search, theory of information service,
theory of the technical means of support of the information processes,
theory of the cognitive modeling technology
i n t h e t h e o r e t i c a l i n f o r m a t i c s ;
the financing of fundamental researches and developments in the area
“ T h e o r e t i c a l c o g n i t i v e i n f o r m a t i c s ” () –*
theory of the modified stratified-step model
of perception (psycho-physiology of perception), processing (cognitive psychology)
and understanding (cognitive linguistics) of the content of information fragments,
theoretical bases of cognitive informatics and the cognitive modeling technology
in the technical, economic, physical-mathematical and other sciences,
theoretical bases of formation of the parametrical cognitive models block
for the system analysis of the information-educational environments
(the cognitive models of the subject of training and the means of training),

theoretical bases of formation of the parametrical cognitive models block for the financial analysis of the (credit) organizations (the cognitive models for the vertical, horizontal and trend financial analysis), theoretical bases of formation of the parametrical cognitive models block for the complex analysis of the objects, processes and phenomena of cognitive informatics, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), theory of the technical means of support of the financial analysis (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting, the automation means of formation of the accounting balance and the report about profits and losses of the organization, the automation means of the vertical, horizontal and trend financial analysis based on the analytical coefficients system), theory of the technical means of support of the complex analysis (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others)].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

3.2.2. The fundamental researches financing branch “Cognitive modeling in the physical sciences” (“CM in PHS”) (“OFN”) of “SF “SFA CMT” n. a. Prokopenko N.A.”

The developed “The fundamental researches financing branch “Cognitive modeling in the physical sciences”” (“OFN”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches financing department “Theory of physics, astronomy and space researches”” (“SOFA”) (*)
*[the financing of fundamental researches and developments in the area “ T h e o r e t i c a l p h y s i c s ” (*)* – theory of the questions and general problems of physical experiment, theory of physics of elementary particles, theory of fields, theory of physics of high energies, theory of nuclear physics, t h e o r y o f p h y s i c s o f g a s a n d l i q u i d s , theory of thermal-dynamics and statistical physics, theory of physics of firm bodies, theory of physics of plasma, theory of physics of atom and molecule, theory of optics, theory of laser physics, theory of radio-physics, theory of physical bases of electronics, theory of acoustics, t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y i n t h e t h e o r e t i c a l p h y s i c s , theory of the cognitive models of the interaction between elementary particles and firm bodies, fields, liquids and gases, theory of the cognitive model of the modified volumetric planetary model of atom n. a. Bohr N.H.D., theory of the cognitive models of the temperature areas of plasma of the atom and molecule, theory of the cognitive model of the optical environment of eye as the optical device, theory of the cognitive model of the acoustical environment of ear as the acoustical device, theory of the cognitive model of the distribution of waves in the environment of research;

the financing of fundamental researches and developments in the area “Theoretical astronomy” ()* – theory of astronomy and heavenly mechanics, theory of astronomy and astro-physics of The Solar system, The Sun, stars, fogs, interstellar environment, star systems, theory of cosmology, theory of observatories, tools, devices and methods of astronomical supervision, theory of the cognitive modeling technology in the theoretical astronomy, theory of the cognitive models of the relative positioning of 1, 2, 3, 4, 5 and more planets and satellites, The Earth, The Sun and others;

the financing of fundamental researches and developments in the area “Theoretical space researches of The Earth, The Sun and planets” ()* – theory of the general questions of space researches of The Earth, The Sun and planets, theory of the devices and methods of the fundamental scientific researches of space environment, theory of the planning and realization of starts of the space vehicles and artificial heavenly bodies, theory of uncontrol movement of the space vehicles and artificial heavenly bodies, theory of the control of movement of the space vehicles and artificial heavenly bodies, theory of space technics and technology, theory of safety and the medical-biological problems of space flights, theory of use of the space systems for the connection and navigation, theory and problems of extraterrestrial territories discovery and prospects of astronautics, theory of research of the astronomical objects by the space means, theory of the geo-physical fundamental researches by the space means, theory of research of The Earth from space (the means of research of new generation), theory of the cognitive modeling technology in the theoretical space researches of The Earth, The Sun and planets, theory of the cognitive models of the gravitational and other interactions between 1, 2, 3, 4, 5 and more artificial space objects, satellites, planets, The Earth and The Sun, theory of the cognitive models of the work of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle and others].

II. “The fundamental researches financing department

“Theory of nuclear physics and physics of atomic nucleus” (“SYF”) (*)

[the financing of fundamental researches and developments in the area

*“ T h e o r e t i c a l n u c l e a r p h y s i c s ” (*) –*

t h e o r y o f t h e n u c l e a r r a w m a t e r i a l s a n d f u e l ,

t h e o r y o f s y n t h e s i s o f i s o t o p e s , t h e o r y o f i s o t o p e s a n d i o n i z a t i o n r a d i a t i o n s ,

t h e o r y o f n u c l e a r r e a c t o r s , t h e o r y o f t h e r m o - n u c l e a r r e a c t o r s ,

t h e o r y o f t h e a c t i o n o f r a d i a t i o n s a n d p r o t e c t i o n a g a i n s t t h e m ,

t h e o r y o f n u c l e a r e x p l o s i o n s , t h e o r y o f t h e p r o c e s s i n g o f n u c l e a r f u e l a n d w a s t e d i s p o s a l ,

t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y

i n t h e t h e o r e t i c a l n u c l e a r p h y s i c s ,

t h e o r y o f t h e c o g n i t i v e m o d e l s o f t h e s t r u c t u r e o f t h e c h e m i c a l e l e m e n t s

w i t h 1 , 2 , 3 , 4 , 5 a n d m o r e n u c l e i s (t h e n u c l e a r p o l y m e r s) ,

t h e o r y o f t h e c o g n i t i v e m o d e l o f t h e m o d i f i e d v o l u m e t r i c p r i n c i p l e n . a . P a u l i W . E .

f o r t h e s t u d y i n g o f e l e c t r o n i c c l o u d s w i t h i n l i m i t s o f p o w e r l e v e l s ,

t h e o r y o f t h e c o g n i t i v e m o d e l o f t h e m o d i f i e d

p l a n e t a r y m o d e l o f a t o m n . a . B o h r N . H . D . a n d o t h e r s] .

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

**3.2.3. The fundamental researches financing branch
“Cognitive modeling in the nano-technologies
and information technologies”
 (“CM in N-T and IT”) (“ONIT”)
of “SF "SFA CMT" n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch
"Cognitive modeling in the nano-technologies
and information technologies"” (“ONIT”) treats to the fundamental researches financing divisions of “The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.” (“SF "SFA CMT" n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) ([www.vetrovan.\(spb.\)ru](http://www.vetrovan.(spb.)ru)) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches financing department "Theory of electronics, radio-engineering and communication”” (“SVLTSEB”) [*the financing of fundamental researches and developments in the area “Theoretical electronics and radio-engineering”* – theoretical bases of electronic technics, theory of radio-engineering, theory of the materials for electronics and radio-engineering, theory of technology and equipment for the electronic and radio-engineering manufacture, theory of designing and constructing of the electronic devices and radio-electronic equipment,

theory of the electrical-vacuum and gas-discharge devices and units, theory of the accelerators of charged particles and plasma, theory of solid-state devices, theoretical bases of quantum electronics, theory of holography, theoretical bases of cryo-electronics, theory of radio-electronic circuits, theory of the distribution of radio-waves, theory of antennas, theory of wave-transport, theory of the elements of over-high-frequency techniques, theory of the radio-transmission and radio-receiving devices, theory of the radio-engineering systems of sounding, location and navigation, theory of television (TV) technics, theory of record and reproduction of signals, theory of electrical-acoustics, theory of ultra-sonic and infra-sonic technics, theory of infra-red technics, theory of the units, details and elements of radio-electronic equipment, theory of the devices for the radio-engineering measurements, theory of the systems and units of display of the information, theory of the cognitive modeling technology in the theoretical electronics and radio-engineering; *the financing of fundamental researches and developments in the area “ Theoretical communication ”* – theory of communication, theory of designing and constructing of the devices of communication, theory of technology and equipment for the assembly and adjustment of the equipment of communication, the systems of transfer and the lines of communication, theory of the multi-channel communication, theory of the networks and centres of communication, theory of the services and facilities of communication, theory of the telegraph (cable) communication and equipment, theory of the systems and equipment of data transmission, theory of the tele-information services and equipment, theory of the telephone communication and equipment, theory of the systems of transfer of the moving images and sound, theory of the facsimile communication and equipment, theory of radio-communication and radio-broadcasting, theory of the light-guiding communication and equipment, theory of television (TV), theory of the optical communication in the free space and equipment, theory of the post communication, theory of the cognitive modeling technology in the theoretical communication and terminal equipment of data transmission].

II. “The fundamental researches financing department
“Theory of automatics, computer engineering and the system analysis
based on the cognitive modeling technology”” (“SITA”) (*)
*[the financing of fundamental researches and developments in the area
“Theoretical automatics and computer engineering”* –
theory of automatic control, theoretical bases of programming,
t h e o r e t i c a l b a s e s o f c o m p u t e r e n g i n e e r i n g ,
theory of the elements, units and devices of automatics and computer engineering,
theory of the devices of input-output, theory of the memory devices,
theory of technology and equipment for the manufacture
of the means of automatics and computer engineering,
theory of the keyboard and counting-perforating machines,
theory of the analog calculating machines (ACM),
theory of the digital calculating machines and calculating complexes (DCM),
theory of the analog-digital (hybrid) calculating machines and calculating complexes,
theory of calculating centres (CC), theory of calculating networks (CN),
theory of the software of calculating machines, complexes and networks,
theory of the systems of automatic measurement, regulation and control,
theory of the systems of tele-control and tele-measurement,
theory of the automated control systems of technological processes,
theory of the automated systems of organizational management,
t h e o r y o f t h e a u t o m a t i o n o f d e s i g n i n g ,
theory of the automation of scientific researches,
theory of the cognitive modeling technology
in the theoretical automatics and computer engineering;
*the financing of fundamental researches and developments in the area
“The theoretical system analysis” (*)* –
theory of tendencies, dependences and laws
of the system analysis of the objects, processes and phenomena,
theory of the cognitive modeling technology
with dynamic cloning, verification and subverification,
theory of the iterative cycle and the technique of use
of the cognitive modeling technology,
theory of the parametrical cognitive models block
for the system analysis of the information-educational environments
and the increase of efficiency of functioning
of the automated training system
with the properties of adaptation based on the cognitive models
(the cognitive models of the subject of training and the means of training),

theory of the ways of representation of the structure of the cognitive models and problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the algorithm of formation of the cognitive model structure,
theory of the technique of research of the cognitive model parameters,
theory of the algorithm of analysis of a posteriori results of research,
theory of the adaptive automation means of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
theory of the technical means of support of the adaptive information interaction
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
the linguistic processor and other processors),
theory of the statistical substantiation of practical use of the received results,
theory of the factors influencing to the efficiency of knowledge formation
in the information-educational environment
and the efficiency of functioning of the objects, processes and phenomena,
theory of organization and plan of carrying out of the experiment,
theory of research of the cognitive models parameters,
theory of preliminary processing of a posteriori results of diagnostics,
theory of choice of the statistical analysis methods of the generated data sets,
theory of the analysis of dynamics of the resultativity of objects, processes and phenomena,
theory of dispersion, regression, discriminant, cluster analysis,
multivariate scale, factor analysis and bibliographic lists].

III. “The fundamental researches financing department
“Theory of nano-technologies for the mechanical-engineering, instrument-making,
polygraphy, reprography and photo-cinema-technics, the light and food-processing industry,
transport, architecture and construction”” (“SNT”) (*)
[the financing of fundamental researches and developments in the area
“Theoretical nano-technologies for mechanical-engineering” –
 theory of nano-technologies for the machines-science and details of machines,
 for the machine-building materials, for the technologies of mechanical-engineering,
 for the foundry manufacture, for the forge-stamp manufacture,
 for the assembly manufacture, for the cutting of materials,
 for the electrical-physical-chemical processing,
 for the thermal and strengthening powder materials,
 for the manufacture of nonmetallic products,
 for the machine-tool-construction, for the robotics, for the tool manufacture,
 for the mining mechanical-engineering, for the metallurgical mechanical-engineering,
 for the reactor-constriction, for the turbine-construction,
 for the special power-engineering installations, for the chemical and oil mechanical-engineering,
 for the locomotive-construction and carriage-building, for the engine-construction, for the motor-car-building,
 for the ship-building, for the aircraft-building, for the space technics and rocket-building,
 for the hoisting-transport mechanical-engineering,
 for the building and road mechanical-engineering, for the communal mechanical-engineering,
 for the tractor and agricultural mechanical-engineering,
 for the mechanical-engineering of light industry,
 for the polygraphic mechanical-engineering, for the mechanical-engineering of food-processing industry,
 for the mechanical-engineering of trade and public catering, for the household machines and devices,
 for the manufacture of weapon, for the other branches of mechanical-engineering,
 theory of the cognitive modeling technology
 in the theoretical nano-technologies for mechanical engineering;
the financing of fundamental researches and developments in the area
“Theoretical nano-technologies for instrument-making” –
 theory of nano-technologies for the theoretical bases of instrument-making,
 for the general technology of production and equipment in instrument-making,
 for the designing and constructing of devices,
 for the devices of measurement of the electrical and magnetic sizes,
 for the devices of measurement of the mechanical sizes,
 for the devices of measurement of the time and frequency,
 for the devices of measurement of the structure and physical-chemical properties of substances and materials,
 for the devices of heating-technical and heating-physical measurements,
 for the devices of measurement of the acoustical sizes and characteristics,
 for the devices of measurement of the optical and lighting-technical sizes and characteristics,
 for the devices of measurement of the ionization radiations,
 for the devices of non-destroying control of the products and materials,
 for the general structural elements,
 the units of measuring devices and systems and the means of office equipment,
 theory of the cognitive modeling technology
 in the theoretical nano-technologies for instrument-making;

the financing of fundamental researches and developments in the area “Theoretical nano-technologies for polygraphy, reprography and photo-cinema-technics” – theory of nano-technologies for polygraphy, reprography and photo-cinema-technics, theory of the cognitive modeling technology in the theoretical nano-technologies for polygraphy, reprography and photo-cinema-technics;

the financing of fundamental researches and developments in the area “Theoretical nano-technologies for light industry” – theory of nano-technologies for the textile industry, for the knitted industry, for the clothing industry, for the tanning industry, for the fur industry, for the industry of artificial leather and film materials, for the shoe industry, for the leather-haberdashery industry, for the bristle-brush manufacture, for the manufacture of furniture, theory of the cognitive modeling technology in the theoretical nano-technologies for light industry;

the financing of fundamental researches and developments in the area “Theoretical nano-technologies for the food-processing industry” – theory of nano-technologies for the food raw materials and auxiliary materials, for the processes and devices of food manufactures, for the (grain-)elevator and flour(-grinding)-sereals(croup) industry, for the mixed-fodder industry, for the baking of bread and macaroni industry, for the confectionery industry, for the sugar industry, for the starched-treacle industry, for the barmy industry, for the brewing industry, for the spirituous industry, for the industry of high-alcohol drinks, for the wine-making (vinous) industry, for the industry of without-alcohol (soft) drinks, for the canning, vegetable-drying and food-concentrate industry, for the food-gustatory industry, for the tobacco industry, for the meat and bird-fancier-processing industry, for the manufacture of eggs and egg products, for the dairy (milk) industry, for the butter-fatty (creamery) industry, theory of the cognitive modeling technology in the theoretical nano-technologies for the food-processing industry;

the financing of fundamental researches and developments in the area “Theoretical nano-technologies for transport” – theory of nano-technologies for the railway transport, for the motor-car transport, for the water transport, for the air transport, for the pipeline transport, for the industrial transport, for the municipal transport, for the interaction of the different kinds (types) of transport, for the mixed transportations, for the other kinds (types) of transport, theory of the cognitive modeling technology in the theoretical nano-technologies for transport;

the financing of fundamental researches and developments in the area “Theoretical nano-technologies for architecture and construction” ()* – the engineering-theoretical bases of construction, architecture, building materials, products and building constructions, theory of technology of construction-installation works, theory of technology of production of the building materials and products, machines, mechanisms, equipment and tool, used in the construction and industry of building materials, theory of engineering researches in construction, theory of architectural-building designing, theory of district lay-out, theory of town-planning, theory of the objects of construction and engineering support of the objects of construction, theory of tendencies, dependences and laws in architecture and construction, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), theoretical bases of formation of the parametrical cognitive models block, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and non-formal classical and new of 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of the adaptive automation means of architecture and construction (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of construction of the buildings and constructions, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of construction, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scale, factor analysis and bibliographic lists].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

**3.2.4. The fundamental researches financing branch
“Cognitive modeling in the exact sciences”
 (“CM in ES”) (“OEMMPU”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch “Cognitive modeling in the exact sciences”” (“OEMMPU”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches financing department “Theory of (theoretical) mechanics and gyroscopes”” (“SM”) (*) [*the financing of fundamental researches and developments in the area “ T h e o r e t i c a l m e c h a n i c s ” (*)* – theoretical bases, general tasks and methods of theoretical mechanics, theory of general mechanics, theory of mechanics of liquid and gas, theory of mechanics of deformable firm body, theory of the complex and special sections of theoretical mechanics, theoretical bases of the cognitive modeling technology in theoretical mechanics, theoretical bases of formation of the parametrical cognitive models block for the complex system analysis of the objects, processes and phenomena of theoretical mechanics,

theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of research of the objects, processes and phenomena of theoretical mechanics, theory of the technical means of support of the complex system analysis of the difficult objects, processes and phenomena of theoretical mechanics (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the objects, processes and phenomena of theoretical mechanics, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of functioning of the objects, processes and phenomena of theoretical mechanics, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the financing of fundamental researches and developments in the area “ T h e o r e t i c a l m e c h a t r o n i c s ”* – theoretical bases, general tasks and methods of theoretical mechatronics, theory of general theoretical mechatronics, theory of mechatronics of liquid and gas, deformable firm body, theory of the complex and special sections of theoretical mechatronics, theory of the automation means and devices of mechatronics, theory of the cognitive modeling technology in the theoretical mechatronics (theory of hygroscope-building)].

II. “The fundamental researches financing department
“Theory of mechanical-engineering, instrument-making and metrology” (“SPMPU”)
[the financing of fundamental researches and developments in the area
“ Theoretical mechanical - engineering ” –
theory of machines-engineering-science and details of machines,
theory of machine - building materials ,
theory of technology of mechanical-engineering, theory of foundry manufacture,
theory of forge-stamp manufactures, theory of assembly manufacture,
theory of cutting of materials, theory of electrical-physical-chemistry processing,
theory of thermal and strengthening processing ,
theory of furnish of surfaces and drawings of coverings,
theory of manufacture of products from powder materials,
theory of manufacture of nonmetallic products ,
theory of machine-tool construction, theory of robotics,
theory of tool manufacture, theory of mining mechanical-engineering,
theory of metallurgical mechanical - engineering ,
theory of reactor-constriction, theory of turbine-construction,
theory of special power-engineering installations ,
theory of chemical and oil mechanical-engineering ,
theory of locomotive-construction and carriage-building, theory of engine-construction,
theory of motor-car-building, theory of ship-building, theory of aircraft-building,
theory of space technics and rocket - building ,
theory of hoisting-transport mechanical-engineering ,
theory of building and road mechanical-engineering ,
theory of communal mechanical - engineering ,
theory of tractor and agricultural mechanical-engineering ,
theory of mechanical-engineering for the light industry ,
theory of polygraphic mechanical - engineering ,
theory of mechanical-engineering for the food-processing industry ,
theory of mechanical-engineering for the trade and public catering ,
theory of household machines and devices, theory of manufacture of weapon,
theoretical bases of the other branches of mechanical-engineering ,
theory of the cognitive modeling technology
in the theoretical mechanical - engineering ;

the financing of fundamental researches and developments in the area
“ T h e o r e t i c a l i n s t r u m e n t - m a k i n g ” –
t h e o r e t i c a l b a s e s o f i n s t r u m e n t - m a k i n g ,
theory of general technology of production and equipment in instrument-making,
theory of designing and constructing of devices,
theory of the devices for the measurement of electrical and magnetic sizes,
theory of the devices for the measurement of mechanical sizes,
theory of the devices for the measurement of time and frequency,
theory of the devices for the measurement of composition (structure)
and physical-chemical properties of the substances and materials,
theory of the devices for the heating-technical and heating-physical measurements,
theory of the devices for the measurement of acoustical sizes and characteristics,
theory of the devices for the measurement of optical
and lighting-technical sizes and characteristics,
theory of the devices for the measurement of ionization radiations,
theory of the devices of the non-destroying control of products and materials,
theoretical bases of the general structural elements,
the units of measuring devices and systems,
the devices of interface and the means of office equipment (periphery),
theory of the cognitive modeling technology
in the theoretical instrument-making;
the financing of fundamental researches and developments in the area
“ T h e o r e t i c a l m e t r o l o g y ” –
theory of the scientific bases and technical means
of theoretical metrology and metrological support,
theory of the state, national and international systems and services of metrology,
theory of the measurement of separate sizes and characteristics,
theory of the standard samples of composition (structure)
and properties of the substances and materials,
theory of the cognitive modeling technology
in the theoretical metrology (theory of measurement)].

III. “The fundamental researches financing department “Theory of power-engineering and electrical-engineering”” (“SE”
[the financing of fundamental researches and developments in the area
“ *T h e o r e t i c a l p o w e r - e n g i n e e r i n g* ” –
 theory of power-resources, theory of power-engineering (energetic) balance,
 theory of electrical-power-engineering (energetics) (industry),
 theory of heating-power-engineering (industry), theory of heating-technics,
 theory of atomic power-engineering (industry),
 theory of water-power-engineering (industry),
 theory of helium-power-engineering (industry),
 theory of wind-power-engineering (industry),
 theory of the direct transformation of energy,
 theory of the cognitive modeling technology
 in the theoretical power-engineering;
the financing of fundamental researches and developments in the area
“ *T h e o r e t i c a l e l e c t r i c a l - e n g i n e e r i n g* ” –
 theory of electrical-engineering, theory of electrical-technical materials,
 theory of electrical machines, theory of electrical devices,
 theory of transformers and electrical reactors,
 theory of power electrical condensers,
 theory of power converting technics,
 theory of electrical drive, theory of electrical-thermics, theory of electrical-welding equipment,
 theory of wire and cable, theory of electrical isolators, theory of light-engineering,
 theory of the electrical-technical equipment of special purpose,
 theory of the cognitive modeling technology
 in the theoretical electrical-engineering].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

3.2.5. The fundamental researches financing branch

**“Cognitive modeling
in the industry and chemical sciences”
 (“CM in I and CHS”) (“OHNM”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch “Cognitive modeling in the industry and chemical sciences”” (“OHNM”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches financing department “Theory of the light, food, forestry and wood-processing industry, architecture and construction, the agriculture, forestry, water and fish economy and aqua-culture”” (“SNM”) (*)
[the financing of fundamental researches and developments in the area “ T h e o r e t i c a l l i g h t i n d u s t r y ” – theory of textile industry, theory of knitted industry, theory of clothing industry, theory of tanning industry, t h e o r y o f f u r i n d u s t r y , theory of the industry of artificial leather and film materials, theory of shoe industry, theory of leather-haberdashery industry, theory of bristle-brush manufacture, theory of the manufacture of furniture, t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y i n t h e t h e o r e t i c a l l i g h t i n d u s t r y ;

the financing of fundamental researches and developments in the area
“ Theoretical food-processing industry ” –
theory of food raw materials and auxiliary materials,
theory of the processes and devices of food manufactures,
theory of (grain-)elevator and flour(-grinding)-sereals(croup) industry,
t h e o r y o f m i x e d - f o d d e r i n d u s t r y ,
theory of baking of bread and macaroni industry, theory of confectionery industry,
theory of sugar industry, theory of starched-treacle industry,
theory of barmy industry, theory of brewing industry,
theory of spirituous industry, theory of the industry of high-alcohol drinks,
t h e o r y o f w i n e - m a k i n g (v i n o u s) i n d u s t r y ,
theory of the industry of without-alcohol (soft) drinks,
theory of canning, vegetable drying and food-concentrate industry,
theory of food-gustatory industry, theory of tobacco industry,
theory of meat and bird-fancier-processing industry,
theory of the manufacture of eggs and egg products,
theory of dairy (milk) industry, theory of butter-fatty (creamery) industry,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l f o o d - p r o c e s s i n g i n d u s t r y ;
the financing of fundamental researches and developments in the area
“Theoretical forestry and wood-processing industry” –
theory of wood-science, theory of forestry-cutting works,
theory of the transportation of wood, theory of forestry-timber works,
theory of technology and equipment for the processing of wood,
t h e o r y o f s a w m i l l w o o d - p r o c e s s i n g m a n u f a c t u r e ,
theory of the manufacture of joiner-building products,
theory of the manufacture of plywood and plates,
theory of the manufacture of furniture, theory of the manufacture of matches,
t h e o r y o f t h e m a n u f a c t u r e o f w o o d e n c o n t a i n e r ,
theory of the special wood-processing manufactures,
t h e o r y o f p u l p - p a p e r i n d u s t r y ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l w o o d - p r o c e s s i n g i n d u s t r y ;

the financing of fundamental researches and developments in the area "Theoretical architecture and construction" ()* – the engineering-theoretical bases of construction, theory of architecture, theory of building materials and products, theory of building constructions, theory of the technology of construction-installation works, theory of the technology of production of the building materials and products, theory of machines and mechanisms, equipment and tools, used in construction and the industry of building materials, theory of engineering researches in construction, theory of architectural-building designing, theory of district lay-out, theory of town-planning, theory of the objects of construction, theory of the engineering support of the objects of construction, theory of tendencies, dependences and laws in architecture and construction, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori data of research, theory of the adaptive automation means of architecture and construction (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of construction of the buildings and constructions, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of construction, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists;

the financing of fundamental researches and developments in the area “ Theoretical agriculture and forestry ” – theory of agricultural biology, theory of soil-science, theory of agriculture, theory of agricultural melioration, theory of agro-chemistry, theory of plant-growing-science, theory of the protection of agricultural plants, theory of live-stock-farming (animal-industry), theory of veterinary-science, theory of the preparation of agricultural production, theory of hunting and hunting economy, theory of forestry, theory of economics and organization of agriculture, theory of the mechanization and electrification of agriculture, theory of the cognitive modeling technology in the theoretical agriculture and forestry;

the financing of fundamental researches and developments in the area “ Theoretical water economy ” – the theoretical scientific bases of water economy, theory of water economy, theory of water-economy construction, theory of hydro-technical and hydro-ameliorative constructions, theory of irrigation and water-supply, theory of irrigating systems, theory of drying systems, theory of sewage waters, their clearing and use, theory of the quality of water, theory of tests, measurements and control in the water economy, theory of mechanization and automation in the water economy, theory of complex use of water resources, theory of the cognitive modeling technology in the theoretical water economy;

the financing of fundamental researches and developments in the area “ Theoretical fish economy and aqua-culture ” – theory of the biological resources of the world ocean and internal reservoirs, theory of aqua-culture, theory of fish-breeding (culture), theory of industrial fishery, theory of the technical operation of the fleet of fishing industry, theory of the technical operation of fish seaports, theory of the technology of processing of the raw materials of water origin, theory of the equipment for the fish-processing industry, theory of the cognitive modeling technology in the theoretical fish economy and aqua-culture].

II. “The fundamental researches financing department “Theory of chemistry, chemical technology and chemical industry”” (“SCHN”) [*the financing of fundamental researches and developments in the area “Theoretical chemistry”* (*) – theory of the general-laboratory chemical equipment, theory of equipment, theory of physical chemistry, theory of nonorganic chemistry, theory of complex compounds, theory of analytical chemistry, theory of organic chemistry, theory of bio-organic chemistry, theory of the natural organic compounds and their synthetic analogues, theory of chemistry of high-molecular compounds, theory of biological chemistry, theory of the cognitive modeling technology in the theoretical chemistry, theory of modeling of the structure of the (non)organic chemical elements and the chemical elements with 1, 2, 3, 4, 5 and more nucleuses; *the financing of fundamental researches and developments in the area “Theoretical chemical technology and chemical industry”* – theory of the processes and devices of chemical technology, theory of chemical raw materials, theory of production of the nonorganic substances and products, theory of production of the fertilizers, theory of production of the silicate and refractory nonmetallic materials, theory of industrial organic synthesis, theory of the industrial synthesis of organic dyes and pigments, theory of the technology of production of the photographic materials, theory of the technology of production of the explosive substances and chemical protection means, theory of the technology of storage and destruction of the chemical weapon, theory of the technology of production of the chemical-pharmaceutical means, theory of the technology of production of the fragrant substances, theory of the technology of production of the pesticides and disinfectant substances, theory of the technology of processing of the natural gases, oil, gas condensate, their products and analogues, motor fuel and lubricant materials, theory of the technology of processing of the firm combustible minerals, theory of timber-chemical productions, theory of the technology of production of the natural high-molecular compounds, theory of the technology of production of the synthetic high-molecular compounds, theory of the technology of production of the plastics, theory of the technology of production of the rubbers and products from them, theory of the technology of production of the varnish-paint materials and organic coverings, theory of the technology of production of the chemical fibers and strings, theory of the technology of production of the chemical reactants and especially clean substances, theory of the technology of production of the household chemical (goods) products, theory of the technology of production of the auxiliary materials, theory of the cognitive modeling technology in the theoretical chemical technology and chemical industry].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

**3.2.6. The fundamental researches financing branch
“Cognitive modeling in the biological sciences”
 (“CM in BS”) (“OBN”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch “Cognitive modeling in the biological sciences”” (“OBN”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) ([www.vetrovan.\(spb.\)ru](http://www.vetrovan.(spb.)ru)) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches financing department “Theory of biology and pharmacology”” (“SOB”) [*the financing of fundamental researches and developments in the area “Theoretical biology”* – theory of biology, theory of the methods and equipment for the biological researches, theory of molecular biology, theory of bio-physics, theory of cytology, theory of embryology, theory of genetics, theory of virology, theory of micro-biology, theory of botanic, theory of plants physiology, theory of zoology, theory of ecology, theory of anthropology, theory of physiology of human and animals, theory of morphology of human and animals, theory of immunology, theory of pharmacology, theory of toxicology, theory of radiation biology, theory of space biology, theory of bionics, theory of bio-cybernetics, theory of bio-engineering, theory of the cognitive modeling technology in the theoretical biology, theory of modeling of the biological construct of organism of the organic individual;

the financing of fundamental researches and developments in the area “ Theoretical pharmacology ” – theory of pharmacology, theory of the methods and equipment for the pharmacological researches, theory of the pharmaco-kinetics and pharmaco-dynamics of preparations and substances, theory of molecular pharmacology, theory of bio-pharmacology, theory of cytological pharmacology, theory of embryological pharmacology, theory of genetic pharmacology, theory of virologic pharmacology, theory of micro-biological pharmacology, theory of botanical pharmacology, theory of physiological pharmacology of plants, theory of zoological pharmacology, theory of ecological pharmacology, theory of anthropology of pharmacology, theory of physiological pharmacology of human and animals, theory of immunological pharmacology, theory of toxicological pharmacology, theory of radiation pharmacology, theory of space pharmacology, theory of bio-engineering pharmacology, theory of the cognitive modeling technology in the theoretical pharmacology].

II. “The fundamental researches financing department “Theory of physical-chemical bio-technology”” (“SFCHB”) (*) [*the financing of fundamental researches and developments in the area “ Theoretical bio-technology ”* (*) – theory of raw materials and producers for the bio-technological manufacture, theory of bio-technological processes and devices, theory of cellular engineering, theory of technological bio-energetics, theory of applied genetic engineering, theory of enzymology engineering, theory of the immuno-bio-technological methods of analysis, the other theories and problems of bio-technology (genetic engineering), theory of the cognitive modeling technology in the theoretical physical-chemical bio-technology and genetic engineering, theory of modeling of the structure of desoxyribonucleic acid based on the multidimensional cognitive cylinder].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

**3.2.7. The fundamental researches financing branch
“Cognitive modeling in the physiology,
fundamental medicine and public-health-services”
 (“CM in PHFM and P”) (“OFFM”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch
“Cognitive modeling in the physiology,
fundamental medicine and public-health-services”” (“OFFM”)
treats to the fundamental researches financing divisions
of “The scientific fund “System and financial analysis based on
cognitive modeling technology” named after Prokopenko N.A.”
 (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF
in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””)
and the add. component of the system of science and education of the modern country
for the financing of creation, distribution and use
of the fundamental main and derivative scientific results
of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru)
[see the fundamental researches financing branches and departments of “SF”]:
1) it is executed by the principle of “the administrative-economy submission”;
2) works in the several main directions, which allow to provide
the financing of development, production and promotion
of the fundamental main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU “LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The fundamental researches financing department
“Theory of physiology, bio-physiology and private physiology”” (“SF”) (*)
*[the financing of fundamental researches and developments in the area
“ T h e o r e t i c a l p h y s i o l o g y ” (*)* –
theory of common physiology, theory of the methods and equipment of physiological researches,
theory of physiology, theory of molecular physiology, theory of physiological cytology,
theory of physiological embryology, theory of physiological genetics,
theory of physiology of viruses, theory of micro-physiology,
theory of physiology of organic individuals, theory of physiology of plants,
theory of zoological physiology, theory of ecological physiology,
theory of anthropology of physiology, theory of physiology of human and animals,
theory of physiological immunology, theory of physiological pharmacology and toxicology,
theory of radiation physiology, theory of space physiology,
t h e o r y o f p h y s i o l o g i c a l c y b e r n e t i c s ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l p h y s i o l o g y ;

the financing of fundamental researches and developments in the area “Theoretical bio-physiology and public-health-services” () – theory of bio-medical-physiological disciplines, theory of private physiology of analyzers and sensory systems, theory of bio-physiological materials, means and products, theory of bio-physiological technics, theory of clinical physiology, theory of physiological bio-pharmacology and bio-epidemiology, theory of the other branches of bio-medicine and public-health-services, theory of social physiology, theory of the organization and management of public-health-services, theory of the modified model of reduced eye, theory of the modified model of reduced ear, theory of the software for the automation of research tasks of the physiological, psychological and linguistic parameters of the parametrical cognitive models block in medicine, theory of the statistical substantiation of practical use of the received results, theory of the physiological, psychological and linguistic factors influencing to the efficiency of functioning of the information-educational environment and the increase of resultativity of the automated training system with the properties of adaptation based on the cognitive models, theory of organization and plan of carrying out of the experiment, theory of research of the physiological, psychological and linguistic parameters of the cognitive models of the subject of training and the means of training, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of researches in the area of bio-physiology and public-health-services, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists, theory of the complex analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, theory of the complex analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates].*

II. “The fundamental researches financing department “Theory of medicine, public-health-services, labor safety, environment preservation and ecology of person” (“SFM”) (*) [*the financing of fundamental researches and developments in the area “Theoretical medicine and public-health-services” – theory of medical-biological disciplines, theory of medical materials, means and products, theory of medical technics, theory of clinical medicine, theory of pharmacology, theory of hygiene and epidemiology, theories of the other branches of medicine and public-health-services, theory of social hygiene, theory of the organization and management of public-health-services, theory of the cognitive modeling technology in the theoretical medicine and public-health-services; the financing of fundamental researches and developments in the area “Theoretical labor safety” (*) – theory of the organization and management of labor safety, working conditions, industrial sphere and safety precautions, theory of professional illnesses and their preventive measures, theory of accidents on manufacture and their prevention, theory of work-capacity and the examination of work-capacity, theory of labor safety by the categories of workers, theory of labor safety on the manufactures of increased danger, theory of the cognitive modeling technology in the theoretical labor safety, theory of the cognitive model of the subject of training; the financing of fundamental researches and developments in the area “Theoretical preservation of environment and ecology of person” – theory and methods of studying and preservation of environment and person, theory of the ecological bases of use of the natural resources, theory of international cooperation, theory of contamination of environment, theory of pollution, theory of the pollution and protection of atmosphere, theory of the pollution and protection of the waters of land, seas and oceans, theory of the protection of soils, theory of the protection of bowels, theory of the ecological bases of ability-to-live of the person, theory of influence of the anthropogenic changes of environment on the health and social-labor potential of person, on the condition of natural ecosystems, populations and organisms of the vegetative and generative (fauna) world, theory of protection of the vegetative and generative (fauna) world, theory of the anthropogenic influence on landscape, theory of the protection and optimization of landscape, theory of reserved affair, theory of the protected natural territories and water-areas, theory of the acts of nature and the accidents of anthropogenic origin, theory of the ecological safety of person, theory of the rational use and reproduction of natural resources by the person, theory of the preservation of environment and natural resources in the separate regions and countries, theory of waste management, theory of small-waste and without waste technology, theory of the protection of person from the noise, vibrations, electric and magnetic fields and radiations, theory of the cognitive modeling technology in the theoretical preservation of environment and ecology of person*].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

3.2.8. The fundamental researches financing branch
“Cognitive modeling in the sciences about The Earth”
(“CM in S about E”) (“ONZ”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”

The developed “The fundamental researches financing branch “Cognitive modeling in the sciences about The Earth”” (“ONZ”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches financing department “Theory of geo-physics, geology, mining and metallurgy”” (“SGGGGN”) [*the financing of fundamental researches and developments in the area “ T h e o r e t i c a l g e o - p h y s i c s ”* – theory of geo-magnetism and the high layers of atmosphere, theory of meteorology, theory of climatology, theory of oceanology, theory of hydrology of land, theory of glaciology, theory of physics of The Earth, theory of the cognitive modeling technology in the theoretical geo-physics, geology, mining and metallurgy;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l g e o l o g y ” – theory of lithology, theory of tectonics, theory of the geological-geo-physical researches of the deep structure of The Earth, theory of regional geology, theory of planetology, theory of stratigraphy, theory of paleontology, theory of geo-chemistry, theory of mineralogy, theory of petrography, theory of experimental and technical mineralogy and petrography, theory and methods of the mineralogical-petrographical and geo-chemical laboratory researches, theory of anthropogenic period, theory of neo-tectonics, theory of geo-morphology, theory of geology of ore minerals, theory of geology of nonmetallic minerals, theory of geology of the fields of oil, gas and condensates, theory of geology of the deposits of coal, bituminous breeds and peat, theory of the methods of search and investigation of the minerals deposits, theory of the technics and technology of geological-prospecting works, theory of hydro-geology, theory of engineering geology, theory of frozen-condition-of-ground-science, theory of the cognitive modeling technology in the theoretical geology ;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l m i n i n g ” – theory of the technics and technology of development of the deposits of firm minerals, theory of development of the deposits of ores of the ferrous metals, theory of development of the deposits of ores and looses of the color and rare metals and diamonds, theory of development of the deposits of coal and combustible slates, theory of development of the deposits of peat, theory of development of the deposits of building and road materials, fire-resistant, ceramic, glass and mineral technical raw materials, theory of development of the deposits of chemical and agricultural-chemistry raw materials and salts, theory of development of the deposits of precious and ornamental stones, theory of the enrichment of minerals, theory of development of the oil and gas deposits, theory of the cognitive modeling technology in the theoretical mining ;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l m e t a l l u r g y ” – theory of metallurgical processes, theory of metallurgical heating-engineering, theory of the production of ferrous metals and alloys, theory of the production of color (nonferrous) metals and alloys, theory of powder metallurgy, theory of the metallurgy of semi-conductors, theory of rolling production, theory of drawing and hardware production theory of the production of pipes, theory of metallurgical-science, theory of the technical analysis in metallurgy, theory of the cognitive modeling technology in the theoretical metallurgy] .

II. “The fundamental researches financing department “Theory of oceanology, structure and physics of atmosphere, geodesy, cartography and geography of The Earth and planets”” (“SOFAG”) [*the financing of fundamental researches and developments in the area “ **T h e o r e t i c a l o c e a n o l o g y** ”* – theory of oceanology, theory of applied oceanology, theory of aero-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of oceanodesy, theory of mapping of the underwater world of The Earth and planets, theory of the cognitive modeling technology in the theoretical oceanology; *the financing of fundamental researches and developments in the area “ **T h e o r e t i c a l s t r u c t u r e o f a t m o s p h e r e** ”* – theory of the structure of atmosphere, theory of aero-survey and photo-metrology, theory of topography, theory of photo-topography, theory of cartography, theory of planetodesy of atmospheres, theory of mapping of the atmosphere of The Earth and planets, theory of the cognitive modeling technology in the theoretical structure of atmosphere; *the financing of fundamental researches and developments in the area “ **T h e o r e t i c a l p h y s i c s o f a t m o s p h e r e** ”* – theory of the questions of the atmosphere of The Earth and planets, theory of the general problems of the physical experiment of atmosphere, theory of physics of elementary particles of atmosphere, theory of fields of atmosphere, theory of physics of gases and liquids of atmosphere, theory of thermal-dynamics and statistical physics of atmosphere, theory of physics of micro-disperse firm bodies of atmosphere, theory of physics of plasma of atmosphere, theory of physics of atom and molecule of atmosphere, theory of optics of atmosphere, theory of radio-physics of atmosphere, theory of acoustics of atmosphere, theory of the cognitive modeling technology in the theoretical physics of atmosphere; *the financing of fundamental researches and developments in the area “ **T h e o r e t i c a l g e o d e s y a n d c a r t o g r a p h y** ”* – theory of higher geodesy, theory of applied geodesy, theory of aerial-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of selenodesy, theory of planetodesy, theory of mapping of The Moon and planets, theory of the cognitive modeling technology in the theoretical geodesy and cartography; *the financing of fundamental researches and developments in the area “ **T h e o r e t i c a l g e o g r a p h y** ”* – theory of geography, theory of historical geography, theory of military geography, theory of physical geography, theory of economic and social geography, theory of regional-geography (country-science), theory of medical geography, theory of toponymics, theory of the cognitive modeling technology in the theoretical geography].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

3.2.9. The fundamental researches financing branch "Cognitive modeling in the social sciences" ("CM in SS") ("OON") of "SF "SFA CMT" n. a. Prokopenko N.A."

The developed "The fundamental researches financing branch "Cognitive modeling in the social sciences"" ("OON") treats to the fundamental researches financing divisions of "The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A." ("SF "SFA CMT" n. a. Prokopenko N.A." – "SF") as the first SF in the structure of "SIO "Academy of cognitive natural sciences"" ("SIO "ACNS") and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of "SF"]:

- 1) it is executed by the principle of "the administrative-economy submission";
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to "SPbSETU "LETI"" and "The Government of RF" for the translation, carrying out of int. action and receiving of "The Nobel prize");
- 3) includes the several various main divisions:
 - I. "The fundamental researches financing department "Theory of social sciences, philosophy, science-study, politics and political sciences, sociology, (cognitive) psychology, state, law and jurisprudential sciences, patenting business, invention and rationalization work"" ("SFPSPP") (*) [*the financing of fundamental researches and developments in the area " T h e o r e t i c a l s o c i a l s c i e n c e s " – theory and ideology of social sciences, theory of history of social sciences, theory of the modern condition of social sciences, theory of scientific societies, conventions, congresses, conferences and symposiums on the social sciences, theory of international cooperation in the area of social sciences, theory of the organization of scientific-research work in the area of social sciences, theory of information work in the social sciences, theory of the terminology of social sciences, theory of the propagation and popularization of social sciences, theory of the teaching of social sciences, theory of mathematical modeling in the social and humanitarian sciences, theory of the staff of social-scientists, theory of the cognitive modeling technology in the theoretical social sciences;*

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l p h i l o s o p h y ” – theory of the general problems of modern philosophy, theory of general-philosophical problems, theory of logic, theory of philosophy and methodology of science, theory of social philosophy, theory of ethics, theory of aesthetics, theory of philosophy of religion and atheism, theory of history of philosophy, theory of history of philosophy of science and society, theory of the cognitive modeling technology in the theoretical philosophy ;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l s c i e n c e - s t u d y ” – theory of the development of science, theory of science and society, theory of sociology of science, theory of scientific work and scientific creativity, theory of the organization of science, theory of politics in the area of science, theory of the technique and technics of scientific-research work, theory of economics of science, theory of scientific staff, theory of international cooperation in science, theory of science and scientific-research work in the separate countries, theory of the cognitive modeling technology in the theoretical science - study ;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l p o l i t i c s a n d p o l i t i c a l s c i e n c e s ” – theory of the methodology of political researches, theory of history of political doctrines, theory of political systems, theory of internal policy, theory of international relations, theory of external (foreign) politics and diplomacy, theory of the cognitive modeling technology in the theoretical politics and political sciences ;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l s o c i o l o g y ” – theory of the general problems of modern sociology, theory of the methodology of sociology, theory of the technique and technics of sociological researches, theory of society as the system, theory of social relations and processes, theory of social classes, communities and groups, theory of sociology of the spheres of social life, theory of social phenomena and institutes, theory of sociology of personality and behavior, theory of historical and regional sociology, theory of applied sociology, theory of history of sociology, theory of the cognitive modeling technology in the theoretical sociology ;

the financing of fundamental researches and developments in the area
*“ Theoretical (cognitive) psychology ” (*)* –
theory of general psychology, theory of psychology of development,
theory of age psychology, theory of comparative psychology,
theory of social psychology, theory of applied psychology,
theory of the cognitive modeling technology
in the theoretical (cognitive) psychology,
theory of the modified stratified-step model
of processing (cognitive psychology) of the content of information fragments,
theoretical bases of cognitive psychology and the cognitive modeling technology,
theoretical bases of the parametrical cognitive models block
for the system analysis of the information-educational environments
(the cognitive models of the subject of training and the means of training),
theory of the ways of representation of the structure of the cognitive models and problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the adaptive automation means of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
theory of the technical means of support of the adaptive information interaction
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
the linguistic processor and other processors),
theory of the technical means of support of the complex analysis
(the automation means of formation and research
of the psychological parameters of the cognitive model in the view of the cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere,
one-, two-, three-, four-, five- and more cognitive sphere and others);

*the financing of fundamental researches and developments in the area
“Theoretical state management, law and jurisprudential sciences”* –

theory of state and law, theory of history of state and law, theory of history of political and legal doctrines, theory of constitutional (state) law, theory of municipal law, theory of administrative law, theory of information law, theory of financial law, theory of entrepreneurial law, theory of civil law, theory of civil-procedural law (civil process), theory of arbitration-procedural law (arbitration process), theory of patent law, theory of the law of industrial property, theory of copyright and adjacent rights, theory of succession law, theory of family law, theory of agrarian law, theory of the legal problems of environment preservation, theory of ecological law, theory of land law, theory of forestry law, theory of water law, theory of air-protection law, theory of legislation about bowels, theory of legislation about the fauna world, theory of labor law, theory of the law of social welfare, theory of law-enforcement-authorities, theory of criminal law, theory of criminal-procedural law (criminal process), theory of criminology, theory of criminal-executive law, theory of penitentiary, theory of criminalistics, theory of judicial statistics, theory of international law, theory of international private law, theory of state and law of the separate countries, theory of the cognitive modeling technology in the theoretical state management, law and jurisprudential sciences;

*the financing of fundamental researches and developments in the area
“Theoretical patent business, invention and rationalization”* –

theory of patent-information activity, theory of invention and rationalization, theory of patent-license work, theory of the technical-economic analysis on patent materials, theory of invention law, theory of the cognitive modeling technology in the theoretical patent business, invention and rationalization].

II. “The fundamental researches financing department
“Theory of economics and economic sciences, organization, management, statistics
and the financial analysis based on the cognitive modeling technology”” (“SE”) (*)
[the financing of fundamental researches and developments in the area
“Theoretical economics and economic sciences” –
the economic theories, theory of history of economic idea,
theory of accounting-economic sciences, theory of science of the management of economics,
theory of economic history, theory of world economy,
theory of international economic relations, theory of economic development and growth,
theory of the prediction and planning of economics, theory of economic cycles and crises,
theory of productive forces and scientific-technical progress,
t h e o r y o f t h e s o c i a l - e c o n o m i c s t r u c t u r e ,
theory of the reproduction structure of economics, theory of accumulation and consumption,
theory of well-being, theory of the territorial structure of economics,
theory of regional and city economics, theory of the branch structure of economics,
theory of financial science, the monetary and tax theories, theory of the credit-financial institutes,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
in the theoretical economics and economic sciences;
the financing of fundamental researches and developments in the area
“Theoretical organization and management” –
t h e o r y a n d m e t h o d o l o g y o f m a n a g e m e n t ,
theory of the state and administrative management,
theory of organization of the management of economics,
theory of social management, theory of prediction, theory of futurology,
theory of strategical management, theory of strategical planning,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
in the theoretical organization and management;
the financing of fundamental researches and developments in the area
“Theoretical statistics” –
theory of general statistics, theory of economic statistics,
theory of branch statistics, theory of social statistics,
t h e o r y o f i n t e r n a t i o n a l s t a t i s t i c s ,
theory of statistics of the separate countries and social-economic systems,
theory of the organization and management of statistics,
theory of the methods and means of data mining,
processing and the analysis of statistical information,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
in the theoretical statistics ;

the financing of fundamental researches and developments in the area “The theoretical financial analysis, monetary circulation and credit” ()* – theory of tendencies, dependences and laws of the financial analysis of the objects, processes and phenomena, theory of the system, information and cognitive approaches in economics, theory of the structure and dynamics of functioning of the financial market, theory of the global purposes of standardization of the accounting and the problems of unification of the financial and accounting reporting-documentation, theory of the institutional subjects regulating the creation, distribution and use of the international standards, theory of the principles of creation, distribution and use of the international standards of financial and accounting reporting-documentation, theory of the basic methods of transformation of the financial reporting-documentation, theory of formation of the accounting balance by the international standards of the financial reporting-documentation, theory of qualifying tests of the professional participants of the financial market of the financial system of the country, theory of the administrative-legal forms of existence of the managing subject, theory of the features of procedure of the financial analysis of the managing subject, theory of the organizational structure of enterprise and its features (the educational establishment of the system of education and the information-educational environment), theory of the inflationary depreciation, discounting and compounding of monetary streams in the economic system of the country, theory of the indexes of dynamics of the financial market and tools, theory of dynamics and communications of the managing subjects, theory of investment and innovative politics of the managing subject in the financial system of the modern country, theory of the organizational, technological, scientific, methodical, normative-legal, information, hardware, software, brainware, raw, warehouse, personnel and economic preparations of production and the bases of the financial analysis and estimation of quality of activity of the credit and other organization, theory of the requirements and structure of financial reporting-documentation of the (non)production organizational structures, theory of the additional elements of accounting and financial reporting-documentation of the credit organization, theory of the consumers of financial reporting-documentation,

theory of the elements of financial reporting-documentation connected with the changes of financial-economy activity, theory of the simple and consolidated accounting and financial reporting-documentation, theory of the methods of the financial analysis of the different forms of reporting-documentation, theory of the structure of accounts of the accounting and financial analysis, theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, theory of the scheme of carrying out of the auditor check-inspection, the financial analysis and audit, theory of the external and internal control of activity of the different organizations, theory of the kinds of bank operations of the (credit) organization and enterprise, theory of the structure of the accounting balance (form №1), theory of the structure of the explanatory note to the accounting balance, theory of the structure of the report about profits and losses (form №2), theory of the structure of the explanatory note to the report about profits and losses, theory of the structure of the report about the change of capital (form №3), theory of the structure of the report about the movement of monetary resources on accounts (form №4), theory of the structure of the explanatory note to the report about the movement of means, theory of the structure of the appendix to the accounting balance (form №5), theory of the structure of the report about the target use of received means (form №6), theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserved system of USA, theory of the analysis of stability of the credit organization and commercial bank, theory of the basic analytical coefficients of the financial analysis, theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the technique of formation of the normative-legal and information basis for the financial analysis of the (credit) organization and enterprise, theory of the technique of additional check of the information basis of the financial analysis of the (credit) organization and enterprise, theory of the technique of creation and modification of the working plan of accounts and the model of accounting, theory of the technique of carrying out of the financial analysis of the condition of organization, theory of the parametrical cognitive models block for the financial analysis and the increase of efficiency of functioning of the objects, processes and phenomena,

theory of the structure of the cognitive model for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive models parameters, theory of the algorithm of analysis of a posteriori results of research, theory of formation and calculating of the aggregates of accounting balance of the production and nonproduction organization, theory of the calculation of parameters of the cognitive models for the vertical, horizontal and trend static and dynamic financial analysis of the (credit) organization and enterprise in the conditions of definiteness and uncertainty, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the (credit) organization and enterprise in the economic system, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the cognitive models for the vertical, horizontal and trend financial analysis, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of financial-economy activity, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the financing of fundamental researches and developments in the area “Theoretical other branches of economics”* – theory of the production of musical instruments, theory of the production of art products, theory of jeweler industry, theory of the production of toys, theory of the production of sports products, theory of the production of writing goods, theory of the cognitive modeling technology in the theoretical other branches of economics].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

**3.2.10. The fundamental researches financing branch
“Cognitive modeling in the global problems
and international relations”
 (“CM in GP and IR”) (“OGPMO”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch
“Cognitive modeling in the global problems
and international relations”” (“OGPMO”)
treats to the fundamental researches financing divisions
of “The scientific fund “System and financial analysis based on
cognitive modeling technology” named after Prokopenko N.A.”
 (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF
in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches financing department “Theory of demography, pedagogics and national education, standardization, the complex studying of separate countries and regions, the general and complex problems of natural, exact, technical, public and applied sciences and branches of production”” (“SGP”) [*the financing of fundamental researches and developments in the area “Theoretical demography”* – theory and methodology of demographical science, theory of the general problems of national-population, theory of statistics of population, theory of history of population, theory of historical demography, theory of the resettlement of population, theory of geographical demography, theory of population of the world, theory of the cognitive modeling technology in the theoretical demography;

the financing of fundamental researches and developments in the area
“Theoretical pedagogics and national education” –
theory of general pedagogics, theory of history of education and pedagogics,
theory of personnels, theory of the system of education, theory of preschool education,
theory of preschool pedagogics, theory of general-educational (comprehensive) school,
theory of the pedagogics of general-educational (comprehensive) school,
theory of out-of-school (additional) education and training,
theory of out-of-school pedagogics, theory of special (correctional) schools,
theory of defectology, theory of primary professional-technical education,
theory of the pedagogics of professional (vocational) school,
theory of average professional (vocational) education,
theory of the pedagogics of average professional (vocational) education,
theory of higher professional (vocational) education,
theory of the pedagogics of higher professional (vocational) school,
theory of education of adults, theory of the improvement of professional skills,
theory of self-education, theory of family education,
theory of family pedagogics, theory of the specialized branches of education,
theory of the technical means of training and training equipment,
theory of national education and pedagogics in the separate countries,
theory of the cognitive modeling technology
in the theoretical pedagogics and national education;
the financing of fundamental researches and developments in the area
“Theoretical standardization” –
theory of the systems and services of standardization,
theory of the scientific-methodological support of the systems and services of standardization,
theory of the cognitive modeling technology
in the theoretical standardization;

the financing of fundamental researches and developments in the area “Theoretical complex studying of the separate countries and regions” – theory of RF as a particular, theory of RF as a whole, theory of The North-Western federal district of RF, theory of The Central federal district of RF, theory of The Privolzhsky federal district of RF, theory of The Southern federal district of RF, theory of The Uralian federal district of RF, theory of The Siberian federal district of RF, theory of The Far-Eastern federal district of RF, theory of the area and territory of the former USSR, theory of the countries of CIS of Eastern Europe, theory of the countries of CIS of Zacaucasia, theory of the countries of CIS of Central Asia, theory of the Baltic countries and Baltic, theory of Europe as a whole, theory of Western Europe, theory of Southern Europe, theory of Central Europe, theory of Eastern Europe as a whole, theory of Scandinavia and the Scandinavian countries, theory of Asia as a whole, theory of Forward Asia, theory of Eastern Asia, theory of Southern Asia, theory of South-Eastern Asia, theory of Central Asia, theory of Near and Middle East, theory of Africa as a whole, theory of Northern Africa, theory of Eastern Africa, theory of Central Africa, theory of Western Africa, theory of Southern Africa, theory of America as a whole, theory of USA and Canada, theory of Central America, theory of Southern America, theory of Australia and the countries of Oceania, theory of the Arctic and Antarctic polar areas, theory of the surface of The Earth and land, ocean, sea and internal waters, theory of the other political-geographical features of The Earth, theory of the cognitive modeling technology in the theoretical complex studying of the separate countries and regions;

the financing of fundamental researches and developments in the area
“Theoretical general and complex problems of natural and exact sciences” –
theory of the general and complex problems of natural and exact sciences,
theory of the cognitive modeling technology
in the theoretical general and complex problems of natural and exact sciences;
the financing of fundamental researches and developments in the area
“Theoretical general and complex problems
of technical, applied sciences and branches of production” –
theory of materials-science, theory of the general technology of production,
theory of designing, theory of constructing,
theory of the flexible industrial systems (FIS), theory of vacuum technics,
theory of cryogenic technics, theory of corrosion and protection against corrosion, theory of welding,
theory of optical production, theory of staff,
theory of the control and management of quality, theory of installation,
theory of the operation and repair of industrial equipment,
theory of material-technical support, theory of logistics,
theory of warehouse economy, theory of container and packing, theory of secondary raw materials,
theory of fire safety, theory of safety, theory of salvage-rescue services,
theory of technical aesthetics, theory of ergonomics, theory of the protection of information,
theory of the cognitive modeling technology
in the theoretical general and complex problems
of technical and applied sciences and the branches of production;
the financing of fundamental researches and developments in the area
“Theoretical complex problems of social sciences” –
theory of social-political idea, theory of global problems, theory of labor,
theory of the cognitive modeling technology
in the theoretical complex problems of social sciences].

II. “The fundamental researches financing department
“Theory of culture and cultural-science, art and art-science,
mass communication, journalism and mass media means,
religion, internal trade and tourist-excursion service,
external trade, transport, housing-communal economy,
housekeeping and household services at the international level” (“SMO”)
[the financing of fundamental researches and developments in the area
“ Theoretical culture and cultural - science ” –
 theory, methodology and philosophy of culture, theory of history of culture,
 theory of history of the studying of culture, theory of culture in the modern world,
 theory of organization and management in the area of culture,
 theory of international cooperation in the area of culture,
 theory of hardware of the establishments of culture,
 theory of social-cultural activity in the sphere of leisure,
 theory of library affair, theory of library - science,
 theory of bibliography, theory of bibliography - science,
 theory of museum affair, theory of museology (museum-science),
 theory of protection of the monuments of history and culture,
 theory of archival affair, theory of archival - science,
 theory of culture of the separate countries and peoples,
 theory of the cognitive modeling technology
 in the theoretical culture and cultural - science;
the financing of fundamental researches and developments in the area
“ Theoretical art and art - science ” –
 theory and methodology of art and the problems of art-science,
 theory of history and the modern condition of art,
 theory of art-science and art criticism, theory of art in the modern world,
 theory of organization and management in the area of art,
 theory of international cooperation in the area of art,
 t h e o r y o f f i n e a r t ,
 theory of music and musicology (music-science), theory of theatre and theater-science,
 t h e o r y o f m a s s a n d t h e a t r i c a l h o l i d a y s ,
 theory of dance and choreography, theory of circus, theory of platform,
 theory of cinema and motion-picture-art, theory of national folk art,
 theory of art of the separate countries and peoples,
 theory of the cognitive modeling technology
 in the theoretical art and art - science;

the financing of fundamental researches and developments in the area
“ Theoretical mass communication ,
journalism and mass media means ” –
theory of the mass communication means ,
theory of the open network information resources (“Internet” and “WWW”),
theory of journalism, theory of the mass media means,
theory of printing, theory of television (TV), theory of radio,
theory of use of the technical means for the mass communication,
theory of the cognitive modeling technology
in the theoretical mass communication ,
journalism and the mass media means ;
the financing of fundamental researches and developments in the area
“ Theoretical religion ” –
theory of atheism and free-thinking, theory of separate religions,
theory of church and cults, theory of the problems of religious consciousness,
theory of philosophy and religion, theory of religion, theory of church and society,
theory of the organizational-practical activity of churches,
theory of history of atheism, theory of religions and churches,
theory of the cognitive modeling technology
in the theoretical religion ;
the financing of fundamental researches and developments in the area
“Theoretical internal trade and tourist-excursion service” –
theory of the general questions of internal trade and tourist-excursion service,
theory of wholesale trade, theory of retail trade,
theory of public catering, theory of hotel economy,
theory of tourist-excursion service ,
theory of the cognitive modeling technology
in the theoretical internal trade and tourist-excursion service;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l e x t e r n a l t r a d e ” – theory of the kinds of external trade, theory of external-trade politics, theory of communication of the external trade with production, theory of the structure of external trade, theory of the calculations on the external-trade operations, theory of the external-trade transportations, theory of the world commodity markets, theory of the international agreements about trade, theory of international contracts, theory of the international trading organizations, theory of commodity agreements, theory of the organization and management of external trade, theory of the cognitive modeling technology in the theoretical external trade ;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l t r a n s p o r t ” – theory of railway transport, theory of motor-car transport, theory of water transport, theory of air transport, theory of pipeline transport, theory of industrial transport, theory of urban (city) transport, theory of interaction of the different kinds (types) of transport, theory of mixed transportations, theory of the other kinds (types) of transport, theory of the cognitive modeling technology in the theoretical transport ;

the financing of fundamental researches and developments in the area “ T h e o r e t i c a l h o u s i n g - c o m m u n a l e c o n o m y , h o u s e k e e p i n g a n d h o u s e h o l d s e r v i c e s ” – theory of housing economy, theory of communal economy, theory of consumer services, theory of housekeeping, theory of the cognitive modeling technology in the theoretical housing-communal economy, housekeeping and household services] .

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

**3.2.11. The fundamental researches financing branch
“Cognitive modeling
in the historical-philological sciences”
 (“CM in H-PHS”) (“OIFN”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch “Cognitive modeling in the historical-philological sciences”” (“OIFN”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches financing department “Theory of history and historical sciences”” (“SI”) [*the financing of fundamental researches and developments in the area “Theoretical history and historical sciences”* – theory of general history, theory of history of Azerbaijan, theory of history of Armenia, theory of history of Belorussia, theory of history of Georgia, theory of history of Kazakhstan, theory of history of Kirghizia, theory of history of Moldova, theory of history of RF, theory of history of Tajikistan, theory of history of Turkmenia, theory of history of Uzbekistan, theory of history of Ukraine, theory of history of the separate processes, parties and phenomena of human activity, theory of archeology, theory of ethnography, theory of historical anthropology, theory of auxiliary historical disciplines, theory of history of the separate countries, theory of the cognitive modeling technology in the theoretical history and historical sciences].

II. “The fundamental researches financing department “Theory of science of language, (cognitive) linguistics, literature, literary-science and oral national creativity”” (“SYL”) (*)
[the financing of fundamental researches and developments in the area “Theoretical science of language” – theory of general science of language, theory of applied science of language, theory of languages of the world, theory of the cognitive modeling technology in the theoretical science of language; the financing of fundamental researches and developments in the area “Theoretical (cognitive) linguistics” (*) – theory of (cognitive) linguistics, theory of applied linguistics, theory of the cognitive modeling technology in the theoretical (cognitive) linguistics, theory of the general questions of (cognitive) linguistics, theory of the modified stratified-step model of understanding (cognitive linguistics) of the content of information fragments, theoretical bases of cognitive linguistics and the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors); the financing of fundamental researches and developments in the area “Theoretical literature, literary-science and oral national creativity” – theory of literature, theory of history of literature, theory of national creativity, theory of the auxiliary literary-science disciplines, theory of the products of fiction literature, theory of the cognitive modeling technology in the theoretical literature, literary-science and oral national creativity].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

**3.2.12. The fundamental researches financing branch
“Cognitive modeling in the sports sciences”
 (“CM in SPS”) (“OSN”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch “Cognitive modeling in the sports sciences”” (“OSN”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches financing department “Theory of competitions, sport and sports sciences”” (“STSSSN”) [*the financing of fundamental researches and developments in the area “Theoretical physical training and sport” – theory of physical training and sport, theory of the medical-biological bases of physical training and sport, theory of the material-technical base of physical training and sport, theory of the methodical bases of the kinds of sport, theory of sports competitions, theory of the cognitive modeling technology in the theoretical physical training and sport*].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

**3.2.13. The fundamental researches financing branch
“Cognitive modeling in the military sciences”
 (“CM in MILS”) (“OVN”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The fundamental researches financing branch “Cognitive modeling in the military sciences”” (“OVN”) treats to the fundamental researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches financing branches and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches financing department “Theory of architecture, construction, technics, history, education, politics and economics in the armed forces”” (“STASTIOPEVS”) [the financing of fundamental researches and developments in the area “ T h e o r e t i c a l m i l i t a r y s c i e n c e ” – theory of doctrines about war and army, theory of military history, theory of military education and professional training of staff, theory of military politics, theory of military doctrines, theory of military science, theory of military-applied science, theory of arms and military technics, theory of armed forces, theory of military economics, theory of the cognitive modeling technology in the theoretical military science].

The fundamental researches financing branches and departments of “SF” allow to finance the development, production and promotion of the fundamental main and derivative scientific results of CMT.

3.3. The applied researches financing divisions (at the microscopic level) of “SF "SFA CMT" n. a. Prokopenko N.A.”

The structure of “The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.” (www.sfacmtfund.spb.ru) (“SF "SFA CMT" n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO "ACNS”” (www.acns.spb.ru) of the author (www.vetrovan.spb.ru) includes the different divisions for the financing of receiving of the scientific results:

B. The applied researches (management) financing divisions of “SF "SFA CMT" n. a. Prokopenko N.A.” (“SIO "ACNS”” and “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”) for the microscopic system, financial and complex analysis – the 27 applied researches financing departments (ARFDP) on the 9 applied researches financing directions (ARFD) of “SF "SFA CMT" n. a. Prokopenko N.A.” correspond to the 27 applied scientific researches sections (departments) (ASRS(DP)) on the 9 applied scientific researches directions (ASRD) of “SIO "ACNS””, and also correspond to the 27 scientific-researches laboratories (SRL) on the 9 applied developments directions (ADD) of “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, besides, correspond to the 27 sections on the 9 directions of “The Russian academy of natural sciences”.

- B.1. ARFD [ASRD (ADD)] “Cognitive modeling in the natural sciences” (“CM in NS”) (“NEN”).
- B.1.1. ARFDP [ASRS(DP) (SRL)] “Applications of (cognitive) informatics, cybernetics, automatics, computer engineering, data transmission and connection” (“AP(C)ICACEDT and C”) (“SIC”) (*).
- B.1.2. ARFDP [ASRS(DP) (SRL)] “Applications of mathematics, mathematical physics, mechanics, metrology, astronomy, space researches, the complex system analysis based on the cognitive modeling technology and the complex problems of natural sciences” (“APMMPHMMASRCSAB on CMT and CPNS”) (“SMMF”) (*).
- B.1.3. ARFDP [ASRS(DP) (SRL)] “Applications of geo-chemical ecology and preservation of environment” (“APG-CHE and PE”) (“SNOS”).
- B.1.4. ARFDP [ASRS(DP) (SRL)] “Applications of the models of The Earth and The Solar system planets in geography, geology, geodesy, cartography, astronomy and other sciences” (“APME and SSP in GGGCA and OS”) (“SNZ”) (*).
- B.1.5. ARFDP [ASRS(DP) (SRL)] “Applications of the models, methods and technologies of geology of oil and gas and the oil and gas industry” (“APMM and TGO and G and O and GI”) (“SNG”).

- B.1.6. ARFDP [ASRS(DP) (SRL)] “Applications of the system analysis based on the cognitive modeling technology, prediction, standardization, unification and the complex problems of exact technical sciences” (“APSAB on CMTPSU and CPETS”) (“SSAP”) (*).
- B.1.7. ARFDP [ASRS(DP) (SRL)] “Applications of theoretical and experimental physics, geo-physics, power-engineering, electrical-engineering, electronics and radio-engineering, nuclear physics, technics and instrument-making” (“APT and EPHG-PHP-EE-EE and R-ENPHT and I-M”) (“SF”) (*).
- B.1.8. ARFDP [ASRS(DP) (SRL)] “Applications of (non)organic chemistry, crystallography, mineralogy and chemical industry” (“AP(N)OCHCM and CHI”) (“SH”) (*).
- B.2. ARFD [ASRD (ADD)] “Cognitive modeling in the applied technical sciences and technologies” (“CM in ATS and T”) (“NNT”).
- B.2.1. ARFDP [ASRS(DP) (SRL)] “Applications of mining and metallurgy” (“APM and M”) (“SGM”).
- B.2.2. ARFDP [ASRS(DP) (SRL)] “Applications of the sciences about wood and wood processing” (“APS about W and WP”) (“SNL”).
- B.2.3. ARFDP [ASRS(DP) (SRL)] “Applications of the noo-sphere knowledge and technologies: the (heavy) mechanical-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture, construction and other branches” (“APN-SK and T: (H)M-El-MPR and PH-C-TE and FITAC and OB”) (“SNZT”) (*).
- B.2.4. ARFDP [ASRS(DP) (SRL)] “Applications of the scientific problems of agro-industrial complex” (“APSPA-IC”) (“SNPAK”).
- B.3. ARFD [ASRD (ADD)] “Cognitive modeling in the geo-political sciences and researches” (“CM in G-PS and R”) (“NSGI”).
- B.3.1. ARFDP [ASRS(DP) (SRL)] “Applications of geo-politics and safety” (“APG - P and S”) (“SGB”).
- B.3.2. ARFDP [ASRS(DP) (SRL)] “Applications of the classical and military history” (“APC and MH”) (“SVIT”).
- B.4. ARFD [ASRD (ADD)] “Cognitive modeling in the society steady development of post-industrial country” (“CM in SSDP-IC”) (“NURS”).
- B.4.1. ARFDP [ASRS(DP) (SRL)] “Applications of the complex problems of country development” (“APCPCD”) (“SPUR”) (*).
- B.5. ARFD [ASRD (ADD)] “Cognitive modeling in the social-economic and jurisprudential sciences” (“CM in S-E and JS”) (“NSEPP”).
- B.5.1. ARFDP [ASRS(DP) (SRL)] “Applications of the inter-branch jurisprudential and economic system researches of society and country” (“APIJ and ESS and C”) (“SMEE SI”).
- B.5.2. ARFDP [ASRS(DP) (SRL)] “Applications of the complex problems of micro-(macro-)economics, social sphere and market economy of the country” (“APCPM-(M-)ESS and MEC”) (“SPMSRH”).

- B.5.3. ARFDP [ASRS(DP) (SRL)] “Applications of economics, management, sociology, statistics and their other branches” (“APEMSS and TOB”) (“SES”).
- B.5.4. ARFDP [ASRS(DP) (SRL)] “Applications of the financial analysis, accounting and audit of the (credit) organization based on the cognitive modeling technology” (“APFAA and A(C)OB on CMT”) (“SFABUA”) (*).
- B.6. ARFD [ASRD (ADD)] “Cognitive modeling in the biological and medical sciences” (“CM in B and MS”) (“NBME”).
- B.6.1. ARFDP [ASRS(DP) (SRL)] “Applications of biology, ecology and physiology of plants” (“APBE and PHP”) (“SBE”).
- B.6.2. ARFDP [ASRS(DP) (SRL)] “Applications of bio-technology, bio-medicine, ergonomics and labor safety of organic individuals” (“APB-TB-ME and LSOP”) (“SB”) (*).
- B.7. ARFD [ASRD (ADD)] “Cognitive modeling in the humanitarian sciences, art and creativity” (“CM in HSA and C”) (“NGNOT”).
- B.7.1. ARFDP [ASRS(DP) (SRL)] “Applications of (cognitive) linguistics, (national) creativity, culture, art and religion” (“AP(C)L(N)CCA and R”) (“SGNT”) (*).
- B.7.2. ARFDP [ASRS(DP) (SRL)] “Applications of literature, science-study, philosophy, journalism and mass communication means” (“APLS-SPHJ and MCM”) (“SLPZ”).
- B.7.3. ARFDP [ASRS(DP) (SRL)] “Applications of the problems of (cognitive) psychology, education, science and support of young scientists (the programs of grants and others)” (“APP(C)PES and SYS (PG and O)”) (“SPOPMU”) (*).
- B.7.4. ARFDP [ASRS(DP) (SRL)] “Applications of innovations of the project "The Russian encyclopedias", philosophy of science, technics and technology on the branches of knowledge” (“APIPREPHST and T on BK”) (“SRE”).
- B.8. ARFD [ASRD (ADD)] “Cognitive modeling in the physical training and sport” (“CM in PHT and S”) (“NFS”).
- B.8.1. ARFDP [ASRS(DP) (SRL)] “Applications of sport, sports sciences and actions” (“APSSS and A”) (“SSSNM”).
- B.9. ARFD [ASRD (ADD)] “Cognitive modeling in the military sciences” (“CM in MILS”) (“NVN”).
- B.9.1. ARFDP [ASRS(DP) (SRL)] “Applications of architecture, construction, technics, history, education, politics and economics in the armed forces” (“APACTHEP and E in AF”) (“SASTIOPEVC”).

“SF "SFA CMT" n. a. Prokopenko N.A.” allows to finance the development of the main and derivative scientific results, in particular the algorithms, methods and technologies of the system, financial and complex analysis for the increase of efficiency of the diverse (information) technologies of the single, serial and mass (not) material production of the one or several assortment groups and nomenclature units of goods, works and services to the end consumer of social-econ. formation based on the cognitive modeling technology and the cognitive models.

3.3.1. The applied researches financing direction “Cognitive modeling in the natural sciences” (“CM in NS”) (“NEN”) of “SF “SFA CMT” n. a. Prokopenko N.A.”

The developed “The applied researches financing direction “Cognitive modeling in the natural sciences”” (“NEN”) treats to the applied researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches financing directions and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches financing department “Applications of (cognitive) informatics, cybernetics, automatics, computer engineering, data transmission and connection”” (“SIC”) (*)
[the financing of applied researches and developments in the area “Applications of informatics (theory of information)” – usage of theory of informatics (theory of information), usage of theory of organization of information work, usage of theory of documentary information sources, usage of theory of analytical-synthetical processing of the documentary information sources, usage of theory of information search, usage of theory of information service, usage of theory of the technical means of support of information processes, usage of theory of the cognitive modeling technology in the applications of informatics (theory of information);

the financing of applied researches and developments in the area “Applications of cognitive informatics” ()* – usage of theory of the modified stratified-step model of perception (psycho-physiology of perception), processing (cognitive psychology) and understanding (cognitive linguistics) of the information fragments content, usage of theory of the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, usage of theory of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the parametrical cognitive models block for the financial analysis of the (credit) organizations and enterprises (the cognitive models for the vertical, horizontal and trend financial analysis of the managing subjects of the economic system), usage of theory of the parametrical cognitive models block for the complex analysis of the difficult objects, processes and phenomena, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), usage of theory of the technical means of support of the financial analysis (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting, the automation means of formation of the accounting balance and the report about profits and losses of the (credit) organization, the automation means of the vertical, horizontal and trend financial analysis based on the analytical coefficients system), usage of theory of the technical means of support of the complex analysis (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others);

the financing of applied researches and developments in the area “Applications of cybernetics” – usage of theory of automatic control systems, usage of theory of modeling, usage of theory of cybernetic control systems, usage of theory of information, usage of theory of artificial intelligence, usage of theory of final automatic-devices and formal languages, usage of theory of reliability of the objects, processes and systems, usage of theory of the system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology in the applications of cybernetics;

the financing of applied researches and developments in the area “Applications of automatics and computer engineering” – usage of theory of automatic control, usage of theoretical bases of programming, usage of theory of computer engineering, usage of theory of elements, units and devices of automatics and computer engineering, usage of theory of input-output devices, usage of theory of memory devices, usage of theory of technology and equipment for the manufacture of the means of automatics and computer engineering, usage of theory of keyboard and calculating-tabulating machines, usage of theory of analog calculating machines (ACM), usage of theory of digital calculating machines and calculating complexes (DCM), usage of theory of analog-digital (hybrid) calculating machines and calculating complexes, usage of theory of calculating centres (CC), usage of theory of calculating networks (CN), usage of theory of software of calculating machines, complexes and networks, usage of theory of automatic measurement, regulation and control systems, usage of theory of the systems of tele-control and tele-measurement, usage of theory of the automated control systems of technological processes (technological stages), usage of theory of the automated systems of organizational management, usage of theory of automation of designing and scientific researches, usage of theory of the cognitive modeling technology in the applications of automatics and computer engineering;

the financing of applied researches and developments in the area “Applications of data transmission and connection” – usage of theory of data transmission and connection, usage of theory of designing and constructing of connection devices, usage of theory of technology and equipment for the assembly and adjustment of connection equipment, systems of data transmission, communication lines, multi-channel connection, networks and communication centres, services and facilities of connection, usage of theory of telegraph (cable) connection and equipment, usage of theory of the systems and equipment of data transmission, usage of theory of tele-information services and equipment, usage of theory of phone connection and equipment, usage of theory of the systems of transfer of moving images and sound, usage of theory of facsimile connection and equipment, usage of theory of radio-connection and radio-broadcasting, usage of theory of hyber-optic (LED) connection and equipment, usage of theory of television (TV), usage of theory of optical connection in the free space and equipment, usage of theory of post connection, usage of theory of the cognitive modeling technology in the applications of data transmission and connection].

II. “The applied researches financing department “Applications of mathematics, mathematical physics, mechanics, metrology, astronomy, space researches, the complex system analysis based on the cognitive modeling technology and the complex problems of natural sciences”” (“SMMF”) (*)
[the financing of applied researches and developments in the area “ Applications of mathematics ” –
 usage of theory of mathematical logic and applied bases of mathematics, usage of theory of numbers, usage of theory of algebra, usage of theory of topology, usage of theory of geometry, usage of theory of the mathematical analysis, usage of theory of the functions of valid variables, usage of theory of the functions of complex variables, usage of theory of ordinary differential equations, usage of theory of differential equations with private derivatives, usage of theory of integrated equations, usage of theory of mathematical models of natural and technical sciences, usage of theory of the equations of mathematical physics, usage of theory of variation calculation, usage of mathematical theory of optimum control, usage of theory of the functional analysis, usage of theory of calculation mathematics, usage of theory of probability and mathematical statistics, usage of theory of the combinatory analysis, usage of theory of graphs, usage of theory of mathematical cybernetics, usage of theory of the cognitive modeling technology in the applications of mathematics;
the financing of applied researches and developments in the area “ Applications of mathematical physics ” () –*
 usage of theory of the general problems of mathematical physics, usage of theory of the mathematical models of physics of elementary particles, usage of theory of fields (united theory of field), usage of theory of the mathematical models of physics of high energies, usage of theory of nuclear physics, usage of theory of physics of gases and liquids, usage of theory of the mathematical models of thermo-dynamics and statistical physics, usage of theory of physics of firm bodies, usage of theory of physics of plasma, usage of theory of physics of atom and molecule, usage of theory of optics, usage of theory of physics of lasers, usage of theory of radio-physics, usage of theory of the mathematical models of physical bases of electronics, usage of theory of acoustics (theory of waves distribution in the environment), usage of theory of the cognitive modeling technology in the applications of mathematical physics, usage of theory of the cognitive models of the interaction between the elementary particles and firm bodies, fields, liquids and gases, usage of theory of the cognitive model of the modified volumetric planetary model of atom n. a. Bohr N.H.D., usage of theory of the cognitive models of the temperature areas of plasma of atom and molecule, usage of theory of the cognitive model of the optical environment of eye, usage of theory of the cognitive model of the acoustical environment of ear, usage of theory of the cognitive model of the waves distribution in the environment;

*the financing of applied researches and developments in the area “ Applications of mechanics ” (*)* – usage of theory of the general tasks and methods of mechanics, usage of theory of mechanics of liquid and gas, usage of theory of mechanics of deformable firm body, usage of theory of the complex and special sections of mechanics, usage of theory of the cognitive modeling technology in the applications of mechanics, usage of theoretical bases of formation of the parametrical cognitive models block for the complex system analysis of the objects, processes and phenomena of mechanics, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and the 2nd generation and the hybrid of the 3rd generation), usage of theory of the adaptive automation means of research of the objects, processes and phenomena of mechanics, usage of theory of the technical means of support of research of the objects, processes and phenomena of mechanics, usage of theory of the technical means of support of the complex system analysis of the difficult objects, processes and phenomena of mechanics (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others);

the financing of applied researches and developments in the area “Applications of mechatronics (theory of hygroscope-building)” – usage of theoretical bases, general tasks and methods of mechatronics, usage of theory of general mechatronics, usage of theory of mechatronics of liquid and gas, usage of theory of mechatronics of deformable firm body, usage of theory of the complex and special sections of mechatronics, usage of theory of the automation means and devices of mechatronics, usage of theory of the cognitive modeling technology in the applications of mechatronics (theory of hygroscope-building);

the financing of applied researches and developments in the area “Applications of metrology (theory of measurement)” – usage of theory of the scientific bases and technical means of metrology and metrological support, usage of theory of the state, national and international systems and services of metrology, usage of theory of measurement of separate sizes and characteristics, usage of theory of standard samples of the structure and properties of substances and materials, usage of theory of the cognitive modeling technology in the applications of metrology (theory of measurement);

the financing of applied researches and developments in the area
“ Applications of astronomy ” (*) – usage of theory of astronomy, usage of theory of heavenly mechanics, usage of theory of astrometry, usage of theory of astro-physics of The Solar system, The Sun, stars, fogs, interstellar environment and star systems, usage of theory of cosmology, usage of theory of observatories, tools, devices and methods of astronomical supervisions, usage of theory of the cognitive modeling technology in the applications of astronomy, usage of theory of the cognitive models of the relative positioning of 1, 2, 3, 4, 5 and more planets and satellites, The Earth, The Sun and others;

the financing of applied researches and developments in the area
“ Applications of space researches ” – usage of theory of the devices and methods of applied scientific researches of the space environment, usage of theory of planning and realization of starts of the space vehicles and artificial heavenly bodies, usage of theory of uncontrol movement of the space vehicles and artificial heavenly bodies, usage of theory of control of movement of the space vehicles and artificial heavenly bodies, usage of theory of space technics and technology, usage of theory of safety and medical-biological problems of space flights, usage of theory of use of space systems for the connection and navigation, usage of theory of the practical problems of development of extraterrestrial territories and prospects of astronautics, usage of theory of research of the astronomical objects by the space means, usage of theory of geo-physical applied scientific researches by the space means, usage of theory of research of The Earth from the space, usage of theory of the cognitive modeling technology in the applications of space researches;

the financing of applied researches and developments in the area “Applications of the complex system analysis” () – usage of theory of tendencies, dependences and laws of the complex system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology for the complex system analysis of the difficult objects, processes and phenomena, usage of theory of the parametrical cognitive models block for the complex system analysis and the increase of efficiency of functioning of the difficult objects, processes and phenomena, usage of theory of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and the 2nd generation and the hybrid of the 3rd generation), usage of theory of the algorithms of formation of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the techniques of research of parameters of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the algorithms of processing of a posteriori data of the complex system analysis of the problem spheres, usage of theory of software for the automation of research tasks, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of functioning of the difficult objects, processes and phenomena, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the cognitive models parameters, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the methods of the statistical analysis of the generated data sets, usage of theory of the analysis of dynamics of the productivity of training, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the complex system analysis of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle, the multivariate code device, the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of 2 and 3 coordinates, the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of 2 and 3 coordinates, the chemical element with 1, 2, 3, 4, 5 and more nucleuses, the difficult multivariate hurricane].*

III. “The applied researches financing department
“Applications of geo-chemical ecology and preservation of environment” (“SNOS”)
[the financing of applied researches and developments in the area
“Applications of preservation of environment and ecology” –
usage of theory of the methods of studying of the preservation of environment of the person and animals,
usage of theory of the ecological bases of use of the natural resources,
usage of theory of international cooperation,
usage of theory of studying of environmental contamination of the person and animals,
usage of theory of the control of pollution and protection
of atmosphere, waters of land, seas and oceans,
usage of theory of the protection of soils and bowels,
usage of theory of the ecological bases of ability-to-live of the organic individuals,
usage of theory of influence of the anthropogenic changes of environment
on the health and activity of organic individuals, on the condition of natural ecosystems,
populations and organisms of the vegetative and generative (fauna) world,
usage of theory of protection of the vegetative and generative world of the person and animals,
usage of theory of the anthropogenic influence on landscape,
usage of theory of the protection and optimization of landscape,
usage of theory of nature reserve,
usage of theory of protected natural territories and water-areas,
usage of theory of nature acts and accidents of anthropogenic origin,
usage of theory of ecological safety,
usage of theory of the rational use and reproduction of natural resources,
usage of theory of the preservation of environment and natural resources
in the separate regions and countries,
usage of theory of waste management,
usage of theory of small waste and without waste technology,
usage of theory of protection of organic individuals
against noise, vibration, electrical and magnetic fields and radiations,
usage of theory of the cognitive modeling technology
in the applications of preservation of environment and ecology].

IV. “The applied researches financing department “Applications of the models of The Earth and The Solar system planets in geography, geology, geodesy, cartography, astronomy and other sciences” (“SNZ”) (*)
[the financing of applied researches and developments in the area “ Applications of geography ” –
 usage of theory of geography, usage of theory of historical geography, usage of theory of military geography, usage of theory of physical geography, usage of theory of economic and social geography, usage of theory of regional-geography (country-science), usage of theory of medical geography, usage of theory of toponymics, usage of theory of the cognitive modeling technology in the applications of geography ;
the financing of applied researches and developments in the area “ Applications of geology ” –
 usage of theory of lithology, usage of theory of tectonics, usage of theory of geological-geo-physical researches of the deep structure of The Earth, usage of theory of regional geology, usage of theory of planetology, usage of theory of stratigraphy, usage of theory of paleontology, usage of theory of geo-chemistry, usage of theory of mineralogy, usage of theory of petrography, usage of theory of experimental and technical mineralogy and petrography, usage of theory of the methods of mineralogical-petrographical and geo-chemical laboratory researches, usage of theory of anthropogenic period, usage of theory of neo-tectonics, usage of theory of geo-morphology, usage of theory of geology of ore minerals, usage of theory of geology of nonmetallic minerals, usage of theory of geology of the fields of oil, gas and their condensates, usage of theory of geology of the deposits of coal, bituminous breeds and peat, usage of theory of the methods of search and investigation of the deposits of minerals, usage of theory of technics and technology of geological-prospecting works, usage of theory of hydro-geology, usage of theory of engineering geology, usage of theory of frozen condition of ground, usage of theory of the cognitive modeling technology in the applications of geology ;

the financing of applied researches and developments in the area
“Applications of geodesy and cartography” –
 usage of theory of supreme geodesy, usage of theory of geodesy,
 usage of theory of aerial-survey and photogrammetry,
 usage of theory of topography, usage of theory of photo-topography,
 usage of theory of cartography, usage of theory of selenodesy,
 u s a g e o f t h e o r y o f p l a n e t o d e s y ,
 usage of theory of mappings of The Moon and planets,
 usage of theory of the cognitive modeling technology
 in the applications of geodesy and cartography;
the financing of applied researches and developments in the area
“Applications of astronomy” (*) –
 usage of theory of astronomy, usage of theory of heavenly mechanics,
 u s a g e o f t h e o r y o f a s t r o m e t r y ,
 usage of theory of astro-physics of The Solar system, The Earth, The Sun,
 stars, fogs, interstellar environment and star systems,
 u s a g e o f t h e o r y o f c o s m o l o g y ,
 usage of theory of observatories, tools,
 devices and methods of astronomical supervisions,
 usage of theory of the cognitive modeling technology
 in the applications of astronomy ,
 usage of theory of the cognitive models of the gravitational and other interactions
 b e t w e e n 1 , 2 , 3 , 4 , 5 a n d m o r e a r t i f i c i a l
 space objects, satellites, planets, The Earth and The Sun,
 usage of theory of the cognitive models of the work of the basic rocket engine,
 the first, the second, the third and the fourth rocket engine of the launch vehicle and others].

V. “The applied researches financing department “Applications of the models, methods and technologies of geology of oil and gas and the oil and gas industry”” (“SNG”) [the financing of applied researches and developments in the area “Applications of geology of oil and gas” – usage of theory of lithology, usage of theory of tectonics, usage of theory of geological-geo-physical researches of the deep structure of The Earth, usage of theory of regional geology of deposits, usage of theory of planetology, usage of theory of stratigraphy, usage of theory of paleontology, usage of theory of geo-chemistry, usage of theory of mineralogy, usage of theory of petrography, usage of theory of experimental and technical mineralogy and petrography of oil, natural and passing gas, usage of theory of the methods of mineral-petrographical and geo-chemical laboratory researches, usage of theory of anthropogenic period, usage of theory of neo-tectonics, usage of theory of geo-morphology, usage of theory of geology of the fields of oil, gas and their condensates, usage of theory of the methods of search and investigation of the fields of oil and gas, usage of theory of technics and technology of geological-prospecting works, usage of theory of hydro-geology, usage of theory of engineering geology of oil and gas, usage of theory of frozen condition of ground of deposits, usage of theory of the cognitive modeling technology in the applications of geology of oil and gas; the financing of applied researches and developments in the area “Applications of oil and gas industry” – usage of theory of processes and devices of oil and gas technology, usage of theory of oil and gas raw materials, usage of theory of technology of nonorganic substances and products of oil, natural and passing gas, usage of theory of technology of production of fertilizers from oil and gas, usage of theory of technology of production of silicate and refractory nonmetallic materials from oil and gas,

usage of theory of industrial organic synthesis, usage of theory of industrial synthesis of organic dyes and pigments from oil and gas, usage of theory of technology of production of photographic materials from oil and gas, usage of theory of technology of protection against explosions and the means of chemical protection of oil and gas technology, usage of theory of technology of production of the chemical-pharmaceutical means from oil, natural and passing gas, usage of theory of technology of production of fragrant substances from oil and gas, usage of theory of technology of production of pesticides and disinfectant substances from oil, natural and passing gas, usage of theory of technology of refining of oil, natural and passing gases and their condensates, their products and analogues, motor fuel and lubricant materials from oil and gas, usage of theory of technology of production of natural high-molecular compounds from oil, natural and passing gas, usage of theory of technology of production of synthetic high-molecular compounds from oil and gas, usage of theory of technology of production of plastics, rubbers and products from oil, natural and passing gas, usage of theory of technology of production of paint-varnish materials and organic coverings from oil and gas, usage of theory of technology of production of chemical fibers and strings from oil and gas, usage of theory of technology of production of chemical reactants and especially clean substances from oil and gas, usage of theory of technology of production of household chemical goods and auxiliary materials from oil, natural and passing gas, usage of theory of the cognitive modeling technology in the applications of oil and gas industry].

VI. “The applied researches financing department
“Applications of the system analysis based on the cognitive modeling technology,
prediction, standardization, unification
and the complex problems of exact technical sciences” (“SSAP”) (*)
[the financing of applied researches and developments in the area
“Applications of the system analysis” ()* –
 usage of theory of tendencies, dependences and laws
 of the system analysis of the objects, processes and phenomena,
 usage of theory of the cognitive modeling technology
 with dynamic cloning, verification and subverification,
 usage of theory of the iterative cycle and the technique of use
 of the cognitive modeling technology,
 usage of theory of the parametrical cognitive models block
 for the system analysis of the information-educational environments
 and the increase of efficiency of functioning of the automated training system
 with the properties of adaptation based on the cognitive models
 (the cognitive models of the subject of training and the means of training),
 usage of theory of the ways of representation of the structure
 of the cognitive models and difficult problem environments:
 the formal classical of the 0th generation (the logical and production models),
 the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
 the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
 and the innovative calculus of theory of sets and graphs),
 the nonformal new of the 0th generation (the multi-level structural scheme
 and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
 the flat of the 1st generation (the cognitive circle and the cognitive disc),
 the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
 the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
 cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
 the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithm of formation of the cognitive model structure,
usage of theory of the technique of research of the cognitive model parameters,
usage of theory of the algorithm of analysis of a posteriori results of research,
usage of theory of the adaptive automation means
of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
usage of theory of the technical means of support
of the adaptive information interaction
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
the linguistic processor and other processors),
usage of theory of the statistical substantiation
of practical use of the received results,
usage of theory of the factors influencing to the efficiency
of knowledge formation in the information-educational environment
and the increase of resultativity of functioning
of the difficult objects, processes and phenomena,
usage of theory of organization and plan of carrying out of the experiment
for the research of parameters of the parametrical cognitive models block,
usage of theory of preliminary processing of a posteriori results of diagnostics,
usage of theory of choice of the methods of statistical analysis of the generated data sets,
usage of theory of the analysis of dynamics of the resultativity of training,
usage of theory of dispersion, regression, discriminant, cluster analysis,
multivariate scaling, factor analysis and bibliographic lists;
the financing of applied researches and developments in the area
“ Applications of standardization ” –
usage of theory of systems and services of standardization,
usage of theory of scientific-methodological support of systems and services of standardization,
usage of theory of the cognitive modeling technology
in the applications of standardization].

VII. “The applied researches financing department
 “Applications of theoretical and experimental physics, geo-physics,
 power-engineering, electrical-engineering, electronics and radio-engineering,
 nuclear physics, technics and instrument-making” (“SF”) (*)
*[the financing of applied researches and developments in the area
 “ Applications of physics ” (*)* –
 usage of theory of the general problems of physical experiment,
 usage of theory of physics of elementary particles,
 usage of theory of fields (united theory of field),
 usage of theory of physics of high energies, usage of theory of nuclear physics,
 usage of theory of physics of gases and liquids,
 usage of theory of thermal-dynamics and statistical physics,
 usage of theory of physics of firm bodies, usage of theory of physics of plasma,
 usage of theory of physics of atom and molecule,
 usage of theory of optics, usage of theory of laser physics,
 usage of theory of radio-physics,
 usage of theory of the physical bases of electronics, usage of theory of acoustics,
 usage of theory of the cognitive modeling technology
 in the applications of physics,
 usage of theory of the cognitive models of the interaction between
 the elementary particles and firm bodies, fields, liquids and gases,
 usage of theory of the cognitive model of the modified
 volumetric planetary model of atom n. a. Bohr N.H.D.,
 usage of theory of the cognitive models of the temperature areas of plasma of atom and molecule,
 usage of theory of the cognitive model of the optical environment of eye,
 usage of theory of the cognitive model of the acoustical environment of ear,
 usage of theory of the cognitive model of the waves distribution in the environment;
*the financing of applied researches and developments in the area
 “ Applications of geo-physics ”* –
 usage of theory of geo-magnetism in the high layers of atmosphere,
 usage of theory of meteorology, usage of theory of climatology,
 usage of theory of oceanography, usage of theory of hydrology of land,
 usage of theory of glaciology, usage of theory of physics of The Earth,
 usage of theory of the cognitive modeling technology
 in the applications of geo-physics;

the financing of applied researches and developments in the area
“ Applications of power-engineering ” –
usage of theory of power-resources, usage of theory of power balance,
usage of theory of electrical-power-engineering, usage of theory of heating-power engineering,
usage of theory heating-technics, usage of theory of atomic power-engineering,
usage of theory of hydro-power-engineering, usage of theory of gelio-power-engineering,
usage of theory of wind-power-engineering,
usage of theory of direct transformation of energy,
usage of theory of the cognitive modeling technology
in the applications of power-engineering;
the financing of applied researches and developments in the area
“ Applications of electrical-engineering ” –
usage of theory of electrical-engineering,
usage of theory of electrical-technical materials,
usage of theory of electrical machines,
usage of theory of electrical devices,
usage of theory of transformers, usage of theory of electrical reactors,
usage of theory of power electrical condensers,
usage of theory of power converting technics,
usage of theory of electrical-drive, usage of theory of electrical-thermics,
usage of theory of electrical-welding equipment,
usage of theory of wire and cable, usage of theory of electrical isolators,
usage of theory of light-engineering,
usage of theory of electrical-technical equipment of special purpose,
usage of theory of the cognitive modeling technology
in the applications of electrical-engineering;

the financing of applied researches and developments in the area “Applications of electronics and radio-engineering” – usage of theory of the theoretical bases of electronic technics, usage of theory of radio-engineering, usage of theory of materials for electronics and radio-engineering, usage of theory of technology and equipment for the electronic and radio-technical manufacture, usage of theory of designing and constructing of electronic devices and radio-electronic equipment, usage of theory of electrical-vacuum and gas-discharge devices and units, usage of theory of accelerators of charged particles and plasma, usage of theory of solid-state devices, usage of theory of quantum electronics, usage of theory of holography, usage of theory of crio-electronics, usage of theory of radio-electronic circuits, usage of theory of distribution of radio-waves, usage of theory of antennas, usage of theory of wave-transports, usage of theory of elements of micro-wave technics, usage of theory of radio-transmission and radio-receiving devices, usage of theory of the radio-technical systems of sounding, locations and navigation, usage of theory of television (TV) technics, usage of theory of record and reproduction of signals, usage of theory of electrical-acoustics (theory of waves distribution in the environment), usage of theory of ultra-sonic and infra-sonic technics, usage of theory of infra-red technics, usage of theory of units, details and elements of radio-electronic equipment, usage of theory of devices for the radio-technical measurements, usage of theory of the systems and units of information display, usage of theory of the cognitive modeling technology in the applications of electronics and radio-engineering;

the financing of applied researches and developments in the area “Applications of nuclear technics and instrument-making” (*) – usage of theory of nuclear raw materials and fuel, usage of theory of synthesis of isotopes, usage of theory of isotopes and ionization radiations, usage of theory of nuclear reactors, usage of theory of thermal-nuclear reactors, usage of theory of action of radiations and protection against them, usage of theory of nuclear explosions, usage of theory of processing of nuclear fuel and waste disposal, usage of theory of the cognitive modeling technology in the applications of nuclear technics and instrument-making, usage of theory of the cognitive models of the structure of the chemical elements with 1, 2, 3, 4, 5 and more nucleuses, usage of theory of the cognitive model of the modified volumetric principle n. a. Pauli W.E. for the studying of electronic clouds within limits of power levels, usage of theory the cognitive model of the modified planetary model of atom n. a. Bohr N.H.D. and others].

VIII. “The applied researches financing department “Applications of (non)organic chemistry, crystallography, mineralogy and chemical industry”” (“SH”) (*)
[the financing of applied researches and developments in the area “Applications of chemistry” (*) – usage of theory of basic-laboratory chemical equipment and units, usage of theory of physical chemistry, usage of theory nonorganic chemistry, usage of theory complex compounds, usage of theory of analytical chemistry, usage of theory organic chemistry, usage of theory of bio-organic chemistry, usage of theory of natural organic compounds and their synthetic analogues, usage of theory of chemistry of high-molecular compounds, usage of theory of biological chemistry, usage of theory of the cognitive modeling technology in the applications of chemistry, usage of theory of modeling of the structure of the (non)organic chemical elements and the chemical elements with 1, 2, 3, 4, 5 and more nucleuses, usage of theory of research of the molecular structure of (non)organic compounds; the financing of applied researches and developments in the area “Applications of chemical technology and chemical industry” – usage of theory of processes and devices of chemical technology, usage of theory of chemical raw materials, usage of theory of technology of production of nonorganic substances and products, usage of theory of production of fertilizers, usage of theory of technology of production of silicate and refractory nonmetallic materials, usage of theory of industrial organic synthesis, usage of theory of industrial synthesis of organic dyes and pigments, usage of theory of technology of production of photographic materials, usage of theory of technology of production of explosive substances and means of chemical protection, usage of theory of storage and destruction of chemical weapon, usage of theory of technology of production of the chemical-pharmaceutical means, usage of theory of technology of production of fragrant substances, usage of theory of technology of production of pesticides and disinfectant substances, usage of theory of processing of natural gas, oil, gas condensate, their products and analogues, motor fuel, lubricant materials, usage of theory of technology of processing of firm combustible minerals, usage of theory of forestry-chemical manufactures, usage of theory of technology of production of natural high-molecular compounds, usage of theory of technology of production of synthetic high-molecular compounds, usage of theory of technology of production of plastic, usage of theory of technology of production of rubbers and products from them, usage of theory of technology of production of paint-varnish materials and organic coverings, usage of theory of technology of production of chemical fibers and strings, usage of theory of technology of production of chemical reactants and especially clean substances, usage of theory of technology of production of household chemical goods products, usage of theory of technology of production of auxiliary materials, usage of theory of the cognitive modeling technology in the applications of chemical technology and chemical industry].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

3.3.2. The applied researches financing direction "Cognitive modeling in the applied technical sciences and technologies" ("CM in ATS and T") ("NNT") of "SF "SFA CMT" n. a. Prokopenko N.A."

The developed "The applied researches financing direction "Cognitive modeling in the applied technical sciences and technologies"" ("NNT") treats to the applied researches financing divisions of "The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A." ("SF "SFA CMT" n. a. Prokopenko N.A." – "SF") as the first SF in the structure of "SIO "Academy of cognitive natural sciences"" ("SIO "ACNS") and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches financing directions and departments of "SF"]:

- 1) it is executed by the principle of "the administrative-economy submission";
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to "SPbSETU "LETI" and "The Government of RF" for the translation, carrying out of int. action and receiving of "The Nobel prize");
- 3) includes the several various main divisions:
 - I. "The applied researches financing department "Applications of mining and metallurgy"" ("SGM")
[the financing of applied researches and developments in the area "Applications of mining" – usage of theory of technics and technology of development of the deposits of firm minerals, usage of theory of development of the deposits of ores and ferrous metals, usage of theory of development of the deposits of ores and looses of the color and rare metals and diamonds, usage of theory of development of the deposits of coal and combustible slates, usage of theory of development of the peat deposits, usage of theory of development of the deposits of building and road materials, fire-resistant, ceramic, glass and mineral technical raw materials, usage of theory of development of the deposits of chemical and agricultural-chemical raw materials and salts, usage of theory of development of the deposits of precious and ornamental stones, usage of theory of enrichment of minerals, usage of theory of development of the oil and gas deposits, usage of theory of the cognitive modeling technology in the applications of mining;
the financing of applied researches and developments in the area "Applications of metallurgy" – usage of theory of metallurgical processes, usage of theory of metallurgical heating-technics, usage of theory of manufacture of ferrous metals and alloys, usage of theory of manufacture of nonferrous metals and alloys, usage of theory of powder metallurgy, usage of theory of semiconductors metallurgy, usage of theory of rolling manufacture, usage of theory of drawing and hardware manufacture, usage of theory of pipes manufacture, usage of theory of metallurgical science, usage of theory of the technical analysis in metallurgy, usage of theory of the cognitive modeling technology in the applications of metallurgy].

II. “The applied researches financing department “Applications of the sciences about forestry and wood processing”” (“SNL”) [*the financing of applied researches and developments in the area “Applications of forestry and wood-processing industry”* – usage of theory of wood-science, usage of theory of forestry-cutting works, usage of theory of forestry transportation, usage of theory of forestry-timber works, usage of theory of technology and equipment for wood processing, usage of theory of technology of forestry sawmill manufacture, usage of theory of technology of manufacture of joiner-building products, usage of theory of technology of manufacture of plywood and plates, usage of theory of technology of manufacture of blocks, usage of theory of technology of manufacture of furniture, usage of theory of technology of manufacture of matches, usage of theory of technology of manufacture of wooden container, usage of theory of technology of special wood-processing manufactures, usage of theory of technology of pulp-paper industry, usage of theory of the cognitive modeling technology in the applications of forestry and wood-processing industry; *the financing of applied researches and developments in the area “Applications of forestry economy”* – usage of theory of forestry-economy biology, usage of theory of soil-science, usage of theory of agriculture, usage of theory of forestry-economy melioration, usage of theory of agricultural chemistry, usage of theory of plant-science, usage of theory of protection of forestry-economy plants, usage of theory of animal-industry, usage of theory of veterinary-science, usage of theory of preparation of production of forestry economy, usage of theory of hunting and hunting economy, usage of theory of forestry economy, usage of theory of economics and organization of forestry economy, usage of theory of mechanization and electrification of forestry economy, usage of theory of the cognitive modeling technology in the applications of forestry economy].

III. “The applied researches financing department
“Applications of the noo-sphere knowledge and technologies:
the (heavy) mechanical-engineering, instrument-making,
polygraphy, reprography and photo-cinema-technics, the light and food-processing industry,
transport, architecture, construction and other branches” (“SNZT”) (*)
*[the financing of applied researches and developments in the area
“Applications of mechanical-engineering”* –
usage of theory of machine-engineering-science and details of machines,
usage of theory of mechanical-engineering materials,
usage of theory of technology of mechanical-engineering,
usage of theory of foundry production,
usage of theory of forge-stamp manufacture,
usage of theory of assembly manufacture, usage of theory of cutting of materials,
usage of theory of electrical-physical-chemistry processing,
usage of theory of thermal and strengthening powder materials,
usage of theory of manufacture of nonmetallic products,
usage of theory of machine-tool-construction, usage of theory of robotics,
usage of theory of tool manufacture,
usage of theory of mining mechanical-engineering,
usage of theory of metallurgical mechanical-engineering,
usage of theory of reactor construction, usage of theory of turbine construction,
usage of theory of special power-engineering installations,
usage of theory of chemical and oil mechanical-engineering,
usage of theory of locomotive-construction and carriage-building,
usage of theory of engine-construction, usage of theory of motor-car-industry,
usage of theory of ship-building, usage of theory of aircraft-construction,
usage of theory of space technics and rocket-production,
usage of theory of hoisting-transport mechanical-engineering,
usage of theory of building and road mechanical-engineering,
usage of theory of municipal mechanical-engineering,
usage of theory of tractor and agricultural mechanical-engineering,
usage of theory of mechanical-engineering for light industry,
usage of theory of polygraphic mechanical-engineering,
usage of theory of mechanical-engineering for the food-processing industry,
usage of theory of mechanical-engineering for trade and public catering,
usage of theory of household machines and devices, usage of theory of manufacture of weapon,
usage of theory of the other branches of mechanical-engineering,
usage of theory of the cognitive modeling technology
in the applications of mechanical-engineering;

the financing of applied researches and developments in the area
“ Applications of instrument-making ” –
usage of theoretical bases of instrument-making,
usage of theory of general technology of production and equipment in instrument-making,
usage of theory of designing and constructing of devices,
usage of theory of devices for the measurement of electrical and magnetic sizes,
usage of theory of devices for the measurement of mechanical sizes,
usage of theory of devices for the measurement of time and frequency,
usage of theory of devices for the measurement
of structure and physical-chemical properties of substances and materials,
usage of theory of devices for the heating-technical and heating-physical measurements,
usage of theory of devices for the measurement of acoustical sizes and characteristics,
usage of theory of devices for the measurement
of optical and lighting-technical sizes and characteristics,
usage of theory of devices for the measurement of ionization radiations,
usage of theory of devices of non-destroying control of products and materials,
usage of theoretical bases of the general structural elements,
units of measuring devices, systems and means of office-equipment,
usage of theory of the cognitive modeling technology
in the applications of instrument-making;
the financing of applied researches and developments in the area
“Applications of polygraphy, reprography and photo-cinema-technics” –
usage of theory of polygraphy, reprography and photo-cinema-technics,
usage of theory of the cognitive modeling technology
in the applications of polygraphy, reprography and photo-cinema-technics;
the financing of applied researches and developments in the area
“ Applications of light industry ” –
usage of theory of textile industry,
usage of theory of knitted industry,
usage of theory of clothing industry,
usage of theory of tanning industry,
usage of theory of fur industry,
usage of theory of industry of artificial leather and film materials,
usage of theory of shoe industry,
usage of theory of leather-haberdashery industry,
usage of theory of bristle-brush manufacture,
usage of theory of manufacture of accessories,
usage of theory of the cognitive modeling technology
in the applications of light industry;

the financing of applied researches and developments in the area “Applications of food-processing industry” – usage of theory of food raw materials and auxiliary materials, usage of theory of the processes and devices of food manufactures, usage of theory of (grain-)elevator and flour(-grinding)-sereals(croup) industry, usage of theory of mixed fodder industry, usage of theory of baking and macaroni industry, usage of theory of confectionery industry, usage of theory of sugar industry, usage of theory of starched-treacle industry, usage of theory of barmy industry, usage of theory of brewing industry, usage of theory of spirituous industry, usage of theory of the industry of high-alcohol drinks, usage of theory of wine-making (vinous) industry, usage of theory of the industry of without-alcohol (soft) drinks, usage of theory of canning, vegetable-drying and food-concentrate industry, usage of theory of food-gustatory industry, usage of theory of tobacco industry, usage of theory of meat and bird-fancier-processing industry, usage of theory of the manufacture of eggs and egg products, usage of theory of dairy (milk) industry, usage of theory of butter-fatty (creamery) industry, usage of theory of the cognitive modeling technology in the applications of food-processing industry;

the financing of applied researches and developments in the area “Applications of architecture and construction” ()* – usage of engineering-theoretical bases of architecture and construction, usage of theory of building materials and products, usage of theory of building constructions, usage of theory of technology of building-installation works, usage of theory of technology of production of building materials and products, machines, mechanisms, equipment and tool, used in the construction and industry of building materials, usage of theory of engineering researches in construction, usage of theory of architectural-building designing, usage of theory of regional (district) lay-out, usage of theory of town-planning, usage of theory of objects of construction and engineering support of objects of construction, usage of theory of tendencies, dependences and laws in architecture and construction, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology, usage of theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),

usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the algorithm of formation of the cognitive model structure, usage of theory of the technique of research of the cognitive models parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of the adaptive automation means of architecture and construction (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others), usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of construction of the buildings and constructions, usage of theory of organization and plan of carrying out of the experiment, usage of theory of the research of parameters of the parametrical cognitive models block, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of construction, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scale, factor analysis and bibliographic lists; ***the financing of applied researches and developments in the area “ Applications of transport ”*** – usage of theory of railway transport, usage of theory of motor-car transport, usage of theory of water transport, usage of theory of air transport, usage of theory of pipeline transport, usage of theory of industrial transport, usage of theory of municipal transport, usage of theory of interaction of the different kinds (types) of transport, usage of theory of mixed transportations, usage of theory of the other kinds (types) of transport, usage of theory of the cognitive modeling technology in the applications of transport].

IV. “The applied researches financing department “Applications of the scientific problems of agro-industrial complex” (“SNPAK”) [the financing of applied researches and developments in the area “Applications of agriculture and hunting economy” – usage of theory of agricultural biology, usage of theory of soil-science, usage of theory of agriculture, usage of theory of agricultural melioration, usage of theory of agro-chemistry, usage of theory of plant-growing, usage of theory of protection of agricultural plants, usage of theory of animal-industry, usage of theory of veterinary-science, usage of theory of preparation of production of agriculture, usage of theory of hunting and hunting economy, usage of theory of forestry economy, usage of theory of economics and organization of agriculture, usage of theory of mechanization and electrification of agriculture, usage of theory of the cognitive modeling technology in the applications of agriculture and hunting economy; the financing of applied researches and developments in the area “Applications of fishery economy and aqua-culture” – usage of theory of biological resources of the world ocean and internal reservoirs, usage of theory of aqua-culture, usage of theory of fish-breeding, usage of theory of industrial fishery, usage of theory of technical operation of fleet of fishing industry, usage of theory of technical operation of fish seaports, usage of theory of technology of processing of raw materials of water origin, usage of theory of equipment for the fish-processing industry, usage of theory of the cognitive modeling technology in the applications of fishery economy and aqua-culture; the financing of applied researches and developments in the area “Applications of water economy” – usage of theory of scientific bases of water economy, usage of theory of water-economy construction, usage of theory of hydro-technical and hydro-ameliorative constructions, usage of theory of irrigating and water supply, usage of theory of irrigating systems, usage of theory of drying systems, usage of theory of sewage waters, their clearing and use, usage of theory of quality of water, usage of theory of test, measurement and control in the water economy, usage of theory of mechanization and automation in the water economy, usage of theory of complex use of water resources, usage of theory of the cognitive modeling technology in the applications of water economy].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

3.3.3. The applied researches financing direction “Cognitive modeling in the geo-political sciences and researches” (“CM in G-PS and R”) (“NSGI”) of “SF “SFA CMT” n. a. Prokopenko N.A.”

The developed “The applied researches financing direction “Cognitive modeling in the geo-political sciences and researches”” (“NSGI”) treats to the applied researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru) [see the applied researches financing directions and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches financing department “Applications of geo-politics and safety” (“SGB”) [*the financing of applied researches and developments in the area “Applications of demography”* – usage of theory and methodology of demographical science, usage of theory of general problems of national-population, usage of theory of statistics of population, usage of theory of history of population, usage of theory of historical demography, usage of theory of moving of population, usage of theory of geographical demography, usage of theory of population of the world, usage of theory of the cognitive modeling technology in the applications of demography; *the financing of applied researches and developments in the area “Applications of politics and political sciences”* – usage of theory and methodology of political researches, usage of theory of history of political doctrines, usage of theory of political systems, usage of theory of internal politics, usage of theory of international relations, usage of theory of foreign (external) politics and diplomacy, usage of theory of the cognitive modeling technology in the applications of politics and political sciences;

the financing of applied researches and developments in the area “Applications of complex studying of separate countries and regions” – usage of theory of researches of RF as a particular and RF as a whole, usage of theory of The Northwest federal district of RF, usage of theory of The Central federal district of RF, usage of theory of The Privolgsky federal district of RF, usage of theory of The Southern federal district of RF, usage of theory of The Uralian federal district of RF, usage of theory of The Siberian federal district of RF, usage of theory of The Far-East federal district of RF, usage of theory of the areas and territories of the former USSR, usage of theory of the Baltic countries and Baltic, usage of theory of the countries of CIS of East Europe, usage of theory of the countries of CIS of Zacaucasia, usage of theory of the countries of CIS of Central Asia, usage of theory of Europe as a whole, usage of theory of Western Europe, usage of theory of Scandinavia and the Scandinavian countries, usage of theory of Southern Europe, usage of theory of Central Europe, usage of theory of East Europe as a whole, usage of theory of Asia as a whole, usage of theory of Forward Asia, usage of theory of East Asia, usage of theory of Southern Asia, usage of theory of South-East Asia, usage of theory of Central Asia, usage of theory of Near and Middle East, usage of theory of Africa as a whole, usage of theory of Northern Africa, usage of theory of East Africa, usage of theory of Central Africa, usage of theory of Western Africa, usage of theory of Southern Africa, usage of theory of America as a whole, usage of theory of USA and Canada, usage of theory of Central America, usage of theory of South America, usage of theory of Australia and the countries of Oceania, usage of theory of the polar areas – the Arctic and Antarctic areas, usage of theory of the surface of The Earth and land, oceans, seas and internal waters, usage of theory of the other physical-geographical features of The Earth, usage of theory of the cognitive modeling technology in the applications of complex studying of separate countries and regions; *the financing of applied researches and developments in the area “Applications of problems of space flights”* – usage of theory of use of space systems for connection and navigation, usage of theory of studying of extraterrestrial territories and prospects of astronautics, usage of theory of research of The Earth and astronomical objects by the space automation means from space, usage of theory of the cognitive modeling technology in the applications of problems of space flights].

II. “The applied researches financing department “Applications of classical and military history”” (“SVIT”) [*the financing of applied researches and developments in the area “ Applications of history ”* – usage of theory of general history, usage of theory of history of Azerbaijan, usage of theory of history of Armenia, usage of theory of history of Belorussia, usage of theory of history of Georgia, usage of theory of history of Kazakhstan, usage of theory of history of Kirghizia, usage of theory of history of Moldova, usage of theory of history of RF, usage of theory of history of Tajikistan, usage of theory of history of Turkmenia, usage of theory of history of Uzbekistan, usage of theory of history of Ukraine, usage of theory of history of the separate processes, parties and phenomena of human activity, usage of theory of the cognitive modeling technology in the applications of history of RF and countries of near abroad; *the financing of applied researches and developments in the area “Applications of history of Ancient world, Ancient Greece and Ancient Rome, history of Medieval Europe, history of USA, Australia and Oceania, history of Arctic and Antarctic, history of RF, modern history of USSR, newest history of RF, history of The Solar system and planets”* – usage of theory of history of Ancient world, Ancient Greece and Ancient Rome, usage of theory of history of Medieval Europe, usage of theory of history of USA, Australia and Oceania, usage of theory of history of Arctic and Antarctic, usage of theory of history of RF, usage of theory of modern history of USSR, usage of theory of newest history of RF, usage of theory of history of The Solar system and planets, usage of theory of the cognitive modeling technology in the applications of history of RF and countries of far abroad].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

**3.3.4. The applied researches financing direction
“Cognitive modeling in the society steady
development of post-industrial country”
 (“CM in SSDP-IC”) (“NURS”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The applied researches financing direction
“Cognitive modeling in the society
steady development of post-industrial country”” (“NURS”)
treats to the applied researches financing divisions
of “The scientific fund “System and financial analysis based on
cognitive modeling technology” named after Prokopenko N.A.”
 (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF
in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””)
and the add. component of the system of science and education of the modern country
for the financing of creation, distribution and use
of the applied main and derivative scientific results
of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru)
[see the applied researches financing directions and departments of “SF”]:
1) it is executed by the principle of “the administrative-economy submission”;
2) works in the several main directions, which allow to provide
the financing of development, production and promotion
of the applied main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU “LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The applied researches financing department
“Applications of the complex problems of country development”” (“SPUR”) (*)
*[the financing of applied researches and developments in the area
“Applications of economic problems of national economy management”* –
usage of theory of self-financing, usage of theory of economic stimulation,
usage of theory of manpower resources,
usage of theory of the cognitive modeling technology
in the applications of economic problems of national economy management;

*the financing of applied researches and developments in the area
“Applications of global philosophical problems, philosophical and methodological
problems of science and scientific knowledge as a whole” (*) –*

usage of theory of modern philosophy, usage of theory of dialectical logic,
usage of theory of social sciences,
usage of theory of modern social philosophy,
usage of theory of modern sociology,
usage of theory of demography and people-population,
usage of theory of world economy and economics,
usage of theory of grammar and applied science of language,
usage of theory of art and art-science,
usage of theory of artificial intelligence,
usage of theory of biological chemistry,
usage of theory of regional-geography (country-science),
usage of theory of economic and social geography,
usage of theory of toponymics, usage of theory of astro-physics,
usage of theory of pharmacology and chemo-therapy,
usage of theory of normal and pathological physiology,
usage of theory of genetic engineering, usage of theory of bio-technology,
usage of theory of agriculture,
usage of theory of medicine and public-health-services,
usage of theory of technical aesthetics and ergonomics,
usage of theory of preservation of environment,
usage of theory of the global ethical and global esthetical categories and problems,
usage of theory of social activity and social problems,
usage of theory of the sociological problems of printing, television and radio-broadcasting,
usage of theory of influences of anthropogenic changes of environment
on the health and social-labor potential of population,
usage of theory of the world economic development,
usage of theory of activity of international
economic organizations and associations,
usage of theory of economic development and growth,
usage of theory of prediction and planning of economics,
usage of theory of economic cycles and crises,
usage of theory of the social and economic problems
of development of the advanced and less developed countries,
usage of theory of the economic problems
of organization and management of the economy of the country,

usage of theory of the problems of functioning of market economy and the social-economic problems of labor, usage of theory of the legal problems of environment preservation and ecological law, usage of theory of the economic problems of politics, usage of theory of the general problems of political systems at socialism in the advanced and less developed countries, usage of theory of the foreign(external)-political aspects of global problems, usage of theory of the problems of war and peace, usage of theory of the means of sanction of international conflicts, usage of theory of the problems of disarmament and anti-war movement, usage of theory of movement of non-alignment, usage of theory of the international, federal, regional and local problems, usage of theory of international terrorism, usage of theory of the separate philosophical-theoretical problems of culture, usage of theory of the sociological problems of motion-picture-art, usage of theory of religious consciousness, usage of theory of relations of church and philosophical-theological schools to the problem of war and peace, usage of theory of philosophy of mutual-relations of religion and army, usage of theory of relation of religions and churches to the national-liberation movement, national and racial problems, usage of theory of the general problems of physical experiment, usage of theory of the physical problems of mechanics, usage of theory of the bio-chemical problems, usage of theory of the problems of safety of biological experiment, usage of theory of micro-molecular associations and the problems of recognition in molecular biology, usage of theory of the general problems of anthropogenesis in paleontology and archeology, usage of theory of the general problems of researches of The Sun, The Earth, stars, fogs and interstellar environment, atmosphere, chromosphere, crown, near-star environments, usage of theory of the problems of loss of weight of stars and star wind, usage of theory of the general problems of researches of stars, usage of theory of problematical rests, usage of theory and problematics of programming for the computer networks, usage of theory of the general problems of automation of designing,

\usage of theory of the general problems of researches, calculations and designing in the mining mechanical-engineering, usage of theory of the general problems of household radio-electronic equipment, usage of theory of genetic engineering for the decision of problem of bio-degradation, usage of theory of the sociological, demographical and psychological problems in construction, usage of theory of the general problems of melioration of agricultural grounds, usage of theory of the social-economic problems in countryside, usage of theory of the medical problems of space flights, usage of theory of the political problems of sport and sports single-kind-combats, the game kinds of sport, the speed-involving-strength kinds of sport, the complicated-coordinated kinds of sport, the technical kinds of sport and the cyclic kinds of sport, usage of theory of the general problems of war, usage of theory of training of staff, usage of theory of the problems of material interest of workers, usage of theory of the problems of material-technical supply, usage of theory of the problems of fire safety, usage of theory of information about the centres on studying of the problems of management, usage of theory of the general problems of prediction, usage of theory of role of the separate areas of knowledge in the decision of problems of environment and use of natural resources, usage of theory of the general problems of international cooperation, usage of theory of the problems of sorption and auto-purification of waters, usage of theory of the complex and regional problems of protection of waters, bowels, landscape and waste management, usage of theory of innovative materials, describing the research of space environment as a whole and interrelation of this problem with the other sciences and spheres of activity, usage of theory of the general problems and prospects of development of the methods of space researches, usage of theory of safety and the medical-biological problems of space flights, usage of theory of the general problems and principles of work of the space connection systems, usage of theory of the problems of development of extraterrestrial territories and prospects of astronautics, usage of theory of the nonconventional problems of researches of space environment, usage of theory of the cognitive modeling technology in the applications of global philosophical problems, philosophical and methodological problems of science and scientific knowledge as a whole;

the financing of applied researches and developments in the area “Applications of the complex problems of social sciences” – usage of theory of social-political idea, usage of theory of the global problems and labor, usage of theory of the cognitive modeling technology in the applications of complex problems of social sciences;

the financing of applied researches and developments in the area “Applications of the general and complex problems of technical and applied sciences and national economy branches” – usage of theory of materiology (materials-science), usage of theory of general technology of production, usage of theory of designing, usage of theory of construction, usage of theory of the flexible industrial systems, usage of theory of vacuum technics, usage of theory of cryogenic technics, usage of theory of corrosion and protection against corrosion, usage of theory of welding, usage of theory of optical manufacture, usage of theory of staff, usage of theory of control and quality management, usage of theory of installation, operation and repair of industrial equipment, usage of theory of material-technical supply, usage of theory of logistics, usage of theory of warehouse economy, usage of theory of container and packing, usage of theory of secondary raw materials, usage of theory of fire safety, usage of theory of safety, usage of theory of salvage-rescue services, usage of theory of technical aesthetics and ergonomics, usage of theory of protection of information, usage of theory of the cognitive modeling technology in the applications of the general and complex problems of technical and applied sciences and national economy branches;

the financing of applied researches and developments in the area “Applications of the general and complex problems of natural and exact sciences” – usage of theory of the materials of general character, usage of theory of scientific and technical societies, conventions, congresses, conferences, symposiums, seminars and exhibitions, usage of theory of terminology, usage of theory of reference books and training literature, usage of theory of the cognitive modeling technology in the applications of general and complex problems of natural and exact sciences].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

**3.3.5. The applied researches financing direction
“Cognitive modeling
in the social-economic and jurisprudential sciences”
 (“CM in S-E and JS”) (“NSEPP”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The applied researches financing direction
“Cognitive modeling in the social-economic and jurisprudential sciences”” (“NSEPP”) treats to the applied researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches financing directions and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches financing department “Applications of the inter-branch jurisprudential and economic system researches of society and country”” (“SMEESI”) [*the financing of applied researches and developments in the area “Applications of state, law and jurisprudential sciences”* – usage of theory of state and law, usage of theory of history of state and law, usage of theory of history of political and legal doctrines, usage of theory of constitutional (state) law, usage of theory of municipal law, usage of theory of administrative law, usage of theory of information law, usage of theory of financial law, usage of theory of enterprise law, usage of theory of civil law, usage of theory of civil-procedural law (civil process), usage of theory of arbitration-procedural law (arbitration process), usage of theory of patent law, usage of theory of industrial property law, usage of theory of copyright and adjacent rights, usage of theory of succession law, usage of theory of family law,

usage of theory of agrarian law, usage of theory of the legal problems of environment preservation, usage of theory of ecological law, usage of theory of ground law, usage of theory of forestry law, usage of theory of water law, usage of theory of aerial-protection law, usage of theory of legislation about bowels, usage of theory of legislation about the fauna world, usage of theory of labor law, usage of theory of law of social support, usage of theory of law-enforcement authorities, usage of theory of criminal law, usage of theory of criminal-procedural law (criminal process), usage of theory of criminology, usage of theory of criminal-executive law, usage of theory of penitentiary, usage of theory of criminalistics, usage of theory of judicial statistics, usage of theory of international law, usage of theory of international private law, usage of theory of state and law of separate countries, usage of theory of the cognitive modeling technology in the applications of state law and jurisprudential sciences; ***the financing of applied researches and developments in the area “Applications of patent business, invention and rationalization work”*** – usage of theory of patent-information work, usage of theory of invention and rationalization activity, usage of theory of patent-license work, usage of theory of the technical-economic analysis on patent materials, usage of theory of invention law, usage of theory of the cognitive modeling technology in the applications of patent business, invention and rationalization work; ***the financing of applied researches and developments in the area “Applications of international economic relations”*** – usage of theory of prediction and planning, usage of theory of economic cycles and crisis, usage of theory of productive forces and social-economic structure, usage of theory of reproductive structure of economics, usage of theory of accumulation and consumption, usage of theory of well-being, usage of theory of territorial (local), regional (subject of federation), city (federal) and branch structure of economics, usage of theory of the cognitive modeling technology in the applications of international economic relations].

II. “The applied researches financing department
“Applications of the complex problems of micro-(macro-)economics,
social sphere and market economy of the country”” (“SPMSRH”)
[the financing of applied researches and developments in the area
“Applications of internal trade and tourist-excursion service” –
usage of theory of wholesale trade and retail trade,
usage of theory of public catering, usage of theory of hotel economy,
usage of theory of tourist-excursion service,
usage of theory of the cognitive modeling technology
in the applications of internal trade and tourist-excursion service;
the financing of applied researches and developments in the area
“ Applications of external trade ” –
usage of theory of communication of the external trade with manufacture,
usage of theory of the general questions of external trade,
usage of theory of the external-trade politics,
usage of theory of the kinds of external trade,
usage of theory of the structure of external trade,
usage of theory of calculations on the external-trade operations,
usage of theory of the external-trade transportations,
usage of theory of the world commodity markets,
usage of theory of international agreements about trade,
usage of theory of international contracts,
usage of theory of international trading organizations,
usage of theory of commodity agreements,
usage of theory of organization and management of external trade,
usage of theory of the cognitive modeling technology
in the applications of external trade;
the financing of applied researches and developments in the area
“ Applications of housing-communal economy,
housekeeping and household services ” –
usage of theory of housing economy,
usage of theory of communal economy,
usage of theory consumer services, usage of theory of housekeeping,
usage of theory of the cognitive modeling technology
in the applications of housing-communal economy,
housekeeping and household services;

the financing of applied researches and developments in the area
“ Applications of insurance ” –
usage of theory of the state social insurance,
usage of theory of the funds of social support and social insurance,
usage of theory of the external-trade insurance,
usage of theory of statistics of social insurance,
usage of theory of the cognitive modeling technology
in the applications of insurance;
the financing of applied researches and developments in the area
“Applications of investment and investment projects” –
usage of theory of concentration of capital,
usage of theory of the financial-industrial groups,
usage of theory of investment institutes,
usage of theory of the legal bases of investment activity,
usage of theory of the cognitive modeling technology
in the applications of investment and investment projects;
the financing of applied researches and developments in the area
“ Applications of social transport ” –
usage of theory of social railway transportation,
usage of theory of social motor-car transport,
usage of theory of social water transport,
usage of theory of social air transport,
usage of theory of social pipeline transport,
usage of theory of social industrial transport,
usage of theory of social municipal transport,
usage of theory of interaction of the different kinds (types) of social transport,
usage of theory of social mixed transportations,
usage of theory of the other kinds (types) of social transport,
usage of theory of the cognitive modeling technology
in the applications of social transport].

III. “The applied researches financing department
 ” Applications of economics, management,
 sociology, statistics and their other branches” (“SES”)
*[the financing of applied researches and developments in the area
 “Applications of economics and economic sciences”* –
 usage of economic theory, usage of theory of history of economic idea,
 usage of theory of accounting-economic sciences,
 usage of theory of the sciences of management of economics,
 usage of theory of economic history, usage of theory of world economy,
 usage of theory of international economic relations,
 usage of theory of economic development and growth,
 usage of theory of prediction and planning of economics,
 usage of theory of economic cycles and crises,
 usage of theory of productive forces and scientific-technical progress,
 usage of theory of the social-economic structure,
 usage of theory of the reproductive structure of economics,
 usage of theory of accumulation and consumption, usage of theory of well-being,
 usage of theory of the territorial structure of economics,
 usage of theory of regional and municipal economics,
 usage of theory of the branch structure of economics,
 usage of theory of financial science, usage of monetary and tax theories,
 usage of theory of credit-financial institutes (institutional intermediaries),
 usage of theory of the economic problems of organization and management of the economy of the country,
 usage of theory of self-financing, usage of theory of economic incentive provision,
 usage of theory of economics of labor, usage of theory of manpower resources,
 usage of theory of economics and organization of enterprise,
 usage of theory of management of enterprise,
 usage of theory of economics of the separate countries,
 usage of theory of the cognitive modeling technology
 in the applications of economics and economic sciences;
*the financing of applied researches and developments in the area
 “Applications of organization and management”* –
 usage of theory and methodology of management,
 usage of theory of the state and administrative management,
 usage of theory of organization of economics management,
 usage of theory of social management,
 usage of theory of prediction, usage of theory of futurology,
 usage of theory of strategical management,
 usage of theory of strategical planning,
 usage of theory of the cognitive modeling technology
 in the applications of organization and management;

the financing of applied researches and developments in the area “Applications of the other branches of economics” – usage of theory of manufacture of musical instruments, usage of theory of manufacture of fine-art products, usage of theory of jeweler industry, usage of theory of manufacture of toys, usage of theory of manufacture of sport products, usage of theory of manufacture of writing goods, usage of theory of the cognitive modeling technology in the applications of the other branches of economics;

the financing of applied researches and developments in the area “Applications of sociology” – usage of theory of the general problems of modern sociology, usage of theory of methodology of sociology, usage of theory of technique and technics of sociological researches, usage of theory of society as the system, usage of theory of social relations and processes, usage of theory of social classes, usage of theory of communities and groups, usage of theory of sociology of the spheres of social life, usage of theory of social phenomena and institutes, usage of theory of sociology of personality and behavior, usage of theory of historical and regional sociology, usage of theory of sociology, usage of theory of history of sociology, usage of theory of the cognitive modeling technology in the applications of sociology;

the financing of applied researches and developments in the area “Applications of statistics” – usage of theory of general statistics, usage of theory of economic statistics, usage of theory of branch statistics, usage of theory of social statistics, usage of theory of international statistics, usage of theory of statistics of the separate countries and social-economic systems, usage of theory of organization and management of statistics, usage of theory of the methods and technical means of gathering, processing and analysis of the statistical information, usage of theory of the cognitive modeling technology in the applications of statistics].

IV. “The applied researches financing department
“Applications of the financial analysis, accounting
and audit of the (credit) organization
based on the cognitive modeling technology” (“SFABUA”) (*)
*[the financing of applied researches and developments in the area
“Applications of the financial analysis, accounting and audit” (*)* –
usage of theory of the general questions of the financial analysis, accounting and audit,
usage of theory of tendencies, dependences and laws
of the financial analysis of the objects, processes and phenomena,
usage of theory of the system, information and cognitive approaches in economics,
usage of theory of the structure and dynamics of functioning
of the financial market of the economic system of the country,
usage of theory of the global purposes of standardization of the accounting
and the problems of unification of the accounting reporting-documentation (the primary registers),
usage of theory of the institutional subjects regulating
the creation, distribution and use of the international standards,
usage of theory of the principles of creation, distribution and use
of the international standards of the financial and accounting reporting-documentation,
usage of theory of the basic methods of transformation of the financial reporting-documentation
prepared by the national standards into the reporting-documentation by the international standards,
usage of theory of formation of the accounting balance
by the international standards of the financial reporting-documentation,
usage of theory of the qualifying tests of the professional participants
of the financial system of the (developed) country,
usage of theory of the administrative-legal forms of existence of the managing subject,
usage of theory of the features of procedure of the financial analysis of the managing subject,
usage of theory of the organizational structure of enterprise and its features
(the educational establishment of the system of education and the information-educational environment),
usage of theory of inflationary depreciation,
usage of theory of discounting and compounding
of the monetary streams in the economic system of the country,
usage of theory of the indexes of dynamics of the financial market and tools,
usage of theory of dynamics and communications of the managing subjects,
usage of theory of investment and innovative politics
of the managing subject in the financial system of the country,
usage of theory of the organizational, technological, scientific, methodical,
normative-legal, information, hardware, software, brainware,
raw materials, warehouse, personnel and economic preparations of manufacture
and the bases of the financial analysis and the quality estimation of activity
of the (credit) organization and other organization,
usage of theory of requirements and the structure of financial reporting-documentation
of the (non)industrial organizational structures,

usage of theory of the additional elements of the accounting and the financial reporting-documentation of the credit organization, usage of theory of the consumers of the financial reporting-documentation, usage of theory of the elements of the financial reporting-documentation connected with the changes of financial-economy activity, usage of theory of the simple and consolidated accounting and financial reporting-documentation, usage of theory of the methods of the financial analysis of the different forms of reporting-documentation, usage of theory of the structure of accounts of the accounting and financial analysis, usage of theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, usage of theory of the scheme of carrying out of the auditor check, the financial analysis and audit, usage of theory of the external and internal control of activity of the different organizations, usage of theory of the kinds of bank operations, usage of theory of the structure of the accounting balance (form №1), usage of theory of the structure of the explanatory note to the accounting balance, usage of theory of the structure of the report about profits and losses (form №2), usage of theory of the structure of the explanatory note to the report about profits and losses, usage of theory of the structure of the report about the change of capital (form №3), usage of theory of the structure of the report about the movement of monetary resources on accounts (form №4), usage of theory of the structure of the explanatory note to the report about the movement of means, usage of theory of the structure of the appendix to the accounting balance (form №5), usage of theory of the structure of the report about the target use of received means (form №6), usage of theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserve system USA, usage of theory of the analysis of stability of the (credit) organization and commercial bank, usage of theory of the basic analytical coefficients of the financial analysis, usage of theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology, usage of theory of the technique of formation of the normative-legal and the information basis for the financial analysis of the organization, usage of theory of the technique of additional check of the information basis of the financial analysis, usage of theory of the technique of creation and modification of the working plan of accounts and the model of accounting, usage of theory of the technique of carrying out of the financial analysis of the organization condition, usage of theory of the parametrical cognitive models block for the financial analysis and the increase of efficiency of functioning of the objects, processes and phenomena,

usage of theory of the structure of the cognitive models for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the algorithm of formation of the cognitive model structure, usage of theory of the technique of research of the cognitive model parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of formation and calculation of the units of the accounting balance of the industrial and nonproductive organization, usage of theory of calculation of the cognitive models parameters for the vertical, horizontal and trends static and dynamic financial analysis of the (credit) organization in the conditions of definiteness and uncertainty, usage of theory of software for the automation of research tasks, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of functioning of the (credit) organization in the economic system, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the cognitive models parameters for the vertical, horizontal and trend financial analysis, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the financial analysis of the dynamics of resultativity of the financial-economic activity of the (credit) organization, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

3.3.6. The applied researches financing direction “Cognitive modeling in the biological and medical sciences” (“CM in B and MS”) (“NBME”) of “SF “SFA CMT” n. a. Prokopenko N.A.”

The developed “The applied researches financing direction “Cognitive modeling in the biological and medical sciences”” (“NBME”) treats to the applied researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches financing directions and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches financing department “Applications of biology, ecology and physiology of plants”” (“SBE”) [*the financing of applied researches and developments in the area “ A p p l i c a t i o n s o f b i o l o g y ”* – usage of theory of the methods and equipment of biological researches, usage of theory of biology of plants, usage of theory of molecular biology of plants, usage of theory of bio-physics of plants, usage of theory of cytology of plants, usage of theory of embryology of plants, usage of theory of genetics of plants, usage of theory of virology of plants, usage of theory of micro-biology of plants, usage of theory of botany of plants, usage of theory of physiology of plants, usage of theory of zoology of plants, usage of theory of ecology of plants, usage of theory of anthropology of plants, usage of theory of communication of physiology of plants, person and animals, usage of theory of communication of morphology of plants, person and animals, usage of theory of immunology of plants, usage of theory of pharmacology of plants, usage of theory of toxicology of plants, usage of theory of radiation biology of plants, usage of theory of space biology of plants, usage of theory of bionics of plants, usage of theory of bio-cybernetics of plants, usage of theory of bio-engineering of plants, usage of theory of the cognitive modeling technology in the applications of biology;

***the financing of applied researches and developments in the area
“Applications of environment preservation and ecology of plants”*** –

usage of theory and methods of studying and preservation of environment, usage of theory of the ecological bases of use of the natural resources, usage of theory of international cooperation, usage of theory of contamination of environment, usage of theory of control of pollution, usage of theory of pollution and protection of atmosphere, usage of theory of pollution, usage of theory of protection of waters of land, seas and oceans, usage of theory of protection of soils, usage of theory of protection of bowels, usage of theory of the ecological bases of live-ability of plants, usage of theory of influence of the anthropogenic changes of environment on the health and vegetative potential of plants, on the condition of natural ecosystems, populations and organisms of the flora world, usage of theory of protection of the flora world, usage of theory of the anthropogenic influence on landscape, usage of theory of protection and optimization of landscape, usage of theory of reserved affair, usage of theory of protected natural territories and water-areas, usage of theory of acts of nature and accidents of anthropogenic origin, usage of theory of ecological safety, usage of theory of rational use of natural resources, usage of theory of reproduction of natural resources, usage of theory of preservation of environment and natural resources in the separate regions and countries, usage of theory of management of wastes, usage of theory of small-waste and without-waste technology, usage of theory of protection against from the noise, vibration, electrical and magnetic fields and radiations, usage of theory of the cognitive modeling technology in the applications of environment preservation and ecology of plants;

***the financing of applied researches and developments in the area
“Applications of medicine and public-health-services”*** –

usage of theory of medical-biological disciplines, usage of theory of medical materials, means and products, usage of theory of medical technics, usage of theory of clinical medicine, usage of theory of pharmacology, usage of theory of hygiene, usage of theory of epidemiology, usage of theory of the other branches of medicine and public-health-services, usage of theory of social hygiene, usage of theory of organization and management of public-health-services, usage of theory of the cognitive modeling technology in the applications of medicine and public-health-services].

II. “The applied researches financing department
“Applications of bio-technology, bio-medicine,
ergonomics and labor safety of organic individuals”” (“SB”) (*)
*[the financing of applied researches and developments in the area
“Applications of bio-technology” (*)* –
usage of theory of raw materials and producents for the bio-technological manufacture,
usage of theory of bio-technological processes and devices,
usage of theory of cellular engineering,
usage of theory of technological bio-energetics,
usage of theory of genetic engineering,
usage of theory of enzymological engineering,
usage of theory of the immuno-bio-technological methods of analysis,
usage of theory of the other problems of bio-technology,
usage of theory of the cognitive modeling technology
in the applications of physical-chemical bio-technology and genetic engineering,
usage of theory of modeling of the structure of desoxyribonucleic acid
based on the multidimensional cognitive cylinder;
*the financing of applied researches and developments in the area
“Applications of bio-medicine and public-health-services” (*)* –
usage of theory of medical-biological disciplines,
usage of theory of bio-medical materials, means and products,
usage of theory of bio-medical technics,
usage of theory of clinical bio-medicine,
usage of theory of bio-pharmacology,
usage of theory of bio-hygiene and bio-epidemiology,
usage of theory of the other branches of bio-medicine and public-health-services,
usage of theory of social bio-hygiene,
usage of theory of organization and management of public-health-services,
usage of theory of the modified model of reduced eye,
usage of theory of the modified model of reduced ear,
usage of theory of software for the automation of research tasks
of the physiological, psychological and linguistic parameters
of the parametrical cognitive models block,
usage of theory of the statistical substantiation
of practical use of the received results,

usage of theory of the physiological, psychological and linguistic factors influencing to the efficiency of functioning of the information-educational environment and the increase of resultativity of the automated training system with the properties of adaptation based on the cognitive models, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the physiological, psychological and linguistic parameters of the cognitive models of the subject of training and the means of training, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of bio-medicine and public-health-services, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the complex analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, usage of theory of the complex analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates; *the financing of applied researches and developments in the area “ Applications of labor safety ”* – usage of theory of organization and management of labor safety and working conditions, usage of theory of industrial sphere, usage of theory of safety precaution, usage of theory of professional illnesses and their preventive-support, usage of theory of accidents on manufacture and their prevention, usage of theory of work-capacity, usage of theory of examination of work-capacity, usage of theory of labor safety on the categories of workers, usage of theory of work safety on the manufactures of increased danger, usage of theory of the cognitive modeling technology in the applications of labor safety].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

**3.3.7. The applied researches financing direction
“Cognitive modeling
in the humanitarian sciences, art and creativity”
 (“CM in HSA and C”) (“NGNOT”)
of “SF "SFA CMT" n. a. Prokopenko N.A.”**

The developed “The applied researches financing direction “Cognitive modeling in the humanitarian sciences, art and creativity”” (“NGNOT”) treats to the applied researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches financing directions and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches financing department “Applications of (cognitive) linguistics, (national) creativity, culture, art and religion” (“SGNT”) (*) [the financing of applied researches and developments in the area “Applications of science of language” – usage of theory of general science of language, usage of theory of applied science of language, usage of theory of languages of the world, usage of theory of the cognitive modeling technology in the applications of science of language;

the financing of applied researches and developments in the area “Applications of (cognitive) linguistics” ()* – usage of theory of the general questions of languages, usage of theory of (cognitive) linguistics, usage of theory of applied linguistics, usage of theory of the cognitive modeling technology in the applications of (cognitive) linguistics, usage of theory of the modified stratified-step model of understanding (cognitive linguistics) of the content of information fragments, usage of theoretical bases of (cognitive) linguistics and the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, usage of theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors);

the financing of applied researches and developments in the area “Applications of culture and cultural-science” – usage of theory, methodology and philosophy of culture, usage of theory of history of culture, usage of theory of history of the study of culture, usage of theory of culture in the modern world, usage of theory of organization and management in the area of culture, usage of theory of international cooperation in the area of culture, usage of theory of hardware of the establishments of culture, usage of theory of social-cultural activity in the sphere of leisure, usage of theory of library affair, usage of theory of library-science, usage of theory of bibliography, usage of theory of librarygraphy-science, usage of theory of museum affair, usage of theory of museology, usage of theory of protection of the monuments of history and culture, usage of theory of archival affair, usage of theory of archival-science, usage of theory of culture and cultural-science of the separate countries and peoples, usage of theory of the cognitive modeling technology in the applications of culture and cultural-science;

the financing of applied researches and developments in the area “Applications of art and art-science” – usage of theory and methodology of art, usage of theory of the problems of art-science, usage of theory of history of art and the modern condition of art, usage of theory of art-science and fine-art criticism, usage of theory of art in the modern world, usage of theory of organization and management in the area of art, usage of theory of international cooperation in the area of art, usage of theory of fine-art, usage of theory of music, usage of theory of musicology, usage of theory of theatre, usage of theory of theater-science, usage of theory of mass shows and theatrical holidays, usage of theory of dance, usage of theory of choreography, usage of theory of circus, usage of theory of platform, usage of theory of cinema, usage of theory of motion-picture-art, usage of theory of national folk art, usage of theory of art of the separate countries and peoples, usage of theory of the cognitive modeling technology in the applications of art and art-science;

the financing of applied researches and developments in the area “Applications of religion and atheism” – usage of theory of atheism and free-thinking, usage of theory of separate religions, usage of theory of church, usage of theory of cults, usage of theory of the problems of religious consciousness, usage of theory of philosophy and religion, usage of theory of religion, usage of theory of church and society, usage of theory of the organizational-practical activity of churches, usage of theory of history of atheism, usage of theory of religions and churches, usage of theory of the cognitive modeling technology in the applications of religion and atheism].

II. “The applied researches financing department “Applications of literature, science-study, philosophy, journalism and mass communication means”” (“SLPZ”) [*the financing of applied researches and developments in the area “Applications of literature, literary-science and oral national creativity”* – usage of theory of literature, usage of theory of history of literature, usage of theory of oral national creativity, usage of theory of the auxiliary literary-science disciplines, usage of theory of the products of fiction literature, usage of theory of the cognitive modeling technology in the applications of literature, literary-science and oral national creativity; *the financing of applied researches and developments in the area “Applications of science-study”* – usage of theory of the general questions of science-study, usage of theory of the development of science, usage of theory of science and society, usage of theory of sociology of science, usage of theory of scientific work, usage of theory of scientific creativity, usage of theory of the organization of science, usage of theory of politics in the area of science, usage of theory of the technique and technics of research work, usage of theory of economics of science, usage of theory of scientific staff, usage of theory of the international cooperation in science, usage of theory of science and scientific-research work in the separate countries, usage of theory of the cognitive modeling technology in the applications of science-study; *the financing of applied researches and developments in the area “Applications of mass communication, journalism and mass media means”* – usage of theory of the mass communication means, usage of theory of the open network information resources (“Internet” and “WWW”), usage of theory of journalism, usage of theory of the mass media means, usage of theory of printing, usage of theory of television (TV), usage of theory of radio, usage of theory of use of the technical means for mass communication, usage of theory of the cognitive modeling technology in the applications of mass communication means, journalism and mass media means].

III. “The applied researches financing department
“Applications of the problems of (cognitive) psychology, education, science
and support of young scientists (the programs of grants and others)” (“SPOPMU”) (*)
[the financing of applied researches and developments in the area
“Applications of national education and pedagogics” –
 usage of theory of general pedagogics, usage of theory of history of education and pedagogics,
 usage of theory of personnels, usage of theory of the systems of education,
 usage of theory of preschool education, usage of theory of preschool pedagogics,
 usage of theory of general-educational (comprehensive) school,
 usage of theory of pedagogics of general-educational (comprehensive) school,
 usage of theory of out-of-school (additional) education and training,
 u s a g e o f t h e o r y o f o u t - o f - s c h o o l p e d a g o g i c s ,
 usage of theory of special (correctional) schools, usage of theory of defectology,
 usage of theory of primary professional-technical education,
 usage of theory of pedagogics of professional school,
 usage of theory of average professional education,
 usage of theory of pedagogics of average professional education,
 usage of theory of higher professional education,
 usage of theory of pedagogics of higher professional school,
 usage of theory of education of adults, usage of theory of improvement of professional skills,
 u s a g e o f t h e o r y o f s e l f - e d u c a t i o n ,
 usage of theory of family training, usage of theory of family pedagogics,
 usage of theory of the specialized branches of pedagogics,
 usage of theory of the technical means of training and learning equipment,
 usage of theory of national education and pedagogics in the separate countries,
 usage of theory of the cognitive modeling technology
 in the applications of national education and pedagogics;
the financing of applied researches and developments in the area
“Applications of (cognitive) psychology” (*) –
 usage of theory of general psychology, usage of theory of psychology of development,
 usage of theory of age psychology, usage of theory of comparative psychology,
 usage of theory of social psychology, usage of theory of applied psychology,
 usage of theory of the cognitive modeling technology
 in the applications of (cognitive) psychology,
 usage of theory of the modified stratified-step model
 of processing (cognitive psychology) of the content of information fragments,
 usage of theoretical bases of cognitive psychology
 and the cognitive modeling technology,

usage of theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), usage of theory of the technical means of support of the complex analysis (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others); ***the financing of applied researches and developments in the area “Applications of the grants of “RFBR”, “RHSF” and other organizations”*** – usage of theory of the general details of the grants of “The Russian fund of basic researches”, “The Russian humanitarian scientific fund” and other organizations, usage of the theoretical-methodological basis of grants, usage of theory of reception, distribution and use of the grants of “RFBR”, “RHSF” and other grant-formation organizations, usage of theory of the cognitive modeling technology in the applications of the grants of “RFBR”, “RHSF” and other organizations].

IV. “The applied researches financing department
“Applications of the innovations of the project “The Russian encyclopedias”,
philosophy of science, technics and technology on the branches of knowledge” (“SRE”)
[the financing of applied researches and developments in the area
“Applications of encyclopedias on natural and exact sciences” –
usage of theory of encyclopedias on mathematics, cybernetics, physics, mechanics,
chemistry, biology, geodesy, cartography, geo-physics, geology, geography, astronomy,
usage of theory of the general and complex problems of natural and exact sciences,
usage of theory of the cognitive modeling technology
in the applications of encyclopedias on natural and exact sciences;
the financing of applied researches and developments in the area
“Applications of encyclopedias on social sciences” –
usage of theory of encyclopedias on social sciences as a whole,
usage of theory of encyclopedias on philosophy, history and historical science,
sociology, demography, economics and economic sciences,
state, law and jurisprudential sciences, politics and political sciences,
science - study, culture and cultural - science,
national education and pedagogics, psychology, science of language,
literature and literary-science, oral national creativity,
art and art-science, mass communication and journalism,
the mass media means, informatics, religion and atheism,
the complex studying of the separate countries and regions,
the complex problems of social sciences,
usage of theory of the cognitive modeling technology
in the applications of encyclopedias on social sciences;

the financing of applied researches and developments in the area “Applications of encyclopedias on technical, applied and economic sciences” – usage of theory of encyclopedias on power-engineering, electrical-engineering, electronics, radio-engineering, connection, automatics, computer engineering, mining, metallurgy, mechanical-engineering, nuclear technics, instrument-making, polygraphy, reprography, photo-cinema-technics, chemical technology and chemical industry, bio-technology, light industry, food-processing industry, forest and wood-processing industry, construction and architecture, agriculture and forestry economy, fish economy and aqua-culture, water economy, internal trade, tourist-excursion service, external trade, transport, housing-communal economy, housekeeping, consumer service, medicine and public-health-services, physical training and sport, military science, the other branches of economics, usage of theory of the cognitive modeling technology in the applications of encyclopedias on technical, applied and economic sciences;

the financing of applied researches and developments in the area “Applications of encyclopedias on the general and complex problems of technical and applied sciences and the branches of national economy” – usage of theory of encyclopedias on organization and management, statistics, standardization, patent business, invention and rationalization, labor safety, environment preservation and ecology of person, space researches, metrology, usage of theory of the cognitive modeling technology in the applications of encyclopedias on the general and complex problems of technical and applied sciences and the branches of national economy;

the financing of applied researches and developments in the area “Applications of philosophy of science, technics and technology” – usage of theory of the general problems of modern philosophy of science, technics and technology, usage of theory of the general-philosophical problems, usage of theory of logic of philosophy and methodology of science, usage of theory of social philosophy, usage of theory of ethics, usage of theory of aesthetics, usage of theory of philosophy of religion and atheism, usage of theory of history of philosophy, usage of theory of the cognitive modeling technology in the applications of philosophy of science, technics and technology].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

**3.3.8. The applied researches financing direction
“Cognitive modeling
in the physical training and sport”
 (“CM in PHT and S”) (“NFS”)
of “SF "SFA CMT" n. a. Prokopenko N.A.”**

The developed “The applied researches financing direction "Cognitive modeling in the physical training and sport"” (“NFS”) treats to the applied researches financing divisions of “The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.” (“SF "SFA CMT" n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO "Academy of cognitive natural sciences"” (“SIO "ACNS"”) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches financing directions and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches financing department "Applications of sport, sports sciences and actions” (“SSSNM”) [*the financing of applied researches and developments in the area “Applications of physical training and sport”* – usage of theory of physical training and sport, usage of theory of the methodological and medical-biological bases of physical training and sport, usage of theory of the material-technical base of physical training and sport, usage of theory of the methodical bases of the kinds of sport and sport competitions, usage of theory of the cognitive modeling technology in the applications of physical training and sport].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

**3.3.9. The applied researches financing direction
“Cognitive modeling in the military sciences”
 (“CM in MILS”) (“NVN”)
of “SF “SFA CMT” n. a. Prokopenko N.A.”**

The developed “The applied researches financing direction “Cognitive modeling in the military sciences”” (“NVN”) treats to the applied researches financing divisions of “The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) as the first SF in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the financing of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches financing directions and departments of “SF”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the financing of development, production and promotion of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches financing department “Applications of architecture, construction, technics, history, education, politics and economics in the armed forces”” (“SASTIOPEVC”) [*the financing of applied researches and developments in the area “Applications of military sciences”* – usage of theory of the doctrine about war and army, usage of theory of military history, usage of theory of military education, usage of theory of training of staff, usage of theory of military politics, usage of theory of military doctrines, usage of theory of military science, usage of theory of military-applied sciences, usage of theory of arms and military technics, usage of theory of armed forces, usage of theory of military economics, usage of theory of the cognitive modeling technology in the applications of military sciences].

The applied researches financing directions and departments of “SF” allow to finance the development, production and promotion of the applied main and derivative scientific results of CMT.

3.4. The local and international scientific newspapers and journals of “SF “SFA CMT” n. a. Prokopenko N.A.”

“The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A.” (“SF “SFA CMT” n. a. Prokopenko N.A.” – “SF”) (www.sfacmtfund.spb.ru) as the first SF in the structure of “SIO “ACNS”” (www.acns.spb.ru) of “AUT CMT SFA” Vetrov A.N. (www.vetrovan.spb.ru) includes the scientific newspapers and scientific journals with the results of financing.

The scientific newspapers and journals of “SF” (“*” – together with “SIO “ACNS””) are intended for the promotion of the main and derivative scientific results of the system, financial and complex analysis at the microscopic level: firstly, - the 26 fundamental researches financing departments on the 13 fundamental researches financing branches of “SF” corresponds to the 26 fundamental scientific researches sections (departments) on the 13 fundamental scientific researches branches of “SIO “ACNS””, and also corresponds to the 26 fundamental developments departments on the 13 fundamental developments branches directly of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”, besides, corresponds to the 26 sections on 13 branches of “The Russian academy of sciences”; secondly, - the 27 applied researches financing departments on the 9 applied researches financing directions of “SF” corresponds to the 27 applied scientific researches sections (departments) on the 9 applied scientific researches directions of “SIO “ACNS””, and also corresponds to the 27 scientific-researches laboratories on the 9 applied developments directions directly of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.”, besides, corresponds to the 27 sections on the 9 directions of “The Russian academy of natural sciences”:

I. The local scientific newspapers (SN) and scientific journals (SJ) of “SF” (1 SN and 1 SJ).

1.1. SN “News of SF “SFA CMT” n. a. Prokopenko N.A.” (the printing and electronic in the national language).

1.2. SJ “Proceedings of SF “SFA CMT” n. a. Prokopenko N.A.” (the printing and electronic in the national language).

II. The international scientific journals (ISJ) of “SF” (5 ISJ).

- 2.1. ISJ “Bulletin of SF "SFA CMT" n. a. Prokopenko N.A.” (in the nat. and int. language).
- 2.2. ISJ “Cognitive sciences: common questions of financ.” (in the nat. and int. language) (*).
- 2.3. ISJ “Cognitive modeling technology for the microscopic system analysis: financing and achievements” (in the nat. and int. language) (*).
- 2.4. ISJ “Cognitive modeling technology for the microscopic financial analysis: financing and achievements” (in the nat. and int. language) (*).
- 2.5. ISJ “Cognitive modeling technology for the microscopic complex analysis: financing and achievements” (in the nat. and int. language) (*).

III. The regional (RFSJ) and international fundamental scientific journals (IFSJ) of “SF” (13 branches of sciences (R)IFSJ).

- 3.1. (R)IFSJ “The microscopic cognitive modeling (MCM) in the fund. scientific res. (FSR): financ. and achievements” (“The mathematical sciences”), (the multi-section – the 2 sections, in the national and international language).
- 3.2. (R)IFSJ “MCM in FSR: financ. and achievements” (“The physical sciences”), (the multi-section – the 2 sections, in the national and international language).
- 3.3. (R)IFSJ “MCM in FSR: financ. and achievements” (“The nano-technologies and IT”), (the multi-section – the 3 sections, in the national and international language).
- 3.4. (R)IFSJ “MCM in FSR: financ. and achievements” (“The exact sciences”), (the multi-section – the 3 sections, in the national and international language).
- 3.5. (R)IFSJ “MCM in FSR: financ. and achievements” (“The industry and chem. sciences”), (the multi-section – the 2 sections, in the national and international language).
- 3.6. (R)IFSJ “MCM in FSR: financ. and achievements” (“The biological sciences”), (the multi-section – the 2 sections, in the national and international language).
- 3.7. (R)IFSJ “MCM in FSR: financ. and achiev.” (“The physiology, fund. med. and health care”), (the multi-section – the 2 sections, in the national and international language).
- 3.8. (R)IFSJ “MCM in FSR: financ. and achiev.” (“The sciences about The Earth”), (the multi-section – the 2 sections, in the national and international language).
- 3.9. (R)IFSJ “MCM in FSR: financ. and achiev.” (“The social sciences”), (the multi-section – the 2 sections, in the national and international language).
- 3.10. (R)IFSJ “MCM in FSR: financ. and achiev.” (“The glob. problems and int. relation”), (the multi-section – the 2 sections, in the national and international language).
- 3.11. (R)IFSJ “MCM in FSR: financ. and achiev.” (“The historical-philolog. sciences”), (the multi-section – the 2 sections, in the national and international language).
- 3.12. (R)IFSJ “MCM in FSR: financ. and achiev.” (“The sports sciences”), (the multi-section – the 1 section, in the national and international language).
- 3.13. (R)IFSJ “MCM in FSR: financ. and achiev.” (“The military sciences”), (the multi-section – the 1 section, in the national and international language).

IV. The regional (RASJ) and international applied scientific journals (IASJ) of "SF" (9 branches of sciences (R)IASJ).

- 4.1. (R)IASJ "MCM in the applied scientific researches (ASR): financing and achievements" ("The natural sciences"), (the multi-section – the 8 sections, the regional printing and electronic in the nat. language and the international electronic in the int. language).
- 4.2. (R)IASJ "MCM in ASR: financing and achievements" ("The applied technical sciences and technologies"), (the multi-section – the 4 sections, the regional printing and electronic in the nat. language and the international electronic in the int. language).
- 4.3. (R)IASJ "MCM in ASR: financing and achievements" ("The geo-political sciences and researches"), (the multi-section – the 2 sections, the regional printing and electronic in the nat. language and the international electronic in the int. language).
- 4.4. (R)IASJ "MCM in ASR: financing and achievements" ("The steady development of society of the post-industrial country"), (the multi-section – the 1 section, the regional printing and electronic in the nat. language and the international electronic in the int. language).
- 4.5. (R)IASJ "MCM in ASR: financing and achievements" ("The social-economic and jurisprudential sciences"), (the multi-section – the 4 sections, the regional printing and electronic in the nat. language and the international electronic in the int. language).
- 4.6. (R)IASJ "MCM in ASR: financ. and achievements" ("The biol. and med. sciences"), (the multi-section – the 2 sections, the regional printing and electronic in the nat. language and the international electronic in the int. language).
- 4.7. (R)IASJ "MCM in ASR: financing and achievements" ("The humanitarian sciences, art and creativity"), (the multi-section – the 4 sections, the regional printing and electronic in the nat. language and the international electronic in the int. language).
- 4.8. (R)IASJ "MCM in ASR: financ. and achievements" ("The phys. training and sport"), (the multi-section – the 1 section, the regional printing and electronic in the nat. language and the international electronic in the int. language).
- 4.9. (R)IASJ "MCM in ASR: financ. and achievements" ("The military sciences"), (the multi-section – the 1 section, the regional printing and electronic in the nat. language and the international electronic in the int. language).

The scientific newspapers and journals of "SF "SFA CMT" n. a. Prokopenko N.A." allow to propagandize the financing of the main and derivative fundamental and applied scientific results of CMT.

4. "Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition achievements of science and technology named after Sobchak A.A."

1. The name of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." as the organization (legal entity – LE):
 - 1.1) the full company name of LE in the national language (Russian) – «Некоммерческая организация (учреждение) "Санкт-Петербургский выставочный центр имени Брежнева Л.И." на "Выставке достижений науки и технологии имени Собчака А.А."»;
 - 1.2) the full company name of LE in the international language (English) – “The noncommercial organization (establishment) "Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A."”;
 - 1.3) the reduced company name of LE in the national language (Russian) – «"СПбВЦ им. Брежнева Л.И." на "ВДНТ им. Собчака А.А."»;
 - 1.4) the reduced company name of LE in the international language (English) – “"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."”.
2. The description of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." as the organization (LE):
 - 2.1) it has the organizational-legal form – “The noncommercial organization (establishment)” – the mixed property of RF and “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., on the federal financing due to the monetary resources of the budget of RF and the foreign countries, LE and natural persons (NP) (non)residents;
 - 2.1.1) for the propaganda (financing) of the basic and derivative fundamental and applied scientific results;
 - 2.1.2) for the propaganda of reception of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N.;
 - 2.1.3) for the propaganda of payments (gifts) of the budget of RF and the foreign countries;
 - 2.1.4) for the propaganda of payments (gifts) of LE and NP (non)residents;
 - 2.1.5) for the propaganda of reception of sponsor's support and external financing;
 - 2.1.6) for the support of functioning of the organizational structures of “SIO "ACNS"”, “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, “SF "SFA CMT" n. a. Prokopenko N.A.” and “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”;
 - 2.2) it is “the noncommercial organization (establishment)” (with some commercial kinds of charges and incomes) with “the mixed form of ownership” (it is created and functioned due to the monetary resources of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., due to the monetary resources of RF and the foreign countries and due to the monetary resources of LE and NP (non)residents);

- 2.3) it acts in the civil circulation under its company name
 “"Saint-Petersburg exhibition centre named after Brezhnev L.I."
 at "Exhibition of achievements of science and technology named after Sobchak A.A."
 (“"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."”),
 which is defined in its constituent documents (the charter and const. contract)
 and it is included into the unique state register of LE
 at the state registration as the newly created (existing) LE
 for the implementation of the following kinds of activity according to
 “The All-Russian classifier of the kinds of economic activity” (“ACKEA” – «ОКБЭД»);
- 2.3.1) the information activity and scientific activity;
- 92.4 – “The activity of information agencies” (science and education);
- 2.3.2) the scientific - production activity;
- 91.1 – “The activity of commercial, entrepreneurial and professional organizations” (the scientific activity, the activity on interaction with the unions and associations of commercial workers, entrepreneurs, scientists, writers and others);
 - 67.13 – “The other auxiliary activity in the sphere of financial intermediary” (the information-consulting services of managing subjects, the information-auditor services of enterprises (organizations) and the information-auditor services of credit organizations);
- 2.3.3) the commercial (trading) activity;
- 51.12 – “The other retail trade in the unspecialized shops” (51.15.4 – “The activity of agents on the wholesale trade of radio-, tele-instrumentation and the technical carriers of information (with records and without records)”);
 - 52.4 – “The other retail trade in the specialized shops” (51.43.2 – “The wholesale trade of radio-, tele-instrumentation and the technical carriers of information (with records and without records)”);
 - 52.45 – “The retail trade of household electric-equipment, radio- and tele-instrumentation”;
 - 52.47 – “The retail trade of books, journals, newspapers, food-paper and writing goods” (51.47.21 – “The wholesale trade of books”; 51.47.22 – “The wholesale trade of newspapers and journals”; 51.56.1 – “The wholesale trade of paper and cardboard”);
- 2.3.4) the production - publishing activity;
- 22 – “The publishing and polygraphic activity (production) and the duplicating of the written down carriers of information” (the production and duplicating of optical discs for the laser storages of information with computer programs, books, monographies, reports on the scientific-research work (SRW), textbooks, scientific articles, scientific reports and multimedia-presentations);
 - 30.02 – “The production of electronic calculating machines (ECM) and other equipment for the information processing” (the production of programs for ECM, multimedia-presentations and auxiliary materials).

3. The sphere of scientific interests of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.":
the (microscopic) system analysis and control, the information technologies, the information-educational environments, the automated (remote) training systems, the innovative architectures and algorithms in the basis of the automation means of training, (cognitive) informatics, psycho-physiology of perception, (cognitive) psychology, (cognitive) linguistics, the (microscopic) financial analysis, accounting and audit of the enterprises and (credit) organizations, the (microscopic) complex analysis, theoretical mechanics, physical chemistry, molecular biology and medicine.
4. The directions of scientific researches of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.":
 - 4.1) it is engaged in the propaganda (financing) of the (microscopic) system analysis and the increase of efficiency of functioning of the (adaptive) information-educational environments;
 - 4.1.1) it propagandizes (finances) the development and modernization of the apparatus of the cognitive modeling technology for the (microscopic) system analysis of the (adaptive) information-educational environments;
 - 4.1.2) it propagandizes (finances) the creation and modernization of the structure of the parametrical cognitive models of the subject of training and the means of training;
 - 4.1.3) it is engaged in the propaganda (financing) of creation and modernization of the architecture of the (adaptive) automation means of training (at distance) based on the parametrical cognitive models block;
 - 4.2) it is engaged in the propaganda (financing) of the (microscopic) financial analysis and the increase of efficiency of functioning of the (credit) organizations;
 - 4.2.1) it propagandizes (finances) the development and modernization of the apparatus of the cognitive modeling technology for the (microscopic) financial analysis of the organizational structures of the enterprises and (credit) organizations;
 - 4.2.2) it propagandizes (finances) the creation and modernization of the structure of the parametrical cognitive models for the vertical, horizontal and trend (microscopic) financial analysis of the (credit) organizations based on the primary registers of financial and accounting reporting-documents;
 - 4.2.3) it is engaged in the propaganda (financing) of creation and modernization of the architecture of the means of automation of the financial analysis and audit based on the parametrical cognitive models block;
 - 4.3) it is engaged in the propaganda (financing) of the (microscopic) complex analysis and the increase of efficiency of functioning of the difficult objects, processes and phenomena;
 - 4.3.1) it propagandizes (finances) the development and modernization of the apparatus of the cognitive modeling technology for the (microscopic) complex analysis of the difficult objects, processes and phenomena;
 - 4.3.2) it propagandizes (finances) the creation and modernization of the structure of the parametrical cognitive models for the (microscopic) complex analysis based on the (multidimensional) cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere;
 - 4.3.3) it is engaged in the propaganda (financing) of creation and modernization of the architecture of the means of automation of the (microscopic) complex analysis based on the parametrical cognitive models block;
 - 4.3.4) it is engaged in the propaganda (financing) of development of the fundamental and applied scientific results in the area of theoretical mechanics, physical chemistry, molecular biology and medicine (preventive and clinical).

4.1. The general details

about “"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.””

“"Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A.”” (“"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.”” – “"SPbEC" at "EAST"”) acts as the add. component of the system of science and education of the country for the support of holding of the various exhibitions (financing) at the creation, distribution and use of the main and derivative fundamental and applied diverse scientific results of the cognitive modeling technology (www.vetrovan.spb.ru and www.eceast.spb.ru):

- 1) it was executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions of exhibition activity, which allow to provide the support of demonstration and promotion (financing) of the fundamental and applied scientific results (“The Nobel prize” in The Kingdom of Norway and The Kingdom of Sweden);
- 3) includes the several main divisions of organizational structure:

I. The administrative-scientific divisions of “"SPbEC" at "EAST"” [the director of “"SPbEC" at "EAST"” (at “SIO "ACNS"” or “*”), the secretary of the director of “"SPbEC" at "EAST"” (*), the head (director) of the scientific-consulting centre of “"SPbEC" at "EAST"” (*) on different exhibitions of the available scientific schools of the specified “SIO "ACNS"” and the deputy head of the scientific-consulting centre of “"SPbEC" at "EAST"” (*) at exhibitions on physical-mathematical, technical, social, economic, chemical, biological, medical, sports and military sciences].

II. The scientific-organizational divisions of “"SPbEC" at "EAST"” [the expert council on exhibitions of “"SPbEC" at "EAST"” (*) on phys.-math., tech., soc., econ., chem., biol., med., sport. and mil. sciences (*), the expert councils on exhibitions on directions (branches) of “SIO "ACNS"” (*) (the objects and subjects of research: the information-education environments, the (credit) organizations and the objects of theoretical mechanics), in particular on the physical-mathematical sciences (spec. 01.02.01 – “Theoretical mechanics” and others), on the technical sciences (spec. 05.13.10 – “Management in the social and economic systems”, 05.13.01 – “The system analysis, control and information processing” and others), on the social sciences (spec. 10.02.21 – “Applied and math. linguistics” and others), on the economic sciences (spec. 08.00.10 – “Finance, monetary circulation and credit” and others), on the chemical sciences (spec. 02.00.04 – “Physical chemistry” and others), on the biological sciences (spec. 03.00.03 – “Molecular biology” and others), on the medical sciences (spec. 14.01.07 – “Eye illnesses and ophthalmology”, 19.00.01 – “Cognitive psychology”, 19.00.02 – “Psychophysiology of perception”, 19.00.03 – “Psychology of work, engineering psychology and ergonomics” and others), the archives of the scientific-cons. centre and the exp. councils on exhibitions of “"SPbEC" at "EAST"” (*) and the scientific-methodical department (on exhibitions) of “"SPbEC" at "EAST"” (*)].

III. The administrative-economy divisions of “"SPbEC" at "EAST"”

[the deputy director of “"SPbEC" at "EAST"” (*) on administrative-economy work (the administrative department (*), the document-circulation department (*), the legal support department (*), the document-office (*), the archive of documents (*), the inf.-analytical support department (*), the communication and correspondence (expedition) department (*), the deposition department (*), the certification, licensing and patenting department (*), the fire-prevention safety department (*), the construction and repair department (*), the automation department (*), the planning of deliveries and shipments of production department (*), the supply and purchases of production department (*) and the transport support department (*)), the chief accountant of “"SPbEC" at "EAST"” (*) (the planning and econom. analysis department (*), the calculations department (*), the delivery department (*), the clearing of payment requirements and payment assignments department (*), the accounting of commodity-material assets department (*) and the inventory department (*)), the deputy director of “"SPbEC" at "EAST"” (*) on personnel support (the vocational (re)training and improvement of professional skills department (*), the personnel registration department (*), the electronic accounting of visitors and employees department (*), the labor safety department (*), the medicine department (*) and the professional union department (*)), the deputy director of “"SPbEC" at "EAST"” (*) on library support (the purchase and sale of (exhibition) (scientific) literature department (*), the library service (exhibition) department (systematic catalogue) (*), the fundamental and applied (exhibition) (scientific) literature departments (*), the normative (legal) (reference) documentation (information) department (*), the (exhibition) periodical (scientific) editions department (*), the electronic library department (*) and the funds of library department (*)), the deputy director of “"SPbEC" at "EAST"” (*) on publishing house (the publishing house department (*), the polygraphy department (*), the editing department (*), the printing house department (*) and the warehouse of book-printing production department (*)), the deputy director of “"SPbEC" at "EAST"” (*) on security (the security dep. (*), the territory protection dep. (*) and the el. passports registration dep. (*))]; [see the list of scientific newspapers and journals of “"SPbEC" at "EAST"”].

IV. The scientific-res. and educational activity exhibitions divisions of “SPbEC” at “EAST” [the deputies director of “SPbEC” at “EAST” (*) on scientific work at exhibitions – phys.-math., tech., soc., econ., chem., biol., med., sport. and mil. researches directions (the fundamental and applied researches exhibitions departments), on databases and inf. storehouses (the departments and scientific-res. laboratories of introduction and support of information warehouses for hardware, software and brainware support and integrated systems (*)), on quality management (the quality management research department (*)), on investments and innovations (the investments and innovations research department (*)), on financial planning (the financial planning and researches department (*)), on advertising and marketing (the marketing researches and advertising department (*)), on purchase and realizations of book-printing production (the delivery (shipment) res. departments (*)), on international relations (the external communications and researches department (*), the visas registration, researches and scientific international programs departments (*), the educational programs department (*) and the translations department (*)), on (supervision of) basic and additional educational activity (the (supervision of) basic (distance) education, postgraduate study and doctoral studies dep. and the professional (re)training and improvement of professional skill department)].

IV.A. The fundamental researches exhibitions divisions of “SPbEC” at “EAST” – the exhibitions branches and departments [see the fund. scientific researches branches and sections (departments) of “SIO “ACNS””, and also the fundamental developments branches and departments of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” (*) and the fundamental researches financing branches and departments of “SF “SFA CMT” n. a. Prokopenko N.A.” (*)].

IV.B. The applied researches exhibitions divisions of “SPbEC” at “EAST” – the exhibitions directions and departments [see the applied scientific researches directions and sections (departments) of “SIO “ACNS””, and also the applied developments directions and the scientific-researches laboratories of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” (*) and the applied researches financing directions and departments of “SF “SFA CMT” n. a. Prokopenko N.A.” (*)].

V. The scientific centre of the exhibition centre divisions at “SIO “ACNS”” (add.).

VI. The scientific-historical divisions of “SPbEC” at “EAST” (*) (add.).

VII. The scientific-public divisions of “SPbEC” at “EAST” (*) (add.).

VIII. The divisions of “SIO “Academy of cognitive natural sciences” (add.).

“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” allows to purposeful represent and propagandize (finance) the creation, distribution and use of the algorithms, methods and technologies of the system, financial and complex analysis, and also to increase the resultativity of functioning of the system of education and science of the country based on CMT and CM.

4.2. The fundamental researches (financing) exhibitions divisions (at the microscopic level) of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”

The structure of “Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “SPbEC” at “EAST”) (www.eceast.spb.ru) as the first exhibition centre in the structure of “SIO “ACNS”” (www.acns.spb.ru) (*) of the author (www.vetrovan.spb.ru) includes the different divisions for the propaganda (fin.) and exhibition of scientific results:

A. The fundamental researches (financing) exhibitions divisions of “SPbEC” at “EAST” (“SIO “ACNS””, “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” and “SF “SFA CMT” n. a. Prokopenko N.A.”) for the promotion of the microscopic system, financial and complex analysis –

the 26 fundamental researches exhibitions departments (FREDP) on the 13 fund. researches exhibitions branches (FREB) of “SPbEC” at “EAST” corresponds to the 26 fundamental scientific researches sections (departments) (FSRS(DP)) on the 13 fundamental scientific researches branches (FSRB) of “SIO “ACNS””, and also corresponds to the 26 fundamental developments departments (FDDP) on the 13 fundamental developments branches (FDB) of “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” (*) and corresponds to the 26 fundamental researches fin. departments (FRFDP) on the 13 fundamental researches financing branches (FRFB) of “SF “SFA CMT” n. a. Prokopenko N.A.” (*), besides, corresponds to the 26 sections on 13 branches of “The Russian academy of sciences”.

A.1. FREB [FSRB (FDB)] “Cognitive modeling in the mathematical sciences” (“CM in MATHS”) (“OMN”).

A.1.1. FREDP [FSRS(DP) (FDDP)] “Theory of mathematics and the complex system analysis based on the cognitive modeling technology” (“TM and CSAB on CMT”) (“SM”) (*).

A.1.2. FREDP [FSRS(DP) (FDDP)] “Theory of cybernetics and (cognitive) informatics” (“TC and (C)I”) (“SPMI”) (*).

A.2. FREB [FSRB (FDB)] “Cognitive modeling in the physical sciences” (“CM in PHS”) (“OFN”).

A.2.1. FREDP [FSRS(DP) (FDDP)] “Theory of physics, astronomy and space researches” (“TPHA and SR”) (“SOFA”) (*).

A.2.2. FREDP [FSRS(DP) (FDDP)] “Theory of nuclear physics and physics of atomic nucleus” (“TNPH and PHAN”) (“SYF”) (*).

- A.3. FREB [FSRB (FDB)] “Cognitive modeling in the nano-technologies and information technologies” (“CM in N-T and IT”) (“ONIT”).
- A.3.1. FREDP [FSRS(DP) (FDDP)] “Theory of electronics, radio-engineering and connection” (“TER-E and C”) (“SVLTSEB”).
- A.3.2. FREDP [FSRS(DP) (FDDP)] “Theory of automatics, computer engineering and the system analysis based on the cognitive modeling technology” (“TACE and SAB on CMT”) (“SITA”) (*).
- A.3.3. FREDP [FSRS(DP) (FDDP)] “Theory of nano-technologies for the mechanical-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture and construction” (“TN-T for M-EI-MPR and PH-C-TE and FITA and C”) (“SNT”) (*).
- A.4. FREB [FSRB (FDB)] “Cognitive modeling in the exact sciences” (“CM in ES”) (“OEMMPU”).
- A.4.1. FREDP [FSRS(DP) (FDDP)] “Theory of (theoretical) mechanics and gyroscopes” (“T(T)M and G”) (“SM”) (*).
- A.4.2. FREDP [FSRS(DP) (FDDP)] “Theory of mechanical-engineering, instrument-making and metrology” (“TM-EI-M and M”) (“SPMPU”).
- A.4.3. FREDP [FSRS(DP) (FDDP)] “Theory of power-engineering and electrical-engineering” (“TP-E and E-E”) (“SE”).
- A.5. FREB [FSRB (FDB)] “Cognitive modeling in the industry and chemical sciences” (“CM in I and CHS”) (“OHNM”).
- A.5.1. FREDP [FSRS(DP) (FDDP)] “Theory of the light, food, forest and wood-processing industry, the architecture and construction, the agricultural, forestry, water and fish economy and aqua-culture” (“TEFF and W-PIA and CAFW and FE and A-C”) (“SNM”) (*).
- A.5.2. FREDP [FSRS(DP) (FDDP)] “Theory of chemistry, chemical technology and chemical industry” (“TCHCHT and CHI”) (“SCHN”).
- A.6. FREB [FSRB (FDB)] “Cognitive modeling in the biological sciences” (“CM in BS”) (“OBN”).
- A.6.1. FREDP [FSRS(DP) (FDDP)] “Theory of biology and pharmacology” (“TB and PH”) (“SOB”).
- A.6.2. FREDP [FSRS(DP) (FDDP)] “Theory of physical-chemical bio-technology” (“TPH-CHB-T”) (“SFCHB”) (*).
- A.7. FREB [FSRB (FDB)] “Cognitive modeling in the physiology, fundamental medicine and public-health-services” (“CM in PHFM and P-H-S”) (“OFFM”).
- A.7.1. FREDP [FSRS(DP) (FDDP)] “Theory of physiology, bio-physiology and private physiology” (“TPHB-PH and PPH”) (“SF”).
- A.7.2. FREDP [FSRS(DP) (FDDP)] “Theory of medicine, public-health-services, labor safety, environment preservation and ecology of person” (“TMP-H-SLSEP and EP”) (“SFM”) (*).
- A.8. FREB [FSRB (FDB)] “Cognitive modeling in the sciences about The Earth” (“CM in S about E”) (“ONZ”).
- A.8.1. FREDP [FSRS(DP) (FDDP)] “Theory of geo-physics, geology, mining and metallurgy” (“TG-PHGM and M”) (“SGGGGN”).
- A.8.2. FREDP [FSRS(DP) (FDDP)] “Theory of oceanology, structure and physics of atmosphere, geodesy, cartography and geography of The Earth and planets” (“TOS and PHAGC and GE and P”) (“SOFAG”).

- A.9. F R E B [F S R B (F D B)] “ C o g n i t i v e m o d e l i n g
in the social sciences” (“C M in S S”) (“O O N”).
- A.9.1. F R E D P [F S R S (D P) (F D D P)] “Theory of social sciences, philosophy,
science-study, politics and political sciences, sociology, (cognitive) psychology,
state, law and jurisprudential sciences, patenting business,
i n v e n t i o n a n d r a t i o n a l i z a t i o n - w o r k ”
 (“TSSPHS-SP and PSS(C)PSL and JSPBI and R-W”) (“SFPSPP”) (*).
- A.9.2. F R E D P [F S R S (D P) (F D D P)] “Theory of economics and economic sciences,
organization, management, statistics and the financial analysis
b a s e d o n t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y ”
 (“T E a n d E S O M S a n d F A B o n C M T”) (“S E”) (*).
- A.10. F R E B [F S R B (F D B)] “ C o g n i t i v e m o d e l i n g
in the global problems and international
relations” (“C M in G P a n d I R”) (“O G P M O”).
- A.10.1. F R E D P [F S R S (D P) (F D D P)] “Theory of demography, pedagogics
a n d n a t i o n a l e d u c a t i o n , s t a n d a r d i z a t i o n ,
the complex studying of separate countries and regions,
the general and complex problems of natural, exact, technical,
public and applied sciences and manufacture branches”
 (“TDP and NESCSSC and RG and CPNETP and AS and MB”) (“SGP”).
- A.10.2. F R E D P [F S R S (D P) (F D D P)] “Theory of the culture and cultural-science,
a r t a n d a r t - s c i e n c e , m a s s c o m m u n i c a t i o n ,
journalism and mass media means, religion,
internal trade and tourist-excursion service,
external trade, transport, housing-communal economy,
housekeeping and household services at the international level”
 (“T C a n d C - S A a n d A - S M C J a n d M M M R I T a n d T - E S E T T H - C E H a n d H S a t I L”) (“S M O”).
- A.11. F R E B [F S R B (F D B)] “Cognitive modeling in the historical-
philological sciences” (“C M in H - P H S”) (“O I F N”).
- A.11.1. F R E D P [F S R S (D P) (F D D P)] “Theory of history
a n d h i s t o r i c a l s c i e n c e s ” (“T H a n d H S”) (“S I”).
- A.11.2. F R E D P [F S R S (D P) (F D D P)] “Theory of science of language, (cognitive) linguistics,
l i t e r a t u r e , l i t e r a r y - s c i e n c e a n d o r a l n a t i o n a l
creativity” (“T S L (C) L L L - S a n d O N C”) (“S Y L”) (*).
- A.12. F R E B [F S R B (F D B)] “ C o g n i t i v e m o d e l i n g
in the sports sciences” (“C M in S P S”) (“O S N”).
- A.12.1. F R E D P [F S R S (D P) (F D D P)] “Theory of competitions, sport
a n d s p o r t s s c i e n c e s ” (“T C S P a n d S P S”) (“S T S S S N”).
- A.13. F R E B [F S R B (F D B)] “ C o g n i t i v e m o d e l i n g
in the military sciences” (“C M in M I L S”) (“O V N”).
- A.13.1. F R E D P [F S R S (D P) (F D D P)] “Theory of architecture, construction, technics,
h i s t o r y , e d u c a t i o n , p o l i t i c s a n d e c o n o m i c s i n t h e a r m e d f o r c e s ”
 (“T A C T H E P a n d E i n A F”) (“S T A S T I O P E V S”).

4.2.1. The fundamental researches exhibitions branch “Cognitive modeling in the mathematical sciences” (“CM in MATHS”) (“OMN”) of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the mathematical sciences”” (“OMN”) treats to the fundamental researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches exhibitions department “Theory of mathematics and the complex system analysis based on the cognitive modeling technology”” (“SM”) (*) [*the propaganda of fundamental researches and developments in the area of “Theoretical mathematics” (*)* – theory of mathematical logic and theoretical bases of mathematics, theory of numbers, theory of algebra, theory of topology, theory of geometry, theory of the mathematical analysis, theory of the functions of valid variables, theory of the functions of complex variables, theory of the ordinary differential equations, theory of the differential equations with private derivatives, theory of the integrated equations, theoretical mathematical models of the objects, processes and phenomena of the natural and technical sciences, theory of the equations of mathematical physics, theory of variation calculus, mathematical theory of optimum control, theory of the functional analysis, theory of calculation mathematics, theory of probability and mathematical statistics, theory of the combinatory analysis, theory of graphs, theoretical mathematical cybernetics, theory of the ways of representation of the structure of the cognitive models and problem environments, theory of the parametrical cognitive models block, theory of the cognitive modeling technology in the theoretical mathematics;

the propaganda of fundamental researches and developments in the area
“The theoretical complex system analysis” ()* –
theory of the general questions of the complex system analysis,
theory of tendencies, dependences and laws
of the complex system analysis of the objects, processes and phenomena,
theory of the cognitive modeling technology
with dynamic cloning, verification and subverification,
theory of the iterative cycle and the technique of use
of the cognitive modeling technology
for the complex system analysis of the difficult objects, processes and phenomena,
theory of the parametrical cognitive models block for the complex system analysis
and the increase of efficiency of functioning of the difficult objects, processes and phenomena,
theory of the parametrical cognitive model structure of the 0th, 1st, 2nd and 3rd generation,
theory of the ways of representation of the structure of the cognitive models and problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the algorithms of formation of the structure
of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations,
theory of the techniques of research of parameters
of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations,

theory of the algorithms of processing of a posteriori data of the complex system analysis of the difficult problem spheres, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the difficult objects, processes and phenomena, theory of organization and plan of carrying out of the experiment, theory of research of the cognitive models parameters, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of resultativity of the difficult system analysis, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists, the theoretical complex system analysis of basic rocket engine, the first, the second, the third and the fourth rocket engine of launch vehicle, the theoretical complex system analysis of the multivariate code device, the theoretical complex system analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis of the chemical element with 1, 2, 3, 4, 5 and more nucleuses, the theoretical complex system analysis of the difficult multivariate hurricane and others].

II. “The fundamental researches exhibitions department
“Theory of cybernetics and (cognitive) informatics” (“SPMI”) (*)
*[the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l c y b e r n e t i c s ”* –
theory of the automatic control systems,
theory of modeling, theory of the cybernetic control systems,
theory of information, theory of artificial intelligence,
theory of the discrete (final) automatic devices and formal languages,
theory of reliability, theory of the applied system analysis,
theory of the cognitive modeling technology
in the theoretical cybernetics ;
*the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l i n f o r m a t i c s ”* –
theory of informatics, theory of the organization of information work,
theory of the documentary information sources,
theory of the analytical-synthetical processing of documentary information sources,
theory of information search, theory of information service,
theory of the technical means of support of the information processes,
theory of the cognitive modeling technology
in the theoretical informatics ;
*the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l c o g n i t i v e i n f o r m a t i c s ”* (*) –
theory of the modified stratified-step model
of perception (psycho-physiology of perception), processing (cognitive psychology)
and understanding (cognitive linguistics) of the content of information fragments,
theoretical bases of cognitive informatics and the cognitive modeling technology
in the technical, economic, physical-mathematical and other sciences,

theoretical bases of formation of the parametrical cognitive models block
 for the system analysis of the information-educational environments
 (the cognitive models of the subject of training and the means of training),
 theoretical bases of formation of the parametrical cognitive models block
 for the financial analysis of the (credit) organizations
 (the cognitive models for the vertical, horizontal and trend financial analysis),
 theoretical bases of formation of the parametrical cognitive models block
 for the complex analysis of the objects, processes and phenomena of cognitive informatics,
 theory of the ways of representation of the structure of the cognitive models and difficult problem environments
 (the formal and nonformal classical and new of the 0th generation,
 the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation),
 theory of the adaptive automation means of the information-educational environment
 (the basic and applied diagnostic module, the electronic textbook,
 the laboratory practical work, the electronic dean, the electronic library and others),
 theory of the technical means of support of the adaptive information interaction
 (the adaptive representation of sequence of information fragments processor,
 the question-answers structures sequence processing processor,
 the linguistic processor and other processors),
 theory of technical means of the financial analysis support
 (the automation means of formation of working plan of accounts
 based on the normative-regulated plan of accounts of the accounting;
 the automation means of formation of the accounting balance
 and the report about profits and losses of the organization,
 the automation means of the vertical, horizontal and trend
 financial analysis of the organization based on the analytical coefficients system),
 theory of the technical means of support of the complex analysis
 (the automation means of formation and research of the cognitive circle,
 cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere,
 one-, two-, three-, four-, five- and more cognitive sphere and others)].

The fundamental researches exhibitions branches and departments of “EC”
 allow to propagandize the development, production and financing
 of the fundamental main and derivative scientific results of CMT.

4.2.2. The fundamental researches exhibitions branch

“Cognitive modeling in the physical sciences”

(“CM in PHS”) (“OFN”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the physical sciences”” (“OFN”) treats to the fundamental researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches exhibitions department “Theory of physics, astronomy and space researches”” (“SOFA”) (*) [*the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l p h y s i c s ” (*)* – theory of questions and general problems of physical experiment, theory of physics of elementary particles, theory of fields, theory of physics of high energies, theory of nuclear physics, theory of physics of gases and liquids, theory of thermo-dynamics and statistical physics, theory of physics of firm bodies, theory of physics of plasma, theory of physics of atom and molecule, theory of optics, theory of laser physics, theory of radio-physics, theory of physical bases of electronics, theory of acoustics, theory of the cognitive modeling technology in the theoretical physics, theory of the cognitive models of the interaction between the elementary particles and firm bodies, fields, liquids and gases, theory of the cognitive model of the modified volumetric planetary model of atom n. a. Bohr N.H.D., theory of the cognitive models of the temperature areas of plasma of the atom and molecule, theory of the cognitive model of the optical environment of eye as the optical device, theory of the cognitive model of the acoustical environment of ear as the acoustical device, theory of the cognitive model of the distribution of waves in the environment of research;

the propaganda of fundamental researches and developments in the area “Theoretical astronomy” ()* – theory of astronomy and heavenly mechanics, theory of astrometry and astro-physics of The Solar system, The Sun, stars, fogs, interstellar environment and star systems, theory of cosmology, theory of observatories, tools, devices and methods of astronomical supervisions, theory of the cognitive modeling technology in the theoretical astronomy, theory of the cognitive models of the relative positioning of 1, 2, 3, 4, 5 and more planets and satellites, The Earth, The Sun and others;

the propaganda of fundamental researches and developments in the area “Theoretical space researches of The Earth, The Sun and planets” ()* – theory of the general questions of space researches of The Earth, The Sun and planets, theory of the devices and methods of the fundamental scientific researches of space environment, theory of the planning and realization of starts of the space vehicles and artificial heavenly bodies, theory of uncontrol movement of the space vehicles and artificial heavenly bodies, theory of the control of movement of the space vehicles and artificial heavenly bodies, theory of space technics and technology, theory of safety and the medical-biological problems of space flights, theory of use of the space systems for the connection and navigation, theory and problems of extraterrestrial territories discovery and prospects of astronautics, theory of research of the astronomical objects by the space means, theory of the geo-physical fundamental researches by the space means, theory of research of The Earth from space (the means of research of new generation), theory of the cognitive modeling technology in the theoretical space researches of The Earth, The Sun and planets, theory of the cognitive models of the gravitational and other interactions between 1, 2, 3, 4, 5 and more artificial space objects, satellites, planets, The Earth and The Sun, theory of the cognitive model of the work of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle and others].

II. “The fundamental researches exhibitions department “Theory of nuclear physics and physics of atomic nucleus” (“SYF”) (*) [*the propaganda of fundamental researches and developments in the area “Theoretical nuclear physics” (*)* – theory of the nuclear raw materials and fuel, theory of synthesis of isotopes, theory of isotopes and ionization radiations, theory of nuclear reactors, theory of thermo-nuclear reactors, theory of the action of radiations and protection against them, theory of nuclear explosions, theory of the processing of nuclear fuel and waste disposal, theory of the cognitive modeling technology in the theoretical nuclear physics, theory of the cognitive models of the structure of the chemical elements with 1, 2, 3, 4, 5 and more nucleuses (the nuclear polymers), theory of the cognitive model of the modified volumetric principle n. a. Pauli W.E. for the studying of electronic clouds within limits of power levels, theory of the cognitive model of the modified planetary model of atom n. a. Bohr N.H.D. and others].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.3. The fundamental researches exhibitions branch “Cognitive modeling in the nano-technologies and information technologies” (“CM in N-T and IT”) (“ONIT”) of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the nano-technologies and information technologies” (“ONIT”) treats to the fundamental researches (financing) exhibitions divisions of “Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches exhibitions department “Theory of electronics, radio-engineering and communication” (“SVLTSEB”) [*the propaganda of fundamental researches and developments in the area “Theoretical electronics and radio-engineering”* – theoretical bases of electronic technics, theory of radio-engineering, theory of the materials for electronics and radio-engineering, theory of technology and equipment for the electronic and radio-engineering manufacture, theory of designing and constructing of the electronic devices and radio-electronic equipment, theory of the electrical-vacuum and gas-discharge devices and units, theory of the accelerators of charged particles and plasmas, theory of solid-state devices, theoretical bases of quantum electronics, theory of holography, theoretical bases of crio-electronics, theory of radio-electronic circuits, theory of the distribution of radio-waves, theory of antennas, theory of wave-transport, theory of the elements of over-high-frequency techniques, theory of the radio-transmission and radio-receiving devices, theory of the radio-engineering systems of sounding, location and navigation, theory of television (TV) technics, theory of record and reproduction of signals, theory of electrical-acoustics, theory of ultra-sonic and infra-sonic technics, theory of infra-red technics, theory of the units, details and elements of radio-electronic equipment, theory of the devices for the radio-engineering measurements, theory of the systems and units of display of the information, theory of the cognitive modeling technology in the theoretical electronics and radio-engineering;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l c o m m u n i c a t i o n ” – theory of communication, theory of designing and constructing of the devices of communication, theory of technology and equipment for the assembly and adjustment of the equipment of communication, the systems of transfer and the lines of communication, theory of the multi-channel communication, theory of the networks and centres of communication, theory of the services and facilities of communication, theory of the telegraph (cable) communication and equipment, theory of the systems and equipment of data transmission, theory of the tele-information services and equipment, theory of the telephone communication and equipment, theory of the systems of transfer of the moving images and sound, theory of the facsimile communication and equipment, theory of radio-communication and radio-broadcasting, theory of the light-guiding communication and equipment, theory of television (TV), theory of the optical communication in the free space and equipment, t h e o r y o f t h e p o s t c o m m u n i c a t i o n , theory of the cognitive modeling technology in the theoretical communication and terminal equipment of data transmission].

II. “The fundamental researches exhibitions department “Theory of automatics, computer engineering and the system analysis based on the cognitive modeling technology”” (“SITA”) (*) [*the propaganda of fundamental researches and developments in the area “Theoretical automatics and computer engineering”* – theory of automatic control, theoretical bases of programming, t h e o r e t i c a l b a s e s o f c o m p u t e r e n g i n e e r i n g , theory of the elements, units and devices of automatics and computer engineering, theory of the devices of input-output, theory of the memory devices, theory of technology and equipment for the manufacture of the means of automatics and computer engineering, theory of the keyboard and counting-perforating machines, theory of the analog calculating machines (ACM), theory of the digital calculating machines and calculating complexes (DCM), theory of the analog-digital (hybrid) calculating machines and calculating complexes, theory of calculating centres (CC), theory of calculating networks (CN), theory of the software of calculating machines, complexes and networks, theory of the systems of automatic measurement, regulation and control, theory of the systems of tele-control and tele-measurement, theory of the automated control systems of technological processes, theory of the automated systems of organizational management, theory of the automation of designing, theory of the automation of scientific researches, t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y in the theoretical automatics and computer engineering;

the propaganda of fundamental researches and developments in the area
*“ The theoretical system analysis ” (*)* –
theory of tendencies, dependences and laws
of the system analysis of the objects, processes and phenomena,
theory of the cognitive modeling technology
with dynamical cloning, verification and subverification,
theory of the iterative cycle and the technique of use
of the cognitive modeling technology,
theory of the parametrical cognitive models block
for the system analysis of the information-educational environments
and the increase of efficiency of functioning
of the automated training system
with the properties of adaptation based on the cognitive models
(the cognitive models of the subject of training and the means of training),
theory of the ways of representation of the structure of the cognitive models and problem environments:
the formal classical of the 0th generation (the logical and production models),
the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
and the innovative calculus of theory of sets and graphs),
the nonformal new of the 0th generation (the multi-level structural scheme
and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the algorithm of formation of the cognitive model structure,
theory of the technique of research of the cognitive model parameters,
theory of the algorithm of analysis of a posteriori data of research,
theory of the adaptive automation means of the information-educational environment
(the basic and applied diagnostic module, the electronic textbook,
the laboratory practical work, the electronic dean, the electronic library and others),
theory of the technical means of support of the adaptive information interaction
(the adaptive representation of sequence of information fragments processor,
the question-answers structures sequence processing processor,
the linguistic processor and other processors),
theory of the statistical substantiation of practical use of the received results,
theory of the factors influencing to the efficiency of knowledge formation
in the information-educational environment
and the efficiency of functioning of the objects, processes and phenomena,
theory of organization and plan of carrying out of the experiment,
theory of research of the cognitive models parameters,
theory of preliminary processing of a posteriori results of diagnostics,
theory of choice of the statistical analysis methods of the generated data sets,
theory of the analysis of dynamics of the resultativity of objects, processes and phenomena,
theory of dispersion, regression, discriminant, cluster analysis,
multidimensional scaling, factor analysis and bibliographic lists].

III. “The fundamental researches exhibitions department
 “Theory of nano-technologies for the mechanical-engineering, instrument-making,
 polygraphy, reprography and photo-cinema-technics,
 the light and food-processing industry,
 transport, architecture and construction” (“SNT”) (*)
 [*the propaganda of fundamental researches and developments in the area
 “Theoretical nano-technologies for mechanical-engineering”* –
 theory of nano-technologies for the machine-science and details of machines,
 for the machine-building materials, for the technologies of mechanical-engineering,
 for the foundry manufacture, for the forge-stamp manufacture,
 for the assembly manufacture, for the cutting of materials,
 for the electrical-physical-chemical processing,
 for the thermal and strengthening powder materials,
 for the manufacture of nonmetallic products,
 for the machine-tool-construction, for the robotics, for the tool manufacture,
 for the mining mechanical-engineering, for the metallurgical mechanical-engineering,
 for the reactor-construction,, for the turbine-construction,
 for the special power-engineering installations, for the chemical and oil mechanical-engineering,
 for the locomotive-construction and carriage-building,
 for the engine-construction, for the motor-car-building,
 for the ship-building, for the aircraft-building, for the space technics and rocket-building,
 for the hoisting-transport mechanical-engineering,
 for the building and road mechanical-engineering, for the communal mechanical-engineering,
 for the tractor and agricultural mechanical-engineering,
 for the mechanical-engineering of light industry,
 for the polygraphic mechanical-engineering, for the mechanical-engineering of food-processing industry,
 for the mechanical-engineering of trade and public catering, for the household machines and devices,
 for the manufacture of weapon, for the other branches of mechanical-engineering,
 theory of the cognitive modeling technology
 in the theoretical nano-technologies for mechanical-engineering;
*the propaganda of fundamental researches and developments in the area
 “Theoretical nano-technologies for instrument-making”* –
 theory of nano-technologies for the theoretical bases of instrument-making,
 for the general technology of production and equipment in instrument-making,
 for the designing and constructing of devices,
 for the devices of measurement of the electrical and magnetic sizes,
 for the devices of measurement of the mechanical sizes,
 for the devices of measurement of the time and frequency,
 for the devices of measurement of the structure and physical-chemical properties of substances and materials,
 for the devices of heating-technical and heating-physical measurements,
 for the devices of measurement of the acoustical sizes and characteristics,
 for the devices of measurement of the optical and lighting sizes and characteristics,
 for the devices of measurement of the ionization radiations,
 for the devices of non-destroying control of the products and materials,
 for the general structural elements,
 the units of measuring devices and systems and the means of office equipment,
 theory of the cognitive modeling technology
 in the theoretical nano-technologies for instrument-making;

the propaganda of fundamental researches and developments in the area “Theoretical nano-technologies for polygraphy, reprography and photo-cinema-technics” – theory of nano-technologies for polygraphy, reprography and photo-cinema-technics, theory of the cognitive modeling technology in the theoretical nano-technologies for polygraphy, reprography and photo-cinema-technics;

the propaganda of fundamental researches and developments in the area “Theoretical nano-technologies for light industry” – theory of nano-technologies for the textile industry, for the knitted industry, for the clothing industry, for the tanning industry, for the fur industry, for the industry of artificial leather and film materials, for the shoe industry, for the leather-haberdashery industry, for the bristle-brush manufacture, for the manufacture of furniture, theory of the cognitive modeling technology in the theoretical nano-technologies for light industry;

the propaganda of fundamental researches and developments in the area “Theoretical nano-technologies for the food-processing industry” – theory of nano-technologies for the food raw materials and auxiliary materials, for the processes and devices of food manufactures, for the (grain-)elevator and flour(-grinding)-sereals(croup) industry, for the mixed-fodder industry, for the baking of bread and macaroni industry, for the confectionery industry, for the sugar industry, for the starched-treacle industry, for the barmy industry, for the brewing industry, for the spirituous industry, for the industry of high-alcohol drinks, for the wine-making (vinous) industry, for the industry of without-alcohol (soft) drinks, for the canning, vegetable-drying and food-concentrate industry, for the food-gustatory industry, for the tobacco industry, for the meat and bird-fancier-processing industry, for the manufacture of eggs and egg products, for the dairy (milk) industry, for the butter-fatty (creamery) industry, theory of the cognitive modeling technology in the theoretical nano-technologies for the food-processing industry;

the propaganda of fundamental researches and developments in the area “Theoretical nano-technologies for transport” – theory of nano-technologies for the railway transport, for the motor-car transport, for the water transport, for the air transport, for the pipeline transport, for the industrial transport, for the municipal transport, for the interaction of the different kinds (types) of transport, for the mixed transportations, for the other kinds (types) of transport, theory of the cognitive modeling technology in the theoretical nano-technologies for transport;

the propaganda of fundamental researches and developments in the area “Theoretical nano-technologies for architecture and construction” () –*

the engineering-theoretical bases of construction, architecture, building materials, products and building constructions, theory of technology of construction-installation works, theory of technology of production of the building materials and products, machines, mechanisms, equipment and tool, used in construction and industry of building materials, theory of engineering researches in construction, theory of architectural-building designing, theory of district lay-out, theory of town-planning, theory of the objects of construction and engineering support of the objects of construction, theory of tendencies, dependences and laws in architecture and construction, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), theoretical bases of formation of the parametrical cognitive models block, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and non-formal classical and new of 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori data of research, theory of the adaptive automation means of architecture and construction (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of construction of the buildings and constructions, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of construction, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.4. The fundamental researches exhibitions branch

“Cognitive modeling in the exact sciences”

(“CM in ES”) (“OEMMPU”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the exact sciences”” (“OEMMPU”) treats to the fundamental researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches exhibitions department “Theory of (theoretical) mechanics and gyroscopes”” (“SM”) (*) [*the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l m e c h a n i c s ” (*)* – theoretical bases, general tasks and methods of theoretical mechanics, theory of general mechanics, theory of mechanics of liquid and gas, theory of mechanics of deformable firm body, theory of the complex and special sections of theoretical mechanics, theoretical bases of the cognitive modeling technology in theoretical mechanics, theoretical bases of formation of the parametrical cognitive models block for the complex system analysis of the objects, processes and phenomena of theoretical mechanics,

theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of research of the objects, processes and phenomena of theoretical mechanics, theory of the technical means of support of the complex system analysis of the difficult objects, processes and phenomena of theoretical mechanics (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the objects, processes and phenomena of theoretical mechanics, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of functioning of the objects, processes and phenomena of theoretical mechanics, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l m e c h a t r o n i c s ”* – theoretical bases, general tasks and methods of theoretical mechatronics, theory of general theoretical mechatronics, theory of mechatronics of liquids and gas, theory of deformable firm body, theory of the complex and special sections of theoretical mechatronics, theory of the automation means and devices of mechatronics, theory of the cognitive modeling technology in the theoretical mechatronics (theory of hygroscope-building)].

II. “The fundamental researches exhibitions department
“Theory of mechanical-engineering, instrument-making and metrology” (“SPMPU”)
[the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l m e c h a n i c a l - e n g i n e e r i n g ” –
theory of machine-engineering-science and details of machines,
theory of machine-building materials, theory of technology of mechanical-engineering,
theory of foundry manufacture, theory of forge-stamp manufacture,
theory of assembly manufacture, theory of cutting of materials,
theory of electrical-physical-chemistry processing,
theory of thermal and strengthening processing,
theory of furnish of surfaces and drawing of coverings,
theory of manufacture of products from powder materials,
theory of manufacture of nonmetallic products,
theory of machine-tool construction, theory of robotics,
theory of tool manufacture, theory of mining mechanical-engineering,
theory of metallurgical mechanical-engineering,
theory of reactor-construction, theory of turbine-construction,
theory of special power-engineering installations,
theory of chemical and oil mechanical-engineering,
theory of locomotive-construction and carriage-building, theory of engine-construction,
theory of motor-car-building, theory of ship-building, theory of aircraft-building,
theory of space technics and rocket-building,
theory of hoisting-transport mechanical-engineering,
theory of building and road mechanical-engineering,
theory of communal mechanical-engineering,
theory of tractor and agricultural mechanical-engineering,
theory of mechanical-engineering for the light industry,
theory of polygraphic mechanical-engineering,
theory of mechanical-engineering for the food-processing industry,
theory of mechanical-engineering for the trade and public catering,
theory of household machines and devices, theory of manufacture of weapon,
theoretical bases of the other branches of mechanical-engineering,
theory of the cognitive modeling technology
in the theoretical mechanical-engineering;

the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l i n s t r u m e n t - m a k i n g ” –
t h e o r e t i c a l b a s e s o f i n s t r u m e n t - m a k i n g ,
theory of general technology of production and equipment in instrument-making,
theory of designing and constructing of devices,
theory of the devices for the measurement of electrical and magnetic sizes,
theory of the devices for the measurement of mechanical sizes,
theory of the devices for the measurement of time and frequency,
theory of the devices for the measurement of composition (structure)
and physical-chemical properties of the substances and materials,
theory of the devices for the heating-technical and heating-physical measurements,
theory of the devices for the measurement of acoustical sizes and characteristics,
theory of the devices for the measurement of optical
a n d l i g h t i n g s i z e s a n d c h a r a c t e r i s t i c s ,
theory of the devices for the measurement of ionization radiations,
theory of the devices of the non-destroying control of products and materials,
theoretical bases of the general structural elements,
t h e u n i t s o f m e a s u r i n g d e v i c e s a n d s y s t e m s ,
the devices of interface and the means of office equipment (periphery),
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l i n s t r u m e n t - m a k i n g ;
the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l m e t r o l o g y ” –
t h e o r y o f t h e s c i e n t i f i c b a s e s a n d t e c h n i c a l m e a n s
o f t h e o r e t i c a l m e t r o l o g y a n d m e t r o l o g i c a l s u p p o r t ,
theory of the state, national and international systems and services of metrology,
theory of the measurement of separate sizes and characteristics,
theory of the standard samples of composition (structure)
a n d p r o p e r t i e s o f t h e s u b s t a n c e s a n d m a t e r i a l s ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l m e t r o l o g y (t h e o r y o f m e a s u r e m e n t)].

III. “The fundamental researches (financing) exhibitions department “Theory of power-engineering and electrical-engineering”” (“SE”)
[the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l p o w e r - e n g i n e e r i n g ” –
theory of power-resources, theory of power-engineering (energetic) balance,
theory of electrical-power-engineering (energetics) (industry),
theory of heating-power-engineering (industry), theory of heating-technics,
t h e o r y o f a t o m i c - p o w e r - e n g i n e e r i n g (i n d u s t r y) ,
t h e o r y o f w a t e r - p o w e r - e n g i n e e r i n g (i n d u s t r y) ,
t h e o r y o f h e l i u m - p o w e r - e n g i n e e r i n g (i n d u s t r y) ,
t h e o r y o f w i n d - p o w e r - e n g i n e e r i n g (i n d u s t r y) ,
t h e o r y o f t h e d i r e c t t r a n s f o r m a t i o n o f e n e r g y ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l p o w e r - e n g i n e e r i n g ;
the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l e l e c t r i c a l - e n g i n e e r i n g ” –
theory of electrical-engineering, theory of electrical-technical materials,
theory of electrical machines, theory of electrical devices,
t h e o r y o f t r a n s f o r m e r s a n d e l e c t r i c a l r e a c t o r s ,
t h e o r y o f p o w e r e l e c t r i c a l c o n d e n s e r s ,
t h e o r y o f p o w e r c o n v e r t i n g t e c h n i c s ,
theory of electrical drive, theory of electrical-thermics, theory of electrical-welding equipment,
theory of wire and cable, theory of electrical isolators, theory of light-engineering,
theory of the electrical-technical equipment of special purpose,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l e l e c t r i c a l - e n g i n e e r i n g] .

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.5. The fundamental researches exhibitions branch

“Cognitive modeling

in the industry and chemical sciences”

(“CM in I and CHS”) (“OHNM”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the industry and chemical sciences” (“OHNM”) treats to the fundamental researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches exhibitions department “Theory of the light, food, forestry and wood-processing industry, architecture and constructions, the agriculture, forestry, water and fish economy and aqua-culture”” (“SNM”) (*) [*the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l l i g h t i n d u s t r y ”* – theory of textile industry, theory of knitted industry, theory of clothing industry, theory of tanning industry, t h e o r y o f f u r i n d u s t r y , theory of the industry of artificial leather and film materials, theory of shoe industry, theory of leather-haberdashery industry, theory of bristle-brush manufacture, theory of the manufacture of furniture, t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y i n t h e t h e o r e t i c a l l i g h t i n d u s t r y ;

the propaganda of fundamental researches and developments in the area
“ Theoretical food-processing industry ” –
theory of food raw materials and auxiliary materials,
theory of the processes and devices of food manufactures,
theory of (grain-)elevator and flour(-grinding)-sereals(croup) industry,
t h e o r y o f m i x e d - f o d d e r i n d u s t r y ,
theory of baking of bread and macaroni industry, theory of confectionery industry,
theory of sugar industry, theory of starched-treacle industry,
theory of barmy industry, theory of brewing industry,
theory of spirituous industry, theory of the industry of high-alcohol drinks,
theory of wine-making (vinous) industry, theory of the industry of without-alcohol (soft) drinks,
theory of canning, vegetable drying and food-concentrate industry,
theory of food-gustatory industry, theory of tobacco industry,
theory of meat and bird-fancier-processing industry,
theory of the manufacture of eggs and egg products,
theory of dairy (milk) industry, theory of butter-fatty (creamery) industry,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l f o o d - p r o c e s s i n g i n d u s t r y ;
the propaganda of fundamental researches and developments in the area
“Theoretical forestry and wood-processing industry” –
theory of wood-science, theory of forestry-cutting works,
theory of the transportation of wood, theory of forestry-timber works,
theory of technology and equipment for the processing of wood,
theory of forestry-sawmill manufacture, theory of the manufacture of joiner-building products,
theory of the manufacture of plywood and plates, theory of the manufacture of furniture,
theory of the manufacture of matches, theory of the manufacture of wooden container,
t h e o r y o f t h e s p e c i a l w o o d - p r o c e s s i n g m a n u f a c t u r e s ,
t h e o r y o f p u l p - p a p e r i n d u s t r y ,
t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y
i n t h e t h e o r e t i c a l f o r e s t r y a n d w o o d - p r o c e s s i n g i n d u s t r y ;

the propaganda of fundamental researches and developments in the area “Theoretical architecture and construction” ()* – the engineering-theoretical bases of construction, theory of architecture, theory of building materials and products, theory of building constructions, theory of the technology of building-installation works, theory of the technology of production of the building materials and products, theory of machines and mechanisms, equipment and tools, used in construction and the industry of building materials, theory of engineering researches in construction, theory of architectural-building designing, theory of district lay-out, theory of town-planning, theory of the objects of construction, theory of the engineering support of the objects of construction, theory of tendencies, dependences and laws in architecture and construction, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori data of research, theory of the adaptive automation means of architecture and construction (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, fore-, five- and more cognitive sphere and others), theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of construction of the buildings and constructions, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of construction, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists;

the propaganda of fundamental researches and developments in the area “ Theoretical agriculture and forestry ” – theory of agricultural biology, theory of soil-science, theory of agriculture, theory of agricultural melioration, theory of agro-chemistry, theory of plant-growing-science, theory of the protection of agricultural plants, theory of live-stock-farming (animal-industry), theory of veterinary-science, theory of the preparation of agricultural production, theory of hunting and hunting economy, theory of forestry, theory of economics and organization of agriculture, theory of the mechanization and electrification of agriculture, theory of the cognitive modeling technology in the theoretical agriculture and forestry;

the propaganda of fundamental researches and developments in the area “ Theoretical water economy ” – the theoretical scientific bases of water economy, theory of water economy, theory of water-economy construction, theory of hydro-technical and hydro-ameliorative constructions, theory of irrigation and water-supply, theory of irrigating systems, theory of drying systems, theory of sewage waters, their clearing and use, theory of the quality of water, theory of tests, measurements and control in the water economy, theory of mechanization and automation in the water economy, theory of complex use of water resources, theory of the cognitive modeling technology in the theoretical water economy;

the propaganda of fundamental researches and developments in the area “ Theoretical fish economy and aqua-culture ” – theory of the biological resources of the world ocean and internal reservoirs, theory of aqua-culture, theory of fish-breeding (culture), theory of industrial fishery, theory of the technical operation of the fleet of fishing industry, theory of the technical operation of fish seaports, theory of the technology of processing of the raw materials of water origin, theory of the equipment for the fish-processing industry, theory of the cognitive modeling technology in the theoretical fish economy and aqua-culture].

II. “The fundamental researches exhibitions department “Theory of chemistry, chemical technology and chemical industry”” (“SCHN”) [*the propaganda of fundamental researches and developments in the area “Theoretical chemistry”* (*) – theory of the general-laboratory chemical equipment, theory of equipment, theory of physical chemistry, theory of nonorganic chemistry, theory of complex compounds, theory of analytical chemistry, theory of organic chemistry, theory of bio-organic chemistry, theory of the natural organic compounds and their synthetic analogues, theory of chemistry of high-molecular compounds, theory of biological chemistry, theory of the cognitive modeling technology in the theoretical chemistry, theory of modeling of the structure of the (non)organic chemical elements and the chemical elements with 1, 2, 3, 4, 5 and more nucleuses; *the propaganda of fundamental researches and developments in the area “Theoretical chemical technology and chemical industry”* – theory of the processes and devices of chemical technology, theory of chemical raw materials, theory of production of the nonorganic substances and products, theory of production of the fertilizers, theory of production of the silicate and refractory nonmetallic materials, theory of industrial organic synthesis, theory of the industrial synthesis of organic dyes and pigments, theory of the technology of production of the photographic materials, theory of the technology of production of the explosive substances and chemical protection means, theory of the technology of storage and destruction of the chemical weapon, theory of the technology of production of the chemical-pharmaceutical means, theory of the technology of production of the fragrant substances, theory of the technology of production of the pesticides and disinfectant substances, theory of the technology of processing of the natural gases, oil, gas condensate, their products and analogues, motor fuel and lubricant materials, theory of the technology of processing of the firm combustible minerals, theory of timber-chemical productions, theory of the technology of production of the natural high-molecular compounds, theory of the technology of production of the synthetic high-molecular compounds, theory of the technology of production of the plastics, theory of the technology of production of the rubbers and products from them, theory of the technology of production of the varnish-paint materials and organic coverings, theory of the technology of production of the chemical fibers and strings, theory of the technology of production of the chemical reactants and especially clean substances, theory of the technology of production of the household chemical (goods) products, theory of the technology of production of the auxiliary materials, theory of the cognitive modeling technology in the theoretical chemical technology and chemical industry].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.6. The fundamental researches exhibitions branch

“Cognitive modeling in the biological sciences”

(“CM in BS”) (“OBN”)

of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the biological sciences”” (“OBN”) treats to the fundamental researches (financing) exhibitions divisions of “Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches exhibitions department “Theory of biology and pharmacology”” (“SOB”) [*the propaganda of fundamental researches and developments in the area “Theoretical biology”* – theory of biology, theory of the methods and equipment for the biological researches, theory of molecular biology, theory of bio-physics, theory of cytology, theory of embryology, theory of genetics, theory of virology, theory of micro-biology, theory of botany, theory of physiology of plants, theory of zoology, theory of ecology, theory of anthropology, theory of physiology of human and animals, theory of morphology of human and animals, theory of immunology, theory of pharmacology, theory of toxicology, theory of radiation biology, theory of space biology, theory of bionics, theory of bio-cybernetics, theory of bio-engineering, theory of the cognitive modeling technology in the theoretical biology, theory of modeling of the biological construct of organism of the organic individual;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l p h a r m a c o l o g y ” – theory of pharmacology, theory of the methods and equipment for the pharmacological researches, theory of the pharmaco-kinetics and pharmaco-dynamics of preparations and substances, theory of molecular pharmacology, theory of bio-pharmacology, t h e o r y o f c y t o l o g i c a l p h a r m a c o l o g y , theory of embryological pharmacology, theory of genetic pharmacology, theory of virologic pharmacology, theory of micro-biological pharmacology, theory of botanical pharmacology, theory of physiological pharmacology of plants, theory of zoological pharmacology, theory of ecological pharmacology, t h e o r y o f a n t h r o p o l o g y o f p h a r m a c o l o g y , theory of physiological pharmacology of human and animals, t h e o r y o f i m m u n o l o g i c a l p h a r m a c o l o g y , theory of toxicological pharmacology, theory of radiation pharmacology, theory of space pharmacology, theory of bio-engineering pharmacology, t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y i n t h e t h e o r e t i c a l p h a r m a c o l o g y] .

II. “The fundamental researches exhibitions department “Theory of physical-chemical bio-technology”” (“SFCHB”) (*) [*the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l b i o - t e c h n o l o g y ” (*)* – theory of raw materials and producents for the bio-technological manufacture, theory of bio-technological processes and devices, theory of cellular engineering, theory of technological bio-energetics, theory of applied genetic engineering, theory of enzymology engineering, theory of the immuno-bio-technological methods of analysis, the other theories and problems of bio-technology (genetic engineering), t h e o r y o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y i n t h e t h e o r e t i c a l b i o - t e c h n o l o g y , theory of modeling of the structure of desoxyribonucleic acid based on the multidimensional cognitive cylinder].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

**4.2.7. The fundamental researches exhibitions branch
“Cognitive modeling in the physiology,
fundamental medicine and public-health-services”
 (“CM in PHFM and P”) (“OFFM”)
of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”**

The developed “The fundamental researches exhibitions branch
“Cognitive modeling in the physiology,
fundamental medicine and public-health-services”” (“OFFM”)
treats to the fundamental researches (financing) exhibitions divisions
of “Saint-Petersburg exhibition centre named after Brezhnev L.I.”
at “Exhibition of achievements of science and technology named after Sobchak A.A.”
 (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “EC”) as the first EC
in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””)
and the add. component of the system of science and education of the modern country
for the promotion (of financing) of creation, distribution and use
of the fundamental main and derivative scientific results
of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru)
[see the fundamental researches exhibitions branches and departments of “EC”]:
1) it is executed by the principle of “the administrative-economy submission”;
2) works in the several main directions, which allow to provide
the promotion of development, production and distribution
of the fundamental main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU “LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The fundamental researches exhibitions department
“Theory of physiology, bio-physiology and private physiology”” (“SF”) (*)
*[the propaganda of fundamental researches and developments in the area
“Theoretical physiology” (*)* –
theory of general physiology, theory of the methods and equipment of physiological researches,
theory of physiology, theory of molecular physiology,
theory of physiological cytology, theory of physiological embryology,
theory of physiological genetics, theory of physiology of viruses,
theory of micro-physiology, theory of physiology of organic individuals,
theory of physiology of plants, theory of zoological physiology,
theory of ecological physiology, theory of anthropology of physiology,
theory of physiology of human and animals, theory of physiological immunology,
theory of physiological pharmacology and toxicology,
theory of radiation physiology, theory of space physiology,
theory of physiological cybernetics,
theory of the cognitive modeling technology
in the theoretical physiology;

the propaganda of fundamental researches and developments in the area “Theoretical bio-physiology and public-health-services” () –*
theory of bio-medical-physiological disciplines,
theory of private physiology of analyzers and sensory systems,
theory of bio-physiological materials, means and products,
theory of bio-physiological technics, theory of clinical physiology,
theory of physiological bio-pharmacology and bio-epidemiology,
theory of the other branches of bio-medicine and public-health-services,
theory of social physiology, theory of the organization and management of public-health-services,
theory of the modified model of reduced eye,
theory of the modified model of reduced ear,
theory of the software for the automation of research tasks
of the physiological, psychological and linguistic parameters
of the parametrical cognitive models block in medicine,
theory of the statistical substantiation of practical use of the received results,
theory of the physiological, psychological and linguistic factors influencing
to the efficiency of functioning of the information-educational environment
and the increase of resultativity of the automated training system
with the properties of adaptation based on the cognitive models,
theory of organization and plan of carrying out of the experiment,
theory of research of the physiological, psychological and linguistic parameters
of the cognitive models of the subject of training and the means of training,
theory of preliminary processing of a posteriori results of diagnostics,
theory of choice of the statistical analysis methods of the generated data sets,
theory of the analysis of dynamics of the resultativity of researches
in the area of bio-physiology and public-health-services,
theory of dispersion, regression, discriminant, cluster analysis,
multidimensional scaling, factor analysis and bibliographic lists,
theory of the complex analysis of the modified model of reduced eye
for the research of acuity of vision, field of vision, color perception and other parameters
in the Descartes space of the 2 and 3 coordinates,
theory of the complex analysis of the modified model of reduced ear
for the research of absolute sensitivity and thresholds of sensitivity
in the Descartes space of the 2 and 3 coordinates].

II. “The fundamental researches exhibitions department “Theory of medicine, public-health-services, labor safety, environment preservation and ecology of person” (“SFM”) (*) [*the propaganda of fundamental researches and developments in the area “Theoretical medicine and public-health-services” – theory of medical-biological disciplines, theory of medical materials, means and products, theory of medical technics, theory of clinical medicine, theory of pharmacology, theory of hygiene and epidemiology, theories of the other branches of medicine and public-health-services, theory of social hygiene, theory of the organization and management of public-health-services, theory of the cognitive modeling technology in the theoretical medicine and public-health-services; the propaganda of fundamental researches and developments in the area “Theoretical labor safety” (*) – theory of the organization and management of labor safety, working conditions, industrial sphere and safety precautions, theory of professional illnesses and their preventive measures, theory of accidents on manufacture and their prevention, theory of work-capacity and the examination of work-capacity, theory of labor safety by the categories of workers, theory of labor safety on the manufactures of increased danger, theory of the cognitive modeling technology in the theoretical labor safety, theory of the cognitive model of the subject of training; the propaganda of fundamental researches and developments in the area “Theoretical preservation of environment and ecology of person” – theory and methods of studying and preservation of environment and person, theory of the ecological bases of use of the natural resources, theory of international cooperation, theory of contamination of environment, theory of pollution, theory of the pollution and protection of atmosphere, theory of the pollution and protection of the waters of land, seas and oceans, theory of the protection of soils, theory of the protection of bowels, theory of the ecological bases of ability-to-live of the person, theory of influence of the anthropogenic changes of environment on the health and social-labor potential of person, on the condition of natural ecosystems, populations and organisms of the vegetative and generative (fauna) world, theory of protection of the vegetative and generative (fauna) world, theory of the anthropogenic influence on landscape, theory of the protection and optimization of landscape, theory of reserved affair, theory of the protected natural territories and water-areas, theory of the acts of nature and the accidents of anthropogenic origin, theory of the ecological safety of person, theory of the rational use and reproduction of natural resources by the person, theory of the preservation of environment and natural resources in the separate regions and countries, theory of waste management, theory of small-waste and without waste technology, theory of the protection of person from the noise, vibrations, electrical and magnetic fields and radiations, theory of the cognitive modeling technology in the theoretical preservation of environment and ecology of person*].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.8. The fundamental researches exhibitions branch

“Cognitive modeling in the sciences about The Earth”

(“CM in S about E”) (“ONZ”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the sciences about The Earth”” (“ONZ”) treats to the fundamental researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches exhibitions department “Theory of geo-physics, geology, mining and metallurgy”” (“SGGGGN”) [*the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l g e o - p h y s i c s ”* – theory of geo-magnetism and the high layers of atmosphere, theory of meteorology, theory of climatology, theory of oceanology, theory of hydrology of land, theory of glaciology, theory of physics of The Earth, theory of the cognitive modeling technology in the theoretical geo-physics ;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l g e o l o g y ” – theory of lithology, theory of tectonics, theory of the geological-geo-physical researches of the deep structure of The Earth, theory of regional geology, theory of planetology, theory of stratigraphy, theory of paleontology, theory of geo-chemistry, theory of mineralogy, theory of petrography, theory of experimental and technical mineralogy and petrography, theory and methods of the mineralogical-petrographical and geo-chemical laboratory researches, theory of anthropogenic period, theory of neo-tectonics, theory of geo-morphology, theory of geology of ore minerals, theory of geology of nonmetallic minerals, theory of geology of the fields of oil, gas and condensates, theory of geology of the deposits of coal, bituminous breeds and peat, theory of the methods of search and investigation of the minerals deposits, theory of the technics and technology of geological-prospecting works, theory of hydro-geology, theory of engineering geology, theory of frozen-condition-of-ground-science, theory of the cognitive modeling technology in the theoretical geology ;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l m i n i n g ” – theory of the technics and technology of development of the deposits of firm minerals, theory of development of the deposits of ores of the ferrous metals, theory of development of the deposits of ores and looses of the color and rare metals and diamonds, theory of development of the deposits of coal and combustible slates, theory of development of the deposits of peat, theory of development of the deposits of building and road materials, fire-resistant, ceramic, glass and mineral technical raw materials, theory of development of the deposits of chemical and agricultural-chemistry raw materials and salts, theory of development of the deposits of precious and ornamental stones, theory of the enrichment of minerals, theory of development of the oil and gas deposits, theory of the cognitive modeling technology in the theoretical mining ;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l m e t a l l u r g y ” – theory of metallurgical processes, theory of metallurgical heating-engineering, theory of the production of ferrous metals and alloys, theory of the production of color (nonferrous) metals and alloys, theory of powder metallurgy, theory of the metallurgy of semiconductors, theory of rolling production, theory of drawing and hardware production, theory of the production of pipes, theory of metallurgical-science, theory of the technical analysis in metallurgy, theory of the cognitive modeling technology in the theoretical metallurgy] .

II. “The fundamental researches exhibitions department “Theory of oceanology, structure and physics of atmosphere, geodesy, cartography and geography of The Earth and planets” (“SOFAG”) [*the propaganda of fundamental researches and developments in the area “Theoretical oceanology”* – theory of oceanology, theory of applied oceanology, theory of aero-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of oceanodesy, theory of mapping of the underwater world of The Earth and planets, theory of the cognitive modeling technology in the theoretical oceanology; *the propaganda of fundamental researches and developments in the area “Theoretical structure of atmosphere”* – theory of the structure of atmosphere, theory of aero-survey and photo-metrology, theory of topography, theory of photo-topography, theory of cartography, theory of planetodesy of atmosphere, theory of mapping of the atmosphere of The Earth and planets, theory of the cognitive modeling technology in the theoretical structure of atmosphere; *the propaganda of fundamental researches and developments in the area “Theoretical physics of atmosphere”* – theory of the questions of the atmosphere of The Earth and planets, theory of the general problems of the physical experiment of atmosphere, theory of physics of elementary particles of atmosphere, theory of fields of atmosphere, theory of physics of gases and liquids of atmosphere, theory of thermal-dynamics and statistical physics of atmosphere, theory of physics of micro-disperse firm bodies of atmosphere, theory of physics of plasma of atmosphere, theory of physics of atom and molecule of atmosphere, theory of optics of atmosphere, theory of radio-physics of atmosphere, theory of acoustics of atmosphere, theory of the cognitive modeling technology in the theoretical physics of atmosphere; *the propaganda of fundamental researches and developments in the area “Theoretical geodesy and cartography”* – theory of higher geodesy, theory of applied geodesy, theory of aerial-survey and photogrammetry, theory of topography, theory of photo-topography, theory of cartography, theory of selenodesy, theory of planetodesy, theory of mapping of The Moon and planets, theory of the cognitive modeling technology in the theoretical geodesy and cartography; *the propaganda of fundamental researches and developments in the area “Theoretical geography”* – theory of geography, theory of historical geography, theory of military geography, theory of physical geography, theory of economic and social geography, theory of regional-geography (country-science), theory of medical geography, theory of toponymics, theory of the cognitive modeling technology in the theoretical geography].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.9. The fundamental researches exhibitions branch

“Cognitive modeling in the social sciences”

(“CM in SS”) (“OON”)

of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the social sciences”” (“OON”) treats to the fundamental researches (financing) exhibitions divisions of “Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches exhibitions department “Theory of social sciences, philosophy, science-study, politics and political sciences, sociology, (cognitive) psychology, state, law and jurisprudential sciences, patenting business, invention and rationalization work”” (“SFPSPP”) (*)
[the propaganda of fundamental researches and developments in the area “Theoretical social sciences” – theory and ideology of social sciences, theory of history of social sciences, theory of the modern condition of social sciences, theory of scientific societies, conventions, congresses, conferences and symposiums on the social sciences, theory of international cooperation in the area of social sciences, theory of the organization of scientific-research work in the area of social sciences, theory of information work in the social sciences, theory of the terminology of social sciences, theory of the propagation and popularization of social sciences, theory of the teaching of social sciences, theory of mathematical modeling in the social and humanitarian sciences, theory of the staff of social-scientists, theory of the cognitive modeling technology in the theoretical social sciences;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l p h i l o s o p h y ” – theory of the general problems of modern philosophy, theory of general-philosophical problems, theory of logic, theory of philosophy and methodology of science, theory of social philosophy, theory of ethics, theory of aesthetics, theory of philosophy of religion and atheism, theory of history of philosophy, theory of history of philosophy of science and society, theory of the cognitive modeling technology in the theoretical philosophy ;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l s c i e n c e - s t u d y ” – theory of the development of science, theory of science and society, theory of sociology of science, theory of scientific work and scientific creativity, theory of the organization of science, theory of politics in the area of science, theory of the technique and technics of scientific-research work, theory of economics of science, theory of scientific staff, theory of international cooperation in science, theory of science and scientific-research work in the separate countries, theory of the cognitive modeling technology in the theoretical science - study ;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l p o l i t i c s a n d p o l i t i c a l s c i e n c e s ” – theory of the methodology of political researches, theory of history of political doctrines, theory of political systems, theory of internal policy, theory of international relations, theory of external (foreign) politics and diplomacy, theory of the cognitive modeling technology in the theoretical politics and political sciences ;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l s o c i o l o g y ” – theory of the general problems of modern sociology, theory of the methodology of sociology, theory of the technique and technics of sociological researches, theory of society as the system, theory of social relations and processes, theory of social classes, communities and groups, theory of sociology of the spheres of social life, theory of social phenomena and institutes, theory of sociology of personality and behavior, theory of historical and regional sociology, theory of applied sociology, theory of history of sociology, theory of the cognitive modeling technology in the theoretical sociology ;

*the propaganda of fundamental researches and developments in the area “ Theoretical (cognitive) psychology ” (*) –* theory of general psychology, theory of psychology of development, theory of age psychology, theory of comparative psychology, theory of social psychology, theory of applied psychology, theory of the cognitive modeling technology in the theoretical (cognitive) psychology, theory of the modified stratified-step model of processing (cognitive psychology) of the content of information fragments, theoretical bases of cognitive psychology and the cognitive modeling technology, theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), theory of the technical means of support of the complex analysis (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others);

the propaganda of fundamental researches and developments in the area “Theoretical state management, law and jurisprudential sciences” –

theory of state and law, theory of history of state and law, theory of history of political and legal doctrines, theory of constitutional (state) law, theory of municipal law, theory of administrative law, theory of information law, theory of financial law, theory of entrepreneurial law, theory of civil law, theory of civil-procedural law (civil process), theory of arbitration-procedural law (arbitration process), theory of patent law, theory of the law of industrial property, theory of copyright and adjacent rights, theory of succession law, theory of family law, theory of agrarian law, theory of the legal problems of environment preservation, theory of ecological law, theory of land law, theory of forestry law, theory of water law, theory of air-protection law, theory of legislation about bowels, theory of legislation about the fauna world, theory of labor law, theory of the law of social welfare, theory of law-enforcement-authorities, theory of criminal law, theory of criminal-procedural law (criminal process), theory of criminology, theory of criminal-executive law, theory of penitentiary, theory of criminalistics, theory of judicial statistics, theory of international law, theory of international private law, theory of state and law of the separate countries, theory of the cognitive modeling technology in the theoretical state management, law and jurisprudential sciences;

the propaganda of fundamental researches and developments in the area “Theoretical patent business, invention and rationalization” –

theory of patent-information activity, theory of invention and rationalization, theory of patent-license work, theory of the technical-economic analysis on patent materials, theory of invention law, theory of the cognitive modeling technology in the theoretical patent business, invention and rationalization].

II. “The fundamental researches exhibitions department
“Theory of economics and economic sciences, organization, management, statistics
and the financial analysis based on the cognitive modeling technology”” (“SE”) (*)
[the propaganda of fundamental researches and developments in the area
“Theoretical economics and economic sciences” –
the economic theories, theory of history of economic idea,
theory of accounting-economic sciences, theory of science of the management of economics,
theory of economic history, theory of world economy,
theory of international economic relations,
theory of economic development and growth, theory of the prediction and planning of economics,
theory of economic cycles and crises,
theory of productive forces and scientific-technical progress,
theory of the social-economic structure,
theory of the reproduction structures of economics, theory of accumulation and consumption,
theory of well-being, theory of the territorial structure of economics,
theory of regional and city economics, theory of the branch structure of economics,
theory of financial science, the monetary and tax theories,
theory of the credit-financial institutes,
theory of the cognitive modeling technology
in the theoretical economics and economic sciences;
the propaganda of fundamental researches and developments in the area
“Theoretical organization and management” –
theory and methodology of management, theory of the state and administrative management,
theory of organization of the management of economics, theory of social management,
theory of prediction, theory of futurology,
theory of strategic management, theory of strategic planning,
theory of the cognitive modeling technology
in the theoretical organization and management;
the propaganda of fundamental researches and developments in the area
“Theoretical statistics” –
theory of general statistics, theory of economic statistics,
theory of branch statistics, theory of social statistics,
theory of international statistics,
theory of statistics of the separate countries and social-economic systems,
theory of the organization and management of statistics,
theory of the methods and means of data mining,
processing and the analysis of statistical information,
theory of the cognitive modeling technology
in the theoretical statistics;

the propaganda of fundamental researches and developments in the area “The theoretical financial analysis, monetary circulation and credit” ()* – theory of tendencies, dependences and laws of the financial analysis of the objects, processes and phenomena, theory of the system, information and cognitive approaches in economics, theory of the structure and dynamics of functioning of the financial market, theory of the global purposes of standardization of the accounting and the problems of unification of the financial and accounting reporting-documentation, theory of the institutional subjects regulating the creation, distribution and use of the international standards, theory of the principles of creation, distribution and use of the international standards of financial and accounting reporting-documentation, theory of the basic methods of transformation of the financial reporting-documentation, theory of formation of the accounting balance by the international standards of financial reporting-documentation, theory of qualifying tests of the professional participants of the financial market of the financial system of the country, theory of the administrative-legal forms of existence of the managing subject, theory of the features of procedure of the financial analysis of the managing subject, theory of the organizational structure of enterprise and its features (the educational establishment of the system of education and the information-educational environment), theory of the inflationary depreciation, discounting and compounding of monetary streams in the economic system of the country, theory of the indexes of dynamics of the financial market and tools, theory of dynamics and communications of the managing subjects, theory of investment and innovative politics of the managing subject in the financial system of the modern country, theory of the organizational, technological, scientific, methodical, normative-legal, information, hardware, software, brainware, raw, warehouse, personnel and economic preparations of production and the bases of the financial analysis and estimation of quality of activity of the credit and other organization, theory of the requirements and structure of financial reporting-documentation of the (non)production organizational structures, theory of the additional elements of accounting and financial reporting-documentation of the credit organization, theory of the consumers of financial reporting-documentation,

theory of the elements of financial reporting-documentation connected with the changes of financial-economy activity, theory of the simple and consolidated accounting and financial reporting-documentation, theory of the methods of the financial analysis of the different forms of reporting-documentation, theory of the structure of accounts of the accounting and financial analysis, theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, theory of the scheme of carrying out of the auditor check-inspection, the financial analysis and audit, theory of the external and internal control of activity of the different organizations, theory of the kinds of bank operations of the (credit) organization and enterprise, theory of the structure of the accounting balance (form №1), theory of the structure of the explanatory note to the accounting balance, theory of the structure of the report about profits and losses (form №2), theory of the structure of the explanatory note to the report about profits and losses, theory of the structure of the report about the change of capital (form №3), theory of the structure of the report about the movement of monetary resources on accounts (form №4), theory of the structure of the explanatory note to the report about the movement of means, theory of the structure of the appendix to the accounting balance (form №5), theory of the structure of the report about the target use of received means (form №6), theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserved system of USA, theory of the analysis of stability of the credit organization and commercial bank, theory of the basic analytical coefficients of the financial analysis, theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, theory of the cognitive modeling technology with dynamic cloning, verification and subverification, theory of the iterative cycle and the technique of use of the cognitive modeling technology, theory of the technique of formation of the normative-legal and information basis for the financial analysis of the (credit) organization and enterprise, theory of the technique of additional check of the information basis of the financial analysis of the (credit) organization and enterprise, theory of the technique of creation and modification of the working plan of accounts and the model of accounting, theory of the technique of carrying out of the financial analysis of the condition of organization, theory of the parametrical cognitive models block for the financial analysis and the increases of efficiency of functioning of the objects, processes and phenomena,

theory of the structure of the cognitive model for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, theory of the ways of representation of the structure of the cognitive models and problem environments (the formal and nonformal classical and new of 0th generation, the flat and volumetric of the 1st generation and 2nd generation and the hybrid of the 3rd generation), theory of the algorithm of formation of the cognitive model structure, theory of the technique of research of the cognitive model parameters, theory of the algorithm of analysis of a posteriori results of research, theory of formation and calculating of the aggregates of accounting balance of the production and nonproduction organization, theory of the calculation of parameters of the cognitive models for the vertical, horizontal and trend static and dynamic financial analysis of the (credit) organization and enterprise in the conditions of definiteness and uncertainty, theory of software for the automation of research tasks, theory of the statistical substantiation of practical use of the received results, theory of the factors influencing to the efficiency of functioning of the (credit) organization and enterprise in the economic system, theory of organization and plan of carrying out of the experiment, theory of the research of parameters of the cognitive models for the vertical, horizontal and trend financial analysis, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of the statistical analysis methods of the generated data sets, theory of the analysis of dynamics of the resultativity of financial-economy activity, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the propaganda of fundamental researches and developments in the area “Theoretical other branches of economics”* – theory of the production of musical instruments, theory of the production of art products, theory of jeweler industry, theory of the production of toys, theory of the production of sports products, theory of the production of writing goods, theory of the cognitive modeling technology in the theoretical other branches of economics].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.10. The fundamental researches exhibitions branch

“Cognitive modeling in the global problems and international relations”

(“CM in GP and IR”) (“OGPMO”)

of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the global problems and international relations”” (“OGPMO”) treats to the fundamental researches (financing) exhibitions divisions of “Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches exhibitions department “Theory of demography, pedagogics and national education, standardization, the complex studying of separate countries and regions, the general and complex problems of natural, exact, technical, public and applied sciences and branches of production”” (“SGP”) [*the propaganda of fundamental researches and developments in the area “Theoretical demography”* – theory and methodology of demographical science, theory of the general problems of national-population, theory of statistics of population, theory of history of population, theory of historical demography, theory of the resettlement of population, theory of geographical demography, theory of population of the world, theory of the cognitive modeling technology in the theoretical demography;

the propaganda of fundamental researches and developments in the area
“Theoretical pedagogics and national education” –
theory of general pedagogics, theory of history of education and pedagogics,
theory of personnels, theory of the system of education, theory of preschool education,
theory of preschool pedagogics, theory of general-educational (comprehensive) school,
theory of the pedagogics of general-educational (comprehensive) school,
theory of out-of-school (additional) education and training,
theory of out-of-school pedagogics, theory of special (correctional) schools,
theory of defectology, theory of primary professional-technical education,
theory of the pedagogics of professional (vocational) school,
theory of average professional (vocational) education,
theory of the pedagogics of average professional (vocational) education,
theory of higher professional (vocational) education,
theory of the pedagogics of higher professional (vocational) school,
theory of education of adults, theory of the improvement of professional skills,
theory of self-education, theory of family education,
theory of family pedagogics, theory of the specialized branches of education,
theory of the technical means of training and training equipment,
theory of national education and pedagogics in the separate countries,
theory of the cognitive modeling technology
in the theoretical pedagogics and national education;
the propaganda of fundamental researches and developments in the area
“Theoretical standardization” –
theory of the systems and services of standardization,
theory of the scientific-methodological support of the systems and services of standardization,
theory of the cognitive modeling technology
in the theoretical standardization;

the propaganda of fundamental researches and developments in the area “Theoretical complex studying of the separate countries and regions” – theory of RF as a particular, theory of RF as a whole, theory of The North-Western federal district of RF, theory of The Central federal district of RF, theory of The Privolgsky federal district of RF, theory of The Southern federal district of RF, theory of The Uralian federal district of RF, theory of The Siberian federal district of RF, theory of The Far-Eastern federal district of RF, theory of the area and territory of the former USSR, theory of the countries of CIS of Eastern Europe, theory of the countries of CIS of Zacaucasia, theory of the countries of CIS of Central Asia, theory of the Baltic countries and Baltic, theory of Europe as a whole, theory of Western Europe, theory of Southern Europe, theory of Central Europe, theory of Eastern Europe as a whole, theory of Scandinavia and the Scandinavian countries, theory of Asia as a whole, theory of Forward Asia, theory of Eastern Asia, theory of Southern Asia, theory of South-Eastern Asia, theory of Central Asia, theory of Near and Middle East, theory of Africa as a whole, theory of Northern Africa, theory of East Africa, theory of Central Africa, theory of Western Africa, theory of Southern Africa, theory of America as a whole, theory of USA and Canada, theory of Central America, theory of Southern America, theory of Australia and the countries of Oceania, theory of the Arctic and Antarctic polar areas, theory of the surface of The Earth and land, ocean, sea and internal waters, theory of the other political-geographical features of The Earth, theory of the cognitive modeling technology in the theoretical complex studying of the separate countries and regions;

the propaganda of fundamental researches and developments in the area “Theoretical general and complex problems of natural and exact sciences” – theory of the general and complex problems of natural and exact sciences, theory of the cognitive modeling technology in the theoretical general and complex problems of natural and exact sciences;

the propaganda of fundamental researches and developments in the area “Theoretical general and complex problems of technical and applied sciences and branches of production” – theory of materials-science, theory of the general technology of production, theory of designing, theory of constructing, theory of the flexible industrial systems (FIS), theory of vacuum technics, theory of cryogenic technics, theory of corrosion and protection against corrosion, theory of welding, theory of optical production, theory of staff, theory of the control and management of quality, theory of installation, theory of the operation and repair of industrial equipment, theory of material-technical support, theory of logistics, theory of warehouse economy, theory of container and packing, theory of secondary raw materials, theory of fire safety, theory of safety, theory of salvage-rescue services, theory of technical aesthetics, theory of ergonomics, theory of the protection of information, theory of the cognitive modeling technology in the theoretical general and complex problems of technical and applied sciences and the branches of production;

the propaganda of fundamental researches and developments in the area “Theoretical complex problems of social sciences” – theory of social-political idea, theory of global problems, theory of labor, theory of the cognitive modeling technology in the theoretical complex problems of social sciences].

II. “The fundamental researches exhibitions department
“Theory of culture and cultural-science, art and art-science,
mass communication, journalism and mass media means,
religion, internal trade and tourist-excursion service,
external trade, transport, housing-communal economy,
housekeeping and household services at the international level” (“SMO”)
[the propaganda of fundamental researches and developments in the area
“ Theoretical culture and cultural - science ” –
theory, methodology and philosophy of culture, theory of history of culture,
theory of history of the studying of culture, theory of culture in the modern world,
theory of organization and management in the area of culture,
theory of international cooperation in the area of culture,
theory of hardware of the establishments of culture,
theory of social-cultural activity in the sphere of leisure,
theory of library affair, theory of library-science, theory of bibliography,
theory bibliography-science, theory of museum affair, theory of museology,
theory of protection of the monuments of history and culture, theory of archival affair,
theory of archival-science, theory of culture of the separate countries and peoples,
theory of the cognitive modeling technology
in the theoretical culture and cultural-science;
the propaganda of fundamental researches and developments in the area
“ Theoretical art and art - science ” –
theory and methodology of art and the problems of art-science,
theory of history and the modern condition of art,
theory of art-science and art criticism,
theory of art in the modern world,
theory of organization and management in the area of art,
theory of international cooperation in the area of art,
theory of fine art, theory of music and musicology,
theory of theatre and theater-science, theory of mass and theatrical holidays,
theory of dance and choreography, theory of circus, theory of platform,
theory of cinema and motion-picture-art,
theory of national folk art, theory of art of the separate countries and peoples,
theory of the cognitive modeling technology
in the theoretical art and art-science;

the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l m a s s c o m m u n i c a t i o n ,
j o u r n a l i s m a n d m a s s m e d i a m e a n s ” –
theory of the mass communication means,
theory of the open network information resources (“Internet” and “WWW”),
theory of journalism, theory of the mass media means,
theory of printing, theory of television (TV), theory of radio,
theory of use of the technical means for the mass communication,
theory of the cognitive modeling technology
in the theoretical mass communication,
journalism and the mass media means;
the propaganda of fundamental researches and developments in the area
“ T h e o r e t i c a l r e l i g i o n ” –
theory of atheism and free-thinking, theory of separate religions,
theory of church and cults, theory of the problems of religious consciousness,
theory of philosophy and religion, theory of religion, theory of church and society,
theory of the organizational-practical activity of churches,
theory of history of atheism, theory of religions and churches,
theory of the cognitive modeling technology
in the theoretical religion;
the propaganda of fundamental researches and developments in the area
“Theoretical internal trade and tourist-excursion service” –
theory of the general questions of internal trade and tourist-excursion service,
theory of wholesale trade, theory of retail trade,
theory of public catering, theory of hotel economy,
theory of tourist-excursion service,
theory of the cognitive modeling technology
in the theoretical internal trade and tourist-excursion service;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l e x t e r n a l t r a d e ” – theory of the kinds of external trade, theory of external-trade politics, theory of communication of the external trade with production, theory of the structure of external trade, theory of the calculations on the external-trade operations, theory of the external-trade transportations, theory of the world commodity markets, theory of the international agreements about trade, theory of international contracts, theory of the international trading organizations, theory of commodity agreements, theory of the organization and management of external trade, theory of the cognitive modeling technology in the theoretical external trade ;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l t r a n s p o r t ” – theory of railway transport, theory of motor-car transport, theory of water transport, theory of air transport, theory of pipeline transport, theory of industrial transport, theory of urban (city) transport, theory of interaction of the different kinds (types) of transport, theory of mixed transportations, theory of the other kinds (types) of transport, theory of the cognitive modeling technology in the theoretical transport ;

the propaganda of fundamental researches and developments in the area “ T h e o r e t i c a l h o u s i n g - c o m m u n a l e c o n o m y , h o u s e k e e p i n g a n d h o u s e h o l d s e r v i c e s ” – theory of housing economy, theory of communal economy, theory of consumer services, theory of housekeeping, theory of the cognitive modeling technology in the theoretical housing-communal economy, housekeeping and household services] .

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.11. The fundamental researches exhibitions branch

“Cognitive modeling

in the historical-philological sciences”

(“CM in H-PHS”) (“OIFN”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the historical-philological sciences”” (“OIFN”) treats to the fundamental researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches exhibitions department “Theory of history and historical sciences”” (“SI”) [*the propaganda of fundamental researches and developments in the area “Theoretical history and historical sciences”* – theory of general history, theory of history of Azerbaijan, theory of history of Armenia, theory of history of Belorussia, theory of history of Georgia, theory of history of Kazakhstan, theory of history of Kirghizia, theory of history of Moldova, theory of history of RF, theory of history of Tajikistan, theory of history of Turkmenia, theory of history of Uzbekistan, theory of history of Ukraine, theory of history of the separate processes, parties and phenomena of human activity, theory of archeology, theory of ethnography, theory of historical anthropology, theory of auxiliary historical disciplines, theory of history of the separate countries, theory of the cognitive modeling technology in the theoretical history and historical sciences].

II. “The fundamental researches exhibitions department “Theory of science of language, (cognitive) linguistics, literature, literary-science and oral national creativity”” (“SYL”) (*) [*the propaganda of fundamental researches and developments in the area “Theoretical science of language”* – theory of general science of language, theory of applied science of language, theory of languages of the world, theory of the cognitive modeling technology in the theoretical science of language; *the propaganda of fundamental researches and developments in the area “Theoretical (cognitive) linguistics” (*)* – theory of (cognitive) linguistics, theory of applied linguistics, theory of the cognitive modeling technology in the theoretical (cognitive) linguistics, theory of the modified stratified-step model of understanding (cognitive linguistics) of the content of information fragments, theoretical bases of cognitive linguistics and the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), theory of the ways of representation of the structure of the cognitive models and problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors); *the propaganda of fundamental researches and developments in the area “Theoretical literature, literary-science and oral national creativity”* – theory of literature, theory of history of literature, theory of national creativity, theory of the auxiliary literary science disciplines, theory of the products of fiction literature, theory of the cognitive modeling technology in the theoretical literature, literary-science and oral national creativity].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.12. The fundamental researches exhibitions branch

“Cognitive modeling in the sports sciences”

(“CM in SPS”) (“OSN”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the sports sciences”” (“OSN”) treats to the fundamental researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental researches exhibitions department “Theory of competitions, sport and sports sciences”” (“STSSSN”) [*the propaganda of fundamental researches and developments in the area “Theoretical physical training and sport”* – theory of physical training and sport, theory of the medical-biological bases of physical training and sport, theory of the material-technical base of physical training and sport, theory of the methodical bases of the kinds of sport, theory of sports competitions, theory of the cognitive modeling technology in the theoretical physical training and sport].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.2.13. The fundamental researches exhibitions branch

“Cognitive modeling in the military sciences”

(“CM in MILS”) (“OVN”)

of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”

The developed “The fundamental researches exhibitions branch “Cognitive modeling in the military sciences”” (“OVN”) treats to the fundamental researches (financing) exhibitions divisions of “Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the fundamental main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental researches exhibitions branches and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The fundamental researches exhibitions department “Theory of architecture, construction, technics, history, education, politics and economics in the armed forces” (“STASTIOPEVS”) [*the propaganda of fundamental researches and developments in the area “Theoretical military science”* – theory of doctrines about war and army, theory of military history, theory of military education and professional training of staff, theory of military politics, theory of military doctrines, theory of military science, theory of military-applied science, theory of arms and military technics, theory of armed forces, theory of military economics, theory of the cognitive modeling technology in the theoretical military science].

The fundamental researches exhibitions branches and departments of “EC” allow to propagandize the development, production and financing of the fundamental main and derivative scientific results of CMT.

4.3. The applied researches (financing) exhibitions divisions (at the microscopic level) of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."

The structure of "Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A." ("SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." – "SPbEC" at "EAST") (www.eceast.spb.ru) as the first exhibition centre in the structure of "SIO ACNS" (www.acns.spb.ru) (*) of the author (www.vetrovan.spb.ru) includes the different divisions for the propaganda (fin.) and exhibition of scientific results.

B. The applied researches (financing) exhibitions divisions of "SPbEC" at "EAST" ("SIO ACNS", "SRI SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." and "SF SFA CMT" n. a. Prokopenko N.A.) for the promotion of the microscopic system, financial and complex analysis – the 27 applied researches exhibitions departments (AREDP) on the 9 applied researches exhibitions directions (ARED) of "SPbEC" at "EAST" corresponds to the 27 applied scientific researches sections (departments) (ASRS(DP)) on the 9 applied scientific researches directions (ASRD) of "SIO ACNS", and also corresponds to the 27 scientific-research laboratories (SRL) on the 9 applied developments directions (ADD) of "SRI SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." (*) and corresponds to the 27 applied researches financing departments (ARFDP) on the 9 applied researches financing directions (ARFD) of "SF SFA CMT" n. a. Prokopenko N.A." (*), besides, corresponds to the 27 sections on 9 directions of "The Russian academy of natural sciences":

- B.1. A R E D [A S R D (A D D)] “ C o g n i t i v e m o d e l i n g i n t h e n a t u r a l s c i e n c e s ” (“ C M i n N S ”) (“ N E N ”).
- B.1.1. A R E D P [A S R S (D P) (S R L)] “ A p p l i c a t i o n s o f (c o g n i t i v e) i n f o r m a t i c s , c y b e r n e t i c s , a u t o m a t i c s , c o m p u t e r e n g i n e e r i n g , d a t a t r a n s m i s s i o n a n d c o n n e c t i o n ” (“ A P (C) I C A C E D T a n d C ”) (“ S I C ”) (*).
- B.1.2. A R E D P [A S R S (D P) (S R L)] “ A p p l i c a t i o n s o f m a t h e m a t i c s , m a t h e m a t i c a l p h y s i c s , m e c h a n i c s , m e t r o l o g y , a s t r o n o m y , s p a c e r e s e a r c h e s , t h e c o m p l e x s y s t e m a n a l y s i s b a s e d o n t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y a n d t h e c o m p l e x p r o b l e m s o f n a t u r a l s c i e n c e s ” (“ A P M M P H M M A S R C S A B o n C M T a n d C P N S ”) (“ S M M F ”) (*).
- B.1.3. A R E D P [A S R S (D P) (S R L)] “ A p p l i c a t i o n s o f g e o - c h e m i c a l e c o l o g y a n d p r e s e r v a t i o n o f e n v i r o n m e n t ” (“ A P G - C H E a n d P E ”) (“ S N O S ”).
- B.1.4. A R E D P [A S R S (D P) (S R L)] “ A p p l i c a t i o n s o f t h e m o d e l s o f T h e E a r t h a n d T h e S o l a r s y s t e m p l a n e t s i n t h e g e o g r a p h y , g e o l o g y , g e o d e s y , c a r t o g r a p h y , a s t r o n o m y a n d o t h e r s c i e n c e s ” (“ A P M E a n d S S P i n G G G C A a n d O S ”) (“ S N Z ”) (*).

- B.1.5. AREDP [ASRS(DP) (SRL)] “Applications of the models, methods and technologies of the geology of oil and gas and the oil and gas industry” (“APMM and TGO and G and O and GI”) (“SNG”).
- B.1.6. AREDP [ASRS(DP) (SRL)] “Applications of the system analysis based on the cognitive modeling technology, prediction, standardization, unification and the complex problems of exact technical sciences” (“APSAB on CMTPSU and CPETS”) (“SSAP”) (*).
- B.1.7. AREDP [ASRS(DP) (SRL)] “Applications of theoretical and experimental physics, geo-physics, power-engineering, electrical-engineering, electronics and radio-engineering, nuclear physics, technics and instrument-making” (“APT and EPHG-PHP-EE-EE and R-ENPHT and I-M”) (“SF”) (*).
- B.1.8. AREDP [ASRS(DP) (SRL)] “Applications of (non)organic chemistry, crystallography, mineralogy and chemical industry” (“AP(N)OCHCM and CHI”) (“SH”) (*).
- B.2. ARED [ASRD (ADD)] “Cognitive modeling in the applied technical sciences and technologies” (“CM in ATS and T”) (“NNT”).
- B.2.1. AREDP [ASRS(DP) (SRL)] “Applications of mining and metallurgy” (“APM and M”) (“SGM”).
- B.2.2. AREDP [ASRS(DP) (SRL)] “Applications of the sciences about wood and wood processing” (“APS about W and WP”) (“SNL”).
- B.2.3. AREDP [ASRS(DP) (SRL)] “Applications of the noo-sphere knowledge and technologies: the (heavy) mechanical-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture, construction and other branches” (“APN-SK and T: (H)M-EI-MPR and PH-C-TE and FITAC and OB”) (“SNZT”) (*).
- B.2.4. AREDP [ASRS(DP) (SRL)] “Applications of the scientific problems of agro-industrial complex” (“APSPA-IC”) (“SNPAK”).
- B.3. ARED [ASRD (ADD)] “Cognitive modeling in the geo-political sciences and researches” (“CM in G-PS and R”) (“NSGI”).
- B.3.1. AREDP [ASRS(DP) (SRL)] “Applications of geo-politics and safety” (“APG-P and S”) (“SGB”).
- B.3.2. AREDP [ASRS(DP) (SRL)] “Applications of classical and military history” (“APC and MH”) (“SVIT”).
- B.4. ARED [ASRD (ADD)] “Cognitive modeling in the society steady development of post-industrial country” (“CM in SSDP-IC”) (“NURS”).
- B.4.1. AREDP [ASRS(DP) (SRL)] “Applications of the complex problems of country development” (“APCPCD”) (“SPUR”) (*).
- B.5. ARED [ASRD (ADD)] “Cognitive modeling in the social-economic and jurisprudential sciences” (“CM in S-E and JS”) (“NSEPP”).
- B.5.1. AREDP [ASRS(DP) (SRL)] “Applications of the inter-branch jurisprudential and economic system researches of society and country” (“APIJ and ESR S and C”) (“SMEESI”).
- B.5.2. AREDP [ASRS(DP) (SRL)] “Applications of the complex problems of micro-(macro-)economics, social sphere and market economy of the country” (“APCPM-(M-)ESS and MEC”) (“SPMSRH”).

- B.5.3. AREDP [ASRS(DP) (SRL)] “Applications of economics, management, sociology, statistics and their other branches” (“APEMSS and TOB”) (“SES”).
- B.5.4. AREDP [ASRS(DP) (SRL)] “Applications of the financial analysis, accounting and audit of the (credit) organization based on the cognitive modeling technology” (“APFAA and A(C)OB on CMT”) (“SFABUA”) (*).
- B.6. ARED [ASRD (ADD)] “Cognitive modeling in the biological and medical sciences” (“CM in B and MS”) (“NBME”).
- B.6.1. AREDP [ASRS(DP) (SRL)] “Applications of biology, ecology and physiology of plants” (“APBE and PHP”) (“SBE”).
- B.6.2. AREDP [ASRS(DP) (SRL)] “Applications of bio-technology, bio-medicine, ergonomics and labor safety of organic individuals” (“APB-TB-ME and LSOI”) (“SB”) (*).
- B.7. ARED [ASRD (ADD)] “Cognitive modeling in the humanitarian sciences, art and creativity” (“CM in HSA and C”) (“NGNOT”).
- B.7.1. AREDP [ASRS(DP) (SRL)] “Applications of (cognitive) linguistics, (national) creativity, culture, art and religion” (“AP(C)L(N)CCA and R”) (“SGNT”) (*).
- B.7.2. AREDP [ASRS(DP) (SRL)] “Applications of literature, science-study, philosophy, journalism and mass communication means” (“APLS-SPHJ and MCM”) (“SLPZ”).
- B.7.3. AREDP [ASRS(DP) (SRL)] “Applications of the problems of (cognitive) psychology, education, science and support of young scientists (the programs of grants and others)” (“APP(C)PES and SYS (PG and O)”) (“SPOPMU”) (*).
- B.7.4. AREDP [ASRS(DP) (SRL)] “Applications of innovations of the project "The Russian encyclopedias", philosophy of science, technics and technology on the branches of knowledge” (“APIPREPHST and T on BK”) (“SRE”).
- B.8. A R E D [A S R D (A D D)] “ C o g n i t i v e m o d e l i n g in the physical training and sport” (“CM in PHT and S”) (“NFS”).
- B.8.1. AREDP [ASRS(DP) (SRL)] “Applications of sport, sports sciences and actions” (“APSSS and A”) (“SSSNM”).
- B.9. A R E D [A S R D (A D D)] “ C o g n i t i v e m o d e l i n g in the military sciences” (“CM in MILS”) (“NVN”).
- B.9.1. AREDP [ASRS(DP) (SRL)] “Applications of architecture, construction, technics, history, education, politics and economics in the armed forces” (“APACTHEP and E in AF”) (“SASTIOPEVC”).

“"Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A."” allows to organize the exhibitions and to propagandize (financing) of the development of the main and derivative scientific results, in particular the algorithms, methods and technologies of the system, financial and complex analysis for the increase of efficiency of the diverse (information) technologies of the single, serial and mass (non)material production of the one or several assortment groups and nomenclature units of the goods, works and services to the final consumer of social-econ. formation based on the cognitive modeling technology and the cognitive models.

Taking part (3 years step by step) in the competition n. a. Nobel A. (Norway and Sweden).

4.3.1. The applied researches exhibitions direction

“Cognitive modeling in the natural sciences”

(“CM in NS”) (“NEN”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The applied researches exhibitions direction “Cognitive modeling in the natural sciences”” (“NEN”) treats to the applied researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches exhibitions department “Applications of (cognitive) informatics, cybernetics, automatics, computer engineering, data transmission and connection”” (“SIC”) (*)
[the propaganda of applied researches and developments in the area “Applications of informatics (theory of information)” – usage of theory of informatics (theory of information), usage of theory of organization of information work, usage of theory of documentary information sources, usage of theory of analytical-synthetical processing of the documentary information sources, usage of theory of information search, usage of theory of information service, usage of theory of the technical means of support of information processes, usage of theory of the cognitive modeling technology in the applications of informatics (theory of information);

the propaganda of applied researches and developments in the area “Applications of cognitive informatics” ()* – usage of theory of the modified stratified-step model of perception (psycho-physiology of perception), processing (cognitive psychology) and understanding (cognitive linguistics) of the information fragments content, usage of theory of the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, usage of theory of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the parametrical cognitive models block for the financial analysis of the (credit) organizations and enterprises (the cognitive models for the vertical, horizontal and trend financial analysis of the managing subjects of the economic system), usage of theory of the parametrical cognitive models block for the complex analysis of the difficult objects, processes and phenomena, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), usage of theory of the technical means of support of the financial analysis (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting, the automation means of formation of the accounting balance and the report about profits and losses of the (credit) organization, the automation means of the vertical, horizontal and trend financial analysis based on the analytical coefficients system), usage of theory of the technical means of support of the complex analysis (the automation means of formation and research of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others); *the propaganda of applied researches and developments in the area “ Applications of cybernetics ”* – usage of theory of automatic control systems, usage of theory of modeling, usage of theory of cybernetic control systems, usage of theory of information, usage of theory of artificial intelligence, usage of theory of final automatic-devices and formal languages, usage of theory of reliability of the objects, processes and systems, usage of theory of the system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology in the applications of cybernetics;

the propaganda of applied researches and developments in the area “Applications of automatics and computer engineering” – usage of theory of automatic control, usage of theoretical bases of programming, usage of theory of computer engineering, usage of theory of elements, units and devices of automatics and computer engineering, usage of theory of input-output devices, usage of theory of memory devices, usage of theory of technology and equipment for the manufacture of the means of automatics and computer engineering, usage of theory of keyboard and calculating-tabulating machines, usage of theory of analog calculating machines (ACM), usage of theory of digital calculating machines and calculating complexes (DCM), usage of theory of analog-digital (hybrid) calculating machines and calculating complexes, usage of theory of calculating centres (CC), usage of theory of calculating networks (CN), usage of theory of software of calculating machines, complexes and networks, usage of theory of automatic measurement, regulation and control systems, usage of theory of the systems of tele-control and tele-measurement, usage of theory of the automated control systems of technological processes (technological stages), usage of theory of the automated systems of organizational management, usage of theory of automation of designing and scientific researches, usage of theory of the cognitive modeling technology in the applications of automatics and computer engineering;

the propaganda of applied researches and developments in the area “Applications of data transmission and connection” – usage of theory of data transmission and connection, usage of theory of designing and constructing of connection devices, usage of theory of technology and equipment for the assembly and adjustment of connection equipment, systems of data transmission, communication lines, multi-channel connection, networks and centres of communication, services and facilities of connection, usage of theory of telegraph (cable) connection and equipment, usage of theory of the systems and equipment of data transmission, usage of theory of tele-information services and equipment, usage of theory of phone connection and equipment, usage of theory of the systems of transfer of moving images and sound, usage of theory of facsimile connection and equipment, usage of theory of radio-connection and radio-broadcasting, usage of theory of hyber-optic (LED) connection and equipment, usage of theory of television (TV), usage of theory of optical connection in the free space and equipment, usage of theory of post connection, usage of theory of the cognitive modeling technology in the applications of data transmission and connection].

II. “The applied researches exhibitions department
“Applications of mathematics, mathematical physics,
mechanics, metrology, astronomy, space researches,
the complex system analysis based on the cognitive modeling technology
and the complex problems of natural sciences” (“SMMF”) (*)
[the propaganda of applied researches and developments in the area
“ Applications of mathematics ” –
usage of theory of mathematical logic and applied bases of mathematics,
usage of theory of numbers, usage of theory of algebra,
usage of theory of topology, usage of theory of geometry,
usage of theory of the mathematical analysis,
usage of theory of the functions of valid variables,
usage of theory of the functions of complex variables,
usage of theory of ordinary differential equations,
usage of theory of differential equations with private derivatives,
usage of theory of integrated equations,
usage of theory of mathematical models of natural and technical sciences,
usage of theory of the equations of mathematical physics,
usage of theory of variation calculus,
usage of mathematical theory of optimum control,
usage of theory of the functional analysis,
usage of theory of calculation mathematics,
usage of theory of probability and mathematical statistics,
usage of theory of the combinatory analysis, usage of theory of graphs,
usage of theory of mathematical cybernetics,
usage of theory of the cognitive modeling technology
in the applications of mathematics ;

the propaganda of applied researches and developments in the area “ Applications of mathematical physics ” (*) – usage of theory of the general problems of mathematical physics, usage of theory of the mathematical models of physics of elementary particles, usage of theory of fields (united theory of field), usage of theory of the mathematical models of physics of high energies, usage of theory of nuclear physics, usage of theory of physics of gases and liquids, usage of theory of the mathematical models of thermo-dynamics and statistical physics, usage of theory of physics of firm bodies, usage of theory of physics of plasma, usage of theory of physics of atom and molecule, usage of theory of optics, usage of theory of physics of lasers, usage of theory of radio-physics, usage of theory of the mathematical models of physical bases of electronics, usage of theory of acoustics (theory of waves distribution in the environment), usage of theory of the cognitive modeling technology in the applications of mathematical physics, usage of theory of the cognitive models of the interaction between the elementary particles and firm bodies, fields, liquids and gases, usage of theory of the cognitive model of the modified volumetric planetary model of atom n. a. Bohr N.H.D., usage of theory of the cognitive models of the temperature areas of plasma of atom and molecule, usage of theory of the cognitive model of the optical environment of eye, usage of theory of the cognitive model of the acoustical environment of ear, usage of theory of the cognitive model of the waves distribution in the environment;

the propaganda of applied researches and developments in the area “ Applications of mechanics ” (*) – usage of theory of the general tasks and methods of mechanics, usage of theory of mechanics of liquid and gas, usage of theory of mechanics of deformable firm body, usage of theory of the complex and special sections of mechanics, usage of theory of the cognitive modeling technology in the applications of mechanics, usage of theoretical bases of formation of the parametrical cognitive models block for the complex system analysis of the objects, processes and phenomena of mechanics, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and the 2nd generation and the hybrid of the 3rd generation), usage of theory of the adaptive automation means of research of the objects, processes and phenomena of mechanics, usage of theory of the technical means of support of research of the objects, processes and phenomena of mechanics, usage of theory of the technical means of support of the complex system analysis of the difficult objects, processes and phenomena of mechanics (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others);

the propaganda of applied researches and developments in the area “Applications of mechatronics (theory of hygroscope-building)” – usage of theoretical bases, general tasks and methods of mechatronics, usage of theory of general mechatronics, usage of theory of mechatronics of liquid and gas, usage of theory of mechatronics of deformable firm body, usage of theory of the complex and special sections of mechatronics, usage of theory of the automation means and devices of mechatronics, usage of theory of the cognitive modeling technology in the applications of mechatronics (theory of hygroscope-building);

the propaganda of applied researches and developments in the area “Applications of metrology (theory of measurement)” – usage of theory of the scientific bases and technical means of metrology and metrological support, usage of theory of the state, national and international systems and services of metrology, usage of theory of measurement of separate sizes and characteristics, usage of theory of standard samples of the structure and properties of substances and materials, usage of theory of the cognitive modeling technology in the applications of metrology (theory of measurement);

the propaganda of applied researches and developments in the area “Applications of astronomy” (*) – usage of theory of astronomy, usage of theory of heavenly mechanics, usage of theory of astrometry, usage of theory of astro-physics of The Solar system, The Sun, stars, fogs, interstellar environment and star systems, usage of theory of cosmology, usage of theory of observatories, tools, devices and methods of astronomical supervisions, usage of theory of the cognitive modeling technology in the applications of astronomy, usage of theory of the cognitive models of the relative positioning of 1, 2, 3, 4, 5 and more planets, satellites, The Earth, The Sun and others;

the propaganda of applied researches and developments in the area “Applications of space researches” – usage of theory of the devices and methods of applied scientific researches of the space environment, usage of theory of planning and realization of starts of the space vehicles and artificial heavenly bodies, usage of theory of uncontrol movement of the space vehicles and artificial heavenly bodies, usage of theory of control of movement of the space vehicles and artificial heavenly bodies, usage of theory of space technics and technology, usage of theory of safety and medical-biological problems of space flights, usage of theory of use of space systems for the connection and navigation, usage of theory of the practical problems of development of extraterrestrial territories and prospects of astronautics, usage of theory of applied scientific researches of the astronomical objects by the space means, usage of theory of geo-physical applied scientific researches by the space means, usage of theory of research of The Earth from the space, usage of theory of the cognitive modeling technology in the applications of space researches;

the propaganda of applied researches and developments in the area “Applications of the complex system analysis” () – usage of theory of tendencies, dependences and laws of the complex system analysis of the objects, processes and phenomena, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology for the complex system analysis of the difficult objects, processes and phenomena, usage of theory of the parametrical cognitive models block for the complex system analysis and the increase of efficiency of functioning of the difficult objects, processes and phenomena, usage of theory of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments (the formal and nonformal classical and new of the 0th generation, the flat and volumetric of the 1st generation and the 2nd generation and the hybrid of the 3rd generation), usage of theory of the algorithms of formation of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the techniques of research of parameters of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, usage of theory of the algorithms of processing of a posteriori data of the complex system analysis of the problem spheres, usage of theory of software for the automation of research tasks, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of functioning of the difficult objects, processes and phenomena, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the cognitive models parameters, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the methods of the statistical analysis of the generated data sets, usage of theory of the analysis of dynamics of the productivity of training, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the complex system analysis of the basic rocket engine, the first, the second, the third and the fourth rocket engine of the launch vehicle, the multivariate code device, the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates, the chemical element with 1, 2, 3, 4, 5 and more nucleuses, the difficult multivariate hurricane].*

III. “The applied researches exhibitions department “Applications of geo-chemical ecology and preservation of environment”” (“SNOS”)
[the propaganda of applied researches and developments in the area “Applications of preservation of environment and ecology” – usage of theory of the methods of studying of the preservation of environment of the person and animals, usage of theory of the ecological bases of use of the natural resources, usage of theory of international cooperation, usage of theory of studying of environmental contamination of the person and animals, usage of theory of the control of pollution and protection of atmosphere, waters of land, seas and oceans, usage of theory of the protection of soils and bowels, usage of theory of the ecological bases of ability-to-live of the organic individuals, usage of theory of influence of anthropogenic changes of environment on the health and activity of organic individuals, on the condition of natural ecosystems, populations and organisms of the vegetative and generative (fauna) world, usage of theory of protection of the vegetative and generative world of the person and animals, usage of theory of the anthropogenic influence on landscape, usage of theory of the protection and optimization of landscape, usage of theory of nature reserve, usage of theory of protected natural territories and water-areas, usage of theory of nature acts and accidents of anthropogenic origin, usage of theory of ecological safety, usage of theory of the rational use and reproduction of natural resources, usage of theory of the preservation of environment and natural resources in the separate regions and countries, usage of theory of waste management, usage of theory of small waste and without waste technology, usage of theory of protection of organic individuals against noise, vibration, electrical and magnetic fields and radiations, usage of theory of the cognitive modeling technology in the applications of preservation of environment and ecology].

IV. “The applied researches exhibitions department
“Applications of the models of The Earth and The Solar system planets
in geography, geology, geodesy, cartography, astronomy and other sciences” (“SNZ”) (*)
[the propaganda of applied researches and developments in the area
“ Applications of geography ” –
usage of theory of geography, usage of theory of historical geography,
usage of theory of military geography, usage of theory of physical geography,
usage of theory of economic and social geography,
usage of theory of regional-geography (country-science),
usage of theory of medical geography and toponymics,
usage of theory of the cognitive modeling technology
in the applications of geography ;
the propaganda of applied researches and developments in the area
“ Applications of geology ” –
usage of theory of lithology, usage of theory of tectonics,
usage of theory of geological-geo-physical researches of the deep structure of The Earth,
usage of theory of regional geology ,
usage of theory of planetology, usage of theory of stratigraphy,
usage of theory of paleontology, usage of theory of geo-chemistry,
usage of theory of mineralogy, usage of theory of petrography,
usage of theory of experimental and technical mineralogy and petrography,
usage of theory of the methods of mineralogical-petrographical
and geo-chemical laboratory researches ,
usage of theory of anthropogenic period ,
usage of theory of neo-tectonics, usage of theory of geo-morphology,
usage of theory of geology of ore minerals ,
usage of theory of geology of nonmetallic minerals ,
usage of theory of geology of the fields of oil, gas and their condensates,
usage of theory of geology of the deposits of coal, bituminous breeds and peat,
usage of theory of the methods of search and investigation of the deposits of minerals,
usage of theory of technics and technology of geological-prospecting works,
usage of theory of hydro-geology, usage of theory of engineering geology,
usage of theory of frozen condition of ground ,
usage of theory of the cognitive modeling technology
in the applications of geology ;

the propaganda of applied researches and developments in the area
“ Applications of geodesy and cartography ” –
 usage of theory of supreme geodesy, usage of theory of geodesy,
 usage of theory of aerial-survey, usage of theory of photogrammetry,
 usage of theory of topography, usage of theory of photo-topography,
 usage of theory of cartography, usage of theory of selenodesy,
 u s a g e o f t h e o r y o f p l a n e t o d e s y ,
 usage of theory of mapping of The Moon and planets,
 usage of theory of the cognitive modeling technology
 in the applications of geodesy and cartography;
the propaganda of applied researches and developments in the area
*“ Applications of astronomy ” (*)* –
 usage of theory of astronomy, usage of theory of heavenly mechanics,
 u s a g e o f t h e o r y o f a s t r o m e t r y ,
 usage of theory of astro-physics of The Solar system, The Earth, The Sun,
 stars, fogs, interstellar environment and star systems,
 u s a g e o f t h e o r y o f c o s m o l o g y ,
 usage of theory of observatories, tools,
 devices and methods of astronomical supervisions,
 usage of theory of the cognitive modeling technology
 in the applications of astronomy ,
 usage of theory of the cognitive models of the gravitational and other interactions
 b e t w e e n 1 , 2 , 3 , 4 , 5 a n d m o r e a r t i f i c i a l
 space objects, satellites, planets, The Earth and The Sun,
 usage of theory of the cognitive models of the work of the basic rocket engine,
 the first, the second, the third and the fourth rocket engine of the launch vehicle and others].

V. “The applied researches exhibitions department “Applications of the models, methods and technologies of geology of oil and gas and the oil and gas industry”” (“SNG”)
[the propaganda of applied researches and developments in the area “Applications of geology of oil and gas” – usage of theory of lithology, usage of theory of tectonics, usage of theory of geological-geo-physical researches of the deep structure of The Earth, usage of theory of regional geology of deposits, usage of theory of planetology, usage of theory of stratigraphy, usage of theory of paleontology, usage of theory of geo-chemistry, usage of theory of mineralogy, usage of theory of petrography, usage of theory of experimental and technical mineralogy and petrography of oil, natural and passing gas, usage of theory of the methods of mineral-petrographical and geo-chemical laboratory researches, usage of theory of anthropogenic period, usage of theory of neo-technics, usage of theory of geo-morphology, usage of theory of geology of the fields of oil, gas and their condensates, usage of theory of the methods of search and investigation of the fields of oil and gas, usage of theory of technics and technology of geological-prospecting works, usage of theory of hydro-geology, usage of theory of engineering geology of oil and gas, usage of theory of frozen condition of ground of deposits, usage of theory of the cognitive modeling technology in the applications of geology of oil and gas;
the propaganda of applied researches and developments in the area “Applications of oil and gas industry” – usage of theory of processes and devices of oil and gas technology, usage of theory of oil and gas raw materials, usage of theory of technology of nonorganic substances and products of oil, natural and passing gas, usage of theory of technology of production of fertilizers from oil and gas, usage of theory of technology of production of silicate and refractory nonmetallic materials from oil and gas,

usage of theory of industrial organic synthesis, usage of theory of industrial synthesis of organic dyes and pigments from oil and gas, usage of theory of technology of production of photographic materials from oil and gas, usage of theory of technology of protection against explosions and the means of chemical protection of oil and gas technology, usage of theory of technology of production of the chemical-pharmaceutical means from oil, natural and passing gas, usage of theory of technology of production of fragrant substances from oil and gas, usage of theory of technology of production of pesticides and disinfectant substances from oil, natural and passing gas, usage of theory of technology of refining of oil, natural and passing gases and their condensates, their products and analogues, motor fuel and lubricant materials from oil and gas, usage of theory of technology of production of natural high-molecular compounds from oil, natural and passing gas, usage of theory of technology of production of synthetic high-molecular compounds from oil and gas, usage of theory of technology of production of plastics, rubbers and products from oil, natural and passing gas, usage of theory of technology of production of paint-varnish materials and organic coverings from oil and gas, usage of theory of technology of production of chemical fibers and strings from oil and gas, usage of theory of technology of production of chemical reactants and especially clean substances from oil and gas, usage of theory of technology of production of household chemical goods and auxiliary materials from oil, natural and passing gas, usage of theory of the cognitive modeling technology in the applications of oil and gas industry].

VI. “The applied researches exhibitions department
“Applications of the system analysis based on the cognitive modeling technology,
p r e d i c t i o n , s t a n d a r d i z a t i o n , u n i f i c a t i o n
and the complex problems of exact technical sciences”” (“SSAP”) (*)
[the propaganda of applied researches and developments in the area
*“ Applications of the system analysis ” (*) –*
 usage of theory of tendencies, dependences and laws
 of the system analysis of the objects, processes and phenomena,
 usage of theory of the cognitive modeling technology
 with dynamic cloning, verification and subverification,
 usage of theory of the iterative cycle and the technique of use
 o f t h e c o g n i t i v e m o d e l i n g t e c h n o l o g y ,
 usage of theory of the parametrical cognitive models block
 for the system analysis of the information-educational environments
 and the increase of efficiency of functioning of the automated training system
 with the properties of adaptation based on the cognitive models
 (the cognitive models of the subject of training and the means of training),
 usage of theory of the ways of representation of the structure
 of the cognitive models and difficult problem environments:
 the formal classical of the 0th generation (the logical and production models),
 the nonformal classical of the 0th generation (the semantic network, the frame network and ontology),
 the formal new of the 0th generation (the calculus of theory of sets and corteges on domains
 and the innovative calculus of theory of sets and graphs),
 the nonformal new of the 0th generation (the multi-level structural scheme
 and the multi-level encapsulated pyramids combining theory of graphs and theory of sets),
 the flat of the 1st generation (the cognitive circle and the cognitive disc),
 the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
 the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle,
 cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere),
 the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithm of formation of the cognitive model structure, usage of theory of the technique of research of the cognitive model parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of knowledge formation in the information-educational environment and the increase of resultativity of functioning of the difficult objects, processes and phenomena, usage of theory of organization and plan of carrying out of the experiment for the research of parameters of the parametrical cognitive models block, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the methods of statistical analysis of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of training, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists; ***the propaganda of applied researches and developments in the area “ Applications of standardization ”*** – usage of theory of systems and services of standardization, usage of theory of scientific-methodological support of systems and services of standardization, usage of theory of the cognitive modeling technology in the applications of standardization].

VII. “The applied researches exhibitions department
 “Applications of theoretical and experimental physics, geo-physics,
 power-engineering, electrical-engineering, electronics and radio-engineering,
 nuclear physics, technics and instrument-making” (“SF”) (*)
*[the propaganda of applied researches and developments in the area
 “ Applications of physics ” (*)* –
 usage of theory of the general problems of physical experiment,
 usage of theory of physics of elementary particles,
 usage of theory of fields (united theory of field),
 usage of theory of physics of high energies, usage of theory of nuclear physics,
 usage of theory of physics of gases and liquids,
 usage of theory of thermal-dynamics and statistical physics,
 usage of theory of physics of firm bodies, usage of theory of physics of plasma,
 usage of theory of physics of atom and molecule,
 usage of theory of optics, usage of theory of laser physics,
 usage of theory of radio-physics,
 usage of theory of the physical bases of electronics, usage of theory of acoustics,
 usage of theory of the cognitive modeling technology
 in the applications of physics,
 usage of theory of the cognitive models of the interaction between
 the elementary particles and firm bodies, fields, liquids and gases,
 usage of theory of the cognitive model of the modified
 volumetric planetary model of atom n. a. Bohr N.H.D.,
 usage of theory of the cognitive models of the temperature areas of plasma of atom and molecule,
 usage of theory of the cognitive model of the optical environment of eye,
 usage of theory of the cognitive model of the acoustical environment of ear,
 usage of theory of the cognitive model of the waves distribution in the environment;
*the propaganda of applied researches and developments in the area
 “ Applications of geo-physics ”* –
 usage of theory of geo-magnetism in the high layers of atmosphere,
 usage of theory of meteorology, usage of theory of climatology,
 usage of theory of oceanography, usage of theory of hydrology of land,
 usage of theory of glaciology, usage of theory of physics of The Earth,
 usage of theory of the cognitive modeling technology
 in the applications of geo-physics ;

the propaganda of applied researches and developments in the area
“ Applications of power-engineering ” –
usage of theory of power-resources, usage of theory of power balance,
usage of theory of electrical-power-engineering, usage of theory of heating-power-engineering,
usage of theory of heating-technics, usage of theory of atomic power-engineering,
usage of theory of hydro-power-engineering, usage of theory of gelio-power-engineering,
usage of theory of wind-power-engineering,
usage of theory of direct transformation of energy,
usage of theory of the cognitive modeling technology
in the applications of power-engineering;
the propaganda of applied researches and developments in the area
“ Applications of electrical-engineering ” –
usage of theory of electrical-engineering,
usage of theory of electrical-technical materials,
usage of theory of electrical machines,
usage of theory of electrical devices,
usage of theory of transformers, usage of theory of electrical reactors,
usage of theory of power electrical condensers,
usage of theory of power converting technics,
usage of theory of electrical-drive, usage of theory of electrical-thermics,
usage of theory of electrical-welding equipment,
usage of theory of wire and cable, usage of theory of electrical isolators,
usage of theory of light-engineering,
usage of theory of electrical-technical equipment of special purpose,
usage of theory of the cognitive modeling technology
in the applications of electrical-engineering;

the propaganda of applied researches and developments in the area “Applications of electronics and radio-engineering” – usage of the theoretical bases of electronic technics, usage of theory of radio-engineering, usage of theory of materials for electronics and radio-engineering, usage of theory of technology and equipment for the electronic and radio-technical manufacture, usage of theory of designing and constructing of electronic devices and radio-electronic equipment, usage of theory of electrical-vacuum and gas-discharge devices and units, usage of theory of accelerators of charged particles and plasma, usage of theory of solid-state devices, usage of theory of quantum electronics, usage of theory of holography, usage of theory of crio-electronics, usage of theory of radio-electronic circuits, usage of theory of distribution of radio-waves, usage of theory of antennas, usage of theory of wave-transports, usage of theory of elements of micro-wave technics, usage of theory of radio-transmission and radio-receiving devices, usage of theory of the radio-technical systems of sounding, location and navigation, usage of theory of television (TV) technics, usage of theory of record and reproduction of signals, usage of theory of electrical-acoustics, usage of theory of ultra-sonic and infra-sonic technics, usage of theory of infra-red technics, usage of theory of units, details and elements of radio-electronic equipment, usage of theory of devices for the radio-technical measurements, usage of theory of the systems and units of information display, usage of theory of the cognitive modeling technology in the applications of electronics and radio-engineering;

the propaganda of applied researches and developments in the area “Applications of nuclear technics and instrument-making” (*) – usage of theory of nuclear raw materials and fuel, usage of theory of synthesis of isotopes, usage of theory of isotopes and ionization radiations, usage of theory of nuclear reactors, usage of theory of thermal-nuclear reactors, usage of theory of action of radiations and protection against them, usage of theory of nuclear explosions, usage of theory of processing of nuclear fuel and waste disposal, usage of theory of the cognitive modeling technology in the applications of nuclear technics and instrument-making, usage of theory of the cognitive models of the structure of the chemical elements with 1, 2, 3, 4, 5 and more nucleuses, usage of theory of the cognitive model of the modified volumetric principle n. a. Pauli W.E. for the studying of electronic clouds within limits of power levels, usage of theory of the cognitive model of the modified planetary model of atom n. a. Bohr N.H.D. and others].

VIII. “The applied researches exhibitions department “Applications of (non)organic chemistry, crystallography, mineralogy and chemical industry”” (“SH”) (*)
[the propaganda of applied researches and developments in the area “Applications of chemistry” ()* – usage of theory of basic-laboratory chemical equipment and units, usage of theory of physical chemistry, usage of theory of nonorganic chemistry, usage of theory of complex compounds, usage of theory of analytical chemistry, usage of theory of organic chemistry, usage of theory of bio-organic chemistry, usage of theory of natural organic compounds and their synthetic analogues, usage of theory of chemistry of high-molecular compounds, usage of theory of biological chemistry, usage of theory of the cognitive modeling technology in the applications of chemistry, usage of theory of modeling of the structure of the (non)organic chemical elements and the chemical elements with 1, 2, 3, 4, 5 and more nucleuses, usage of theory of research of the molecular structure of (non)organic compounds;
the propaganda of applied researches and developments in the area “Applications of chemical technology and chemical industry” – usage of theory of processes and devices of chemical technology, usage of theory of chemical raw materials, usage of theory of technology of production of nonorganic substances and products, usage of theory of production of fertilizers, usage of theory of technology of production of silicate and refractory nonmetallic materials, usage of theory of industrial organic synthesis, usage of theory of industrial synthesis of organic dyes and pigments, usage of theory of technology of production of photographic materials, usage of theory of technology of production of explosive substances and means of chemical protection,

usage of theory of technology of storage and destruction of chemical weapon, usage of theory of technology of production of the chemical-pharmaceutical means, usage of theory of technology of production of fragrant substances, usage of theory of technology of production of pesticides and disinfectant substances, usage of theory of technology of processing of natural gases, oil, gas condensate, their products and analogues, motor fuel and lubricant materials, usage of theory of technology of processing of firm combustible minerals, usage of theory forestry-chemical manufactures, usage of theory of technology of production of natural high-molecular compounds, usage of theory of technology of production of synthetic high-molecular compounds, usage of theory of technology of production of plastics, usage of theory of technology of production of rubbers and products from them, usage of theory of technology of production of paint-varnish materials and organic coverings, usage of theory of technology of production of chemical fibers and strings, usage of theory of technology of production of chemical reactants and especially clean substances, usage of theory of technology of production of household chemical goods products, usage of theory of technology of production of auxiliary materials, usage of theory of the cognitive modeling technology in the applications of chemical technology and chemical industry].

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

4.3.2. The applied researches exhibitions direction

"Cognitive modeling in the applied technical sciences and technologies"

("CM in ATS and T") ("NNT")

of "'SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.""

The developed "The applied researches exhibitions direction "Cognitive modeling in the applied technical sciences and technologies"" ("NNT") treats to the applied researches (financing) exhibitions divisions of "'Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A." ("SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." – "EC") as the first EC in the structure of "SIO "Academy of cognitive natural sciences"" ("SIO "ACNS")" and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of "EC"]: 1) it is executed by the principle of "the administrative-economy submission"; 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to "SPbSETU "LETI" and "The Government of RF" for the translation, carrying out of int. action and receiving of "The Nobel prize"); 3) includes the several various main divisions: I. "The applied researches exhibitions department "Applications of mining and metallurgy"" ("SGM") [*the propaganda of applied researches and developments in the area "Applications of mining"* – usage of theory of technics and technology of development of the deposits of firm minerals, usage of theory of development of the deposits of ores and ferrous metals, usage of theory of development of the deposits of ores and looses of the color and rare metals and diamonds, usage of theory of development of the deposits of coal and combustible slates, usage of theory of development of the deposits of peat, usage of theory of development of the deposits of building and road materials, fire-resistant, ceramic, glass and mineral technical raw materials, usage of theory of development of the deposits of chemical and agricultural-chemical raw materials and salts, usage of theory of development of the deposits of precious and ornamental stones, usage of theory of enrichment of minerals, usage of theory of development of the oil and gas deposits, usage of theory of the cognitive modeling technology in the applications of mining;

the propaganda of applied researches and developments in the area “ Applications of metallurgy ” – usage of theory of metallurgical processes, usage of theory of metallurgical heating-technics, usage of theory of manufacture of ferrous metals and alloys, usage of theory of manufacture of nonferrous metals and alloys, usage of theory of powder metallurgy, usage of theory of semi-conductors metallurgy, usage of theory of technology of rolling manufacture, usage of theory of drawing and hardware manufacture, usage of theory of technology of pipes manufacture, usage of theory of metallurgical-science, usage of theory of the technical analysis in metallurgy, usage of theory of the cognitive modeling technology in the applications of metallurgy].

II. “The applied researches exhibitions department “Applications of the sciences about forestry and wood processing” (“SNL”)

[the propaganda of applied researches and developments in the area “Applications of forestry and wood-processing industry” – usage of theory of wood-science, usage of theory of wood-cutting works, usage of theory of wood transportation, usage of theory of forestry-timber works, usage of theory of technology and equipment for wood processing, usage of theory of technology of forestry-sawmill manufacture, usage of theory of technology of manufacture of joiner-building products, usage of theory of technology of manufacture of plywood and plates, usage of theory of technology of manufacture of blocks, usage of theory of technology of manufacture of furniture, usage of theory of technology of manufacture of matches, usage of theory of technology of manufacture of wooden container, usage of theory of technology of special wood-processing manufactures, usage of theory of technology of pulp-paper industry, usage of theory of the cognitive modeling technology in the applications of forestry and wood-processing industry;

the propaganda of applied researches and developments in the area “ Applications of forestry economy ” – usage of theory of forestry-economy biology, usage of theory of soil-science, usage of theory of agriculture, usage of theory of forestry-economy melioration, usage of theory of agro-chemistry, usage of theory of plant-science, usage of theory of protection of forestry-economy plants, usage of theory of animal-industry, usage of theory of veterinary-science, usage of theory of technology of preparation of production of forestry economy, usage of theory of hunting and hunting economy, usage of theory of forestry economy, usage of theory of economics and organization of forestry economy, usage of theory of mechanization and electrification of forestry economy, usage of theory of the cognitive modeling technology in the applications of forestry economy].

III. “The applied researches exhibitions department
“Applications of the noo-sphere knowledge and technologies:
the (heavy) mechanical-engineering, instrument-making, polygraphy,
reprography and photo-cinema-technics, the light and food-processing industry,
transport, architecture, construction and other branches” (“SNZT”) (*)
*[the propaganda of applied researches and developments in the area
“Applications of mechanical-engineering”* –
usage of theory of machine-engineering-science and details of machines,
usage of theory of mechanical-engineering materials,
usage of theory of technology of mechanical-engineering,
usage of theory of foundry manufacture,
usage of theory of forge-stamp manufacture,
usage of theory of assembly manufacture, usage of theory of cutting of materials,
usage of theory of electrical-physical-chemistry processing,
usage of theory of thermal and strengthening powder materials,
usage of theory of manufacture of nonmetallic products,
usage of theory of machine-tool-construction, usage of theory of robotics,
usage of theory of tool manufacture,
usage of theory of mining mechanical-engineering,
usage of theory of metallurgical mechanical-engineering,
usage of theory of reactor-construction, usage of theory of turbine-construction,
usage of theory of manufacture of special power-engineering installations,
usage of theory of chemical and oil mechanical-engineering,
usage of theory of locomotive-construction and carriage-building,
usage of theory of engine-construction, usage of theory of motor-car-industry,
usage of theory of ship-building, usage of theory of aircraft-construction,
usage of theory of space technics and rocket-production,
usage of theory of hoisting-transport mechanical-engineering,
usage of theory of building and road mechanical-engineering,
usage of theory of municipal mechanical-engineering,
usage of theory of tractor and agricultural mechanical-engineering,
usage of theory of mechanical-engineering for the light industry,
usage of theory of polygraphic mechanical-engineering,
usage of theory of mechanical-engineering for the food-processing industry,
usage of theory of mechanical-engineering for the trade and public catering,
usage of theory of production of household machines and devices,
usage of theory of manufacture of weapon,
usage of theory of the other branches of mechanical-engineering,
usage of theory of the cognitive modeling technology
in the applications of mechanical-engineering;

the propaganda of applied researches and developments in the area
“ Applications of instrument-making ” – usage of theoretical bases of instrument-making, usage of theory of general technology of production and equipment in instrument-making, usage of theory of designing and constructing of devices, usage of theory of devices for the measurement of electrical and magnetic sizes, usage of theory of devices for the measurement of mechanical sizes, usage of theory of devices for the measurement of time and frequency, usage of theory of devices for the measurement of structure and physical-chemical properties of substances and materials, usage of theory of devices for the heating-technical and heating-physical measurements, usage of theory of devices for the measurement of acoustical sizes and characteristics, usage of theory of devices for the measurement of optical and lighting-technical sizes and characteristics, usage of theory of devices for the measurement of ionization radiations, usage of theory of devices of the non-destroying control of products and materials, usage of theoretical bases of the general structural elements, units of measuring devices, systems and means of office-equipment, usage of theory of the cognitive modeling technology in the applications of instrument-making;
the propaganda of applied researches and developments in the area
“Applications of polygraphy, reprography and photo-cinema-technics” – usage of theory of polygraphy, reprography and photo-cinema-technics, usage of theory of the cognitive modeling technology in the applications of polygraphy, reprography and photo-cinema-technics;
the propaganda of applied researches and developments in the area
“ Applications of light industry ” – usage of theory of textile industry, usage of theory of knitted industry, usage of theory of clothing industry, usage of theory of tanning industry, usage of theory of fur industry, usage of theory of industry of artificial leather and film materials, usage of theory of shoe industry, usage of theory of leather-haberdashery industry, usage of theory of bristle-brush manufacture, usage of theory of manufacture of accessories, usage of theory of the cognitive modeling technology in the applications of light industry;

the propaganda of applied researches and developments in the area
“Applications of food-processing industry” –
usage of theory of food raw materials and auxiliary materials,
usage of theory of the processes and devices of food manufactures,
usage of theory of (grain-)elevator and flour(-grinding)-sereals(croup) industry,
usage of theory of mixed fodder industry,
usage of theory of baking and macaroni industry,
usage of theory of confectionery industry,
usage of theory of sugar industry,
usage of theory of starched-treacle industry,
usage of theory of barmy industry,
usage of theory of brewing industry,
usage of theory of spirituous industry,
usage of theory of the industry of high-alcohol drinks,
usage of theory of wine-making (vinous) industry,
usage of theory of the industry of without-alcohol (soft) drinks,
usage of theory of canning, vegetable-drying
and food-concentrate industry,
usage of theory of food-gustatory industry,
usage of theory of tobacco industry,
usage of theory of meat and bird-fancier-processing industry,
usage of theory of the manufacture of eggs and egg products,
usage of theory of dairy (milk) industry,
usage of theory of butter-fatty (creamery) industry,
usage of theory of the cognitive modeling technology
in the applications of food-processing industry;

the propaganda of applied researches and developments in the area “Applications of architecture and construction” ()* – usage of engineering-theoretical bases of architecture and construction, usage of theory of building materials and products, usage of theory of building constructions, usage of theory of technology of building-installation works, usage of theory of technology of production of building materials and products, usage of theory of machines, mechanisms, equipment and tools, used in the construction and industry of building materials, usage of theory of engineering researches in construction, usage of theory of architectural-building designing, usage of theory of regional (district) lay-out, usage of theory of town-planning, usage of theory of objects of construction and engineering support of objects of construction, usage of theory of tendencies, dependences and laws in architecture and construction, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology, usage of theory of the parametrical cognitive models block for architecture and construction (the buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithm of formation of the cognitive model structure, usage of theory of the technique of research of the cognitive model parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of the adaptive automation means of architecture and construction (the automation means of formation and research based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others), usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of construction of the buildings and constructions, usage of theory of organization and plan of carrying out of the experiment, usage of theory of the research of parameters of the parametrical cognitive models block, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of construction, usage of theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographic lists; *the propaganda of applied researches and developments in the area “ Applications of transport ”* – usage of theory of railway transport, usage of theory of motor-car transport, usage of theory of sea transport, usage of theory of air transport, usage of theory of pipeline transport, usage of theory of industrial transport, usage of theory of municipal transport, usage of theory of interaction of the different kinds (types) of transport, usage of theory of mixed transportations, usage of theory of the other kinds (types) of transport, usage of theory of the cognitive modeling technology in the applications of transport].

IV. “The applied researches exhibitions department “Applications of the scientific problems of agro-industrial complex”” (“SNPAK”) [*the propaganda of applied researches and developments in the area “Applications of agriculture and hunting economy”* – usage of theory of agricultural biology, usage of theory of soil-science, usage of theory of agriculture, usage of theory of agricultural melioration, usage of theory of agro-chemistry, usage of theory of plant-growing, usage of theory of protection of agricultural plants, usage of theory of animal-industry, usage of theory of veterinary-science, usage of theory of preparation of production of agriculture, usage of theory of hunting and hunting economy, usage of theory of forestry economy, usage of theory of economics and organization of agriculture, usage of theory of mechanization and electrification of agriculture, usage of theory of the cognitive modeling technology in the applications of agriculture and hunting economy; *the propaganda of applied researches and developments in the area “Applications of fish economy and aqua-culture”* – usage of theory of biological resources of the world ocean and internal reservoirs, usage of theory of aqua-culture, usage of theory of fish-breeding, usage of theory of industrial fishery, usage of theory of technical operation of fleet of fishing industry, usage of theory of technical operation of fish seaports, usage of theory of technology of processing of raw materials of water origin, usage of theory of equipment for the fish-processing industry, usage of theory of the cognitive modeling technology in the applications of fish economy and aqua-culture; *the propaganda of applied researches and developments in the area “Applications of water economy”* – usage of theory of scientific bases of water economy, usage of theory of water-economy construction, usage of theory of hydro-technical and hydro-ameliorative constructions, usage of theory of irrigating and water supply, usage of theory of irrigating systems, usage of theory of drying systems, usage of theory of sewage waters, their clearing and use, usage of theory of quality of water, usage of theory of test, measurement and control in the water economy, usage of theory of mechanization and automation in the water economy, usage of theory of complex use of water resources, usage of theory of the cognitive modeling technology in the applications of water economy].

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

**4.3.3. The applied researches exhibitions direction
"Cognitive modeling
in the geo-political sciences and researches"
("CM in G-PS and R") ("NSGI")
of "'SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.""**

The developed "The applied researches exhibitions direction "Cognitive modeling in the geo-political sciences and researches"" ("NSGI") treats to the applied researches (financing) exhibitions divisions of "'Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A." ("SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." – "EC") as the first EC in the structure of "SIO "Academy of cognitive natural sciences"" ("SIO "ACNS")" and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of "EC"]:

- 1) it is executed by the principle of "the administrative-economy submission";
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to "SPbSETU "LETI" and "The Government of RF" for the translation, carrying out of int. action and receiving of "The Nobel prize");
- 3) includes the several various main divisions:
I. "The applied researches exhibitions department "Applications of geo-politics and safety" ("SGB")
[the propaganda of applied researches and developments in the area "Applications of demography" – usage of theory and methodology of demographical science, usage of theory of general problems of national-population, usage of theory of statistics of population, usage of theory of history of population, usage of theory of historical demography, usage of theory of moving of population, usage of theory of geographical demography, usage of theory of population of the world, usage of theory of the cognitive modeling technology in the applications of demography;
the propaganda of applied researches and developments in the area "Applications of politics and political sciences" – usage of theory of methodology of political researches, usage of theory of history of political doctrines, usage of theory of political systems, usage of theory of internal politics, usage of theory of international relations, usage of theory of foreign (external) politics and diplomacy, usage of theory of the cognitive modeling technology in the applications of politics and political sciences;

the propaganda of applied researches and developments in the area “Applications of complex studying of separate countries and regions” – usage of theory of researches of RF as a particular and RF as a whole, usage of theory of The North-Western federal district of RF, usage of theory of The Central federal district of RF, usage of theory of The Privolgsky federal district of RF, usage of theory of The Southern federal district of RF, usage of theory of The Uralian federal district of RF, usage of theory of The Siberian federal district of RF, usage of theory of The Far-East federal district of RF, usage of theory of the areas and territories of the former USSR, usage of theory of the countries of CIS of Eastern Europe, usage of theory of the countries of CIS of Zacaucasia, usage of theory of the countries of CIS of Central Asia, usage of theory of the Baltic countries and Baltic, usage of theory of Europe as a whole, usage of theory of Western Europe, usage of theory of Southern Europe, usage of theory of Central Europe, usage of theory of Eastern Europe as a whole, usage of theory of Scandinavia and the Scandinavian countries, usage of theory of Asia as a whole, usage of theory of Forward Asia, usage of theory of Eastern Asia, usage of theory of Southern Asia, usage of theory of South-Eastern Asia, usage of theory of Central Asia, usage of theory of Near and Middle East, usage of theory of Africa as a whole, usage of theory of Northern Africa, usage of theory of Eastern Africa, usage of theory of Central Africa, usage of theory of Western Africa, usage of theory of Southern Africa, usage of theory of America as a whole, usage of theory of USA and Canada, usage of theory of Central America, usage of theory of Southern America, usage of theory of Australia and the countries of Oceania, usage of theory of the polar areas – the Arctic and Antarctic areas, usage of theory of the surface of The Earth and land, oceans, seas and internal waters, usage of theory of the other physical-geographical features of The Earth, usage of theory of the cognitive modeling technology in the applications of complex studying of separate countries and regions; *the propaganda of applied researches and developments in the area “Applications of problems of space flights”* – usage of theory of use of space systems for connection and navigation, usage of theory of studying of extraterrestrial territories and prospects of astronautics, usage of theory of research of The Earth and astronomical objects by the space automation means from space, usage of theory of the cognitive modeling technology in the applications of problems of space flights].

II. “The applied researches exhibitions department “Applications of classical and military history”” (“SVIT”) [*the propaganda of applied researches and developments in the area “ Applications of history ”* – usage of theory of general history, usage of theory of history of Azerbaijan, usage of theory of history of Armenia, usage of theory of history of Belorussia, usage of theory of history of Georgia, usage of theory of history of Kazakhstan, usage of theory of history of Kirghizia, usage of theory of history of Moldova, usage of theory of history of RF, usage of theory of history of Tajikistan, usage of theory of history of Turkmenia, usage of theory of history of Uzbekistan, usage of theory of history of Ukraine, usage of theory of history of the separate processes, parties and phenomena of human activity, usage of theory of the cognitive modeling technology in the applications of history of RF and countries of near abroad; *the propaganda of applied researches and developments in the area “Applications of history of Ancient world, Ancient Greece and Ancient Rome, history of Medieval Europe, history of USA, Australia and Oceania, history of Arctic and Antarctic, history of RF, modern history of USSR, newest history of RF, history of The Solar system and planets”* – usage of theory of history of Ancient world, Ancient Greece and Ancient Rome, usage of theory of history of Medieval Europe, usage of theory of history of USA, Australia and Oceania, usage of theory of history of Arctic and Antarctic, usage of theory of history of RF, usage of theory of modern history of USSR, usage of theory of newest history of RF, usage of theory of history of The Solar system and planets, usage of theory of the cognitive modeling technology in the applications of history of RF and countries of far abroad].

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

4.3.4. The applied researches exhibitions direction

“Cognitive modeling in the society steady development of post-industrial country”

(“CM in SSDP-IC”) (“NURS”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The applied researches exhibitions direction “Cognitive modeling in the society steady development of post-industrial country”” (“NURS”) treats to the applied researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. “The applied researches exhibitions department “Applications of the complex problems of country development”” (“SPUR”) (*) [*the propaganda of applied researches and developments in the area “Applications of economic problems of national economy management”* – usage of theory of self-financing, usage of theory of economic stimulation, usage of theory of manpower resources, usage of theory of the cognitive modeling technology in the applications of economic problems of national economy management;

*the propaganda of applied researches and developments in the area
“Applications of global philosophical problems, philosophical
and methodological problems of sciences and scientific knowledge as a whole” (*) –*

usage of theory of modern philosophy, usage of theory of dialectical logic,
usage of theory of social sciences,
usage of theory of modern social philosophy,
usage of theory of modern sociology, demography and people-population,
usage of theory of world economy and economics,
usage of theory of grammar and applied science of language,
usage of theory of art and art-science,
usage of theory of artificial intelligence,
usage of theory of biological chemistry,
usage of theory of regional-geography (country-science),
usage of theory of economic and social geography,
usage of theory of toponymics, usage of theory of astro-physics,
usage of theory of pharmacology and chemo-therapy,
usage of theory of normal and pathological physiology,
usage of theory of genetic engineering, usage of theory of bio-technology,
usage of theory of agriculture,
usage of theory of medicine and public-health-services,
usage of theory of technical aesthetics and ergonomics,
usage of theory of preservation of environment,
usage of theory of the global-ethical and global-esthetical categories and problems,
usage of theory of social activity and social problems,
usage of theory of the sociological problems of printing, television and radio-broadcasting,
usage of theory of influences of anthropogenic changes of environment
on the health and social-labor potential of population,
usage of theory of the world economic development,
usage of theory of activity of international
economic organizations and associations,
usage of theory of economic development and growth,
usage of theory of prediction and planning economics,
usage of theory of economic cycles and crises,
usage of theory of the social and economic problems
of development of the advanced and less developed countries,
usage of theory of the economic problems
of organization and management of the economy of the country,

usage of theory of the problems of functioning of market economy and the social-economic problems of labor, usage of theory of the legal problems of environment preservation and ecological law, usage of theory of the economic problems of politics, usage of theory of the general problems of political systems at socialism in the advanced and less developed countries and the foreign(external)-political aspects of global problems, usage of theory of the problems of war and peace, usage of theory of the means of sanction of international conflicts, usage of theory of the problems of disarmament and anti-war movement, usage of theory of movement of non-alignment, usage of theory of the international, federal, regional and local problems, usage of theory of international terrorism, usage of theory of the separate philosophical-theoretical problems of culture, usage of theory of the sociological problems of motion-picture-art, usage of theory of religious consciousness, usage of theory of relation of church and philosophical-theological schools to the problem of war and peace, usage of theory of philosophy of mutual-relations of religion and army, usage of theory of relation of religions and churches to the national-liberation movement, national and racial problems, usage of theory of the general problems of physical experiment, usage of theory of the physical problems of mechanics, usage of theory of the bio-chemical problems, usage of theory of the problems of safety of biological experiment, usage of theory of micro-molecular associations and the problems of recognition in molecular biology, usage of theory of the general problems of anthropogenesis in paleontology and archeology, usage of theory of the general problems of researches of The Sun, The Earth, stars, fogs and interstellar environment, atmosphere, chromosphere, crown, near stars environments, usage of theory of the problems of loss of weight of stars and star wind, usage of theory of the general problems of researches of stars, usage of theory of problematical rests, usage of theory and problematics of programming for the computer networks,

usage of theory of the general problems of automation of designing, usage of theory of the general problems of researches, calculations and designing in the mining mechanical-engineering, usage of theory of the general problems of household radio-electronic equipment, usage of theory of genetic engineering for the decision of problem of bio-degradation, usage of theory of the sociological, demographical and psychological problems in construction, usage of theory of the general problems of melioration of agricultural grounds, usage of theory of the social-economic problems in countryside, usage of theory of the medical problems of space flights, usage of theory of the political problems of sport and sports single-kind-combats, the game kinds of sport, the speed-involving-strength kinds of sport, the complicated-coordinated kinds of sport, the technical kinds of sport and the cyclical kinds of sport, usage of theory of the general problems of war, usage of theory of training of staff, usage of theory of the problems of material interest of workers, usage of theory of the problems of material-technical supply, usage of theory of the problems of fire safety, usage of theory of information about the centres on studying of the problems of management, usage of theory of the general problems of prediction, usage of theory of role of the separate areas of knowledge in the decision of problems of environment and use of natural resources, usage of theory of the general problems of international cooperation, usage of theory of the problems of sorption and auto-purification of waters, usage of theory of the complex and regional problems of protection of waters, bowels, landscape and waste management, usage of theory of innovative materials, describing the research of space environment as a whole and interrelation of this problem with the other sciences and spheres of activity, usage of theory of the general problems and prospects of development of the methods of space researches, usage of theory of safety and the medical-biological problems of space flights, usage of theory of the general problems and principles of work of the space connection systems, usage of theory of the problems of development of extraterrestrial territories and prospect of astronautics, usage of theory of the nonconventional problems of researches of space environment, usage of theory of the cognitive modeling technology in the applications of global-philosophical problems, philosophical and methodological problems of science and scientific knowledge as a whole;

the propaganda of applied researches and developments in the area “Applications of the complex problems of social sciences” – usage of theory of social-political idea, usage of theory of the global problems and labor, usage of theory of the cognitive modeling technology in the applications of the complex problems of social sciences;

the propaganda of applied researches and developments in the area “Applications of the general and complex problems of technical and applied sciences and national economy branches” – usage of theory of materiology (materials-science), usage of theory of general technology of production, usage of theory of designing, usage of theory of constructing, usage of theory of the flexible industrial systems, usage of theory of vacuum technics, usage of theory of cryogenic technics, usage of theory of corrosion and protection against corrosion, usage of theory of welding, usage of theory of optical manufacture, usage of theory of staff, usage of theory of control and quality management, usage of theory of installation, operation and repair of industrial equipment, usage of theory of material-technical supply, usage of theory of logistic, usage of theory of warehouse economy, usage of theory of container and packing, usage of theory of secondary raw materials, usage of theory of fire safety, usage of theory of safety, usage of theory of salvage-rescue services, usage of theory of technical aesthetics, usage of theory of ergonomics, usage of theory of protection of information, usage of theory of the cognitive modeling technology in the applications of the general and complex problems of technical and applied sciences and national economy branches;

the propaganda of applied researches and developments in the area “Applications of the general and complex problems of natural and exact sciences” – usage of theory of the materials of general character, usage of theory of scientific and technical societies, conventions, congresses, conferences, symposiums, seminars and exhibitions, usage of theory of terminology, usage of theory of reference books and training literature, usage of theory of the cognitive modeling technology in the applications of the general and complex problems natural and exact sciences].

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

**4.3.5. The applied researches exhibitions direction
“Cognitive modeling
in the social-economic and jurisprudential sciences”
 (“CM in S-E and JS”) (“NSEPP”)
of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”**

The developed “The applied researches exhibitions direction
“Cognitive modeling in the social-economic and jurisprudential sciences”” (“NSEPP”) treats to the applied researches (financing) exhibitions divisions of “Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches exhibitions department “Applications of the inter-branch jurisprudential and economic system researches of society and country”” (“SMEESI”) [*the propaganda of applied researches and developments in the area “Applications of state, law and jurisprudential sciences”* – usage of theory of state and law, usage of theory of history of state and law, usage of theory of history of political and legal doctrines, usage of theory of constitutional (state) law, usage of theory of municipal law, usage of theory of administrative law, usage of theory of information law, usage of theory of financial law, usage of theory of enterprise law, usage of theory of civil law, usage of theory of civil-procedural law (civil process), usage of theory of arbitration-procedural law (arbitration process), usage of theory of patent law, usage of theory of industrial property law, usage of theory of copyright and adjacent rights, usage of theory of succession law, usage of theory of family law,

usage of theory of agrarian law, usage of theory of the legal problems of environment preservation, usage of theory of ecological law, usage of theory of ground law, usage of theory of forestry law, usage of theory of water law, usage of theory of aerial-protection law, usage of theory of legislation about bowels, usage of theory of legislation about the fauna world, usage of theory of labor law, usage of theory of law of social support, usage of theory of law-enforcement authorities, usage of theory of criminal law, usage of theory of criminal-procedural law (criminal process), usage of theory of criminology, usage of theory of criminal-executive law, usage of theory of penitentiary, usage of theory of criminalistics, usage of theory of judicial statistics, usage of theory of international law, usage of theory of international private law, usage of theory of state and law of separate countries, usage of theory of the cognitive modeling technology in the applications of state, law and jurisprudential sciences; ***the propaganda of applied researches and developments in the area “Applications of patent business, invention and rationalization work”*** – usage of theory of patent-information work, usage of theory of invention and rationalization activity, usage of theory of patent-license work, usage of theory of the technical-economic analysis on patent materials, usage of theory of invention law, usage of theory of the cognitive modeling technology in the applications of patent business, invention and rationalization work; ***the propaganda of applied researches and developments in the area “Applications of international economic relations”*** – usage of theory of prediction and planning, usage of theory of economic cycles and crisis, usage of theory of productive forces and social-economic structure, usage of theory of reproductive structure of economics, usage of theory of accumulation and consumption, usage of theory of well-being, usage of theory of territorial (local), regional (subject of federation), city (federal) and branch structure of economics, usage of theory of the cognitive modeling technology in the applications of international economic relations].

II. “The applied researches exhibitions department
“Applications of the complex problems of micro-(macro-)economics,
social sphere and market economy of the country” (“SPMSRH”)
*[the propaganda of applied researches and developments in the area
“Applications of internal trade and tourist-excursion service”* –
usage of theory of wholesale trade and retail trade,
usage of theory of public catering,
usage of theory of hotel economy,
usage of theory of tourist-excursion service,
usage of theory of the cognitive modeling technology
in the applications of internal trade and tourist-excursion service;
*the propaganda of applied researches and developments in the area
“Applications of external trade”* –
usage of theory of communication of the external trade with manufacture,
usage of theory of the general questions of external trade,
usage of theory of the external-trade politics,
usage of theory of the kinds of external trade,
usage of theory of the structure of external trade,
usage of theory of calculations on the external-trade operations,
usage of theory of the external-trade transportations,
usage of theory of the world commodity markets,
usage of theory of international agreements about trade,
usage of theory of international contracts,
usage of theory of international trading organizations,
usage of theory of commodity agreements,
usage of theory of organization and management of external trade,
usage of theory of the cognitive modeling technology
in the applications of external trade;
*the propaganda of applied researches and developments in the area
“Applications of housing-communal economy,
housekeeping and consumer service”* –
usage of theory of housing economy,
usage of theory of communal economy,
usage of theory of consumer service, usage of theory of housekeeping,
usage of theory of the cognitive modeling technology
in the applications of housing-communal economy,
housekeeping and consumer service;

the propaganda of applied researches and developments in the area
“ Applications of insurance ” –
usage of theory of the state social insurance,
usage of theory of the funds of social support and social insurance,
usage of theory of the external-trade insurance,
usage of theory of statistics of social insurance,
usage of theory of the cognitive modeling technology
in the applications of insurance;
the propaganda of applied researches and developments in the area
“Applications of investment and investment projects” –
usage of theory of concentration of capital,
usage of theory of the financial-industrial groups,
usage of theory of investment institutes,
usage of theory of the legal bases of investment activity,
usage of theory of the cognitive modeling technology
in the applications of investment and investment projects;
the propaganda of applied researches and developments in the area
“ Applications of social transport ” –
usage of theory of social railway transport,
usage of theory of social motor-car transport,
usage of theory of social water transport,
usage of theory of social air transport,
usage of theory of social pipeline transport,
usage of theory of social industrial transport,
usage of theory of social municipal transport,
usage of theory of interactions of the different kinds (types) of social transport,
usage of theory of social mixed transportations,
usage of theory of the other kinds (types) of social transport,
usage of theory of cognitive modeling technology
in applications of social transport].

III. "The applied researches exhibitions department
" Applications of economics, management,
sociology, statistics and their other branches" ("SES")
*[the propaganda of applied researches and developments in the area
"Applications of economics and economic sciences" –*
usage of economic theory,
usage of theory of history of economic idea,
usage of theory of accounting-economic sciences,
usage of theory of the sciences of management of economics,
usage of theory of economic history, usage of theory of world economy,
usage of theory of international economic relations,
usage of theory of economic development and growth,
usage of theory of prediction and planning of economics,
usage of theory of economic cycles and crises,
usage of theory of productive forces and scientific-technical progress,
usage of theory of the social-economic structure,
usage of theory of the reproductive structure of economics,
usage of theory of accumulation and consumption, usage of theory of well-being,
usage of theory of the territorial structure of economics,
usage of theory of regional and municipal economics,
usage of theory of the branch structure of economics,
usage of theory of financial science, usage of monetary and tax theories,
usage of theory of credit-financial institutes (institutional intermediaries),
usage of theory of the economic problems of organization and management of the economy of the country,
usage of theory of self-financing, usage of theory of economic incentive provision,
usage of theory of economics of labor, usage of theory of manpower resources,
usage of theory of economics and organization of enterprise,
usage of theory of management of enterprise,
usage of theory of economics of the separate countries,
usage of theory of the cognitive modeling technology
in the applications of economics and economic sciences;
*the propaganda of applied researches and developments in the area
"Applications of organization and management" –*
usage of theory and methodology of management,
usage of theory of the state and administration management,
usage of theory of organization of economics management,
usage of theory of social management,
usage of theory of prediction, usage of theory of futurology,
usage of theory of strategical management,
usage of theory of strategical planning,
usage of theory of the cognitive modeling technology
in the applications of organization and management;

the propaganda of applied researches and developments in the area “Applications of the other branches of economics” – usage of theory of manufacture of musical instruments, usage of theory of manufacture of fine-art products, usage of theory of jeweler industry, usage of theory of manufacture of toys, usage of theory of manufacture of sport products, usage of theory of manufacture of writing goods, usage of theory of the cognitive modeling technology in the applications of the other branches of economics;

the propaganda of applied researches and developments in the area “Applications of sociology” – usage of theory of the general problems of modern sociology, usage of theory of methodology of sociology, usage of theory of technique and technics of sociological researches, usage of theory of society as the system, usage of theory of social relations and processes, usage of theory of social classes, usage of theory of communities and groups, usage of theory of sociology of the spheres of social life, usage of theory of social phenomena and institutes, usage of theory of sociology of personality and behavior, usage of theory of historical and regional sociology, usage of theory of sociology, usage of theory of history of sociology, usage of theory of the cognitive modeling technology in the applications of sociology;

the propaganda of applied researches and developments in the area “Applications of statistics” – usage of theory of general statistics, usage of theory of economic statistics, usage of theory of branch statistics, usage of theory of social statistics, usage of theory of international statistics, usage of theory of statistics of the separate countries and social-economic systems, usage of theory of organization and management of statistics, usage of theory of the methods and technical means of gathering, processing and analysis of the statistical information, usage of theory of the cognitive modeling technology in the applications of statistics].

IV. “The applied researches exhibitions department “Applications of the financial analysis, accounting and audit of the (credit) organization based on the cognitive modeling technology”” (“SFABUA”) (*)
[the propaganda of applied researches and developments in the area “Applications of the financial analysis, accounting and audit” (*) – usage of theory of the general questions of the financial analysis, accounting and audit, usage of theory of tendencies, dependences and laws of the financial analysis of the objects, processes and phenomena, usage of theory of the system, information and cognitive approaches in economics, usage of theory of the structure and dynamics of functioning of the financial market of the economic system of the country, usage of theory of the global purposes of standardization of the accounting and the problems of unification of the accounting reporting-documentation (the primary registers), usage of theory of the institutional subjects regulating the creation, distribution and use of the international standards, usage of theory of the principles of creation, distribution and use of the international standards of the financial and accounting reporting-documentation, usage of theory of the basic methods of transformation of the financial reporting-documentation prepared by the national standards into the reporting-documentation by the international standards, usage of theory of formation of the accounting balance by the international standards of the financial reporting-documentation, usage of theory of the qualifying tests of the professional participants of the financial system of the (developed) country, usage of theory of the administrative-legal forms of existence of the managing subject, usage of theory of the features of procedure of the financial analysis of the managing subject, usage of theory of the organizational structure of enterprise and its features (the educational establishment of the system of education and the information-educational environment), usage of theory of inflationary depreciation, usage of theory of discounting and compounding of the monetary streams in the economic system of the country, usage of theory of the indexes of dynamics of the financial market and tools, usage of theory of dynamics and communications of the managing subjects, usage of theory of investment and innovative politics of the managing subject in the financial system of the country, usage of theory of the organizational, technological, scientific, methodical, normative-legal, information, hardware, software, brainware, raw, warehouse, personnel and economic preparations of manufacture and the bases of the financial analysis and the quality estimation of activity of the credit and other organization, usage of theory of requirements and the structure of financial reporting-documentation of the (non)industrial organizational structures,

usage of theory of the additional elements of the accounting and the financial reporting-documentation of the credit organization, usage of theory of the consumers of the financial reporting-documentation, usage of theory of the elements of the financial reporting-documentation connected with the changes of financial-economic activity, usage of theory of the simple and consolidated accounting and financial reporting-documentation, usage of theory of the methods of the financial analysis of the different forms of reporting-documentation, usage of theory of the structure of accounts of the accounting and financial analysis, usage of theory of the vertical, horizontal and trend financial analysis based on the analytical coefficients system, usage of theory of the scheme of carrying out of the auditor check, the financial analysis and audit, usage of theory of the external and internal control of activity of the different organizations, usage of theory of the kinds of bank operations, usage of theory of the structure of the accounting balance (form №1), usage of theory of the structure of the explanatory note to the accounting balance, usage of theory of the structure of the report about profits and losses (form №2), usage of theory of the structure of the explanatory note to the report about profits and losses, usage of theory of the structure of the report about the change of capital (form №3), usage of theory of the structure of the report about the movement of monetary resources on accounts (form №4), usage of theory of the structure of the explanatory note to the report about the movement of means, usage of theory of the structure of the appendix to the accounting balance (form №5), usage of theory of the structure of the report about the target use of received means (form №6), usage of theory of the structure of the auditor conclusion about the results of activity of the enterprise, (credit) organization, organization of The Federal reserve system of USA, usage of theory of the analysis of stability of the credit organization and commercial bank, usage of theory of the basic analytical coefficients of the financial analysis, usage of theory of the structure of the accounting balance and the report about profits and losses of the enterprise for the introduction of the analytical coefficients system, usage of theory of the cognitive modeling technology with dynamic cloning, verification and subverification, usage of theory of the iterative cycle and the technique of use of the cognitive modeling technology, usage of theory of the technique of formation of the normative-legal and the information basis for the financial analysis of the organization, usage of theory of the technique of additional check of the information basis of the financial analysis, usage of theory of the technique of creation and modification of the working plan of accounts and the model of accounting, usage of theory of the technique of carrying out of the financial analysis of the organization condition, usage of theory of the parametrical cognitive models block for the financial analysis and the increase of efficiency of functioning of the objects, processes and phenomena,

usage of theory of the structure of the cognitive models for the vertical, horizontal and trend financial analysis of the (credit) organization and enterprise, usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the algorithm of formation of the cognitive model structure, usage of the technique of research of the cognitive model parameters, usage of theory of the algorithm of analysis of a posteriori results of research, usage of theory of formation and calculation of the units of the accounting balance of the industrial and nonproductive organization, usage of theory of calculation of the cognitive models parameters for the vertical, horizontal and trends static and dynamic financial analysis of the (credit) organization in the conditions of definiteness and uncertainty, usage of theory of software for the automation of research tasks, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the factors influencing to the efficiency of functioning of the (credit) organization in the economic system, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the cognitive models parameters for the vertical, horizontal and trend financial analysis, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the financial analysis of the dynamics of resultativity of the financial-economy activity of the (credit) organization, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists].

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

4.3.6. The applied researches exhibitions direction

“Cognitive modeling

in the biological and medical sciences”

(“CM in B and MS”) (“NBME”)

of “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”

The developed “The applied researches exhibitions direction “Cognitive modeling in the biological and medical sciences”” (“NBME”) treats to the applied researches (financing) exhibitions divisions of “Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches exhibitions department “Applications of biology, ecology and physiology of plants”” (“SBE”) [*the propaganda of applied researches and developments in the area “ A p p l i c a t i o n s o f b i o l o g y ”* – usage of theory of the methods and equipment of biological researches, usage of theory of biology of plants, usage of theory of molecular biology of plants, usage of theory of bio-physics of plants, usage of theory of cytology of plants, usage of theory of embryology of plants, usage of theory of genetics of plants, usage of theory of virology of plants, usage of theory of micro-biology of plants, usage of theory of botany of plants, usage of theory of physiology of plants, usage of theory of zoology of plants, usage of theory of ecology of plants, usage of theory of anthropology of plants, usage of theory of communication of physiology of plants, person and animals, usage of theory of communication of morphology of plants, person and animals, usage of theory of immunology of plants, usage of theory of pharmacology of plants, usage of theory of toxicology of plants, usage of theory of radiation biology of plants, usage of theory of space biology of plants, usage of theory of bionics of plants, usage of theory of bio-cybernetics of plants, usage of theory of bio-engineering of plants, usage of theory of the cognitive modeling technology in the applications of biology;

***the propaganda of applied researches and developments in the area
“Applications of environment preservation and ecology of plants”*** –

usage of theory and methods of studying and preservation of environment, usage of theory of the ecological bases of use of the natural resources, usage of theory of international cooperation, usage of theory of contamination of environment, usage of theory of control of pollution, usage of theory of pollution and protection of atmosphere, usage of theory of pollution and protection of waters of land, seas and oceans, usage of theory of protection of soils, usage of theory of protection of bowels, usage of theory of the ecological bases of live-ability of plants, usage of theory of influence of the anthropogenic changes of environment on the health and vegetative potential of plants, on the condition of natural ecosystems, populations and organisms of the flora world, usage of theory of protection of the flora world, usage of theory of the anthropogenic influence on landscape, usage of theory of protection and optimization of landscape, usage of theory of reserved affair, usage of theory of protected natural territories and water-areas, usage of theory of acts of nature and accidents of anthropogenic origin, usage of theory of ecological safety, usage of theory of rational use of natural resources, usage of theory of reproduction of natural resources, usage of theory of preservation of environment and natural resources in the separate regions and countries, usage of theory of management of wastes, usage of theory of small-waste and without-waste technology, usage of theory of protection against from the noise, vibration, electrical and magnetic fields and radiations, usage of theory of the cognitive modeling technology in the applications of environment preservation and ecology of plants;

***the propaganda of applied researches and developments in the area
“Applications of medicine and public-health-services”*** –

usage of theory of medical-biological disciplines, usage of theory of medical materials, means and products, usage of theory of medical technics, usage of theory of clinical medicine, usage of theory of pharmacology, usage of theory of hygiene, usage of theory of epidemiology, usage of theory of the other branches of medicine and public-health-services, usage of theory of social hygiene, usage of theory of organization and management of public-health-services, usage of theory of the cognitive modeling technology in the applications of medicine and public-health-services].

II. “The applied researches exhibitions department
“Applications of bio-technology, bio-medicine,
ergonomics and labor safety of organic individuals”” (“SB”) (*)
*[the propaganda of applied researches and developments in the area
“Applications of bio-technology” (*)* –
usage of theory of raw materials and products for the bio-technological manufacture,
usage of theory of bio-technological processes and devices,
usage of theory of cellular engineering,
usage of theory of technological bio-energetics,
usage of theory of genetic engineering,
usage of theory of enzymological engineering,
usage of theory of the immuno-bio-technological methods of analysis,
usage of theory of the other problems of bio-technology,
usage of theory of the cognitive modeling technology
in the applications of physical-chemical bio-technology and genetic engineering,
usage of theory of modeling of the structure of desoxyribonucleic acid
based on the multidimensional cognitive cylinder;
*the propaganda of applied researches and developments in the area
“Applications of bio-medicine and public-health-services” (*)* –
usage of theory of medical-biological disciplines,
usage of theory of bio-medical materials, means and products,
usage of theory of bio-medical technics,
usage of theory of clinical bio-medicine,
usage of theory of bio-pharmacology,
usage of theory of bio-hygiene and bio-epidemiology,
usage of theory of the other branches of bio-medicine and public-health-services,
usage of theory of social bio-hygiene,
usage of theory of organization and management of public-health-services,
usage of theory of the modified model of reduced eye,
usage of theory of the modified model of reduced ear,
usage of theory of software for the automation of research tasks
of the physiological, psychological and linguistic parameters
of the parametrical cognitive models block,
usage of theory of the statistical substantiation
of practical use of the received results,

usage of theory of the physiological, psychological and linguistic factors influencing to the efficiency of functioning of the information-educational environment and the increase of resultativity of the automated training system with the properties of adaptation based on the cognitive models, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the physiological, psychological and linguistic parameters of the cognitive models of the subject of training and the means of training, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of bio-medicine and public-health-services, usage of theory of dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the complex analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, usage of theory of the complex analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates; ***the propaganda of applied researches and developments in the area “ Applications of labor safety ”*** – usage of theory of organization and management of labor safety and working conditions, usage of theory of industrial sphere, usage of theory of safety precaution, usage of theory of professional illnesses and their preventive support, usage of theory of accidents on manufacture and their prevention, usage of theory of work-capacity, usage of theory of examination of work-capacity, usage of theory of labor safety on the categories of workers, usage of theory of work safety on the manufactures of increased danger, usage of theory of the cognitive modeling technology in the applications of labor safety] .

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

4.3.7. The applied researches exhibitions direction

“Cognitive modeling

in the humanitarian sciences, art and creativity”

(“CM in HSA and C”) (“NGNOT”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The applied researches exhibitions direction “Cognitive modeling in the humanitarian sciences, art and creativity”” (“NGNOT”) treats to the applied researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches exhibitions department “Applications of (cognitive) linguistics, (national) creativity, culture, art and religion”” (“SGNT”) (*)
[the propaganda of applied researches and developments in the area “Applications of science of language” – usage of theory of general science of language, usage of theory of applied science of language, usage of theory of languages of the world, usage of theory of the cognitive modeling technology in the applications of science of language;

the propaganda of applied researches and developments in the area “Applications of (cognitive) linguistics” ()* – usage of theory of the general questions of languages, usage of theory of (cognitive) linguistics, usage of theory of applied linguistics, usage of theory of the cognitive modeling technology in the applications of (cognitive) linguistics, usage of theory of the modified stratified-step model of understanding (cognitive linguistics) of the content of information fragments, usage of theoretical bases of (cognitive) linguistics and the cognitive modeling technology in the technical, economic, physical-mathematical and other sciences, usage of theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors);

the propaganda of applied researches and developments in the area “Applications of culture and cultural-science” ()* – usage of theory, methodology and philosophy of culture, usage of theory of history of culture, usage of theory of history of the study of culture, usage of theory of culture in the modern world, usage of theory of organization and management in the area of culture, usage of theory of international cooperation in the area of culture, usage of theory of hardware of the establishments of culture, usage of theory of social-cultural activity in the sphere of leisure, usage of theory of library affair, usage of theory of library-science, usage of theory of bibliography, usage of theory of librarygraphy-science, usage of theory of museum affair, usage of theory of museology, usage of theory of protection of the monuments of history and culture, usage of theory of archival affair, usage of theory of archival-science, usage of theory of culture and cultural-science of the separate countries and peoples, usage of theory of the cognitive modeling technology in the applications of culture and cultural-science;

the propaganda of applied researches and developments in the area “Applications of art and art-science” – usage of theory and methodology of art, usage of theory of the problems of art-science, usage of theory of history of art and the modern condition of art, usage of theory of art-science and fine-art criticism, usage of theory of art in the modern world, usage of theory of organization and management in the area of art, usage of theory of international cooperation in the area of art, usage of theory of fine-art, usage of theory of music, usage of theory of musicology, usage of theory of theatre, usage of theory of theater-science, usage of theory of mass shows and theatrical holidays, usage of theory of dance, usage of theory of choreography, usage of theory of circus, usage of theory of platform, usage of theory of cinema, usage of theory of motion-picture-art, usage of theory of national folk-art, usage of theory of art of the separate countries and peoples, usage of theory of the cognitive modeling technology in the applications of art and art-science;

the propaganda of applied researches and developments in the area “Applications of religion and atheism” – usage of theory of atheism and free-thinking, usage of theory of separate religions, usage of theory of church, usage of theory of cults, usage of theory of the problems of religious consciousness, usage of theory of philosophy and religion, usage of theory of religion, usage of theory of church and society, usage of theory of the organizational-practical activity of churches, usage of theory of history of atheism, usage of theory of religions and churches, usage of theory of the cognitive modeling technology in the applications of religion and atheism].

II. “The applied researches exhibitions department “Applications of literature, science-study, philosophy, journalism and mass communication means”” (“SLPZ”)
[the propaganda of applied researches and developments in the area “Applications of literature, literary-science and oral national creativity” – usage of theory of literature, usage of theory of history of literature, usage of theory of oral national creativity, usage of theory of the auxiliary literary-science disciplines, usage of theory of the products of fiction literature, usage of theory of the cognitive modeling technology in the applications of literature, literary-science and oral national creativity;
the propaganda of applied researches and developments in the area “ Applications of science - study ” – usage of theory of the general questions of science-study, usage of theory of the development of science, usage of theory of science and society, usage of theory of sociology of science, usage of theory of scientific work, usage of theory of scientific creativity, usage of theory of the organization of science, usage of theory of politics in the area of science, usage of theory of the technique and technics of research work, usage of theory of economics of science, usage of theory of scientific staff, usage of theory of the international cooperation in science, usage of theory of science and scientific-research work in the separate countries, usage of theory of the cognitive modeling technology in the applications of science - study ;
the propaganda of applied researches and developments in the area “ Applications of mass communication , journalism and mass media means ” – usage of theory of the mass communication means, usage of theory of the open network information resources (“Internet” and “WWW”), usage of theory of journalism, usage of theory of the mass media means, usage of theory of printing, usage of theory of television (TV), usage of theory of radio, usage of theory of use of the technical means for mass communication, usage of theory of the cognitive modeling technology in the applications of mass communication , journalism and mass media means] .

III. “The applied researches exhibitions department “Applications of the problems of (cognitive) psychology, education, science and support of young scientists (the programs of grants and others)” (“SPOPMU”) (*) [the propaganda of applied researches and developments in the area “Applications of national education and pedagogics” – usage of theory of general pedagogics, usage of theory of history of education and pedagogics, usage of theory of personnels, usage of theory of the systems of education, usage of theory of preschool education, usage of theory of preschool pedagogics, usage of theory of general-educational (comprehensive) school, usage of theory of pedagogics of general-educational (comprehensive) school, usage of theory of out-of-school (additional) education and training, usage of theory of out-of-school pedagogics, usage of theory of special (correctional) schools, usage of theory of defectology, usage of theory of primary professional-technical education, usage of theory of pedagogics of professional school, usage of theory of average professional education, usage of theory of pedagogics of average professional education, usage of theory of higher professional education, usage of theory of pedagogics of higher professional school, usage of theory of education of adults, usage of theory of improvement of professional skills, usage of theory of self-education, usage of theory of family training, usage of theory of family pedagogics, usage of theory of the specialized branches of pedagogics, usage of theory of the technical means of training and learning equipment, usage of theory of national education and pedagogics in the separate countries, usage of theory of the cognitive modeling technology in the applications of national education and pedagogics;

the propaganda of applied researches and developments in the area “Applications of (cognitive) psychology” (*) – usage of theory of general psychology, usage of theory of psychology of development, usage of theory of age psychology, usage of theory of comparative psychology, usage of theory of social psychology, usage of theory of applied psychology, usage of theory of the cognitive modeling technology in the applications of (cognitive) psychology, usage of theory of the modified stratified-step model of processing (cognitive psychology) of the content of information fragments, usage of theoretical bases of cognitive psychology and the cognitive modeling technology, usage of theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments (the cognitive models of the subject of training and the means of training), usage of theory of the ways of representation of the structure of the cognitive models and difficult problem environments: the formal classical of the 0th generation (the logical and production models), the nonformal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the nonformal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the adaptive automation means of the information-educational environment (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and other processors), usage of theory of the technical means of support of the complex analysis (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, three-, four-, five- and more cognitive sphere and others); ***the propaganda of applied researches and developments in the area “Applications of the grants of “RFBR”, “RHSF” and other organizations”*** – usage of theory of the general details of the grants of “The Russian fund of basic researches”, “The Russian humanitarian scientific fund” and other organizations, usage of the theoretical-methodological basis of grants, usage of theory of reception, distribution and use of the grants of “RFBR”, “RHSF” and other grant-formation organizations, usage of theory of the cognitive modeling technology in the applications of the grants of “RFBR”, “RHSF” and other organizations].

IV. “The applied researches exhibitions department
“Applications of the innovations of the project “The Russian encyclopedias”,
philosophy of science, technics and technology on the branches of knowledge”” (“SRE”)
[the propaganda of applied researches and developments in the area
“Applications of encyclopedias on natural and exact sciences” –
usage of theory of encyclopedias on mathematics, cybernetics, physics, mechanics,
chemistry, biology, geodesy, cartography, geo-physics, geology, geography, astronomy,
usage of theory of the general and complex problems of natural and exact sciences,
usage of theory of the cognitive modeling technology
in the applications of encyclopedias on natural and exact sciences;
the propaganda of applied researches and developments in the area
“Applications of encyclopedias on social sciences” –
usage of theory of encyclopedias on social sciences as a whole,
usage of theory of encyclopedias on philosophy, history and historical sciences,
sociology, demography, economics and economic sciences,
state, law and jurisprudential sciences, politics and political sciences,
science - study , culture and cultural - science ,
national education and pedagogics, psychology, science of language,
literature and literary-science, oral national creativity,
art and art-science, mass communication and journalism,
the mass media means, informatics, religion and atheism,
the complex studying of the separate countries and regions,
the complex problems of social sciences ,
usage of theory of the cognitive modeling technology
in the applications of encyclopedias on social sciences;

the propaganda of applied researches and developments in the area “Applications of encyclopedias on technical, applied and economic sciences” – usage of theory of encyclopedias on power-engineering, electrical-engineering, electronics, radio-engineering, connection, automatics, computer engineering, mining, metallurgy, mechanical-engineering, nuclear technics, instrument-making, polygraphy, reprography, photo-cinema-technics, chemical technology and chemical industry, bio-technology, light industry, food-processing industry, forest and wood-processing industry, construction and architecture, agriculture and forestry economy, fish economy and aqua-culture, water economy, internal trade, tourist-excursion service, external trade, transport, housing-communal economy, housekeeping, consumer service, medicine and public-health-services, physical training and sport, military science, the other branches of economics, usage of theory of the cognitive modeling technology in the applications of encyclopedias on technical, applied and economic sciences;

the propaganda of applied researches and developments in the area “Applications of encyclopedias on the general and complex problems of technical and applied sciences and the branches of national economy” – usage of theory of encyclopedias on organization and management, statistics, standardization, patent business, invention and rationalization, labor safety, environment preservation and ecology of person, space researches, metrology, usage of theory of the cognitive modeling technology in the applications of encyclopedias on the general and complex problems of technical and applied sciences and the branches of national economy;

the propaganda of applied researches and developments in the area “Applications of philosophy of science, technics and technology” – usage of theory of the general problems of modern philosophy of science, technics and technology, usage of theory of the general-philosophical problems, usage of theory of logic of philosophy and methodology of science, usage of theory of social philosophy, usage of theory of ethics, usage of theory of aesthetics, usage of theory of philosophy of religion and atheism, usage of theory of history of philosophy, usage of theory of the cognitive modeling technology in the applications of philosophy of science, technics and technology].

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

4.3.8. The applied researches exhibitions direction

“Cognitive modeling

in the physical training and sport”

(“CM in PHT and S”) (“NFS”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The applied researches exhibitions direction “Cognitive modeling in the physical training and sport”” (“NFS”) treats to the applied researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches exhibitions department “Applications of sport, sports sciences and actions”” (“SSSNM”) [*the propaganda of applied researches and developments in the area “Applications of physical training and sport”* – usage of theory of physical training and sport, usage of theory of the methodological and medical-biological bases of physical training and sport, usage of theory of the material-technical base of physical training and sport, usage of theory of the methodical bases of the kinds of sport and sports competitions, usage of theory of the cognitive modeling technology in the applications of physical training and sport].

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

4.3.9. The applied researches exhibitions direction “Cognitive modeling in the military sciences” (“CM in MILS”) (“NVN”)

of ““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””

The developed “The applied researches exhibitions direction “Cognitive modeling in the military sciences”” (“NVN”) treats to the applied researches (financing) exhibitions divisions of ““Saint-Petersburg exhibition centre named after Brezhnev L.I.” at “Exhibition of achievements of science and technology named after Sobchak A.A.”” (““SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.”” – “EC”) as the first EC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) and the add. component of the system of science and education of the modern country for the promotion (of financing) of creation, distribution and use of the applied main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied researches exhibitions directions and departments of “EC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the promotion of development, production and distribution of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied researches exhibitions department “Applications of architecture, construction, technics, history, education, politics and economics in the armed forces”” (“SASTIOPEVC”) [*the propaganda of applied researches and developments in the area “ Applications of military sciences ”* – usage of theory of the doctrine about war and army, usage of theory of military history, usage of theory of military education, usage of theory of training of staff, usage of theory of military politics, usage of theory of military doctrines, usage of theory of military science, usage of theory of military-applied sciences, usage of theory of arms and military technics, usage of theory of armed forces, usage of theory of military economics, usage of theory of the cognitive modeling technology in the applications of military sciences].

The applied researches exhibitions directions and departments of “EC” allow to propagandize the development, production and financing of the applied main and derivative scientific results of CMT.

4.4. The local and international scientific newspapers and journals of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."

"Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievement of science and technology named after Sobchak A.A." ("SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." – "SPbEC" at "EAST") (www.eceast.spb.ru) as the first exhibition centre in the structure of "SIO "ACNS" (www.acns.spb.ru) of the author (www.vetrovan.spb.ru) includes the scientific newspapers and scientific journals for the propagandize of scientific results.

The scientific newspapers and journals of "SPbEC" at "EAST" (*) – together with "SIO "ACNS" are intended for the promotion of the main and derivative scientific results of the system, financial and complex analysis at the microscopic level: firstly,- the 26 fundamental researches exhibitions departments on the 13 fund. researches exhibitions branches of "SPbEC" at "EAST" corresponds to the 26 fundamental scientific researches sections (departments) on the 13 fundamental scientific researches branches of "SIO "ACNS", and also corresponds to the 26 fundamental developments departments on the 13 fund. developments branches of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." (*) and corresponds to the 26 fundamental researches financing departments on the 13 fundamental researches financing branches of "SF "SFA CMT" n. a. Prokopenko N.A." (*), besides, corresponds to the 26 sections on 13 branches of "The Russian academy of sciences"; secondly,- the 27 applied researches exhibitions departments on the 9 appl. researches exhibitions directions of "SPbEC" at "EAST" corresponds to the 27 applied scientific researches sections (departments) on the 9 applied scientific researches directions of "SIO "ACNS", and also corresponds to the 27 scientific-researches laboratories on the 9 appl. developments directions of "SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N." (*) and corresponds to the 27 applied researches financing departments on the 9 applied researches financing directions of "SF "SFA CMT" n. a. Prokopenko N.A." (*), besides, corresp. to the 27 sections on the 9 directions of "The Russian academy of natural sciences":

I. The local scientific newspapers (SN) and scientific journals (SJ) of "SPbEC" at "EAST" (1 SN and 1 SJ).

- 1.1. SN "News of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." (the carrier is printing – PR and electronic – EL in the national language – NL).
- 1.2. SJ "Proceedings of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." (PR and EL in NL).

II. The international scientific journals (ISJ) of “"SPbEC" at "EAST"” (5 ISJ).

- 2.1. ISJ “Bulletin of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.””
(in NL and foreign international language (English language) – IL).
- 2.2. ISJ “Cogn. sciences: common questions of exhib. centre” (int. PR and EL in NL and IL) (*).
- 2.3. ISJ “Cognitive modeling technology (CMT) for the microscopic system analysis: exhibitions of achievements” (int. PR and EL in NL and IL) (*).
- 2.4. ISJ “CMT for the microsc. fin. analysis: exhibitions of achiev.” (int. PR and EL in NL and IL) (*).
- 2.5. ISJ “CMT for the microscopic complex analysis: exhibitions of achievements” (int. PR and EL in NL and IL) (*).

III. The regional (RFSJ) and international (IFSJ) fundamental scientific journals of “"SPbEC" at "EAST"” (13 branched (R)IFSJ).

- 3.1. (R)IFSJ “The microscopic cognitive modeling (MCM) in the fund. scientific res. (FSR): exhibition of achievements” (“The mathematical sciences”),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.2. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The physical sciences”),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.3. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The nano-technologies and IT”),
(the multi-section – the 3 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.4. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The exact sciences”),
(the multi-section – the 3 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.5. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The industry and chem. sciences),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.6. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The biological sciences”),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.7. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The physiology, fund. med. and public health care”),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.8. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The sciences about The Earth”),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.9. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The social sciences”),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.10. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The glob. problems and int. rel.”),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.11. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The historical-philolog. sciences”),
(the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 3.12. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The sports sciences”),
(the multi-section – the 1 section, the reg. PR and EL in NL and int. EL in IL).
- 3.13. (R)IFSJ “MCM in FSR: exhibition of achievements” (“The military sciences”),
(the multi-section – the 1 section, the reg. PR and EL in NL and int. EL in IL).

IV. The regional (RASJ) and international (IASJ) applied scientific journals of "SPbEC" at "EAST" (9 branched (R)IASJ).

- 4.1. (R)IASJ "MCM in the applied scientific researches (ASR): exhibition of achievements" ("The natural sciences"), (the multi-section – the 8 sections, the reg. PR and EL in NL and int. EL in IL).
- 4.2. (R)IASJ "MCM in ASR: exhibition of achievements" ("The appl. tech. sciences and technologies"), (the multi-section – the 4 sections, the reg. PR and EL in NL and int. EL in IL).
- 4.3. (R)IASJ "MCM in ASR: exhibition of achievements" ("The geo-polit. sciences and res."), (the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 4.4. (R)IASJ "MCM in ASR: exhibition of ach." ("The st. development of society of the post-ind. country"), (the multi-section – the 1 section, the reg. PR and EL in NL and int. EL in IL).
- 4.5. (R)IASJ "MCM in ASR: exhibition of achievements" ("The soc.-econ. and jur. sciences"), (the multi-section – the 4 sections, the reg. PR and EL in NL and int. EL in IL).
- 4.6. (R)IASJ "MCM in ASR: exhibition of achievements" ("The biol. and med. sciences"), (the multi-section – the 2 sections, the reg. PR and EL in NL and int. EL in IL).
- 4.7. (R)IASJ "MCM in ASR: exhibition of achievements" ("The soc. sciences, art and creativity"), (the multi-section – the 4 sections, the reg. PR and EL in NL and int. EL in IL).
- 4.8. (R)IASJ "MCM in ASR: exhibition of achievements" ("The phys. training and sport"), (the multi-section – the 1 section, the reg. PR and EL in NL and int. EL in IL).
- 4.9. (R)IASJ "MCM in ASR: exhibition of achievements" ("The military sciences"), (the multi-section – the 1 section, the reg. PR and EL in NL and int. EL in IL).

The scientific newspapers and journals of "SPbEC n. a. Brezhnev LI." at "EAST n. a. Sobchak A.A." allow to propagandize of the main and derivative fundamental and applied scientific results of CMT. The manuscript №2 to "The Nobel committee" – Vetrov A.N. CMT for the fin. analysis and audit of org.: Monography ("Economics") and textbook ("Economics") (spec. 08.00.10) / A.N. Vetrov; "SPbSETU "LETI"". – SPb.: "SPbSETU "LETI"", 2004, 2007, 2010, "IBI", 2004, 2007, 2010, "SPbSUEF "FINEC"", 2004, 2007, 2010, "SPbSU", 2010, "SPbSEEU "INGECON"", 2010. – 352 p.: pic. – Bibliogr. 137 nom. – Rus. + 3 CD-ROM (RAS/IAS/GAAP): appendixes: "The calculation of analytical coefficients system for the vert. (the 23rd of November 2010 y. – vol. 2 for rev. 608 p. [red.] and [full] CD-ROM1 (RAS), vol. 5 CD-ROM4 (IAS/GAAP). – SPb.: "SPbSETU "LETI"", 2004, 2007, 2010, "IBI", 2004, 2007, 2010, "SPbSUEF "FINEC"", 2010, "SPbSU", 2010), hor. (the 09th of December 2010 y. – vol. 3 for rev. 896 p. [red.] and [full] CD-ROM2 (RAS), vol. 6 CD-ROM5 (IAS/GAAP). – SPb.: "SPbSETU "LETI"", 2004, 2007, 2010, "IBI", 2004, 2007, 2010, "SPbSEEU "INGECON"", 2010) and trend (the 27th of December 2010 y. – vol. 4 for rev. 480 p. [red.] and [full] CD-ROM3 (RAS), vol. 7 CD-ROM6 (IAS/GAAP). – SPb.: "SPbSETU "LETI"", 2004, 2007, 2010, "IBI", 2004, 2007, 2010, "SPbSEEU "INGECON"", 2010) fin. analysis and audit based on CMT". – for the conf. of my second doct. (acad.) diss. in the form of scientific monography on spec. 08.00.10.

5. "The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after academician Burdenko N.N."

1. The name of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." as the organization (legal entity – LE):
 - 1.1) the full company name of LE in the national language (Russian) – «Некоммерческая организация (учреждение) «научно-образовательный центр "Системного и финансового анализа на основе технологии когнитивного моделирования" "РА(М)Н" имени академика Бурденко Н.Н.»»;
 - 1.2) the full company name of LE in the international language (English) – “The noncommercial organization (establishment) “scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after academician Burdenko N.N.””;
 - 1.3) the reduced company name of LE in the national language (Russian) – «НОЦ "СФА ТКМ" "РА(М)Н" им. акад. Бурденко Н.Н.»;
 - 1.4) the reduced company name of LE in the international language (English) – “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”.
2. The description of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." as the organization (LE):
 - 2.1) it has the organizational-legal form – “The noncommercial organization (establishment)” – the mixed property of RF and “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., on the federal financing due to the monetary resources of the budget of RF and the foreign countries, LE and natural persons (NP) (non)residents;
 - 2.1.1) for the production of the basic and derivative fundamental and applied scientific results;
 - 2.1.2) for the support of reception of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N.;
 - 2.1.3) for the charge of payments (gifts) of the budget of RF and the foreign countries;
 - 2.1.4) for the charge of payments (gifts) of LE and NP (non)residents;
 - 2.1.5) for the charge of received sponsor's support and external financing;
 - 2.1.6) for the support of functioning of the organizational structures of “SIO "ACNS””, “SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”, “SF "SFA CMT" n. a. Prokopenko N.A.”, “SPbEC n. a. Brezhnev L.I.” at “EAST n. a. Sobchak A.A.””;
 - 2.2) it is “the noncommercial organization (establishment)” (with some commercial kinds of charges and incomes) with “the mixed form of ownership” (it is created and functioned due to the monetary resources of “The Nobel prize” of “AUT CMT SFA”, academician of (natural) sciences (“SIO "ACNS"”) Vetrov A.N., due to the monetary resources of RF and the foreign countries and due to the monetary resources of LE and NP (non)residents);

- 2.3) it acts in the civil circulation under its company name "The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after academician Burdenko N.N." ("SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N."), which is defined in its constituent documents (the charter and const. contract) and it is included into the unique state register of LE at the state registration as the newly created (existing) LE for the implementation of the following kinds of activity according to "The All-Russian classifier of the kinds of economic activity" ("АСКЕА" – «ОКВЭД»);
- 2.3.1) учебно-методическая деятельность и научная деятельность;
- 2.3.1) the learning-methodical activity and scientific activity;
- 80.3 – "Education, consulting, seminars and lectures" on the disciplines from the areas of the medical sciences (14.00.00), the pharmaceutical sciences (14.04.00), the chemical sciences (02.00.00), the biological sciences (03.00.00), the technical sciences (05.00.00), the psychological sciences (19.00.00), the economic sciences (08.00.00) and other sciences, in particular: "Informatics and theory of information", "Programming", "The structures of data and databases", "Discrete mathematics", "Theoretical mechanics", "The system analysis", "The financial analysis", "Financial markets", "Accounting and audit" and others (some functions of the higher professional educational institutions, the average special educational institutions, the average common educational institutions and others);
 - 92.4 – "The activity of information agencies" (science and education);
- 2.3.2) the scientific - production activity;
- 91.1 – "The activity of commercial, entrepreneurial and professional organizations" (the scientific activity, the activity on interaction with the unions and associations of commercial workers, entrepreneurs, scientists, writers and others);
 - 67.13 – "The other auxiliary activity in the sphere of financial intermediary" (the information-consulting services of managing subjects, the information-auditor services of enterprises (organizations) and the information-auditor services of credit organizations);
- 2.3.3) the commercial (trading) activity;
- 51.15.4 – "The activity of agents on the wholesale trade of radio-, tele-instrumentation and the technical carriers of information (with records and without records)";
 - 51.43.2 – "The wholesale trade of radio-, tele-instrumentation and the technical carriers of information (with records and without records)";
 - 51.47.21 – "The wholesale trade of books";
 - 51.47.22 – "The wholesale trade of newspapers and journals";
 - 51.56.1 – "The wholesale trade of paper and cardboard";
- 2.3.4) the production - publishing activity;
- 22 – "The publishing and polygraphic activity (production) and the duplicating of the written down carriers of information" (the production and duplicating of optical discs for the laser storages of information with computer programs, books, monographies, reports on the scientific-research work (SRW), textbooks, scientific articles, scientific reports and multimedia-presentations);
 - 30.02 – "The production of electronic calculating machines (ECM) and other equipment for the information processing" (the production of programs for ECM, multimedia-presentations and auxiliary materials).

3. The sphere of scientific interests of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.":
 "Clinical medicine" (14.01.00), "Preventive medicine" (14.02.00),
 "Medical-biological sciences" (14.03.00), "Pharmaceutical sciences" (14.04.00),
 "Chemical sciences" (02.00.00), "Biological sciences" (03.00.00),
 "Psychological sciences" (19.00.00), "Physical-mathematical sciences" (01.02.00),
 "Technical sciences" (05.00.00), "Economic sciences" (08.00.00),
 in particular: the (microscopic) system analysis and control,
 the information technologies, the information-educational environments,
 the automated (remote) training systems,
 the innovative architectures and algorithms in the basis of the automation means of training,
 (cognitive) informatics, psycho-physiology of perception,
 (cognitive) psychology, (cognitive) linguistics,
 the (microscopic) financial analysis, accounting and audit
 of the enterprises and (credit) organizations,
 the (microscopic) complex analysis, theoretical mechanics,
 physical chemistry, molecular biology and medicine.
4. The directions of scientific researches of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.":
- 4.1) it is engaged in the fundamental and applied researches in the field
 of "Clinical medicine" (14.01.00), "Preventive medicine" (14.02.00),
 "Medical-biological sciences" (14.03.00), "Pharmaceutical sciences" (14.04.00),
 "Chemical sciences" (02.00.00), "Biological sciences" (03.00.00),
 "Psychological sciences" (19.00.00), "Physical-mathematical sciences" (01.02.00),
 "Technical sciences" (05.00.00), "Economic sciences" (08.00.00) and other sciences;
- 4.2) it is engaged in the innovative (microscopic) system analysis
 and the increasing of efficiency of functioning of the (adaptive)
 information-educational environments in medicine (05.13.01 and 19.00.03);
- 4.2.1) it develops and modernizes the apparatus of the cognitive modeling
 technology for the (microscopic) system analysis
 of the (adaptive) information-educational environments in medicine;
- 4.2.2) it creates and modernizes the innovative structures of the parametrical
 cognitive models of the subject of training and the means of training in medicine;
- 4.2.3) it is engaged in the creation and modernization of the architecture
 of the (adaptive) automation means of training (at distance)
 based on the parametrical cognitive models block in medicine;

- 4.3) it is engaged in the innovative (microscopic) financial analysis and the increasing of efficiency of functioning of the enterprises and (credit) organizations in medicine (08.00.10);
- 4.3.1) it develops and modernizes the apparatus of the cognitive modeling technology for the (microscopic) financial analysis of the organizational structures of the enterprises and (credit) organizations in medicine;
- 4.3.2) it creates and modernizes the structures parametrical of the cognitive models for the vertical, horizontal and trend (microscopic) financial analysis of the enterprises and (credit) organizations in medicine (in the sphere of medicine) based on the primary registers of financial and accounting reporting-documents;
- 4.3.3) it is engaged in the creation and modernization of the architecture of the means of automation of the financial analysis and audit based on the parametrical cognitive models block in medicine;
- 4.4) it is engaged in the innovative (microscopic) complex analysis and the increasing of efficiency of functioning of the difficult objects, processes and phenomena in medicine (01.02.01, 02.00.04, 03.00.03, 10.02.21, 14.01.07, 19.00.01, 19.00.02 and 19.00.03);
- 4.4.1) it develops and modernizes the apparatus of the cognitive modeling technology for the (microscopic) complex analysis of the difficult objects, processes and phenomena in medicine;
- 4.4.2) it creates and modernizes the structures of the parametrical of the cognitive models for the (microscopic) complex analysis in medicine based on the (multidimensional) cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere;
- 4.4.3) it is engaged in the creation and modernization of the architecture of the means of automation of the (microscopic) complex analysis in medicine based on the parametrical cognitive models block;
- 4.4.4) it develops the fundamental and applied scientific results in the area of medical theoretical mechanics, physical chemistry, molecular biology and medicine (preventive and clinical).

5.1. The general details

about “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

“The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (medical) sciences" named after academician Burdenko N.N.” (“SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” – “SEC”) acts as the first SEC in the structure of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS””), the additional component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (www.vetrovan.(spb.)ru):

- 1) it was executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental and applied scientific results in medicine (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
 - I. The administrative-scientific divisions of “SEC” [the director of “SEC”, the secretary-reviewer of the director of “SEC” and the assistant of the director of “SEC” on communications with the scientific (educ.) organizations and on public relations].
 - II. The scientific-organizational divisions of “SEC” [The scientific council of “SEC” and the scientific schools of “SEC” (* – together with “SIO "ACNS””) on med., sport. med., mil. med., chem., biol., phys.-math., tech., soc. and econ. sciences, the scientific archive of The scientific council and the scientific schools of “SEC” (*), the diss. councils of “SEC” (*) (the objects and subjects of research: the biological construct of organism, the inf.-education environments, the (credit) organizations and the objects of theor. mechanics) on the medical sciences (spec. 14.01.07 – “The eye diseases and ophthalmology”, 14.01.03 – “The diseases of the ear, throat and nose” and others), on the chemical sciences (spec. 02.00.04 – “Physical chemistry” and others), on the biological sciences (spec. 03.00.03 – “Molecular biology” and others), on the physical-mathematical sciences (spec. 01.02.01 – “Theoretical mechanics” and others), on the technical sciences (spec. 05.13.10 – “Management in the social and economic systems”, 05.13.01 – “The system analysis, control and information processing” and others), on the social sciences (spec. 08.00.10 – “Finance, monetary circulation and credit”, 10.02.21 – “Applied and mathematical linguistics”, 19.00.01 – “Cognitive psychology”, 19.00.02 – “Psycho-physiology of perception”, 19.00.03 – “Psychology of work, engineering psychology and ergonomics” and others), the archive of the dissertation council of “SEC” (*) and the scientific-methodical department of “SEC” (*).]

III. The administrative-economy divisions of “SEC”
[the deputy director of “SEC” on administrative-economy work (the administrative department of “SEC”, the document-circulation department of “SEC”, the legal support department of “SEC” (*), the document-office of “SEC”, the archive of documents of “SEC” (*), the information-analytical support department of “SEC” (*), the communication and corresp. (expedition) dep. of “SEC” (*), the deposition department of “SEC” (*), the certification, licensing and patenting department of “SEC” (*), the fire-prevention safety department of “SEC” (*), the construction and repair department of “SEC” (*), the automation department of “SEC” (*), the planning of deliveries and shipments of production department of “SEC” (*), the supply and purchases of production department of “SEC” (*) and the transport support department of “SEC” (*)), the chief accountant of “SEC” (the planning and economic analysis department of “SEC” (*), the calculations department of “SEC”, the delivery department of “SEC”, the clearing of payment requirements and payment assignments department of “SEC”, the accounting of commodity-material assets department of “SEC” and the inventory department of “SEC”), the deputy director of “SEC” on personnel support (the vocational training, retraining and improvement of professional skills department of “SEC” (*), the personnel registration department of “SEC”, the electronic accounting of visitors and employees department of “SEC” (*), the labor safety department of “SEC” (*), the medicine department of “SEC” (*) and the professional union department of “SEC” (*)), the deputy director of “SEC” on library support (the purchase and sale of scientific literature department of “SEC” (*), the library service department of “SEC” (*), the fundamental scientific literature department of “SEC” (*), the applied scientific literature department of “SEC” (*), the norm. documentation dep. of “SEC” (*), the scientific periodical editions department of “SEC” (*), the electronic library department of “SEC” (*) and the funds of library department of “SEC” (*)), the deputy director of “SEC” on publishing house (the publishing house department of “SEC” (*), the polygraphy department of “SEC” (*), the editing department of “SEC” (*), the printing house department of “SEC” (*) and the warehouse of book-printing production department of “SEC” (*)), the deputy director of “SEC” on security (the security department of “SEC” (*), the territory protection department of “SEC” (*) and the registration of electronic passports department of “SEC” (*))].

IV. The scientific-research and educational divisions of “SEC” (*)
[the deputies director of “SEC” on scientific work – med., chem., biol., sport., mil., phys.-math., tech., soc. and econ. researches directions in medicine (the fund. sci. res. departments – see the list IV.A and the applied sci.-res. departments – see the list IV.B), the deputy director of “SEC” on databases and information warehouses, on hardware, software and brainware support and on integrated systems (the departments of the development of information warehouses, hardware, software and brainware support and integrated systems – see the list IV.A, the scientific-research laboratories of the hardware, software and brainware support and integrated systems – see the list IV.B), the deputy director of “SEC” on quality management (the quality management res. department), on investments and innovations (the investments and innovations research department) and on financial planning (the financial planning and researches department of “SEC” (*)), the deputy director of “SEC” on advertising and marketing (the marketing researches and advertising department of “SEC” (*)), the deputy director of “SEC” on purchase and realizations of book-printing production (the book-printing production delivery (purchases and income flow) research department of “SEC” (*) and the book-printing production shipment (sales and outcome flow) research department of “SEC” (*)), the deputy director of “SEC” on int. relations (the ext. communications and res. dep. of “SEC” (*), the visas registration and res. department of “SEC” (*), the sci. int. programs department of “SEC” (*), the educational programs department of “SEC” (*) and the translations department of “SEC” (*)), the deputy director of “SEC” on basic and additional educational activity (the basic education department of “SEC” (*), the remote education department of “SEC” (*), the professional retraining and improvement of professional skill department of “SEC” (*) and the postgraduate study and doctoral studies department of “SEC” (*)].

IV.A. The fundamental scientific researches divisions of “SEC” – the fundamental scientific researches branches and departments
[see the fundamental scientific researches branches and departments of “SEC”, and also the fund. scientific researches branches and sections (departments) of “SIO "ACNS"”].

IV.B. The applied scientific researches divisions of “SEC” – the applied scientific researches directions and departments
[see the applied scientific researches directions and departments of “SEC”, and also the appl. scientific researches directions and sections (departments) of “SIO "ACNS"”].

V. The scientific centre divisions at “SEC” (additional).

VI. The scientific-historical departments of “SEC” (additional).

VII. The scientific-public divisions of “SEC” (additional).

VIII. The divisions of “SIO "Academy of cognitive natural sciences"”
(the main reduction – “SIO "ACNS"” and the add. reduction – “SIO "IACNS"”) (add.).

“SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” allows to develop the main and derivative scientific results of CMT in medicine.

5.2. The divisions of fundamental scientific researches (at the microscopic level) of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N."

The structure of "The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (medical) sciences" named after academician Burdenko N.N." ("SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." – "SEC") as the first SEC in the structure of "SIO "ACNS"" (www.vetrovan.spb.ru) includes the various divisions of process of the carrying out of scientific researches:

- A. The fundamental scientific researches divisions of "SEC"**
for the system, financial and complex analysis at the micro-level in medicine – the 45 fundamental scientific researches sections (departments) (FSRS(DP)) on the 10 fundamental scientific researches branches (FSRB) of "SEC" are connected with the 26 FSRS(DP) on the 13 FSRB of "SIO "ACNS"", and also with FSRS(DP) on FSRB of "The Russian academy of (medical) sciences".
- A.1. FSRB "Theory of preventive medicine" ("TPREVM").
- A.1.1. FSRS(DP) "Theory of hygiene" ("THYG") (*).
- A.1.2. FSRS(DP) "Theory of disinfectology" ("TDIS") (*).
- A.1.3. FSRS(DP) "Theory of preventive epidemiology" ("TPREVEP") (*).
- A.1.4. FSRS(DP) "Theory of recreational medicine" ("TREC RM") (*).
- A.1.5. FSRS(DP) "Theory of sanitation" ("TSAN") (*).
- A.1.6. FSRS(DP) "Theory of public-health-services, medical labor safety, medical environment preservation and medical ecology of person" ("TPMLSMEP and MEP") (*).
- A.1.7. FSRS(DP) "Theory of medical-social expertise, medical-social rehabilitation and medical sociology" ("TM-SEM-SR and MS") (*).
- A.2. FSRB "Theory of clinical medicine" ("TCLINM").
- A.2.1. FSRS(DP) "Theory of obstetrics and gynecology (of the physiological and pathological processes in the organism of woman after the conception, pregnancy and childbirth)" ("TOB and GYN (PH and PPR in ORGWACPR and CH)") (*).
- A.2.2. FSRS(DP) "Theory of anesthesiology and resuscitation (of the methods of protecting of the organism against the surgery trauma)" ("TAN and RES (MPRORG ag SURGTR)") (*).
- A.2.3. FSRS(DP) "Theory of gastro-enterology (of the diseases of gastro-intestinal tract)" ("TGAST-ENT (DG-IT)") (*).
- A.2.4. FSRS(DP) "Theory of hematology and hema-transfusion (of the transfusion of blood)" ("THEMAT and HEMA-TR (TB)") (*).
- A.2.5. FSRS(DP) "Theory of gerontology and geriatrics (of the diseases of aging and rejuvenation)" ("TGERONT and GERIATR (DAG and REJ)") (*).
- A.2.6. FSRS(DP) "Theory of dermatology and venereology (of the diseases of skin and venereal diseases)" ("TDERM and VEN (DS and VEND)") (*).

- A.2.7. FSR S (D P) “Theory of dietetics (of the diseases of improper nutrition)” (“TDIET (DIN)”) (*).
- A.2.8. FSR S (D P) “Theory of cardiology (of the diseases of the cardio-vascular system)” (“TCARD (DC-VS)”) (*).
- A.2.9. FSR S (D P) “Theory of radiation diagnostics and radiation therapy” (“TRDIANG and R THER”) (*).
- A.2.10. FSR S (D P) “Theory of neurology (of the diseases of the nervous system)” (“TNEUR (DNERVS)”) (*).
- A.2.11. FSR S (D P) “Theory of nephrology and urology (of the diseases of the (over)renal and sexual systems)” (“TNEPHR and UR (D(O)REN and SEXS)”) (*).
- A.2.12. FSR S (D P) “Theory of oncology (of the diseases of the new formations and tumors of the biological construct of organism)” (“TONC (DNFORM and TUMBCORG)”) (*).
- A.2.13. FSR S (D P) “Theory of laryngo-oto-rhinology or oto-rhino-laryngology (of the diseases of the ear, throat and nose)” (“TLAR or OTORIN (DETH and N)”) (*).
- A.2.14. FSR S (D P) “Theory of ophthalmology (of the diseases of the visual sensory system)” (“TOPHT (DVSS)”) (*).
- A.2.15. FSR S (D P) “Theory of pediatrics (of the diseases of the biological construct of organism of the children)” (“TPED (DBCORGCH)”) (*).
- A.2.16. FSR S (D P) “Theory of psychiatry and narcology (of the diseases of the psychical construct of the head brain)” (“TPS and NAR (DPCHB)”) (*).
- A.2.17. FSR S (D P) “Theory of pulmonology and phtisiology (of the diseases of the pulmonary and bronchial systems)” (“TPULM and PHTHIS (DP and BS)”) (*).
- A.2.18. FSR S (D P) “Theory of rheumatology (of the inflammatory and degenerative-dystrophic diseases of the joints, spine and the system diseases of connective tissue)” (“TRHEUM (I and D-DDJS and SDCT)”) (*).
- A.2.19. FSR S (D P) “Theory of dentistry (of the diseases of the cavity of mouth, jaws and their border areas of the face and neck)” (“TDENT (DCMJ and BAF and N)”) (*).
- A.2.20. FSR S (D P) “Theory of traumatology, orthopedics and prosthetics (of the diseases of skeletal-muscular system)” (“TTRORTH and PROSTH (DS-MS)”) (*).
- A.2.21. FSR S (D P) “Theory of therapy (of the relieving or eliminating of symptoms and manifestations of the disease or trauma)” (“T THER (REL or ELIMS and MD or TR)”) (*).
- A.2.22. FSR S (D P) “Theory of endocrinology (of the diseases of the internal organs and the disorders of hormonal cycles)” (“TEND (DIO and DHC)”) (*).
- A.2.23. FSR S (D P) “Theory of epidemiology (of the infectious diseases)” (“TEPID (ID)”) (*).
- A.2.24. FSR S (D P) “Theory of surgery, cardio-vascular surgery, neuro-surgery, pediatric surgery, transplantology and artificial organs” (“TSURGC-VSURGN-SURGPSEGT and AO”) (*).
- A.3. FSRB “Theory of pharmacology and pharmaceuticals” (“TPHARMAC and PHARMAC”).
- A.3.1. FSR S (D P) “Theory of pharmacology, pharmaco-epidemiology, pharmacy, bio-chemical pharmacology, clinical pharmacology, molecular pharmacology, pharmaco-genomics and experimental pharmacology” (“TPHPH-EPPHB-CHPHCLPHMPHPH-G and EXPPH”) (*).

- A.4. FSRB “Theory of sports medicine” (“TSPM”).
- A.4.1. FSRB(DP) “Theory of medicine of competitions, sport and sports sciences” (“TMCSP and SPS”).
- A.5. FSRB “Theory of military medicine” (“TMILM”).
- A.5.1. FSRB(DP) “Theory of medicine and medical education in the armed forces” (“TM and NEDUC in MF”).
- A.6. FSRB “Theory of chemistry and chemical technologies in medicine” (“TCHEM and CHEMT in M”).
- A.6.1. FSRB(DP) “Theory of chemistry, chemical technology and chemical industry in medicine” (“TCHEMCHEMT and CHEMIND in M”).
- A.7. FSRB “Theory of biology, physiology and bio-physiological technologies in medicine” (“TBIOLPHYS and B-PHYST in M”).
- A.7.1. FSRB(DP) “Theory of general biology” (“TGENB”).
- A.7.2. FSRB(DP) “Theory of physical-chemical bio-technology” (“TPHYS-CHEMB-T”)(*).
- A.7.3. FSRB(DP) “Theory of physiology, bio-physiology and private physiology (of sensory systems)” (“TPHYSB-PHYS and PRPHYS (SS)”) (*).
- A.8. FSRB “Theory of mathematics and mathematical technologies in medicine” (“TMATH and MATHT in M”).
- A.8.1. FSRB(DP) “Theory of medical mathematics and the complex system analysis based on the cognitive modeling technology” (“TMMATH and DSAB on CMT”) (*).
- A.8.2. FSRB(DP) “Theory of medical cybernetics and (cognitive) informatics” (“TMCYB and (CONG)INF”) (*).
- A.9. FSRB “Theory of nano-technologies and information technologies in medicine” (“TNANO-T and INFT in M”).
- A.9.1. FSRB(DP) “Theory of medical electronics, radio-technics and connection” (“TMELR-T and CONN”).
- A.9.2. FSRB(DP) “Theory of medical automatics, computing technics and the systems analysis based on the cognitive modeling technology” (“TMAUTCT and SAB on CMT”) (*).
- A.9.3. FSRB(DP) “Theory of nano-technologies for the mechanical-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture and construction in medicine” (“TNANO-T for M-EI-MPRPH-S-TL and FITA and C in M”) (*).
- A.10. FSRB “Theory of social-science and technologies of social sciences in medicine” (“TSOC-S and TSOCS in M”).
- A.10.1. FSRB(DP) “Theory of social sciences, philosophy, science-study, politics and political sciences, sociology, (cognitive) psychology, state, law and legal sciences, patent business, invention and rationalization in medicine” (“TSOCSPHS-STP and PSS(C)PSL and JSPBI and R in M”) (*).
- A.10.2. FSRB(DP) “Theory of economics and economic sciences, organization, management, statistics and the financial analysis based on the cognitive modeling technology in medicine” (“TECON and ECONSOMS and FAB on CMT in M”) (*).

5.2.1. The fundamental scientific researches branch

“Theory of preventive medicine” (“TPREVM”)

of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The fundamental scientific researches branch “Theory of preventive medicine”” (“TPREVM”) treats to the fundamental scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department “Theory of hygiene”” (“THYG”) (*)
[*the fundamental scientific researches in the area “Theoretical hygiene”* – studies the influence of the factors of external environment on the organism of person with the purpose of optimization of the favorable impacts and preventing of the adverse impacts, the theoretical bases of hygiene, theory of influence of the factors of external environment on the organism of person, theory of optimization of the favorable impacts and preventing of the adverse impacts, theory of methods of the increasing of the resistance of organism to the diseases, theory of methods of the sanatorium-resort treatment, theory of impact of the conditions of living and labor on the health of person, theory of sanitary norms and rules in the different spheres of activity, theory of development of the standards, requirements and sanitary measures, directed on the improving of settlements, the conditions of living and the activity of people and the cognitive modeling technology in the theoretical hygiene].

II. "The fundamental scientific researches department "Theory of disinfectology" " ("TDIS") (*) [*the fundamental scientific researches in the area "Theoretical disinfectology" – studies the regularities of non-specific prevention of the infectious and parasitic diseases by the exposing on the pathogenic biological objects and their various carriers, the theoretical bases of disinfectology, theory of a set of actions, directed on the destruction of pathogens of the infectious diseases and the destruction of toxins at the objects of the external environment, theory of chemical disinfectant means, theory of planned and unscheduled preventive disinfection, theory of current disinfection, theory of final disinfection and the cognitive modeling technology in the theoretical disinfectology*].

III. "The fundamental scientific researches department "Theory of preventive epidemiology" " ("TPREVEP") (*) [*the fundamental scientific researches in the area "Theoretical preventive epidemiology" – studies the demographics of painful processes, actions on their localization and the reduction of incidence, and includes inside, but is not limited to the study of the various epidemics, the theoretical bases of preventive epidemiology, theory of the regularities of occurrence and the spread of diseases of the various etiology, theory of development of the preventive actions, theory of premorbid prevention, theory of primary prevention, theory of secondary prevention, theory of tertiary prevention, theory of incidence, theory of the regularities of epidemic process, theory of elimination of the epidemiological process, theory of prevention of the epidemiological process, theory of the regularities of occurrence, spread and cessation of the diseases of human and the cognitive modeling technology in the theoretical preventive epidemiology*].

IV. “The fundamental scientific researches department
“Theory of recreational medicine”” (“TREC RM”) (*)
*[the fundamental scientific researches in the area
“ Theoretical recreational medicine ”* –
studies the techniques of increasing of the resistance of organism to the various diseases,
in particular the techniques of sanatorium-resort treatment,
the influence of amateur sports and other,
the theoretical bases of recreational medicine,
theory of the methods of increasing of the resistance of organism to the various diseases,
theory of methods of the sanatorium-resort treatment,
theory of practical application of the amateur sports,
theory of application of the cultural-mass actions
and the cognitive modeling technology in the theoretical recreational medicine].

V. “The fundamental scientific researches department
“ Theory of sanitation ” ” (“ T S A N ”) (*)
*[the fundamental scientific researches in the area
“ Theoretical sanitation ”* –
the system of diverse actions, providing
the protection of health and the prevention of the various diseases,
and also the complex of measures on the practical application of the standards,
sanitary rules and recommendations, developed by the hygienic science,
providing the optimization of the conditions of parenting and training,
the welfare, labor, rest and nutrition of people with the purpose of strengthening
and preserve of their health, the theoretical bases of sanitation,
theory of actions providing the protection of health,
theory of actions providing the prevention of the various diseases,
theory of development of the standards, sanitary rules and recommendations,
theory of application of the standards, sanitary rules and recommendations,
theory of optimization of the conditions of parenting and training of people,
theory of optimization of the conditions of living and labor of people,
theory of optimization of the conditions of rest and eating of people
and the cognitive modeling technology in the theoretical sanitation].

VI. "The fundamental scientific researches department "Theory of public-health-service, medical labor safety, medical environment preservation and medical ecology of person" ("TPMLSMEP and MEP") (*) [*the fundamental scientific researches in the area "Theoretical medical protection of labor" (*)* – theory of organization and management of the protection of labor, the conditions of labor, the industrial sphere and the technique of safety, theory of professional diseases and their prevention, theory of accidents on the production and their prevention, theory of labor-capacity and the examination of labor-capacity, theory of the protection of labor by the categories of workers, theory of the safety of labor on the industries of high danger and the cognitive modeling technology in the theoretical medical protection of labor (theory of the cognitive model of the subject of training); *the fundamental scientific researches in the area "Theoretical medical protection of the environment and ecology of person"* – theory of the methods of studying and protecting of the environment and person, theory of ecological bases of the use of natural resources, theory of international cooperation, theory of the pollution of environment, theory of pollution, theory of pollution and protection of the atmosphere, theory of pollution and protection of the waters of land, seas and oceans, theory of protection of the soils, theory of protection of the subsoils, theory of the ecological bases of life-activity of the person, theory of impact of the anthropogenic changes of environment on the health and social-labor potential of person, theory of the impact of person on the pollution of environment, on the condition of natural ecosystems, populations and organisms of the plant and animal world, theory of protection of the plant and animal world, theory of anthropogenic impact on the landscape, theory of protection and optimization of the landscape, theory of conservation, theory of protected natural territories and water-areas, theory of natural disasters and disasters of anthropogenic origin, theory of ecological safety of the person, theory of rational use and reproduction of natural resources by the person, theory of the protection of environment and natural resources in the certain regions and countries, theory of management of the wastes, theory of low-waste and without-waste technology, theory of protection of the person from the noise, vibration, electric and magnetic fields and radiations and the cognitive modeling technology in the theoretical medical protection of the environment and ecology of person].

VII. “The fundamental scientific researches department “Theory of medical-social expertise, medical-social rehabilitation and medical sociology”” (“TM-SEM-SR and MS”) (*) [*the fundamental scientific researches in the area “Theoretical medical-social expertise”* – one of the kinds of medical expertise, which provides the definition in accordance with the established order the needs of the examined person in the measures of social protection, including rehabilitation, based on the estimation of limitations of life-activity, caused by the persistent disorder of functions of organism, the theoretical bases of medical-social expertise, theory of measures of the social protection, theory of rehabilitation, theory of estimation of the limitations of life-activity of the person, theory of disorders of the functions of organism, theory of establishments of the medical-social expertise, theory of organization and activity of the establishments of medical-social expertise, theory of examination of the citizens with the purpose of establishing of the group of disability and determining of the degree of loss of the professional labor-ability, theory of prevalence and structure of disability, theory of the causes, factors and conditions, affecting on the occurrence, development and outcome of disability, theory of determining of the needs of citizens in the measures of social protection and rehabilitation and the cognitive modeling technology in the theoretical medical-social expertise; *the fundamental scientific researches in the area “Theoretical medical-social rehabilitation”* – a set of medical actions, carried out by the state, private and public organizations, directed on the protection of social rights of the citizens of the various categories, the theoretical bases of medical-social rehabilitation, theory of the process of medical-social rehabilitation, theory of the process of interaction of the personality and society, theory of the ways of transferring of the social experience to the individual, theory of the ways of including of the individual in to the system of social relations, theory of the process of personal changes of the person and the cognitive modeling technology in the theoretical medical-social rehabilitation; *the fundamental scientific researches in the area “Theoretical medical sociology”* – the branch of sociology, studying the system of care of health, the social terms “disease” and “health”, the behavior of people in the sphere of medicine, the theoretical bases of medical sociology, theory of regularities of the formation of value orientations of the population to the health, diseases, medical care, medicine and the care of health, theory of the structure of modern medical sociology, theory of sociology of medical professions, theory of sociology of the disease and the behavior of patient, theory of sociology of the institutes of medicine and the organization of health-care and the cognitive modeling technology in the theoretical medical sociology].

The fundamental scientific researches branches and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.2.2. The fundamental scientific researches branch “Theory of clinical medicine” (“TCLINM”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The fundamental scientific researches branch “Theory of clinical medicine”” (“TCLINM”) treats to the fundamental scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department “Theory of obstetrics and gynecology (of the physiological and pathological processes in the organism of woman after the conception, pregnancy and childbirth)”” (“TOB and GYN (PH and PPR in ORGWACPR and CH)”) (*) [the fundamental scientific researches in the area “Theoretical obstetrics” – the clinical discipline, which studies the physiological and pathological processes, occurring in the organism of women in the connection with the conception and pregnancy, in childbirth and postpartum, and also develops the methods of childbirth-delivery, the prevention and treatment of complications of pregnancy and childbirth, the diseases of fetal and newborn, the theoretical bases of obstetrics, theory of physiological and pathological processes in the organism of a woman in the connection with the conception and pregnancy, theory of the methods of childbirth-delivery, prevention and treatment of complications of pregnancy and childbirth, theory of disease of fetal and newborn and the cognitive modeling technology in the theoretical obstetrics; the fundamental scientific researches in the area “Theoretical gynecology” – the branch of the clinical medicine, studying the diseases of the female reproductive system, the theoretical bases of gynecology and the cognitive modeling technology in the theoretical gynecology].

II. "The fundamental scientific researches department
"Theory of anesthesiology and resuscitation
(of the methods of protecting of the organism against the surgery trauma)"
("TAN and RES (MPRORG ag SURGTR) ") (*)
[*the fundamental scientific researches in the area
" Theoretical anesthesiology "* –
the section of the clinical medicine, carrying out the studying
of means and methods of the providing of anesthesia,
that is the loss of sensitivity, including the pain
at the various acute pain syndromes, shock conditions, traumas
and surgical interventions, the theoretical bases of anesthesiology,
theory of means and methods of the providing of anesthesia,
theory of acute pain syndromes, theory of shock conditions,
theory of traumas, theory of surgical interventions
and the cognitive modeling technology in the theoretical anesthesiology;
*the fundamental scientific researches in the area
"Theoretical resuscitation (intensive therapy) "* –
the clinical discipline, the scientific findings
of whose are used at the resuscitation in the clinic,
and also the science, studying the regularities of death and the revitalization of organism
with the purpose of developing of the most effective methods of prevention and restoration
of the fading or just extinct life functions of the organism,
the theoretical bases of resuscitation, theory of resuscitation,
theory of the regularities of death and the revitalization of organism,
theory of pathological-functional processes during the dying,
theory of terminal conditions, theory of the restoration of life functions
and the cognitive modeling technology in the theoretical resuscitation].

III. "The fundamental scientific researches department
"Theory of gastro-enterology (of the diseases of gastro-
intestinal tract) " " ("TGAST-ENT (DG-IT) ") (*)
[*the fundamental scientific researches in the area
" Theoretical gastro-enterology "* –
the section of the clinical medicine, studying the gastro-intestinal tract of the person,
its structure and functioning, its diseases and methods of their treatment,
the theoretical bases of gastro-enterology,
theory of gastro-intestinal tract of the person,
theory of the structure of gastro-intestinal tract of the person,
theory of the functioning of gastro-intestinal tract of the person,
theory of the structure, functioning and diseases of the liver,
theory of the structure, functioning and diseases of the gall bladder,
theory of the structure, functioning and diseases of the bile tract,
theory of the diseases of gastro-intestinal tract,
theory of the methods of treating of the gastro-intestinal tract
and the cognitive modeling technology in the theoretical gastro-enterology].

IV. "The fundamental scientific researches department
" Theory of hematology and hema-transfusion
(of the transfusion of blood)" ("THEMAT and HEMA-TR (TB)") (*)
[*the fundamental scientific researches in the area
" Theoretical hematology "* –
the section of the clinical medicine, studying the blood, the organs of blood-formation
and the diseases of blood, the theoretical bases of hematology,
theory of the etiology of diseases of the blood-circulatory system,
theory of the diagnosis of diseases of the blood-circulatory system,
theory of the treatment of diseases of the blood-circulatory system,
theory of the prediction and prevention of diseases of the blood-circulatory system,
theory of the production of blood and its components, theory of the cells of blood,
theory of hemoglobin, theory of the proteins of blood,
theory of the mechanisms of coagulation (the clotting of blood),
theory of bio-medicine of the blood, theory of oncology of the blood
and the cognitive modeling technology in the theoretical hematology;
*the fundamental scientific researches in the area
" Theoretical hema-transfusion "* –
the section of the clinical medicine, studying the transfusion of blood, the particular case of transfusion,
at which the biological liquid poured from the donor to the recipient
is the blood or its components, the theoretical bases of hema-transfusion,
theory of the transfusion of blood, theory of transfusion,
the theoretical bases of the technology of the transfusion of blood,
theory of the compatibility of blood
and the cognitive modeling technology in the theoretical hema-transfusion].

V. "The fundamental scientific researches department
" Theory of gerontology and geriatrics
(of the diseases of aging and rejuvenation)" ("TGERONT and GERIATR (DAG and REJ)") (*)
[*the fundamental scientific researches in the area
" Theoretical gerontology and geriatrics "* –
studies the processes of aging of the living organisms,
including the aging of the biological construct of the organism of person,
the theoretical bases of gerontology,
theory of the biological causes of the aging of person,
theory of the social causes of the aging of person,
theory of the psychological causes of the aging of person,
theory of rejuvenation, theory of geriatrics and the causes of diseases of the process of aging,
theory of gero-hygiene, theory of geronto-psychology
and the cognitive modeling technology
in the theoretical gerontology and geriatrics].

VI. "The fundamental scientific researches department
" Theory of dermatology and venereology
(of the diseases of skin and venereal diseases) " "
(" T D E R M and V E N (D S and V E N D) ") (*)
*[the fundamental scientific researches in the area
" T h e o r e t i c a l d e r m a t o l o g y " –*
the section of the clinical medicine, studying the structure and functioning
of the skin and its appendages (hairs, nails, and also mucous membranes),
the diseases of skin, its appendages and mucous membranes, methods of their
prevention and treatment, the theoretical bases of dermatology,
theory of plastic surgery, theory of burn surgery,
theory of severe thermal and radiation damages of skin,
t h e o r y o f m a x i l l a - f a c i a l s u r g e r y ,
theory of periostitis, tumors and dermoid cysts, theory of traumatology,
theory of trauma-genic injury of skin and adjacent tissues,
t h e o r y o f g e n e r a l p u r u l e n t - s e p t i c s u r g e r y ,
t h e o r y o f p y o d e r m a , t h e o r y o f p h l e g m o n s ,
theory of furuncles, theory of carbuncles, theory of trichophthypia,
t h e o r y o f g a n g r e n e - n e c r o t i c s u r g e r y ,
theory of the necrosis of skin and subcutaneous fiber,
t h e o r y o f t h e r a p e u t i c d e r m a t o l o g y ,
theory of differential diagnostics and topography of skin,
theory of infectiology, theory of venereology,
theory of the inoculable viral and parasitic
diseases of skin and hypodermic appendages,
theory of toxicology, theory of taxidermy,
theory of pseudoporphic and other toxic reactions,
theory of dermatopatiya, theory of hematology,
theory of skin manifestations of politsitemiya, eritromegaliya,
gemoblastoz of patekhiya, hemorrhagic rashes and vaskulita,
theory of rheumatology, theory of system kollagenozes, theory of endocrinology,
theory of the change of skin at the mellitus diabetes, hypothyroidism,
hyperthyroidism and the diseases of the parathyroid glands,
theory of oncology, theory of melanomas and other tumors of skin and its appendages,
theory of neurology, theory of neuro-dermitis, theory of ataxia-telangikinesia,
theory of the genetically determined neuro-skin syndromes,
theory of allergology, theory of the syndrome of Lyel, theory of the syndrome of Stevens Johnson,
theory of uriticary rashes, theory of angio-neurotic edema,
theory of the skin-allergic reactions of medicinal drug reactants,
t h e o r y o f i n f e c t i o u s p a t h o g e n s
and the cognitive modeling technology in the theoretical dermatology;

the fundamental scientific researches in the area
“ T h e o r e t i c a l v e n e r o l o g y ” –
the area of the clinical medicine, studying the infections, transmitted by the sexual way or the venereal diseases, the theoretical bases of venereology, theory of course, treatment and prevention of the venereal diseases, theory of “old” or classical venereal diseases, theory of gonorrhoea, theory of syphilis, theory of donovanosis, theory of soft shankr, theory of venereal lympho-granuloma, theory of “new” or uro-genital venereal diseases, theory of clamidiosis, theory of ureaplasmosis, theory of myco-plasmosis, theory of trichomoniasis, theory of candidiasis, theory of gardnerellosis, theory of cyto-megalovirus, theory of genital herpes, theory of the virus of papilloma of the person, theory of the virus of deficit of the immune system of the person and the cognitive modeling technology in the theoretical venereology].
VII. “The fundamental scientific researches department
“Theory of dietetics (of the diseases of improper nutrition)”” (“TDIET (DIN)”) (*)
[*the fundamental scientific researches in the area*
“ T h e o r e t i c a l d i e t e t i c s ” –
studies the impact of food and drink on the health and diseases, especially at the determining of optimal nutrition, prescribes the therapeutic diet at the mellitus diabetes, cardiovascular diseases, over weight and the disturbances of digestive, allergies, malnutrition and tumors, the theoretical bases of dietetics, theory of the impact of food and drink on the health and diseases of person, theory of the determining of optimal nutrition, theory of the prescribing of therapeutic diet at the mellitus diabetes, c a r d i o - v a s c u l a r d i s e a s e s , o v e r w e i g h t and the disturbances of digestive, allergies, malnutrition and tumors, theory of the rationalization of nutrition, theory of the individualization of nutrition, theory of supply of the safety of nutrition, theory of the organized nutrition systems and the cognitive modeling technology in the theoretical dietetics].
VIII. “The fundamental scientific researches department
“Theory of cardiology (of the diseases of the cardio-
v a s c u l a r s y s t e m) ”” (“TCARD (DC-VS)”) (*)
[*the fundamental scientific researches in the area*
“ T h e o r e t i c a l c a r d i o l o g y ” –
the extensive section of the clinical medicine, engaged the studying of the cardio-vascular system of person: the structure and development of the heart and vessels, their functions, and also the different diseases, including the study of the causes of their occurrence, the mechanisms of development, the clinical manifestations, the questions of diagnostics, provides the development of the effective methods of their treatment and prevention, the problems of medical rehabilitation of the persons with the lesions of the cardio-vascular system, the theoretical bases of cardiology, theory of the pathological conditions of cardiology, theory of the coronary disease of heart, theory of hypertension disease, theory of the congenital defects of heart, theory of the acquired defects of heart, theory of cerebro-vascular diseases, theory of cardiological pathology in the structure of mortality of the population of developed countries, theory of the increasing of morbidity and damage of the cardio-vascular system of people, theory of the cardio-vascular and medical-social problems of health care and the cognitive modeling technology in the theoretical cardiology].

IX. “The fundamental scientific researches department “Theory of radiation diagnostics and radiation therapy”” (“TRDIANG and R THER”) (*)

[*the fundamental scientific researches in the area “Theoretical radiation diagnostics”* – the direction of the modern clinical medicine, which is engaged in the ultra-sound researches, computed tomography, the Roentgen research without contrasting, the Roentgen research with contrast, the magnetic-resonance tomography and magnetic-nuclear tomography, the theoretical bases of radiation diagnostics, theory of research of the liver, theory of research of the pancreatic cell and bile ducts, theory of diagnostics of the condition of the esophagus, theory of diagnostics of the hernias of the esophageal orifice of the diaphragm, tumors, diverticulas, strictures, the varicose expansion of veins and foreign bodies, theory of research of the gastric and duodenum, theory of diagnostics of ulcers, tumors, strictures and obturations, theory of control of the results of operative interventions, theory of diagnostics of the tumors of intestine, theory of diagnostics of the inflammatory diseases, theory of diagnostics of the causes of obstruction of gut, strictures and obstruction and the cognitive modeling technology in the theoretical radiation diagnostics; *the fundamental scientific researches in the area “Theoretical radiation therapy (radio-therapy, radiation therapy or radiation oncology)”* – the modern direction in the clinical medicine, which is engaged in the treatment of malignant tumors by the ionizing radiation (the Roentgen, gamma-radiation, beta-radiation, neutron radiation or the beams of elementary particles from the medical accelerator of charged particles), the theoretical bases of radiation therapy, theory of radio-therapy, theory of radiation therapy, theory of radiation oncology, theory of ionizing radiation in medicine, theory of Roentgen radiation in medicine, theory of gamma-radiation in medicine, theory of beta-radiation in medicine, theory of neutron-radiation in medicine, theory of the beams of charged particle in medicine, theory of the medical accelerator of charged particles, theory of medical equipment for the radiation therapy and the cognitive modeling technology in the theoretical radiation therapy].

X. "The fundamental scientific researches department "Theory of neurology (of the diseases of the nervous system)"" ("TNEUR (DNERVS)") (*) [*the fundamental scientific researches in the area "Theoretical neurology"* – the group of medical-biological disciplines, which study the structure and functions of the nervous system, the regularities of development and possible pathologies, the causes of diseases, the methods of their prevention and treatment, the theoretical bases of neurology, theory of the occurrence of diseases of the central nervous system, theory of the occurrence of diseases of the peripheral nervous system, theory of the mechanisms of development, symptomatology and the possible ways of diagnostics, treatment and prevention of the diseases of the nervous system, theory of clinical neurology and neuropathology and the cognitive modeling technology in the theoretical neurology].

XI. "The fundamental scientific researches department "Theory of nephrology and urology (of the diseases of the (over)renal and sexual systems)"" ("TNEPHR and UR (D(O)REN and SEXS)") (*) [*the fundamental scientific researches in the area "Theoretical nephrology"* – the area of the clinical medicine, studying the functions and diseases of kidneys, the theoretical bases of nephrology, theory of differential diagnostics, theory of nephron-surgery, theory of nephro-urology and the cognitive modeling technology in the theoretical nephrology; *the fundamental scientific researches in the area "Theoretical urology"* – the area of the clinical medicine, studying the etiology, pathogenesis, the diagnostics of the diseases of organs of the urinary system, the male sexual system, the diseases of adrenal glands and other pathological processes in the retroperitoneal space and developing the methods of their treatment and prevention, the theoretical bases of urology, theory of the urinary system, theory of the male sexual system, theory of the disease of adrenal glands, theory of pathological processes in the retroperitoneal space, theory of the methods of (surgical) treatment and prevention of diseases and the cognitive modeling technology in the theoretical urology].

XII. "The fundamental scientific researches department "Theory of oncology (of the diseases of the new formations and tumors of the biological construct of organism)"" ("TONC (DNFORM and TUMBCORG)") (*) [*the fundamental scientific researches in the area "Theoretical oncology"* – the section of the modern clinical medicine, studying the benign and malignant tumors, the mechanisms and regularities of their occurrence and development, the methods of their prevention, diagnostics and treatment, the theoretical bases of oncology, theory of oncological diseases, theory of system oncological diseases, theory of the forms and variants of treatment of cancer, theory of the occurrence of cancer cells and micro-tumors, theory of functioning of the systems of anti-tumor immunity and the cognitive modeling technology in the theoretical oncology].

XIII. “The fundamental scientific researches department “Theory of laryngo-oto-rhinology or oto-rhino-laryngology (of the diseases of the ear, throat and nose)” (“TLAR or OTORIN (DETH and N)” (*) [the fundamental scientific researches in the area “Theoretical laryngo-oto-rhinology (LOR) or oto-rhino-laryngology” – the section of the clinical medicine and medical specialty (specialization in medicine), which specializes on the diagnostics and treatment of pathologies of the ear, throat, nose, and also the head and neck, the theoretical bases of oto-rhino-laryngology, theory of occurrence, treatment and prevention of the diseases of the ear, nose and throat, theory of occurrence, treatment and prevention of the diseases of the pharynx, larynx, trachea and bordering areas with them, theory of otology, theory of rhinology, theory of laryngology, theory of the anatomical proximity and functional linkage of organs, theory of the interdependence of diseases, theory of generality of the methods of research, theory of audiology, theory of phoniatry, theory of physiology and pathology of voice-formation, theory of warning and treatment of the disorders of voice, theory of otiatrics, theory of treatment of the pathologies of ear and the cognitive modeling technology in the theoretical laryngo-oto-rhinology (LOR) or oto-rhino-laryngology].

XIV. “The fundamental scientific researches department “Theory of ophthalmology (of the diseases of the visual sensory system)” (“TOPHT (DVSS)” (*) [the fundamental scientific researches in the area “Theoretical ophthalmology” – studies the diseases of eye ball, its appendages (eyelids, lacrimal organs and mucous membrane), the bone structures and fiber, surrounding the eye, the theoretical bases of ophthalmology, theory of eye, theory of the anatomy of eye, theory of the physiology of eye, theory of the diseases of eye, theory of the methods of treatment and preventing of the eye diseases and the cognitive modeling technology in the theoretical ophthalmology].

XV. “The fundamental scientific researches department “Theory of pediatrics (of the diseases of the biological construct of organism of the children)” (“TPED (DBCORGCH)” (*) [the fundamental scientific researches in the area “Theoretical pediatrics” – the scientific area about the distinctive features, dispatches and diseases of the child’s organism and based on those features of the preservation of health and the treatment of diseases at the children, the main task of which is the preserving or returning (in case of illness) of the condition of health to the child, allowing him to maximally fully realize his innate potential of life, the theoretical bases of pediatrics, theory of the distinctive features of the child’s organism, theory of the diseases of the child’s organism, theory of the features of preserving of health and the treating of diseases at the children and the cognitive modeling technology in the theoretical pediatrics].

XVI. "The fundamental scientific researches department "Theory of psychiatry and narcology (of the diseases of the psychical construct of the head brain)"" ("TPS and NAR (DPCHB)") (*) [*the fundamental scientific researches in the area "Theoretical psychiatry"* – studies the mental diseases, the causes of their occurrence, the methods of diagnostics, prevention and treatment, the theoretical bases of psychiatry, theory of the methodology of psychiatry, theory of methods of the diagnostics of diseases of mentality, theory of prevention and treatment of the diseases of mentality, theory of state and accredited non-state psychiatric establishments and the cognitive modeling technology in the theoretical psychiatry; *the fundamental scientific researches in the area "Theoretical narcology"* – the section of the clinical medicine, studying the manifestations of chronic alcoholism, drug-addiction and substance-abuse, developing the methods of their prevention and treatment, the theoretical bases of drug-addiction, theory of alcoholism, theory of drug-addiction, theory of substance-abuse, theory of the classical and modern methods of prevention and treatment of the alcohol, drug and toxicological addictions and the cognitive modeling technology in the theoretical drug-addiction].

XVII. "The fundamental scientific researches department "Theory of pulmonology and phthisiology (of the diseases of the pulmonary and bronchial systems)"" ("TPULM and PTHIS (DP and BS)") (*) [*the fundamental scientific researches in the area "Theoretical pulmonology"* – the section of the clinical medicine, engaging in the studying, diagnostics and treatment of the diseases of the lungs and respiratory tract, the theoretical bases of pulmonology, theory of pulmonology as the thoracic medicine or the respiratory medicine, theory of the linkage of pulmonology with resuscitation and intensive therapy, theory of artificial (mechanical) ventilation of lungs, theory of operations on the respiratory ways, theory of diseases of the organs of rib cage and the methods of their treatment, theory of thoracic surgery, theory of resuscitation and intensive therapy and the cognitive modeling technology in the theoretical pulmonology; *the fundamental scientific researches in the area "Theoretical phthisiology"* – the section of the clinical medicine, studying the causes of occurrence, the regularities of spread and the mechanisms of development of the tuberculosis, caused by it the pathological processes in the organism of person and the methods of its prevention, diagnostics, treatment and rehabilitation of the patients of tuberculosis, the theoretical bases of phthisiology, theory of the anti-tubercular dispensaries, tuberculosis rooms, hospitals and sanatoriums, theory of diagnostics, treatment, dispensary observation and prevention of the tuberculosis, theory of consulting and methodical help to the other medical specialists, theory of early detection and prevention of the tuberculosis, theory of application of the conservative treatment and minimally-invasive procedures, theory of phthisio-surgery, theory of thoracic surgery, theory of osseo-articular tuberculosis and orthopedics, theory of treatment of the tuberculosis of uro-genital organs, theory of phthisiatric urology and gynecology, theory of treatment of the tuberculosis of eye and phthisiatric ophthalmology and the cognitive modeling technology in the theoretical phthisiatrics].

XVIII. “The fundamental scientific researches department “Theory of rheumatology (of the inflammatory and degenerative-dystrophic diseases of the joints, spine and the system diseases of connective tissue)”” (“TRHEUM (I and D-DDJS and SDCT)”) (*) [*the fundamental scientific researches in the area “Theoretical rheumatology”* – the specialization of the internal clinical medicine, which is engaged in the diagnostics and treatment of the rheumatic diseases, the theoretical bases of rheumatology, theory of the inflammatory and degenerative-dystrophic diseases of the joints and the system diseases of the connective tissue, theory of collagenosises, theory of the differential diagnostics of the diseases of rheumatology, theory of traumatology-orthopaedics and the purulent-septic surgery, theory of osteomyelitis, theory of myositis, theory of gonorrhea arthritis, theory of aseptic arthritis, theory of endocrinology at the syndrome of Charcot, mellitus diabetes and hyper-calcemic crisis, theory of nephrology at the nephrogenic gout, nephrogenic osteomalacia and nephrogenic osteoparosis, theory of hematology, theory of cross differential diagnostics, theory of diseases of the blood at the acute lymphoblastic leukemia and the juvenile rheumatoid arthritis, theory of cardiology at the rheumatic endocarditis, theory of vascular and phlebological surgery, theory of the sports medicine at the damage of muscles and the musculo-skeletal apparatus at the athletes and the cognitive modeling technology in the theoretical rheumatology].

XIX. “The fundamental scientific researches department “Theory of dentistry (of the diseases of the cavity of mouth, jaws and their border areas of the face and neck)”” (“TDENT (DCMJ and BAF and N)”) (*) [*the fundamental scientific researches in the area “Theoretical dentistry”* – the section of the clinical medicine, which is engaged in the studying of the teeth, their structure and functioning, their diseases, the methods of their prevention and treatment, and also the diseases of oral cavity, jaws and border areas of the face and neck, the theoretical bases of dentistry, theory of non-carious lesions of teeth, theory of the hypoplasia of enamel, theory of the fluorosis of enamel, theory of the wedge-shaped defect of tooth, theory of the pathological erasure of tooth, theory of the necrosis of the hard tissues of tooth, theory of the hyperesthesia of tooth, theory of the erosion of enamel of the tooth, theory of the acute and chronic injuries of tooth, theory of caries and its complications, theory of pulpitis and its complications, theory of periodontitis and its complications, theory of periostitis and its complications, theory of the diseases of the oral mucosa (stomatitises), theory of the traumatic stomatitises, theory of the symptomatic stomatitises, theory of the infectious stomatitises, theory of the specific stomatitises, theory of the catharal stomatitis, theory of the ulcerative stomatitis, theory of the acute and chronic aphthous stomatitis, theory of heilitis, theory of glossitis and the cognitive modeling technology in the theoretical dentistry].

XX. “The fundamental scientific researches department “Theory of traumatology, orthopedics and prosthetics (of the diseases of skeletal-muscular system)”” (“TTRORTH and PROSTH (DS-MS)”) (*)

[*the fundamental scientific researches in the area “ Theoretical traumatology ”* – the section of the clinical medicine, studying the impact on the organism of person of the various traumatic effects, the consequences of traumas and the methods of their treatment, the theoretical bases of traumatology, theory of differential diagnostics in the area of rheumatology and traumatology, theory of traumatic orthopedics and neuro-surgery, theory of the traumatic and post-traumatic conditions of the nervous system, theory of septic surgery at the tetanus, sepsis, osteomyelitis and phlegmons, theory of purulent and burn surgery at the endogenous and exogenous burns, theory of sports medicine, theory of vascular surgery, theory of phlebology, theory of infectology at the tuberculosis and syphilis of the musculo-skeletal system, theory of toxicology at the toxic arthropathies, theory of hematology at the hema-arthrosises, auto-fractures and pathological fractures, theory of traumatic oncology, theory of traumatic bio-physics, theory of traumatic bio-cybernetics, theory of traumatic military medicine and the cognitive modeling technology in the theoretical traumatology;

the fundamental scientific researches in the area “ Theoretical orthopedics ” – the section of the clinical medicine and the section of surgery, studying the prevention, diagnostics and treatment of deformations and the disorders of functions of the musculo-skeletal system, which are the result of congenital defects, malformations, the consequences of traumas or diseases, the theoretical bases of orthopedics, theory of injuries of the musculo-skeletal apparatus (bones, joints, muscles, ligaments and tendons), theory of bio-mechanics of the musculo-skeletal apparatus, theory of surgery of the spinal column, theory of arthroscopic surgery, theory of endoprosthesis of the joints, theory of bone pathologies and the cognitive modeling technology in the theoretical orthopedics;

the fundamental scientific researches in the area “ Theoretical prosthetics ” – the complex medical-technical discipline, which is engaged in the manufacture and application of prostheses and orthoses (corsets, bands, apparatuses, special shoes and steels) for the restore of the lost forms and functions of the musculo-skeletal system, the theoretical bases of prosthetics, theory of replacement of the lost or irreversibly damaged parts of body by the artificial substitutes, theory of the process of social-labor rehabilitation of the person, theory of diseases of the musculo-skeletal apparatus and the cognitive modeling technology in the theoretical prosthetics].

XXI. “The fundamental scientific researches department
“Theory of therapy (of the relieving or eliminating of symptoms and manifestations
of the disease or trauma)”” (“THER (REL or ELIMS and MD or TR)”) (*)

[*the fundamental scientific researches in the area*
“ T h e o r e t i c a l t h e r a p y ” –
the section of the clinical medicine, studying
the internal diseases, their prevention and treatment,
the theoretical bases of therapy, theory of therapeutic approaches,
theory of etiotropic therapy (anti-bacterial
therapy at the infectious diseases),
theory of pathogenetic therapy (the replacement therapy by the insulin
at the mellitus diabetes in the relation with the insufficient production
of this hormone by the pancreatic gland and the inability to restore
this function at the modern level of development of medicine),
theory of symptomatic (palliative) therapy (the application of analgesics
at the pain, the anti-pyretic drugs at “the high temperature”),
theory of symptomatic therapy at the impossibility of radical
cure (the terminal stage of oncological disease),
theory of the medical-social actions (the palliative help),
theory of conservative treatment,
theory of conservative (non-surgical) treatment
by the chemical, physical and biological methods
(pharmaco-therapy, chemo-therapy, phyto-therapy,
immune-therapy and other methods),
theory of the physical conservative methods of treatment
(physio-therapy, massage, physio-therapy exercises and hydro-therapy),
theory of the physical methods of treatment by means of the electro-magnetic
and sound radiations (radio-therapy, UHF-therapy, magneto-
therapy, medicinal drug electro-phoresis and lasero-therapy),
theory of surgical treatment (surgical therapy)
and the cognitive modeling technology in the theoretical therapy].

XXII. “The fundamental scientific researches department “Theory of endocrinology (of the diseases of the internal organs and the disorders of hormonal cycles)”” (“TEND (DIO and DHC)”) (*) [*the fundamental scientific researches in the area “ Theoretical endocrinology ”* – studies the hormones and their impact on the biological construct of the organism (of the person), the theoretical bases of endocrinology, theory of the structure and functions of the glands of internal secretion (of the endocrine glands), theory of the products of the glands of internal secretion (of the hormones), theory of the formation and action of the hormones on the organism of animals and person, theory of diseases caused by the violation of function of the glands of internal secretion or hormones, theory of disorders in the endocrine system, theory of endocrine cardiology, theory of endocrine oncology, theory of endocrine ophthalmology, theory of endocrine gastro-enterology, theory of endocrine nephrology, theory of endocrine neurology, theory of endocrine gynecology and the cognitive modeling technology in the theoretical endocrinology].

XXIII. “The fundamental scientific researches department “Theory of epidemiology (of the infectious diseases)”” (“TEPID (ID)”) (*) [*the fundamental scientific researches in the area “ Theoretical epidemiology ”* – the general-medical scientific direction, studying the regularities of occurrence and spread of the diseases of various etiology with the purpose of development of the preventive actions (the premorbid prevention, primary prevention, secondary prevention and tertiary prevention), the theoretical bases of epidemiology, theory of the regularities of occurrence and spread of the diseases of various etiology, theory of the development of preventive actions (the premorbid prevention, the primary, secondary and tertiary prevention), theory of morbidity, theory of regularities of the epidemic process, theory of the population approach at the studying of the (non)infectious diseases, theory of determining of the medical and social-economic significance of the disease and its place in the structure of the pathology of the population, theory of studying of the regularities of spread of the disease over time (by the years and months), by the territory and among of the various groups of population (the age, sex and professional), theory of revealing of the causes and conditions, determining the observed character of spread of the disease, theory of developing of the recommendations for the optimizing of prevention, theory of developing of the prediction of spread of the studied disease, theory of the epidemiological methods (the observation, examination, the historical and geographical description, comparison, experiment, the statistical and logical analysis) and the cognitive modeling technology in the theoretical epidemiology].

XXIV. “The fundamental scientific researches department “Theory of surgery, cardio-vascular surgery, neuro-surgery, pediatric surgery, transplantology and artificial organs”” (“TSURGC-VSURGN-SURGPSEGT and AO”) (*)

[the fundamental scientific researches in the area “Theoretical surgery” – the area of the clinical medicine, studying the acute and chronic diseases, which are treated by means of the operative (surgical) method, consisting of the several consecutive stages: the preparing of the patient to the surgery, anesthesia (narcosis), the surgery intervention and restoration of the integrity of the tissues, disturbed during the operation, the theoretical bases of surgery, theory of diagnostic operations, theory of radical operations, theory of palliative operations, theory of emergency operations, theory of urgent operations, theory of scheduled operations, theory of reconstructive surgery, theory of minimally-invasive surgery, theory of abdominal surgery, theory of thoracic surgery, theory of surgical urology, theory of surgical andrology, theory of surgical gynecology, theory of neuro-surgery, theory of surgical angiology, theory of cardiac-surgery, theory of surgical endocrinology, theory of surgical traumatology, theory of surgical orthopedics, theory of plastic surgery, theory of surgical combustiology, theory of surgical transplantology, theory of surgical ophthalmology, theory of maxilla-facial surgery, theory of purulent surgery, theory of surgical oncology and the cognitive modeling technology in the theoretical surgery;

the fundamental scientific researches in the area “Theoretical cardio-vascular surgery (cardiac-surgery and cardio-thoracic surgery)” – the area of surgery and cardiology, eliminating the pathologies of the cardio-vascular system, the theoretical bases of cardio-vascular surgery, ~~theory of the ways of treatment of the coronary disease of the heart, the infarction of myocardium and athero-sclerosis,~~ theory of coronary bypass-surgery, theory of transplantation of the heart, theory of surgeries on the valves of the heart, theory of the surgery of Bentall at the aneurysm of ascending aorta with the aortic insufficiency, theory of the surgery “maze” at the fibrillation of auricles and the cognitive modeling technology in the theoretical cardio-vascular surgery;

the fundamental scientific researches in the area “Theoretical neuro-surgery” – the section of surgery, engaging in the questions of operative treatment of the diseases of the nervous system, including the head brain, spinal cord and the peripheral nervous system, the theoretical bases of neuro-surgery, theory of biological construct of the head brain and spinal cord, theory of stereo-taxy, theory of trepanation and the cognitive modeling technology in the theoretical neuro-surgery;

the fundamental scientific researches in the area “ Theoretical pediatric surgery ” – the area of the clinical medicine, studying the acute and chronic diseases of children, which are threated at the help of the operative (surgical) method, the theoretical bases of pediatric surgery, theory of pediatric diagnostic operations, theory of pediatric radical operations, theory of pediatric palliative operations, theory of pediatric emergency operations, theory of pediatric urgent operations, theory of pediatric scheduled operations, theory of pediatric reconstructive surgery, theory of pediatric minimally-invasive surgery, theory of pediatric abdominal surgery, theory of pediatric thoracic surgery, theory of pediatric surgical urology, theory of pediatric surgical andrology, theory of pediatric surgical gynecology, theory of pediatric neuro-surgery, theory of pediatric surgical angiology, theory of pediatric cardiac-surgery, theory of pediatric surgical endocrinology, theory of pediatric surgical traumatology, theory of pediatric surgical orthopedics, theory of pediatric plastic surgery, theory of pediatric surgical combustiology, theory of pediatric surgical transplantology, theory of pediatric surgical ophthalmology, theory of pediatric maxilla-facial surgery, theory of pediatric purulent surgery, theory of pediatric surgical oncology and the cognitive modeling technology in the theoretical pediatric surgery;

the fundamental scientific researches in the area “ Theoretical transplantology ” – the section of the clinical medicine, studying the problems of transplantation of the organs (in particular, kidneys, liver and heart), and also the prospects of the creation of artificial organs, the theoretical bases of transplantology, theory of xeno-transplantation (of the transplantation of the organs and / or tissues from the animal of the another biological kind), theory of allo-transplantation (transplantation, at which the donor of transplant is the genetically and immunologically another human organism), theory of artificial organs, theory of growth of organs from the stem cells, theory of auto-transplantation (the recipient of transplant is his donor for himself) and the cognitive modeling technology in the theoretical transplantology;

the fundamental scientific researches in the area “ Theoretical artificial organs ” – the direction in the modern clinical medicine, which is engaged in the growing of organs of the biological construct of the organism, the theoretical bases of artificial organs, theory of promising bio-engineering technology, theory of three-dimensional cell cultures (3D cell culture), theory of organoids (organoids), theory of studying and modeling of organo-genesis, theory of modeling of tumors and various diseases, theory of the technology of testing and screening on the organoids of the various medicinal drugs and toxic substances, theory of experiments on the replacement of organs or the therapy of damaged organs by the transplants and the cognitive modeling technology in the theoretical artificial organs].

The fundamental scientific researches branches and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.2.3. The fundamental scientific researches branch “Theory of pharmacology and pharmaceutics” (“TPHARMAC and PHARMAC”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

The developed “The fundamental scientific researches branch “Theory of pharmacology and pharmaceutics”” (“TPHARMAC and PHARMAC”) treats to the fundamental scientific researches divisions of “The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after academician Burdenko N.N.” (“SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department "Theory of pharmacology, pharmaco-epidemiology, pharmacy, bio-chemical pharmacology, clinical pharmacology, molecular pharmacology, pharmaco-genomics and experimental pharmacology”” (“TPHPH-EPPHB-CHPHCLPHMPHPH-G and EXPPH”) (*)
[the fundamental scientific researches in the area “Theoretical pharmacology” – the medical-biological science about the medicinal substances and their action on the organism (the science about the physiologically active substances), the theoretical bases of pharmacology, theory of pharmacology, methods and equipment for the pharmacological researches, theory of pharmaco-kinetics and pharmaco-dynamics of the drugs and substances, theory of molecular pharmacology, theory of bio-pharmacology, theory of cytological pharmacology, theory of embryological pharmacology, theory of genetic pharmacology, theory of virological pharmacology, theory of micro-biological pharmacology, theory of botanical pharmacology, theory of physiological pharmacology of the plants, theory of zoological pharmacology, theory of ecological pharmacology, theory of anthropology of pharmacology, theory of physiological pharmacology of the person and animals, theory of immunological pharmacology, theory of toxicological pharmacology, theory of radiation pharmacology, theory of space pharmacology, theory of bio-engineering pharmacology and the cognitive modeling technology in the theoretical pharmacology;

the fundamental scientific researches in the area “Theoretical pharmaco-epidemiology” – the synthetic area of knowledge for the studying of the application and action of the medicinal drugs on the large groups of people, the theoretical bases of pharmaco-epidemiology, theory of studying of the application and action of the medicinal drugs on the large groups of people, theory of the methodological apparatus of pharmaco-epidemiology (pharmacology and epidemiology), theory of pharmaco-supervision and the cognitive modeling technology in the theoretical pharmaco-epidemiology;

the fundamental scientific researches in the area “Theoretical pharmacy” – the complex of scientific-practical disciplines, studying the problems of creation, safety, research, storage, manufacture, dispensing and marketing of medicinal drugs, and also the search of the natural sources of the medicinal substances, the theoretical bases of pharmacy, theory of pharmaceutical chemistry, theory of the technology of synthesis of the pharmaceutical drugs and medicinal forms, theory of judicial chemistry, theory of pharmaco-gnosy, theory of the organization and economics of pharmacy, theory of military pharmacy and the cognitive modeling of technology in the theoretical pharmacy;

the fundamental scientific researches in the area “Theoretical bio-chemical pharmacology” – the direction in the modern clinical medicine, which is engaged in the creation of the genetic and metabolic certification of the impact of chemical compounds, including the drugs, on the biological organisms with the purpose of development of the principles of individual prevention and therapy, the theoretical bases of bio-chemical pharmacology, theory of system biology, theory of mathematical bio-physics, theory of regulation of hemostasis and thrombosis, theory of intra-cellular signaling, theory of self-organization, theory of regulation of mitosis, theory of development of protein micro-arrays, theory of devices for the diagnostic and the cognitive modeling technology in the theoretical bio-chemical pharmacology;

the fundamental scientific researches in the area “Theoretical clinical pharmacology” – the direction in the modern clinical medicine, which studying the impact of medicinal drugs on the organism of the sick person, the theoretical bases of clinical pharmacology, theory of the requirements to the testing of new pharmacological drugs, theory of development of the principles and methods of comprehensive study of the action of pharmacological drugs, theory of pharmaco-dynamics (the studying of a set of effects of the medicinal substance and its mechanisms of action), theory of pharmaco-kinetics (the studying of the ways of admission, distribution, bio-transformation and removal of medicinal drugs from the organism of the patient), theory of adverse reactions, theory of the features of action of the medicinal substances in the various conditions, theory of the interaction of drugs at their together application, theory of impact of the food on the pharmaco-kinetics of medicinal drugs, theory of pharmaco-genetics (the determining of the genetic bases of reactions of the organism on the medicinal drugs) and the cognitive modeling technology in the theoretical clinical pharmacology;

the fundamental scientific researches in the area “Theoretical molecular pharmacology” – the modern medical-biological scientific direction about the medicinal substances and their action on the organism on the molecular level (the scientific direction about the physiologically active substances, acting on the molecular level), the theoretical bases of molecular pharmacology, theory of molecular pharmacology, methods and equipment for the pharmacological researches on the molecular level, theory of pharmaco-kinetics and pharmaco-dynamics of the drugs and substances on the molecular level, theory of molecular pharmacology, theory of molecular bio-pharmacology, theory of cytological molecular pharmacology, theory of embryological molecular pharmacology, theory of genetic molecular pharmacology, theory of virological molecular pharmacology, theory of micro-biological molecular pharmacology, theory of botanical molecular pharmacology, theory of physiological molecular pharmacology of the plants, theory of zoological molecular pharmacology, theory of ecological molecular pharmacology, theory of anthropology of molecular pharmacology, theory of physiological molecular pharmacology of the person and animals, theory of immunological molecular pharmacology, theory of toxicological molecular pharmacology, theory of radiation molecular pharmacology, theory of space molecular pharmacology, theory of bio-engineering molecular pharmacology and the cognitive modeling technology in the theoretical molecular pharmacology;

the fundamental scientific researches in the area “Theoretical pharmaco-genomics” – the branch of pharmaceutics and pharmacology, which researching the impact of genetic variation of each person in his response on the certain medicinal drug (pharmaco-genomics links the expression of the particular gene or single-nucleotide polymorphism in the genome of person with the efficiency or toxicity of the medicinal drug in order, that to develop the rational means of optimizing of pharmaco-therapy), the theoretical bases of pharmaco-genomics, theory of pharmaco-genomics, theory of the genotypes of people, theory of providing of the maximal efficiency at the minimal side effects, theory of creation of “the personified medicine”, theory of optimizing of the genetic characteristics of person, theory of applied application of the genome of person, theory of research of the interaction of the single gene with the medicinal drugs, theory of treatment of the cancer of mammary gland, theory of treatment of the virus of deficiency of the immune system, theory of treatment of leukemia, theory of revealing of the potential adverse reactions in the response to the action of medicinal drugs and the cognitive modeling technology in the theoretical pharmaco-genomics;

the fundamental scientific researches in the area “Theoretical experimental pharmacology” – the modern medical-biological scientific direction about the experimental medicinal substances and their action on the organism (the scientific direction about the experimental physiologically active substances), the theoretical bases of experimental pharmacology, theory of experimental pharmacology, methods and equipment for the pharmacological experimental researches, theory of pharmaco-kinetics and pharmaco-dynamics of the experimental drugs and substances, theory of experimental molecular pharmacology, theory of experimental bio-pharmacology, theory of cytological experimental pharmacology, theory of embryological experimental pharmacology, theory of genetic experimental pharmacology, theory of virological experimental pharmacology, theory of micro-biological experimental pharmacology, theory of botanical experimental pharmacology, theory of physiological experimental pharmacology of the plants, theory of zoological experimental pharmacology, theory of ecological experimental pharmacology, theory of anthropology of experimental pharmacology, theory of physiological experimental pharmacology of the person and animals, theory of immunological experimental pharmacology, theory of toxicological experimental pharmacology, theory of radiation experimental pharmacology, theory of space experimental pharmacology, theory of bio-engineering experimental pharmacology and the cognitive modeling technology in the theoretical experimental pharmacology].

The fundamental scientific researches branches and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.2.4. The fundamental scientific researches branch

“Theory of sports medicine” (“TSPM”)

of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The fundamental scientific researches branch “Theory of sports medicine”” (“TSPM”) treats to the fundamental scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru) [see the fundamental scientific researches branches and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department “Theory of medicine of competitions, sport and sports sciences”” (“TMCSP and SPS”) [*the fundamental scientific researches in the area “Theoretical physical training and sport in medicine”* – the complex medical-biological scientific direction, studying the changes in the organism at the activities of sport (the desirable and pathological), the theoretical bases of physical training and sport in medicine, theory of physical training and sport, theory of the medical-biological bases of physical training and sport, theory of the material-technical base of physical training and sport, theory of the methodological bases of the kinds of sport, theory of sports competitions and the cognitive modeling technology in the theoretical physical training and sport].

The fundamental scientific researches branches and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.2.5. The fundamental scientific researches branch “Theory of military medicine” (“TMILM”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The fundamental scientific researches branch “Theory of military medicine”” (“TMILM”) treats to the fundamental scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department “Theory of medicine and medical education in the armed forces”” (“TM and NEDUC in MF”) [*the fundamental scientific researches in the area “Theoretical military medicine”* – the theoretical bases of military medicine, theory of medical exercises about the war and army, theory of history of military medicine, theory of military medical education and training of personnel, theory of military medical politics, theory of military medical doctrines, theory of military medical science, theory of military-applied medical science, theory of military medical technics and technology, theory of medicine in the armed forces, theory of economics of military medicine and the cognitive modeling technology in the theoretical military medicine].

The fundamental scientific researches branches and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.2.6. The fundamental scientific researches branch

“Theory of chemistry and chemical technologies in medicine” (“TCHEM and CHEMT in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

The developed “The fundamental scientific researches branch “Theory of chemistry and chemical technologies in medicine”” (“TCHEM and CHEMT in M”) treats to the fundamental scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department “Theory of chemistry, chemical technology and chemical industry in medicine”” (“TCHEM CHEMT and CHEMIND in M”)
[*the fundamental scientific researches in the area “Theoretical chemistry” (*)* – the theoretical bases of chemistry, theory of general-laboratory chemical equipment, theory of equipment, theory of physical chemistry, theory of non-organic chemistry, theory of complex compounds, theory of analytical chemistry, theory of organic chemistry, theory of bio-organic chemistry, theory of natural organic compounds and their synthetic analogs, theory of chemistry of high-molecular compounds, theory of biological chemistry and the cognitive modeling technology in the theoretical chemistry (theory of modeling of the structure of the (non-)organic chemical elements and chemical elements with 1, 2, 3, 4, 5 or more nucleuses);

the fundamental scientific researches in the area
“Theoretical chemical technology and chemical industry” –
the theoretical bases of chemical technology and chemical industry,
theory of processes and apparatuses of chemical technology, theory of chemical raw materials,
theory of technology of non-organic substances and products,
theory of production of silicate and refractory non-metallic materials,
theory of industrial organic synthesis,
theory of industrial synthesis of organic dyes and pigments,
theory of technology of photographic materials,
theory of technology of chemical-pharmaceutical means,
theory of technology of fragrant substances,
theory of technology of pesticides and disinfecting substances,
theory of technology of natural high-molecular compounds,
theory of technology of synthetic high-molecular compounds,
theory of technology of plastics, theory of technology of production of rubbers and products from them,
theory of technology of varnish-paint materials and organic coatings,
theory of technology of chemical fibers and threads,
theory of technology of chemical reactants and especially clear substances,
theory of technology of production of the products of household chemistry,
theory of technology of auxiliary materials
and the cognitive modeling technology in the theoretical
chemical technology and chemical industry].

The fundamental scientific researches branches and departments of “SEC”
allow to develop the main and derivative scientific results of CMT.

**5.2.7. The fundamental scientific researches branch
“Theory of biology, physiology and bio-physiological
technologies in medicine” (“TBIOLPHYS and B-PHYST in M”)
of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”**

The developed “The fundamental scientific researches branch
“Theory of biology, physiology and bio-physiological
technologies in medicine”” (“TBIOLPHYS and B-PHYST in M”)
treats to the fundamental scientific researches divisions
of “The scientific-educational centre “System and financial analysis based on
cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.”
 (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC
in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””)
as the add. component of the system of science and education of the modern country
for the creation, distribution and use of the main and derivative
scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru)
[see the fundamental scientific researches branches and departments of “SEC”]:
1) it is executed by the principle of “the administrative-economy submission”;
2) works in the several main directions, which allow to provide
the development of the fundamental main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU “LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The fundamental scientific researches department
“Theory of general biology”” (“TGENB”)
[*the fundamental scientific researches in the area
“Theoretical biology”* –
the theoretical bases of general biology, theory of biology,
theory of methods and equipment for the biological researches,
theory of molecular biology, theory of bio-physics,
theory of cytology, theory of embryology, theory of genetics,
theory of parasitology, theory of virology, theory of micro-biology,
theory of botany, theory of physiology of plants, theory of zoology, theory of ecology,
theory of anthropology, theory of physiology of person and animals,
theory of morphology of person and animals, theory of immunology,
theory of pharmacology, theory of toxicology,
theory of radiation biology, theory of space biology,
theory of bionics, theory of bio-cybernetics, theory of bio-engineering
and the cognitive modeling technology in the theoretical biology
(theory of modeling of the biological construct of the organism of the organic individual)].

II. "The fundamental scientific researches department "Theory of physical-chemical bio-technology" ("TPHYS-CHEMB-T") (*)
[the fundamental scientific researches in the area "Theoretical bio-technology" (*) – the theoretical bases of bio-technology, theory of raw materials and producers for the bio-technological production, theory of radio-biology, theory of bio-physics, theory of molecular biology, theory of bio-chemistry, theory of bio-technologies and bio-nano-technologies, theory of molecular genetics, theory of bio-engineering, theory of mathematical biology and bio-informatics, theory of bio-technological processes and apparatuses, theory of cell engineering, theory of technological bio-energetics, theory of applied genetic engineering, theory of engineering enzymology, theory of the immune-bio-technological methods of the analysis, other theories and problems of bio-technology (genetic engineering) and the cognitive modeling technology in the theoretical bio-technology (theory of modeling of the structure of the desoxyribonucleic acid based on the cognitive cylinder)].

III. "The fundamental scientific researches department "Theory of physiology, bio-physiology and private physiology (of sensory systems)" ("TPHYSB-PHYS and PRPHYS (SS)) (*)
[the fundamental scientific researches in the area "Theoretical physiology" (*) – the theoretical bases of physiology, general questions of theoretical physiology, theory of methods and equipment for the physiological researches, theory of physiology, theory of molecular physiology, theory of physiological cytology, theory of physiological embryology, theory of physiological genetics, theory of physiology of viruses, theory of micro-physiology, theory of physiology of organic individuals, theory of physiology of plants, theory of zoological physiology, theory of ecological physiology, theory of anthropology of physiology, theory of physiology of person and animals, theory of physiological immunology, theory of physiological pharmacology and toxicology, theory of radiation physiology, theory of space physiology, theory of physiological cybernetics and the cognitive modeling technology in the theoretical physiology;

the fundamental scientific researches in the area “Theoretical bio-physiology and public-health-service” () – the theoretical bases of bio-physiology and public-health-service, general questions of theoretical bio-physiology and public-health-service, theory of bio-medical-physiological disciplines: theory of private physiology of analyzers and sensory systems, theory of bio-physiological materials, means and products, theory of bio-physiological technics, theory of clinical physiology, theory of physiological bio-pharmacology and bio-epidemiology, theory of other branches of bio-medicine and public-health-service, theory of social physiology, theory of organization and management of public-health-service, theory of modified model of reduced eye, theory of software for the automation of research tasks of the physiological, psychological and linguistic parameters of the parametrical cognitive models block in medicine, theory of statistical substantiation of the practical use of received results, theory of the physiological, psychological and linguistic factors influencing to the efficiency of functioning of the information-educational environment and the increase of productivity of the automated training system with the properties of adaptation based on the cognitive models, theory of organization and plan of carrying out of experiment, theory of research of the physiological, psychological and linguistic parameters of the cognitive models of the subject of training and the means of training, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of methods of the statistical analysis of generated data sets, theory of the analysis of the dynamics of resultativity of the objects, processes and phenomena in bio-physiology and public-health-service, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists, theory of the complex analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in Descartes space of the 2 and 3 coordinates and the cognitive modeling technology in the theoretical bio-physiology and public-health-service].*

The fundamental scientific researches branches and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.2.8. The fundamental scientific researches branch “Theory of mathematics and mathematical technologies in medicine” (“TMATH and MATHT in M”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The fundamental scientific researches branch “Theory of mathematics and mathematical technologies in medicine” (“TMATH and MATHT in M”) treats to the fundamental scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru) [see the fundamental scientific researches branches and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department “Theory of medical mathematics and the complex system analysis based on the cognitive modeling technology” (“TMMATH and DSAB on CMT”) (*)
[the fundamental scientific researches in the area “Theoretical medical mathematics” ()* – the theoretical bases of medical mathematics, general questions of theoretical medical mathematics, theory of mathematical logic and theoretical bases of mathematics in medicine, theory of numbers in medicine, theory of medical algebra, theory of medical topology, theory of medical geometry, theory of the mathematical analysis in medicine, theory of the functions of valid variables in medicine, theory of the functions of complex variables in medicine, theory of ordinary differential equations in medicine, theory of differential equations with the private derivatives in medicine, theory of integrated equations in medicine, theory of mathematical models of the objects, processes and phenomena of natural sciences and technical sciences in medicine, theory of the equations of mathematical physics in medicine, theory of variation calculus in medicine, the mathematical theory of optimal control in medicine, theory of the functional analysis in medicine, theory of calculus mathematics in medicine, theory of probability and mathematical statistics in medicine, theory of the combinatory analysis in medicine, theory of graphs in medicine, theory of mathematical cybernetics in medicine, theory of the ways of representation of the cognitive models and problem environments in medicine, theory of the parametrical cognitive models block in medicine and the cognitive modeling technology in the theoretical medical mathematics;

the fundamental scientific researches in the area "Theoretical complex system analysis in medicine" ()* – the theoretical bases of the complex system analysis in medicine, general questions of the theoretical complex system analysis in medicine, theory of tendencies, dependences and regularities of the complex system analysis of the objects, processes and phenomena in medicine, theory of the cognitive modeling technology with the dynamic cloning, verification and subverification in medicine, theory of the iterative cycle of the cognitive modeling technology in medicine, theory of the technique of use of the cognitive modeling technology for the complex system analysis of the difficult objects, processes and phenomena in medicine, theory of the parametrical cognitive models block for the complex system analysis and the increase of functioning efficiency of the difficult objects, processes and phenomena in medicine, theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd generation in medicine, theory of the ways of representation of the structure of the cognitive models and problem environments in medicine: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of algorithms of formation of the structure of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, theory of techniques of research of parameters of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, theory of algorithms of processing of a posteriori data of the complex system analysis of the problem spheres in medicine, theory of software for the automation of the tasks of research in medicine, theory of the statistical substantiation of practical use of the received results in medicine, theory of factors influencing on the efficiency of functioning of the difficult objects, processes and phenomena in medicine, theory of organization and plan of carrying out of the experiment in medicine, theory of research of the parameters of the cognitive models in medicine, theory of preliminary processing of a posteriori results of diagnostics in medicine, theory of choice of the methods of the statistical analysis of the formed data sets in medicine, theory of the analysis of dynamics of the resultativity of training in medicine, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in medicine, theory of the complex system analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color-perception in Descartes space of the 2 and 3 coordinates and the cognitive modeling technology in the theoretical complex system analysis in medicine].

II. "The fundamental scientific researches department
"Theory of medical cybernetics and (cognitive)
informatics" " ("TMCYB and (CONG)INF") (*)
*[the fundamental scientific researches in the area
"Theoretical medical cybernetics" –*
the theoretical bases of medical cybernetics,
theory of the automatic control systems in medicine,
theory of modeling in medicine,
theory of the cybernetic control systems in medicine,
theory of information in medicine, theory of artificial intelligence in medicine,
the applied theory of discrete (finite) automats and formal languages in medicine,
the applied theory of reliability in medicine,
theory of the applied system analysis in medicine
and the cognitive modeling technology in the theoretical medical cybernetics;
*the fundamental scientific researches in the area
"Theoretical medical informatics" –*
the theoretical bases of medical informatics, theory of medical informatics,
theory of the organization of information activity in medicine,
theory of the documentary sources of information in medicine,
theory of analytic-synthetic processing
of the documentary sources of information in medicine,
theory of information search in medicine,
theory of information service in medicine,
theory of the technical means of support of the information processes in medicine
and the cognitive modeling technology in the theoretical medical informatics;
*the fundamental scientific researches in the area
"Theoretical medical cognitive informatics" (*) –*
the theoretical bases of medical cognitive informatics,
theory of the layer-step model of perception (psycho-physiology of perception),
processing (cognitive psychology) and understanding (applied linguistics)
of the content of information fragments in medicine,
the theoretical bases of the parametrical cognitive models block
for the system analysis of the information-educational environments in medicine
(the cognitive models of the subject of training and the means of training),
the theoretical bases of the parametric cognitive models block
for the financial analysis of the (credit) organizations in medicine
(the cognitive models for the vertical,
horizontal and trend financial analysis),
the theoretical bases of formation of the parametrical
cognitive models block in medicine,
theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd generation in medicine,

theory of the ways of representation of the structure of the cognitive models and problem environments in medicine: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), theory of the algorithms of formation of the structure of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, theory of the techniques of research of the parameters of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, theory of the adaptive automation means of the information-educational environment in medicine (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean's office, the electronic library and others), theory of the technical means of support of the adaptive information interaction in medicine (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and others), theory of the technical means of support of the financial analysis in medicine (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting, the automation means of formation of the accounting balance and the report about profits and losses of organization, the automation means of the vertical financial analysis of the organization, the automation means of the horizontal financial analysis of the organization, the automation means of the trend financial analysis of the organization, based on the analytical coefficients system), theory of the technical means of support of the complex analysis in medicine (the automation means of formation and research of the cognitive circle, the automation means of formation and research of the cognitive disc, the automation means of formation and research of the cognitive cylinder, the automation means of formation and research of the cognitive cone, the automation means of formation and research of the cognitive sphere, the automation means of formation and research of the one-, two-, three-, four-, five- and more cognitive sphere and others) and the cognitive modeling technology in the theoretical medical cognitive informatics].

The fundamental scientific researches branches and departments of "SEC" allow to develop the main and derivative scientific results of CMT.

5.2.9. The fundamental scientific researches branch “Theory of nano-technologies and information technologies in medicine” (“TNANO-T and INFT in M”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The fundamental scientific researches branch “Theory of nano-technologies and information technologies in medicine”” (“TNANO-T and INFT in M”) treats to the fundamental scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the fundamental scientific researches branches and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the fundamental main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The fundamental scientific researches department “Theory of medical electronics, radio-technics and connection”” (“TMELR-T and CONN”) [the fundamental scientific researches in the area “Theoretical medical electronics and radio-technics” – theoretical bases of medical electronic technics, theory of medical radio-technics, theory of materials for the medical electronics and radio-technics, theory of technology and equipment for the medical electronic and radio-technical production, theory of designing and constructing of the medical electronic devices and radio-electronic equipment, theory of medical electrical-vacuum and gas-discharge devices and units, theory of medical accelerators of charged particles and plasma, theory of medical solid-state devices, the theoretical bases of quantum medical electronics, theory of medical holography, the theoretical bases of medical cryo-electronics, theory of medical radio-electronic schemes, theory of propagation of radio-waves in the biological construct of the organism, theory of medical antennas, theory of medical waveguides, theory of elements of the medical microwave-technics, theory of medical radio-transmitting and radio-receiving devices, theory of medical radio-technical systems of sensing, location and navigation, theory of medical television (TV) technics, theory of recording and reproducing of the signals in medicine, theory of medical electrical-acoustics, theory of ultra-sound and infra-sound medical technics, theory of infra-red medical technics, theory of nodes, details and elements of the medical radio-electronic equipment, theory of devices for the radio-technical measurements in medicine, theory of medical systems and devices of the displaying of information and the cognitive modeling technology in the theoretical medical electronics and radio-technics;

the fundamental scientific researches in the area “Theoretical communication in medicine” – the theoretical bases of communication in medicine, theory of designing and constructing of the medical devices of communication, theory of technology and equipment for the assembly and adjustment of the medical equipment of communication, the systems of transmission and the lines of communication, theory of multi-channel communication in medicine, theory of networks and nodes of communication in medicine, theory of the medical services and the facilities of communication in medicine, theory of medical telegraph (cable) communication and equipment, theory of medical systems and equipment of the transmission of data, theory of medical tele-information services and equipment, theory of medical telephone communication and equipment, theory of medical systems of the transmitting of moving images and sound, theory of medical facsimile communication and equipment, theory of medical radio-communication and radio-broadcasting, theory of medical light-guiding communication and equipment, theory of television (TV) in medicine, theory of medical optical communication in the free space and medical equipment, theory of medical postal communication and the cognitive modeling technology in the theoretical communication in medicine].

II. “The fundamental scientific researches department “Theory of medical automatics, computing technics and the system analysis based on the cognitive modeling technology” (“TMAUTCT and SAB on CMT”) (*)

the fundamental scientific researches in the area “Theoretical medical automatics and computer engineering” – the theoretical bases of medical automatics and computer engineering, theory of automatic control in medicine, the theoretical bases of programming in medicine, the theoretical bases of computer engineering in medicine, theory of the elements, units and devices of automatics and computer engineering in medicine, theory of the devices of input-output in medicine, theory of the memory devices in medicine, theory of technology and equipment for the production of the medical means of automatics and computer engineering, theory of the keyboard and counting-perforating machines in medicine, theory of the analog calculating machines (ACM) in medicine, theory of the digital calculating machines and calculating complexes (DCM) in medicine, theory of the analog-digital (hybrid) calculating machines and calculating complexes in medicine, theory of calculating centers (CC) in medicine, theory of calculating networks (CN) in medicine, theory of the software of the calculating machines, complexes and networks in medicine, theory of the systems of automatic control, regulation and measurement in medicine, theory of the systems of tele-control and tele-measurement in medicine, theory of the automated control systems of the technological processes in medicine, theory of the automated organizational managerial control systems in medicine, theory of design automation in medicine, theory of the automation of scientific researches in medicine the cognitive modeling technology in the theoretical medical automatics and computer engineering;

the fundamental scientific researches in the area
“Theoretical system analysis in medicine” ()* –
the theoretical bases of the system analysis in medicine,
theory of tendencies, dependencies and regularities
of the system analysis of the objects, processes and phenomena in medicine,
theory of the cognitive modeling technology with the dynamic
cloning, verification and subverification in medicine,
theory of the iterative cycle of the cognitive modeling technology in medicine,
theory of the technique of use of the cognitive modeling technology in medicine,
theory of the parametrical cognitive models block
for the system analysis of the information-educational environments in medicine
and the improving of functioning efficiency
of the automated training system with the properties of adaptation
based on the cognitive models in medicine
(the cognitive models of the subject of training and the means of training),
theory of the ways of representation of the structure
of the cognitive models and problem environments in medicine:
the formal classical of the 0th generation (the logical and production models),
the non-formal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges
on domains and the innovative calculus of theory of sets and graphs),
the non-formal new of the 0th generation (the multi-level structural scheme and the multi-
level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five-
and more cognitive circle, cognitive disc,
cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),

\theory of the algorithms of formation of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, theory of the techniques of research of the parameters of the cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, theory of the algorithms of the analysis of the a posteriori results of research in medicine, theory of the adaptive automation means of the information-educational environment in medicine (the main and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean's office, the electronic library and others), theory of the technical means of support of the adaptive information interaction in medicine (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and others), theory of statistical justification of the practical use of the obtained results in medicine, theory of the factors affecting on the efficiency of formation of knowledge in the information-educational environment in medicine and the effectiveness of functioning of the complex objects, processes and phenomena in medicine, theory of organization and plan of the carrying out of experiment in medicine, theory of research of the parameters in medicine, theory of the preliminary processing of a posteriori results of diagnostics in medicine, theory of selection of the methods of the statistical analysis of the formed samples of data in medicine, theory of the analysis of dynamics of the resultativity of training in medicine, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in medicine and the cognitive modeling technology in the theoretical system analysis in medicine].

III. “The fundamental scientific researches department
 “Theory of nano-technologies for the mechanical-engineering, instrument-making,
 polygraphy, reprography and photo-cinema-technics, the light and food-processing industry,
 transport, architecture and construction in medicine”
 (“TNANO-T for M-EI-MPRPH-S-TL and FITA and C in M”) (*)
 [*the fundamental scientific researches in the area*
“Theoretical nano-technologies for the mechanical-engineering in medicine” –
 the theoretical bases of nano-technologies for the mechanical-engineering in medicine,
 theory of medical nano-technologies for the machine-science and details of machines in medicine,
 for the machine-building materials in medicine,
 for the technologies of mechanical-engineering in medicine,
 for the foundry production in medicine,
 for the forging-stamping production in medicine,
 for the assembly production in medicine,
 for the cutting of materials in medicine, for the electrical-physical-chemical treatment in medicine,
 for the thermal and reinforcing powder materials in medicine,
 for the production of non-metallic products in medicine,
 for the machine-tool-engineering in medicine, for the robotics in medicine,
 for the instrumental production in medicine,
 for the mining mechanical-engineering in medicine, for the metallurgical mechanical-engineering in medicine,
 for the boiler-building in medicine, for the turbine-building in medicine,
 for the special power units in medicine,
 for the chemical and oil mechanical-engineering in medicine,
 for the locomotive-building and carriage-building in medicine,
 for the engine-building in medicine, for the automobile-building in medicine,
 for the ship-building in medicine, for the aircraft-building in medicine,
 for the space technics and rocket-building in medicine,
 for the lifting-transportational mechanical-engineering in medicine,
 for the construction and road mechanical-engineering in medicine,
 for the communal mechanical-engineering in medicine,
 for the tractor and agricultural mechanical-engineering in medicine,
 for the mechanical-engineering of light industry in medicine,
 for the polygraphic mechanical-engineering in medicine,
 for the mechanical-engineering of the food-processing industry in medicine,
 for the mechanical-engineering of trade and public catering in medicine,
 for the household machines and devices in medicine,
 for the production of weapons in medicine, for the other branches of mechanical-engineering in medicine
 and the cognitive modeling technology in the theoretical
 nano-technologies for the mechanical-engineering in medicine;

the fundamental scientific researches in the area “Theoretical nano-technologies for the instrument-making in medicine” – the theoretical bases of nano-technologies for the instrument-making in medicine, theory of medical nano-technologies for the theoretical bases of instrument-making in medicine, for the general technology of production and equipment in the medical instrument-making, for the designing and constructing of devices in medicine, for the devices of measuring of the electrical and magnetic values in medicine, for the devices of measuring of the mechanical values in medicine, for the devices of measuring of the time and frequency in medicine, for the devices of measuring of the composition and physical-chemical properties of the substances and materials in medicine, for the devices of thermal-technical and thermal-physical measurements in medicine, for the devices of measuring of the acoustic values and characteristics in medicine, for the devices of measuring of the optical and lighting-technical values and characteristics in medicine, for the devices of measuring of the ionizing radiations in medicine, for the devices of non-destructive control of the products and materials in medicine, for the general structural elements and units of measuring devices, systems and the means of office-equipment in medicine and the cognitive modeling technology in the theoretical nano-technologies for the instrument-making in medicine;

the fundamental scientific researches in the area “Theoretical nano-technologies for the polygraphy, reprography and photo-cinema-technics in medicine” – the theoretical bases of nano-technologies for the polygraphy, reprography and photo-cinema-technics in medicine, theory of medical nano-technologies for the polygraphy, reprography and photo-cinema-technics in medicine and the cognitive modeling technology in the theoretical nano-technologies for the polygraphy, reprography and photo-cinema-technics in medicine;

the fundamental scientific researches in the area “Theoretical nano-technologies for the light industry in medicine” – the theoretical bases of nano-technologies for the light industry in medicine, theory of medical nano-technologies for the textile industry in medicine, for the knitting industry in medicine, for the garment industry in medicine, for the leather industry in medicine, for the fur industry in medicine, for the industry of artificial leather and film materials in medicine, for the shoe industry in medicine, for the leather-haberdashery industry in medicine, for bristle-brush production in medicine, for the production of furniture in medicine and the cognitive modeling technology in the theoretical nano-technologies for the light industry in medicine;

*the fundamental scientific researches in the area
“Theoretical nano-technologies for the food-processing industry in medicine”* –

the theoretical bases of nano-technologies for the food-processing industry in medicine, theory of medical nano-technologies for the food raw materials and auxiliary materials in medicine, for the processes and apparatuses of food productions in medicine, for the elevator and flour-cereal industry in medicine, for the combi-feed industry in medicine, for the bread-baking and macaroni industry in medicine, for the confectionery industry in medicine, for the sugar industry in medicine, for the starch-molasses industry in medicine, for the barmy industry in medicine, for the beer-brewing industry in medicine, for the spirit industry in medicine, for the industry of high-alcoholic beverages in medicine, for the wine-making industry in medicine, for the industry of non-alcoholic beverage in medicine, for the canning, vegetable-drying and food-concentrate industry in medicine, for the food-taste industry in medicine, for tobacco industry in medicine, for the meat and poultry-processing industry in medicine, for the production of eggs and egg products in medicine, for the dairy industry in medicine, for the oil-fat industry in medicine and the cognitive modeling technology in the theoretical nano-technologies for the food-processing industry in medicine;

*the fundamental scientific researches in the area
“Theoretical nano-technologies for the transport in medicine”* –

the theoretical bases of nano-technologies for the transport in medicine, theory of medical nano-technologies for the railway transport in medicine, for the automobile transport in medicine, for the water transport in medicine, for the air transport in medicine, for the pipeline transport in medicine, for the industrial transport in medicine, for the urban transport in medicine, for the interaction of the different kinds of transport in medicine, for the mixed transportations in medicine, for the other kinds of transport in medicine and the cognitive modeling technology in the theoretical nano-technologies for the transport in medicine;

the fundamental scientific researches in the area “Theoretical nano-technologies for the architecture and construction in medicine” ()* – the theoretical bases of nano-technologies for the architecture and construction in medicine, the engineering-theoretical bases of construction and architecture in medicine, theory of building materials and products in medicine, theory of building constructions in medicine, theory of technology of construction-installation works in medicine, theory of technology of production of building materials, products, machines, mechanisms, equipment and tools, used in the construction and industry of building-materials in medicine, theory of engineering surveys in the medical construction, theory of architectural-construction design in medicine, theory of district planning in medicine, theory of town-planning in medicine, theory of the objects of construction and engineering support of the objects of construction in medicine, theory of tendencies, dependencies and regularities in the medical architecture and construction, theory of the cognitive modeling technology with the dynamic cloning, verification and subverification in the medical architecture and construction, theory of the iterative cycle of the cognitive modeling technology in the medical architecture and construction, theory of the technique of use of the cognitive modeling technology in the medical architecture and construction, theory of the parametrical cognitive models block for the architecture and construction in medicine (buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the theoretical bases of formation of the parametrical cognitive models block in the medical architecture and construction, theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd generation in the medical architecture and construction, theory of the ways of representation of the structure of the cognitive models and problem environments in the medical architecture and construction: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

theory of the algorithms of formation of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations in the medical architecture and construction, theory of the techniques of research of the parameters of the cognitive models of the 0th, 1st, 2nd and 3rd generations in the medical architecture and construction, theory of the algorithms of the analysis of a posteriori results of research in the medical architecture and construction, theory of the adaptive automation means of the architecture and construction in medicine (the automation means of formation and research of the cognitive circle, the automation means of formation and research of the cognitive disc, the automation means of formation and research of the cognitive cylinder, the automation means of formation and research of the cognitive cone, the automation means of formation and research of the cognitive sphere, the automation means of formation and research of the cognitive sphere and others), theory of statistical justification of the practical use of the received results in medical architecture and construction, theory of the factors affecting on the efficiency of architecture and construction of the buildings and constructions in medicine, theory of the organization and plan of carrying out of the experiment in the medical architecture and construction, theory of research of the parameters of the parametrical cognitive models block in the medical architecture and construction, theory of preliminary processing of a posteriori results of the diagnostics in the medical architecture and construction, theory of selection of the methods of the statistical analysis of the formed samples of data in the medical architecture and construction, theory of the analysis of the dynamics of resultativity of the architecture and construction in medicine, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in the medical architecture and construction and the cognitive modeling technology in the theoretical nano-technologies for the architecture and construction in medicine].

The fundamental scientific researches branches and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

**5.2.10. The fundamental scientific researches branch
“Theory of social-science and technologies of social sciences
in medicine” (“TSOC-S and TSOCS in M”)
of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”**

The developed “The fundamental scientific researches branch
“Theory of social-science and technologies of social sciences
in medicine”” (“TSOC-S and TSOCS in M”)
treats to the fundamental scientific researches divisions
of “The scientific-educational centre “System and financial analysis based on
cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.”
 (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC
in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””)
as the add. component of the system of science and education of the modern country
for the creation, distribution and use of the main and derivative
scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru)
[see the fundamental scientific researches branches and departments of “SEC”]:
1) it is executed by the principle of “the administrative-economy submission”;
2) works in the several main directions, which allow to provide
the development of the fundamental main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU “LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The fundamental scientific researches department
“Theory of social sciences, philosophy, science-study, politics and political sciences,
sociology, (cognitive) psychology, state, law and jurisprudential sciences,
patent business, invention and rationalization in medicine””
 (“TSOCSPHS-STP and PSS(C)PSL and JSPBI and R in M”) (*)
*[the fundamental scientific researches in the area
“Theoretical social sciences in medicine” –*
the theoretical bases of social sciences in medicine,
theory of social sciences and ideology in medicine,
theory of the history of social sciences in medicine,
theory of the modern condition of social sciences in medicine,
theory of scientific societies, conventions, congresses, conferences
and symposiums on the social sciences in medicine,
theory of international cooperation in the area of social sciences in medicine,
theory of the organization of scientific-research work
in the area of social sciences in medicine,
theory of information activity in social sciences in medicine,
theory of the terminology of social sciences in medicine,
theory of the promotion and popularization of social sciences in medicine,
theory of the teaching of social sciences in medicine,
theory of mathematical modeling
in the social and humanitarian sciences in medicine,
theory of the personnel of social-scientists in medicine
and the cognitive modeling technology
in the theoretical social sciences in medicine;

the fundamental scientific researches in the area “Theoretical philosophy in medicine” – the theoretical bases of philosophy in medicine, theory of the general problems of modern philosophy in medicine, theory of general-philosophical problems in medicine, theory of logic in medicine, theory of philosophy and methodology of science in medicine, theory of social philosophy in medicine, theory of ethics in medicine, theory of aesthetics in medicine, theory of philosophy of religion and atheism in medicine, theory of history of philosophy in medicine and the cognitive modeling technology in the theoretical philosophy in medicine;

the fundamental scientific researches in the area “Theoretical science-study in medicine” – the theoretical bases of science-study in medicine, theory of the development of medicine as the science, theory of science and society in medicine, theory of the sociology of science in medicine, theory of scientific work and scientific creativity in medicine, theory of the organization of science in medicine, theory of politics in the area of medicine as the science, theory of the technique and technics of research work in medicine, theory of the economics of medicine as the science, theory of scientific personnel in medicine, theory of international cooperation in medicine as the science, theory of medicine as the science and the scientific-research work in the separate countries and the cognitive modeling technology in the theoretical science-study in medicine;

the fundamental scientific researches in the area “Theoretical politics and political sciences in medicine” – the theoretical bases of politics and political sciences in medicine, theory of the methodology of political researches in medicine, theory of the history of political doctrines in medicine, theory of political systems in medicine, theory of internal policy in medicine, theory of international relations in medicine, theory of foreign (external) policy and diplomacy in medicine and the cognitive modeling technology in the theoretical politics and political sciences in medicine;

the fundamental scientific researches in the area “Theoretical sociology in medicine” – the theoretical bases of sociology in medicine, theory of the general problems of modern sociology in medicine, theory of the methodology of sociology in medicine, theory of the technique and technics of sociological researches in medicine, theory of society as the system in medicine, theory of social relations and processes in medicine, theory of social classes, communities and groups in medicine, theory of sociology of the spheres of social life in medicine, theory of social phenomena and institutions in medicine, theory of the sociology of personality and behavior in medicine, theory of the historical and regional sociology in medicine, theory of the applied sociology in medicine, theory of the history of sociology in medicine and the cognitive modeling technology in the theoretical sociology in medicine;

the fundamental scientific researches in the area
“Theoretical (cognitive) psychology in medicine” ()* –
the theoretical bases of (cognitive) psychology in medicine,
theory of general psychology in medicine, theory of the psychology of development in medicine,
theory of age psychology in medicine, theory of comparative psychology in medicine,
theory of social psychology in medicine, theory of applied psychology in medicine,
theory of the layered-step model of processing (cognitive psychology)
of the content of information fragments in medicine,
the theoretical bases of cognitive psychology
and the cognitive modeling technology in medicine,
the theoretical bases of formation of the parametrical cognitive
models block in the theoretical (cognitive) psychology in medicine,
theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd
generation in the theoretical (cognitive) psychology in medicine,
theory of the ways of representation of the structure of the cognitive models
and problem environments in the theoretical (cognitive) psychology in medicine:
the formal classical of the 0th generation (the logical and production models),
the non-formal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges
on domains and the innovative calculus of theory of sets and graphs),
the non-formal new of the 0th generation (the multi-level structural scheme and the multi-
level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five-
and more cognitive circle, cognitive disc,
cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),

theory of the algorithms of formation of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations in the theoretical (cognitive) psychology in medicine, theory of the techniques of research of the parameters of the cognitive models of the 0th, 1st, 2nd and 3rd generation in the theoretical (cognitive) psychology in medicine, theory of the algorithms of the analysis of a posteriori results of research in the theoretical (cognitive) psychology in medicine, theory of the adaptive automation means of the information-educational environment in the theoretical (cognitive) psychology in medicine (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean's office, the electronic library and others), theory of the technical means of support of the adaptive information interaction in the theoretical (cognitive) psychology in medicine (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and others), theory of technical means of support of the system analysis in the theoretical (cognitive) psychology in medicine (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive disc, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive cylinder, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive cone, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive sphere, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the one-, two-, three-, four-, five- and more cognitive sphere and others) and the cognitive modeling technology in the theoretical (cognitive) psychology in medicine;

the fundamental scientific researches in the area “ Theoretical state management, law and jurisprudential sciences in medicine ” – the theoretical bases of state management, law and jurisprudential sciences in medicine, theory of country and law in medicine, theory of the history of country and law in medicine, theory of the history of political and legal doctrines in medicine, theory of constitutional (state) law in medicine, theory of municipal law in medicine, theory of administrative law in medicine, theory of information law in medicine, theory of financial law in medicine, theory of entrepreneurial law in medicine, theory of civil law in medicine, theory of civil-processual law (civil process) in medicine, theory of arbitration-processual law (arbitration process) in medicine, theory of patent law in medicine, theory of the law of industrial property in medicine, theory of copyright and adjacent rights in medicine, theory of succession law in medicine, theory of family law in medicine, theory of agrarian law in medicine, theory of legal problems of the protection of environment in medicine, theory of ecological law in medicine, theory of land law in medicine, theory of forest law in medicine, theory of water law in medicine, theory of air-protection law in medicine, theory of the legislation about the subsoils in medicine, theory of the legislation about the fauna world in medicine, theory of labor law in medicine, theory of the law of social support in medicine, theory of law-enforcement bodies in medicine, theory of criminal law in medicine, theory of criminal-processual law (criminal process) in medicine, theory of criminology in medicine, theory of criminal-enforcement law in medicine, theory of penitentiary in medicine, theory of criminalistics in medicine, theory of judicial statistics in medicine, theory of international law in medicine, theory of international private law in medicine, theory of country and the law of separate countries in medicine and the cognitive modeling technology in the theoretical state management, law and jurisprudential sciences in medicine; *the fundamental scientific researches in the area “ Theoretical patent business, invention and rationalization in medicine ”* – the theoretical bases of patent business, invention and rationalization in medicine, theory of patent-information activity in medicine, theory of invention and rationalization in medicine, theory of patent-license work in medicine, theory of the technical-economic analysis on the patent materials in medicine, theory of inventive law in medicine and the cognitive modeling technology in the theoretical patent business, invention and rationalization in medicine].

II. “The fundamental scientific researches department
 “Theory of economics and economic sciences, organization, management, statistics
 and the financial analysis based on the cognitive modeling technology
 in medicine” (“TECON and ECONSOMS and FAB on CMT in M”) (*)
 [*the fundamental scientific researches in the area
 “Theoretical economics and economic sciences in medicine”* –
 the theoretical bases of economics and economic sciences in medicine,
 the economic theories in medicine, theory of the history of economic thought in medicine,
 theory of accounting-economic sciences in medicine,
 theory of the science of management of economics in medicine,
 theory of economic history in medicine, theory of world economy in medicine,
 theory of the international economic relations in medicine,
 theory of the economic development and growth in medicine,
 theory of the forecasting and planning of economics in medicine,
 theory of economic cycles and crises in medicine,
 theory of productive forces and scientific-technical progress in medicine,
 theory of the social-economic structure in medicine,
 theory of the reproductive structure of economics in medicine,
 theory of accumulation and consumption in medicine, theory of well-being in medicine,
 theory of the territorial structure of economics in medicine,
 theory of regional and urban economics in medicine,
 theory of the branch structure of economics in medicine,
 theory of financial science in medicine, the monetary and tax theories in medicine,
 theory of the credit-financial institutions in medicine
 and the cognitive modeling technology
 in the theoretical economics and economic sciences in medicine;
*the fundamental scientific researches in the area
 “Theoretical organization and management in medicine”* –
 the theoretical bases of organization and management in medicine,
 theory of the methodology of management in medicine,
 theory of state and administrative management in medicine,
 theory of the organization of management by economics in medicine,
 theory of social management in medicine,
 theory of prediction in medicine, theory of futurology in medicine,
 theory of strategic management in medicine,
 theory of strategic planning in medicine
 and the cognitive modeling technology
 in the theoretical organization and management in medicine;
*the fundamental scientific researches in the area
 “Theoretical statistics in medicine”* –
 the theoretical bases of statistics in medicine,
 the general theory of statistics in medicine, theory of economic statistics in medicine,
 theory of branch statistics in medicine, theory of social statistics in medicine,
 theory of international statistics in medicine,
 theory of statistics of the separate countries and social-economic systems in medicine,
 theory of organization and management by statistics in medicine,
 theory of the methods and means of collection, processing
 and analysis of the statistical information in medicine
 and the cognitive modeling technology in the theoretical statistics in medicine;

the fundamental scientific researches in the area “Theoretical financial analysis, monetary circulation and credit in medicine” ()* – the theoretical bases of the financial analysis, monetary circulation and credit in medicine, theory of tendencies, dependencies and regularities of the financial analysis of the objects, processes and phenomena in medicine, theory of the system, information and cognitive approaches in economics and medicine, theory of the structure and dynamics of financial market functioning in medicine, theory of the global goals of standardization of accounting and the problems of unification of reporting in medicine, theory of the institutional subjects regulating the creation, distribution and use of the international standards in medicine, theory of the principles of creation, distribution and use of the international standards of the financial and accounting reporting in medicine, theory of the basic methods of transformation of the financial reporting in medicine, theory of formation of the accounting balance sheet by the international standards of financial reporting in medicine, theory of the qualification tests of the professional participants of the financial system of the country in medicine, theory of the administrative-legal forms of the existence of the economy subject in medicine, theory of the features of the procedure of the financial analysis of the economy subject in medicine, theory of the organizational structure of enterprise, (credit) organization and its features in medicine (the educational establishment of the system of education and the information-educational environment in medicine), theory of inflationary impairment, discounting and compounding of the monetary flows in the economic system of the country in medicine, theory of the indices of dynamics of the financial market and instruments in medicine, theory of dynamics and communication in medicine, theory of the investment and innovation politics of the economy subject in medicine in the financial system of the country, theory of the organizational, technological, scientific, methodological, regulatory-legal, information, hardware, software, algorithmic, raw materials, warehouse, personnel and economic preparation of production in medicine, theory of the bases of the financial analysis and the estimation of quality of the activity of the enterprise, (credit) organization and other organization in medicine, theory of the requirements and composition of the financial reporting of the (non)production organizational structures in medicine,

theory of the additional elements of the accounting and financial reporting of the enterprise and (credit) organization in medicine, theory of the consumers of the financial reporting in medicine, theory of the elements of the financial reporting related with the changes of financial - economy activity in medicine, theory of the concept of the simple and consolidated accounting and financial reporting in medicine, theory of the methods of the financial analysis of the different forms of reporting in medicine, theory of the structure of accounts of the accounting and financial analysis in medicine, theory of the vertical, horizontal and trend financial analysis based on the system of analytical coefficients in medicine, theory of the scheme of carrying out of the audit inspection, financial analysis and audit in medicine, theory of the external and internal control of activity of the different enterprises and (credit) organizations in medicine, theory of the kinds of banking operations in medicine, theory of the structure of the accounting balance sheet (form №1) in medicine, theory of the explanatory note to the accounting balance sheet in medicine, theory of the report about profits and losses (form №2) in medicine, theory of the explanatory note to the report about profits and losses in medicine, theory of the report about the change of capital (form №3) in medicine, theory of the report about the movement of monetary means on the accounts (form №4) in medicine, theory of the explanatory note to the report about the movement of monetary means on the accounts in medicine, theory of the application to the accounting balance sheet (form №5) in medicine, theory of the report about the targeted use of the received means (form №6) in medicine, theory of the audit conclusion about the results of activity of the enterprise, (credit) organization and the organization of the federal reserve system of USA in medicine, theory of the analysis of the sustainability of the enterprise, (credit) organization and commercial bank in medicine, theory of the basic analytical coefficients of the financial analysis in medicine, theory of the structure of the accounting balance sheet and the report about profits and losses of the enterprise and (credit) organization for the introducing of the system of analytical coefficients in medicine, theory of the cognitive modeling technology with the dynamic cloning, verification and subverification in medicine,

theory of the iterative cycle of the cognitive modeling technology in medicine,
theory of the technique of use of the cognitive modeling technology in medicine,
theory of the technique of formation of the regulatory-legal basis
for the financial analysis of the enterprise and (credit) organization in medicine,
theory of the technique of formation of the information basis
for the financial analysis of the enterprise and (credit) organization in medicine,
theory of the technique of the additional check
of the information basis of the financial analysis in medicine,
theory of the technique of creation and modification of the working plan of accounts
and the model of accounting in medicine,
theory of the technique of carrying out of the financial analysis of the condition
of the enterprise and (credit) organization in medicine,
theory of the parametrical cognitive models block for the financial analysis
and the increasing of functioning efficiency of the objects, processes and phenomena in medicine,
theory of the structure of the cognitive model for the vertical, horizontal
and trend financial analysis of the enterprise and (credit) organization in medicine,
theory of the ways of representation of the structure
of the cognitive models and problem environments in medicine:
the formal classical of the 0th generation (the logical and production models),
the non-formal classical of the 0th generation (the semantic network, the frame network and ontology),
the formal new of the 0th generation (the calculus of theory of sets and corteges
on domains and the innovative calculus of theory of sets and graphs),
the non-formal new of the 0th generation (the multi-level structural scheme and the multi-
level encapsulated pyramids combining theory of graphs and theory of sets),
the flat of the 1st generation (the cognitive circle and the cognitive disc),
the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere),
the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five-
and more cognitive circle, cognitive disc,
cognitive cylinder, cognitive cone and cognitive sphere),
the hybrid of the 3rd generation (the combinations of the existing cognitive models),
theory of the algorithms of formation of the structure
of the cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine,
theory of the techniques of research of the parameters
of the cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine,
theory of the algorithms of the analysis of a posteriori results of research in medicine,

theory of the formation and calculation of the aggregates of the accounting balance sheet of the (non)production enterprise and (credit) organization in medicine, theory of the calculation of the parameters of the cognitive model for the vertical, horizontal and trend static and dynamic financial analysis of the enterprise and (credit) organization in the conditions of certainty and uncertainty in medicine, theory of software for the automation of research tasks in medicine, theory of the statistical justification of practical use of the received results in medicine, theory of the factors affecting on the efficiency of functioning of the enterprise and (credit) organization in medicine, theory of the organization and plan of carrying out of the experiment in medicine, theory of the research of the parameters of the cognitive model for the vertical, horizontal and trend financial analysis in medicine, theory of the preliminary processing of a posteriori results of diagnostics in medicine, theory of selection of the methods of the statistical analysis of the formed selections of data in medicine, theory of the analysis of the dynamics of resultativity of the financial-economy activity in medicine, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in medicine and the cognitive modeling technology in the theoretical financial analysis, monetary circulation and credit in medicine; *the fundamental scientific researches in the area “Theoretical other branches of economics in medicine”* – the theoretical bases of other branches of economics in medicine, theory of the production of musical instruments in medicine, theory of the production of fine art products in medicine, theory of jewelry industry in medicine, theory of the production of toys in medicine, theory of the production of sports products in medicine, theory of the production of writing goods in medicine and the cognitive modeling technology in the theoretical other branches of economics in medicine].

The fundamental scientific researches branches and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.3. The divisions of applied scientific researches (at the microscopic level) of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N."

The structure of "The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (medical) sciences" named after academician Burdenko N.N." ("SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." – "SEC") as the first SEC in the structure of "SIO "ACNS"" (www.vetrovan.spb.ru) includes the various divisions of process of the carrying out of scientific researches:

- B. The applied scientific researches divisions of "SEC"** for the system, financial and complex analysis at the micro-level in medicine – the 45 applied scientific researches sections (departments) (ASRS(DP)) on the 10 applied scientific researches directions (ASRD) of "SEC" are connected with the 27 ASRS(DP) on the 9 ASRD of "SIO "ACNS"", and also with ASRS(DP) on ASRD of "The Russian academy of (medical) sciences".
- B.1. ASRD "Applications of preventive medicine" ("APPREVM").
- B.1.1. ASRS(DP) "Applications of hygiene" ("APHYG") (*).
- B.1.2. ASRS(DP) "Applications of disinfectology" ("APDIS") (*).
- B.1.3. ASRS(DP) "Applications of preventive epidemiology" ("APPREVEP") (*).
- B.1.4. ASRS(DP) "Applications of recreational medicine" ("APRECRM") (*).
- B.1.5. ASRS(DP) "Applications of sanitation" ("APSAN") (*).
- B.1.6. ASRS(DP) "Applications of public-health-service, medical labor safety, medical environment preservation and medical ecology of person" ("APPMLSMEP and MEP") (*).
- B.1.7. ASRS(DP) "Applications of medical-social expertise, medical-social rehabilitation and medical sociology" ("APM-SEM-SR and MS") (*).
- B.2. ASRD "Applications of clinical medicine" ("APCLINM").
- B.2.1. ASRS(DP) "Applications of obstetrics and gynecology (of the physiological and pathological processes in the organism of woman after the conception, pregnancy and childbirth)" ("APOB and GYN (PH and PPR in ORGWACPR and CH)") (*).
- B.2.2. ASRS(DP) "Applications of anesthesiology and resuscitation (of the methods of protecting of the organism against the surgery trauma)" ("APAN and RES (MPRORG ag SURGTR)") (*).
- B.2.3. ASRS(DP) "Applications of gastro-enterology (of the diseases of gastro-intestinal tract)" ("APGAST-ENT (DG-IT)") (*).
- B.2.4. ASRS(DP) "Applications of hematology and hema-transfusion (of the transfusion of blood)" ("APHEMAT and HEMA-TR (TB)") (*).
- B.2.5. ASRS(DP) "Applications of gerontology and geriatrics (of the diseases of aging and rejuvenation)" ("APGERONT and GERIATR (DAG and REJ)") (*).
- B.2.6. ASRS(DP) "Applications of dermatology and venereology (of the diseases of skin and venereal diseases)" ("APDERM and VEN (DS and VEND)") (*).
- B.2.7. ASRS(DP) "Applications of dietetics (of the diseases of improper nutrition)" ("APDIET (DIN)") (*).
- B.2.8. ASRS(DP) "Applications of cardiology (of the diseases of the cardio-vascular system)" ("APCARD (DC-VS)") (*).

- B.2.9. ASRS(DP) “Applications of radiation diagnostics and radiation therapy” (“APRDIANG and R THER”) (*).
- B.2.10. ASRS(DP) “Applications of neurology (of the diseases of the nervous system)” (“APNEUR (DNERVS)”) (*).
- B.2.11. ASRS(DP) “Applications of nephrology and urology (of the diseases of the (over)renal and sexual systems)” (“APNEPHR and UR (D(O)REN and SEXS)”) (*).
- B.2.12. ASRS(DP) “Applications of oncology (of the diseases of the new formations and tumors of the biological construct of organism)” (“APONC (DNFORM and TUMBCORG)”) (*).
- B.2.13. ASRS(DP) “Applications of laryngo-oto-rhinology or oto-rhino-laryngology (of the diseases of the ear, throat and nose)” (“APLAR or OTORIN (DETH and N)”) (*).
- B.2.14. ASRS(DP) “Applications of ophthalmology (of the diseases of the visual sensory system)” (“APOPHT (DVSS)”) (*).
- B.2.15. ASRS(DP) “Applications of pediatrics (of the diseases of the biological construct of organism of the children)” (“APPED (DBCORGCH)”) (*).
- B.2.16. ASRS(DP) “Applications of psychiatry and narcology (of the diseases of the psychical construct of the head brain)” (“APPS and NAR (DPCHB)”) (*).
- B.2.17. ASRS(DP) “Applications of pulmonology and phthiology (of the diseases of the pulmonary and bronchial systems)” (“APPULM and PHTHIS (DP and BS)”) (*).
- B.2.18. ASRS(DP) “Applications of rheumatology (of the inflammatory and degenerative-dystrophic diseases of the joints, spine and the system diseases of connective tissue)” (“APRHEUM (I and D-DDJS and SDCT)”) (*).
- B.2.19. ASRS(DP) “Applications of dentistry (of the diseases of the cavity of mouth, jaws and their border areas of the face and neck)” (“APDENT (DCMJ and BAF and N)”) (*).
- B.2.20. ASRS(DP) “Applications of traumatology, orthopedics and prosthetics (of the diseases of skeletal-muscular system)” (“APTRORTH and PROSTH (DS-MS)”) (*).
- B.2.21. ASRS(DP) “Applications of therapy (of the relieving or eliminating of symptoms and manifestations of the disease or trauma)” (“AP THER (REL or ELIMS and MD or TR)”) (*).
- B.2.22. ASRS(DP) “Applications of endocrinology (of the diseases of the internal organs and the disorders of hormonal cycles)” (“APEND (DIO and DHC)”) (*).
- B.2.23. ASRS(DP) “Applications of epidemiology (of the infectious diseases)” (“APEPID (ID)”) (*).
- B.2.24. ASRS(DP) “Applications of surgery, cardio-vascular surgery, neuro-surgery, pediatric surgery, transplantology and artificial organs” (“APSURGC-VSURGN-SURGPSEGT and AO”) (*).
- B.3. ASRD “Applications of pharmacology and pharmaceuticals” (“APPHARMAC and PHARMAC”).
- B.3.1. ASRS(DP) “Applications of pharmacology, pharmaco-epidemiology, pharmacy, bio-chemical pharmacology, clinical pharmacology, molecular pharmacology, pharmaco-genomics and experimental pharmacology” (“APPHPH-EPPHB-CHPHCLPHMPHPH-G and EXPPH”) (*).
- B.4. ASRD “Applications of sports medicine” (“APSPM”).
- B.4.1. ASRS(DP) “Applications of medicine of competitions, sport and sports sciences” (“APMCSP and SPS”).
- B.5. ASRD “Applications of military medicine” (“APMILM”).
- B.5.1. ASRS(DP) “Applications of medicine and medical education in the armed forces” (“APM and NEDUC in AF”).

- B.6. ASRD “Applications of chemistry and chemical technologies in medicine” (“APCHEM and CHEMT in M”).
- B.6.1. ASRS(DP) “Applications of chemistry, chemical technology and chemical industry in medicine” (“APCHEMCHEMT and CHEMIND in M”).
- B.7. ASRD “Applications of biology, physiology and bio-physiological technologies in medicine” (“APBIOLPHYS and B-PHYST in M”).
- B.7.1. ASRS(DP) “Applications of general biology” (“APGENB”).
- B.7.2. ASRS(DP) “Applications of physical-chemical bio-technology” (“APPHYS-CHEMB-T”)(*).
- B.7.3. ASRS(DP) “Applications of physiology, bio-physiology and private physiology (of sensory systems)” (“APPHYSB-PHYS and PRPHYS (SS)”)(*).
- B.8. ASRD “Applications of mathematics and mathematical technologies in medicine” (“APMATH and MATHT in M”).
- B.8.1. ASRS(DP) “Applications of medical mathematics and the complex system analysis based on the cognitive modeling technology” (“APMMATH and DSAB on CMT”)(*).
- B.8.2. ASRS(DP) “Applications of medical cybernetics and (cognitive) informatics” (“APMCYB and (CONG)INF”)(*).
- B.9. ASRD “Applications of nano-technologies and information technologies in medicine” (“APNANO-T and INFT in M”).
- B.9.1. ASRS(DP) “Applications of medical electronics, radio-technics and connection” (“APMELR-T and CONN”).
- B.9.2. ASRS(DP) “Applications of medical automatics, computing technics and the systems analysis based on the cognitive modeling technology” (“APMAUTCT and SAB on CMT”)(*).
- B.9.3. ASRS(DP) “Applications of nano-technologies for the mechanical-engineering, instrument-making, polygraphy, reprography and photo-cinema-technics, the light and food-processing industry, transport, architecture and construction in medicine” (“APNANO-T for M-EL-MPRPH-S-TL and FITA and C in M”)(*).
- B.10. ASRD “Applications of social-science and technologies of social sciences in medicine” (“APSOC-S and TSOCS in M”).
- B.10.1. ASRS(DP) “Applications of social sciences, philosophy, science-study, politics and political sciences, sociology, (cognitive) psychology, state, law and legal sciences, patent business, invention and rationalization in medicine” (“APSOCSPHS-STP and PSS(C)PSL and JSPBI and R in M”)(*).
- B.10.2. ASRS(DP) “Applications of economics and economic sciences, organization, management, statistics and the financial analysis based on the cognitive modeling technology in medicine” (“APECON and ECONSONS and FAB on CMT in M”)(*).
- “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” allows to develop the main and derivative scientific results in medicine, in particular the algorithms, methods and technologies of the system, financial and complex analysis for the increase of efficiency of the diverse (medical) technologies of the single, serial and mass (non)material production of the one or several assortment groups and nomenclature units of the goods, works and services to the final user of the social-economic formation based on the cognitive modeling technology and the cognitive models.

5.3.1. The applied scientific researches direction

“Applications of preventive medicine” (“APPREVM”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction “Applications of preventive medicine”” (“APPREVM”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of hygiene”” (“APHYG”) (*)
[*the applied scientific researches in area “Applications of hygiene”* – studies the influence of the factors of external environment on the organism of person with the purpose of optimization of the favorable impacts and preventing of the adverse impacts, usage of the theoretical bases of hygiene, usage of theory of influence of the factors of external environment on the organism of person, usage of theory of optimization of the favorable impacts and preventing of the adverse impacts, usage of theory of methods of the increasing of the resistance of organism to the diseases, usage of theory of methods of the sanatorium-resort treatment, usage of theory of impact of the conditions of living and labor on the health of person, usage of theory of sanitary norms and rules in the different spheres of activity, usage of theory of development of the standards, requirements and sanitary measures, directed on the improving of settlements, the conditions of living and the activity of people and usage of the cognitive modeling technology in the applications of hygiene].

II. "The applied scientific researches department "Applications of disinfectology" ("APDIS") (*)
[the applied scientific researches in area "Applications of disinfectology" – studies the regularities of non-specific prevention of the infectious and parasitic diseases by the exposing on the pathogenic biological objects and their various carriers, usage of the theoretical bases of disinfectology, usage of theory of a set of actions, directed on the destruction of pathogens of the infectious diseases and the destruction of toxins at the objects of the external environment, usage of theory of chemical disinfectant means, usage of theory of planned and unscheduled preventive disinfection, usage of theory of current disinfection, usage of theory of final disinfection and usage of the cognitive modeling technology in the applications of disinfectology].

III. "The applied scientific researches department "Applications of preventive epidemiology" ("APPREVEP") (*)
[the applied scientific researches in area "Applications of preventive epidemiology" – studies the demographics of painful processes, actions on their localization and the reduction of incidence, and includes inside, but is not limited to the study of the various epidemics, usage of the theoretical bases of preventive epidemiology, usage of theory of the regularities of occurrence and spread of the diseases of the various etiology, usage of theory of development of the preventive actions, usage of theory of premorbid prevention, usage of theory of primary prevention, usage of theory of secondary prevention, usage of theory of tertiary prevention, usage of theory of incidence, usage of theory of the regularities of epidemic process, usage of theory of elimination of the epidemiological process, usage of theory of prevention of the epidemiological process, usage of theory of the regularities of occurrence, spread and cessation of the diseases of human and usage of the cognitive modeling technology in the applications of preventive epidemiology].

IV. “The applied scientific researches department
“Applications of recreational medicine”” (“APRECRM”) (*)
*[the applied scientific researches in area
“Applications of recreational medicine”* –
studies the techniques of increasing of the resistance of organism to the various diseases,
in particular the techniques of sanatorium-resort treatment,
the influence of amateur sports and other,
usage of the theoretical bases of recreational medicine,
usage of theory of the methods of increasing of the resistance of organism to the various diseases,
usage of theory of methods of the sanatorium-resort treatment,
usage of theory of practical application of the amateur sports,
usage of theory of application of the cultural-mass actions
and usage of the cognitive modeling technology in the applications of recreational medicine].

V. “The applied scientific researches department
“Applications of sanitation”” (“APSAN”) (*)
*[the applied scientific researches in area
“Applications of sanitation”* –
the system of diverse actions, providing
the protection of health and the prevention of the various diseases,
and also the complex of measures on the practical application of the standards,
sanitary rules and recommendations, developed by the hygienic science,
providing the optimization of the conditions of parenting and training,
the welfare, labor, rest and nutrition of people with the purpose of strengthening
and preserve of their health, usage of the theoretical bases of sanitation,
usage of theory of actions providing the protection of health,
usage of theory of actions providing the prevention of the various diseases,
usage of theory of development of the standards, sanitary rules and recommendations,
usage of theory of application of the standards, sanitary rules and recommendations,
usage of theory of optimization of the conditions of parenting and training of people,
usage of theory of optimization of the conditions of living and labor of people,
usage of theory of optimization of the conditions of rest and eating of people
and usage of the cognitive modeling technology in the applications of sanitation].

VI. "The applied scientific researches department "Applications of public-health-service, medical labor safety, medical environment preservation and medical ecology of person" ("APPMLSMEP and MEP") (*) [*the applied scientific researches in area "Applications of medical protection of labor" (*)* – usage of theory of organization and management of the protection of labor, the conditions of labor, the industrial sphere and the technique of safety, usage of theory of professional diseases and their prevention, usage of theory of accidents on the production and their prevention, usage of theory of labor-capacity and the examination of labor-capacity, usage of theory of the protection of labor by the categories of workers, usage of theory of the safety of labor on the industries of high danger usage of the cognitive modeling technology in the applications of medical protection of labor (usage of theory of the cognitive model of the subject of training); *the applied scientific researches in area "Applications of medical protection of the environment and ecology of person"* – usage of theory of the methods of studying and protecting of the environment and person, usage of theory of ecological bases of the use of natural resources, usage of theory of international cooperation, usage of theory of the pollution of environment, usage of theory of pollution, usage of theory of pollution and protection of the atmosphere, usage of theory of pollution and protection of the waters of land, seas and oceans, usage of theory of protection of the soils, usage of theory of protection of the subsoils, usage of theory of the ecological bases of life-activity of the person, usage of theory of impact of the anthropogenic changes of environment on the health and social-labor potential of person, usage of theory of the impact of person on the pollution of environment, on the condition of natural ecosystems, populations and organisms of the plant and animal world, usage of theory of protection of the plant and animal world, usage of theory of anthropogenic impact on the landscape, usage of theory of protection and optimization of the landscape, usage of theory of conservation, usage of theory of protected natural territories and water-areas, usage of theory of natural disasters and disasters of anthropogenic origin, usage of theory of ecological safety of the person, usage of theory of rational use and reproduction of natural resources by the person, usage of theory of the protection of environment and natural resources in the certain regions and countries, usage of theory of management of the wastes, usage of theory of low-waste and without-waste technology, usage of theory of protection of the person from the noise, vibration, electric and magnetic fields and radiations and usage of the cognitive modeling technology in the applications of medical protection of the environment and ecology of person].

VII. “The applied scientific researches department “Applications of medical-social expertise, medical-social rehabilitation and medical sociology”” (“APM-SEM-SR and MS”) (*)
[the applied scientific researches in area “Applications of medical-social expertise” – one of the kinds of medical expertise, which provides the definition in accordance with the established order the needs of the examined person in the measures of social protection, including rehabilitation, based on the estimation of limitations of life-activity, caused by the persistent disorder of functions of organism, usage of the theoretical bases of medical-social expertise, usage of theory of measures of the social protection, usage of theory of rehabilitation, usage of theory of estimation of the limitations of life-activity of the person, usage of theory of disorders of the functions of organism, usage of theory of establishments of the medical-social expertise, usage of theory of organization and activity of the establishments of medical-social expertise, usage of theory of examination of the citizens with the purpose of establishing of the group of disability and determining of the degree of loss of the professional labor-ability, usage of theory of prevalence and structure of disability, usage of theory of the causes, factors and conditions, affecting on the occurrence, development and outcome of disability, usage of theory of determining of the needs of citizens in the measures of social protection and rehabilitation and usage of the cognitive modeling technology in the applications of medical-social expertise;
the applied scientific researches in area “Applications of medical-social rehabilitation” – a set of medical actions, carried out by the state, private and public organizations, directed on the protection of social rights of the citizens of the various categories, usage of the theoretical bases of medical-social rehabilitation, usage of theory of the process of medical-social rehabilitation, usage of theory of the process of interaction of the personality and society, usage of theory of the ways of transferring of the social experience to the individual, usage of theory of the ways of including of the individual in to the system of social relations, usage of theory of the process of personal changes of the person and usage of the cognitive modeling technology in the applications of medical-social rehabilitation;
the applied scientific researches in area “Applications of medical sociology” – the branch of sociology, studying the system of care of health, the social terms “disease” and “health”, the behavior of people in the sphere of medicine, usage of the theoretical bases of medical sociology, usage of theory of regularities of the formation of value orientations of the population to the health, diseases, medical care, medicine and the care of health, usage of theory of the structure of modern medical sociology, usage of theory of sociology of medical professions, usage of theory of sociology of the disease and the behavior of patient, usage of theory of sociology of the institutes of medicine and the organization of health-care and usage of the cognitive modeling technology in the applications of medical sociology].

The applied scientific researches directions and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.3.2. The applied scientific researches direction “Applications of clinical medicine” (“APCLINM”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction “Applications of clinical medicine”” (“APCLINM”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of obstetrics and gynecology (of the physiological and pathological processes in the organism of woman after the conception, pregnancy and childbirth)”” (“APOB and GYN (PH and PPR in ORGWACPR and CH)”) (*)
[*the applied scientific researches in area “Applications of obstetrics”* – the clinical discipline, which studies the physiological and pathological processes, occurring in the organism of women in the connection with the conception and pregnancy, in childbirth and postpartum, and also develops the methods of childbirth-delivery, the prevention and treatment of complications of pregnancy and childbirth, the diseases of fetal and newborn, usage of the theoretical bases of obstetrics, usage of theory of physiological and pathological processes in the organism of a woman in the connection with the conception and pregnancy, usage of theory of the methods of childbirth-delivery, prevention and treatment of complications of pregnancy and childbirth, usage of theory of disease of fetal and newborn and usage of the cognitive modeling technology in the applications of obstetrics;
the applied scientific researches in area “Applications of gynecology” – the branch of the clinical medicine, studying the diseases of the female reproductive system, usage of the theoretical bases of gynecology and usage of the cognitive modeling technology in the applications of gynecology].

II. "The applied scientific researches department "Applications of anesthesiology and resuscitation (of the methods of protecting of the organism against the surgery trauma)"" ("APAN and RES (MPRORG ag SURGTR)") (*) [*the applied scientific researches in area "Applications of anesthesiology"* – the section of the clinical medicine, carrying out the studying of means and methods of the providing of anesthesia, that is the loss of sensitivity, including the pain at the various acute pain syndromes, shock conditions, traumas and surgical interventions, usage of the theoretical bases of anesthesiology, usage of theory of means and methods of the providing of anesthesia, usage of theory of acute pain syndromes, usage of theory of shock conditions, usage of theory of traumas, usage of theory of surgical interventions and usage of the cognitive modeling technology in the applications of anesthesiology; *the applied scientific researches in area "Applications of resuscitation (intensive therapy)"* – the clinical discipline, the scientific findings of whose are used at the resuscitation in the clinic, and also the science, studying the regularities of death and the revitalization of organism with the purpose of developing of the most effective methods of prevention and restoration of the fading or just extinct life functions of the organism, usage of the theoretical bases of resuscitation, usage of theory of resuscitation, usage of theory of the regularities of death and the revitalization of organism, usage of theory of pathological-functional processes during the dying, usage of theory of terminal conditions, usage of theory of the restoration of life functions and usage of the cognitive modeling technology in the applications of resuscitation].

III. "The applied scientific researches department "Applications of gastro-enterology (of the diseases of gastrointestinal tract)"" ("APGAST-ENT (DG-IT)") (*) [*the applied scientific researches in area "Applications of gastro-enterology"* – the section of the clinical medicine, studying the gastro-intestinal tract of the person, its structure and functioning, its diseases and methods of their treatment, usage of the theoretical bases of gastro-enterology, usage of theory of gastro-intestinal tract of the person, usage of theory of the structure of gastro-intestinal tract of the person, usage of theory of the functioning of gastro-intestinal tract of the person, usage of theory of the structure, functioning and diseases of the liver, usage of theory of the structure, functioning and diseases of the gall bladder, usage of theory of the structure, functioning and diseases of the bile tract, usage of theory of the diseases of gastro-intestinal tract, usage of theory of the methods of treating of the gastro-intestinal tract and usage of the cognitive modeling technology in the applications of gastro-enterology].

IV. "The applied scientific researches department "Applications of hematology and hema-transfusion (of the transfusion of blood)"" ("APHEMAT and HEMA-TR (TB)") (*) [*the applied scientific researches in area "Applications of hematology"* – the section of the clinical medicine, studying the blood, the organs of blood-formation and the diseases of blood, usage of the theoretical bases of hematology, usage of theory of the etiology of diseases of the blood-circulatory system, usage of theory of the diagnosis of diseases of the blood-circulatory system, usage of theory of the treatment of diseases of the blood-circulatory system, usage of theory of the prediction and prevention of diseases of the blood-circulatory system, usage of theory of the production of blood and its components, usage of theory of the cells of blood, usage of theory of hemoglobin, usage of theory of the proteins of blood, usage of theory of the mechanisms of coagulation (the clotting of blood), usage of theory of bio-medicine of the blood, usage of theory of oncology of the blood and usage of the cognitive modeling technology in the applications of hematology; *the applied scientific researches in area "Applications of hema-transfusion"* – the section of the clinical medicine, studying the transfusion of blood, the particular case of transfusion, at which the biological liquid poured from the donor to the recipient is the blood or its components, usage of the theoretical bases of hema-transfusion, usage of theory of the transfusion of blood, usage of theory of transfusion, usage of the theoretical bases of the technology of the transfusion of blood, usage of theory of the compatibility of blood and usage of the cognitive modeling technology in the applications of hema-transfusion].

V. "The applied scientific researches department "Applications of gerontology and geriatrics (of the diseases of aging and rejuvenation)"" ("APGERONT and GERIATR (DAG and REJ)") (*) [*the applied scientific researches in area "Applications of gerontology and geriatrics"* – studies the processes of aging of the living organisms, including the aging of the biological construct of the organism of person, usage of the theoretical bases of gerontology, usage of theory of the biological causes of the aging of person, usage of theory of the social causes of the aging of person, usage of theory of the psychological causes of the aging of person, usage of theory of rejuvenation, usage of theory of geriatrics and the causes of diseases of the process of aging, usage of theory of gero-hygiene, usage of theory of geronto-psychology and usage of the cognitive modeling technology in the applications of gerontology and geriatrics].

VI. "The applied scientific researches department
"Applications of dermatology and venereology
(of the diseases of skin and venereal diseases)"
("APDERM and VEN (DS and VEND)") (*)
[the applied scientific researches in area
"Applications of dermatology" –
the section of the clinical medicine, studying the structure and functioning
of the skin and its appendages (hairs, nails, and also mucous membranes),
the diseases of skin, its appendages and mucous membranes, methods of their
prevention and treatment, usage of the theoretical bases of dermatology,
usage of theory of plastic surgery, usage of theory of burn surgery,
usage of theory of severe thermal and radiation damages of skin,
usage of theory of maxilla-facial surgery,
usage of theory of periostitis, tumors and dermoid cysts, usage of theory of traumatology,
usage of theory of trauma-genic injury of skin and adjacent tissues,
usage of theory of general purulent-septic surgery,
usage of theory of pyoderma, usage of theory of phlegmons,
usage of theory of furuncles, usage of theory of carbuncles, usage of theory of trichophthyphia,
usage of theory of gangrene-necrotic surgery,
usage of theory of the necrosis of skin and subcutaneous fiber,
usage of theory of therapeutic dermatology,
usage of theory of differential diagnostics and topography of skin,
usage of theory of infectiology, usage of theory of venereology,
usage of theory of the inoculable viral and parasitic
diseases of skin and hypodermic appendages,
usage of theory of toxicology, usage of theory of taxidermy,
usage of theory of pseudoporphic and other toxic reactions,
usage of theory of dermatopatiya, usage of theory of hematology,

usage of theory of skin manifestations of politsitemiya, eritromegaliya, gemoblastoz of patekhiya, hemorrhagic rashes and vaskulita, usage of theory of rheumatology, usage of theory of system kollagenozes, usage of theory of endocrinology, usage of theory of the change of skin at the mellitus diabetes, hypothyroidism, hyperthyroidism and the diseases of the parathyroid glands, usage of theory of oncology, usage of theory of melanomas and other tumors of skin and its appendages, usage of theory of neurology, usage of theory of neuro-dermitis, usage of theory of ataxia-telangikinesia, usage of theory of the genetically determined neuro-skin syndromes, usage of theory of allergology, usage of theory of the syndrome of Lyle, usage of theory of the syndrome of Stevens Johnson, usage of theory of uriticary rashes, usage of theory of angio-neurotic edema, usage of theory of the skin-allergic reactions of medicinal drug reactants, usage of theory of infectious pathogens and usage of the cognitive modeling technology in the applications of dermatology; *the applied scientific researches in area “ Applications of venerology ”* – the area of the clinical medicine, studying the infections, transmitted by the sexual way or the venereal diseases, usage of the theoretical bases of venereology, usage of theory of course, treatment and prevention of the venereal diseases, usage of theory of “old” or classical venereal diseases, usage of theory of gonorrhea, usage of theory of syphilis, usage of theory of donovanosis, usage of theory of soft shankr, usage of theory of venereal lympho-granuloma, usage of theory of “new” or uro-genital venereal diseases, usage of theory of clamidiosis, usage of theory of ureaplasmosis, usage of theory of myco-plasmosis, usage of theory of trichomoniasis, usage of theory of candidiasis, usage of theory of gardnerellosis, usage of theory of cyto-megalovirus, usage of theory of genital herpes, usage of theory of the virus of papilloma of the person, usage of theory of the virus of deficit of the immune system of the person and usage of the cognitive modeling technology in the applications of venereology].

VII. "The applied scientific researches department "Applications of dietetics (of the diseases of improper nutrition)"" ("APDIET (DIN)") (*) [*the applied scientific researches in area "Applications of dietetics"* – studies the impact of food and drink on the health and diseases, especially at the determining of optimal nutrition, prescribes the therapeutic diet at the mellitus diabetes, cardiovascular diseases, over weight and the disturbances of digestive, allergies, malnutrition and tumors, usage of the theoretical bases of dietetics, usage of theory of the impact of food and drink on the health and diseases of person, usage of theory of the determining of optimal nutrition, usage of theory of the prescribing of therapeutic diet at the mellitus diabetes, cardiovascular diseases, over weight and the disturbances of digestive, allergies, malnutrition and tumors, usage of theory of the rationalization of nutrition, usage of theory of the individualization of nutrition, usage of theory of supply of the safety of nutrition, usage of theory of the organized nutrition systems and usage of the cognitive modeling technology in the applications of dietetics].

VIII. "The applied scientific researches department "Applications of cardiology (of the diseases of the cardiovascular system)"" ("APCARD (DC-VS)") (*) [*the applied scientific researches in area "Applications of cardiology"* – the extensive section of the clinical medicine, engaged the studying of the cardio-vascular system of person: the structure and development of the heart and vessels, their functions, and also the different diseases, including the study of the causes of their occurrence, the mechanisms of development, the clinical manifestations, the questions of diagnostics, provides the development of the effective methods of their treatment and prevention, the problems of medical rehabilitation of the persons with the lesions of the cardio-vascular system, usage of the theoretical bases of cardiology, usage of theory of the pathological conditions of cardiology, usage of theory of the coronary disease of heart, usage of theory of hypertension disease, usage of theory of the congenital defects of heart, usage of theory of the acquired defects of heart, usage of theory of cerebro-vascular diseases, usage of theory of cardiological pathology in the structure of mortality of the population of developed countries, usage of theory of the increasing of morbidity and damage of the cardio-vascular system of people, usage of theory of the cardio-vascular and medical-social problems of health care and usage of the cognitive modeling technology in the applications of cardiology].

IX. “The applied scientific researches department “Applications of radiation diagnostics and radiation therapy” (“APRDIANG and R THER”)(*)
[the applied scientific researches in area “Applications of radiation diagnostics” – the direction of the modern clinical medicine, which is engaged in the ultra-sound researches, computed tomography, the Roentgen research without contrasting, the Roentgen research with contrast, the magnetic-resonance tomography and magnetic-nuclear tomography, usage of the theoretical bases of radiation diagnostics, usage of theory of research of the liver, usage of theory of research of the pancreatic cell and bile ducts, usage of theory of diagnostics of the condition of the esophagus, usage of theory of diagnostics of the hernias of the esophageal orifice of the diaphragm, tumors, diverticulas, strictures, the varicose expansion of veins and foreign bodies, usage of theory of research of the gastric and duodenum, usage of theory of diagnostics of ulcers, tumors, strictures and obturations, usage of theory of control of the results of operative interventions, usage of theory of diagnostics of the tumors of intestine, usage of theory of diagnostics of the inflammatory diseases, usage of theory of diagnostics of the causes of obstruction of gut, strictures and obstruction and usage of the cognitive modeling technology in the applications of radiation diagnostics;
the applied scientific researches in area “Applications of radiation therapy (radio-therapy, radiation therapy or radiation oncology)” – the modern direction in the clinical medicine, which is engaged in the treatment of malignant tumors by the ionizing radiation (the Roentgen, gamma-radiation, beta-radiation, neutron radiation or the beams of elementary particles from the medical accelerator of charged particles), usage of the theoretical bases of radiation therapy, usage of theory of radio-therapy, usage of theory of radiation therapy, usage of theory of radiation oncology, usage of theory of ionizing radiation in medicine, usage of theory of Roentgen radiation in medicine, usage of theory of gamma-radiation in medicine, usage of theory of beta-radiation in medicine, usage of theory of neutron-radiation in medicine, usage of theory of the beams of charged particle in medicine, usage of theory of the medical accelerator of charged particles, usage of theory of medical equipment for the radiation therapy and usage of the cognitive modeling technology in the applications of radiation therapy].

X. "The applied scientific researches department "Applications of neurology (of the diseases of the nervous system)"" ("APNEUR (DNERVS)") (*) [*the applied scientific researches in area "Applications of neurology"* – the group of medical-biological disciplines, which study the structure and functions of the nervous system, the regularities of development and possible pathologies, the causes of diseases, the methods of their prevention and treatment, usage of the theoretical bases of neurology, usage of theory of the occurrence of diseases of the central nervous system, usage of theory of the occurrence of diseases of the peripheral nervous system, usage of theory of the mechanisms of development, symptomatology and the possible ways of diagnostics, treatment and prevention of the diseases of the nervous system, usage of theory of clinical neurology and neuropathology and usage of the cognitive modeling technology in the applications of neurology].

XI. "The applied scientific researches department "Applications of nephrology and urology (of the diseases of the (over)renal and sexual systems)"" ("APNEPHR and UR (D(O)REN and SEXS)") (*) [*the applied scientific researches in area "Applications of nephrology"* – the area of the clinical medicine, studying the functions and diseases of kidneys, usage of the theoretical bases of nephrology, usage of theory of differential diagnostics, usage of theory of nephro-surgery, usage of theory of nephro-urology and usage of the cognitive modeling technology in the applications of nephrology; *the applied scientific researches in area "Applications of urology"* – the area of the clinical medicine, studying the etiology, pathogenesis, the diagnostics of the diseases of organs of the urinary system, the male sexual system, the diseases of adrenal glands and other pathological processes in the retroperitoneal space and developing the methods of their treatment and prevention, usage of the theoretical bases of urology, usage of theory of the urinary system, usage of theory of the male sexual system, usage of theory of the disease of adrenal glands, usage of theory of pathological processes in the retroperitoneal space, usage of theory of the methods of (surgical) treatment and prevention of diseases and usage of the cognitive modeling technology in the applications of urology].

XII. "The applied scientific researches department "Applications of oncology (of the diseases of the new formations and tumors of the biological construct of organism)"" ("APONC (DNFORM and TUMBCORG)") (*) [*the applied scientific researches in area "Applications of oncology"* – the section of the modern clinical medicine, studying the benign and malignant tumors, the mechanisms and regularities of their occurrence and development, the methods of their prevention, diagnostics and treatment, usage of the theoretical bases of oncology, usage of theory of oncological diseases, usage of theory of system oncological diseases, usage of theory of the forms and variants of treatment of cancer, usage of theory of the occurrence of cancer cells and micro-tumors, usage of theory of functioning of the systems of anti-tumor immunity and usage of the cognitive modeling technology in the applications of oncology].

XIII. “The applied scientific researches department
“Theory of laryngo-oto-rhinology or oto-rhino-laryngology
(of the diseases of the ear, throat and nose)”” (“APLAR or OTORIN (DETH and N)”)(*)

[*t h e a p p l i e d s c i e n t i f i c r e s e a r c h e s i n a r e a
“Applications of laryngo-oto-rhinology (LOR) or oto-rhino-laryngology”* –
the section of the clinical medicine and medical specialty (specialization in medicine),
which specializes on the diagnostics and treatment of pathologies of the ear, throat, nose,
and also the head and neck, usage of the theoretical bases of oto-rhino-laryngology,
usage of theory of occurrence, treatment and prevention of the diseases of the ear, nose and throat,
usage of theory of occurrence, treatment and prevention of the diseases
of the pharynx, larynx, trachea and bordering areas with them,
usage of theory of otology, usage of theory of rhinology, usage of theory of laryngology,
usage of theory of the anatomical proximity and functional linkage of organs,
usage of theory of the interdependence of diseases, usage of theory of generality of the methods of research,
usage of theory of audiology, usage of theory of phoniatriy,
usage of theory of physiology and pathology of voice-formation,
usage of theory of warning and treatment of the disorders of voice,
usage of theory of otiatrics, usage of theory of treatment of the pathologies of ear
and usage of the cognitive modeling technology in the applications
of laryngo-oto-rhinology (LOR) or oto-rhino-laryngology].

XIV. “The applied scientific researches department
“Applications of ophthalmology (of the diseases of the visual sensory system)”” (“APOPHT (DVSS)”)(*)

[*t h e a p p l i e d s c i e n t i f i c r e s e a r c h e s i n a r e a
“ Applications of ophthalmology ”* –
studies the diseases of eye ball, its appendages
(eyelids, lacrimal organs and mucous membrane),
the bone structures and fiber, surrounding the eye,
usage of the theoretical bases of ophthalmology, usage of theory of eye, usage of theory of the anatomy of eye,
usage of theory of the physiology of eye, usage of theory of the diseases of eye,
usage of theory of the methods of treatment and preventing of the eye diseases
and usage of the cognitive modeling technology in the applications of ophthalmology].

XV. “The applied scientific researches department “Applications of pediatrics (of the diseases of the biological construct of organism of the children)”” (“APPED (DBCORGCH)”) (*) [*the applied scientific researches in area “ Applications of pediatrics ”* – the scientific area about the distinctive features, dispatches and diseases of the child’s organism and based on those features of the preservation of health and the treatment of diseases at the children, the main task of which is the preserving or returning (in case of illness) of the condition of health to the child, allowing him to maximally fully realize his innate potential of life, usage of the theoretical bases of pediatrics, usage of theory of the distinctive features of the child’s organism, usage of theory of the diseases of the child's organism, usage of theory of the features of preserving of health and the treating of diseases at the children and usage of the cognitive modeling technology in the applications of pediatrics].

XVI. “The applied scientific researches department “Applications of psychiatry and narcology (of the diseases of the psychical construct of the head brain)”” (“APPS and NAR (DPCHB)”) (*) [*the applied scientific researches in area “ Applications of psychiatry ”* – studies the mental diseases, the causes of their occurrence, the methods of diagnostics, prevention and treatment, usage of the theoretical bases of psychiatry, usage of theory of the methodology of psychiatry, usage of theory of methods of the diagnostics of diseases of mentality, usage of theory of prevention and treatment of the diseases of mentality, usage of theory of state and accredited non-state psychiatric establishments and usage of the cognitive modeling technology in the applications of psychiatry; *the applied scientific researches in area “ Applications of narcology ”* – the section of the clinical medicine, studying the manifestations of chronic alcoholism, drug-addiction and substance-abuse, developing the methods of their prevention and treatment, usage of the theoretical bases of drug-addiction, usage of theory of alcoholism, usage of theory of drug-addiction, usage of theory of substance-abuse, usage of theory of the classical and modern methods of prevention and treatment of the alcohol, drug and toxicological addictions and usage of the cognitive modeling technology in the applications of drug-addiction].

XVII. "The applied scientific researches department "Applications of pulmonology and phthisiology (of the diseases of the pulmonary and bronchial systems)"" ("APPULM and PHTHIS (DP and BS)") (*)

[*t h e a p p l i e d s c i e n t i f i c r e s e a r c h e s i n a r e a " A p p l i c a t i o n s o f p u l m o n o l o g y "* – the section of the clinical medicine, engaging in the studying, diagnostics and treatment of the diseases of the lungs and respiratory tract, usage of the theoretical bases of pulmonology, usage of theory of pulmonology as the thoracic medicine or the respiratory medicine, usage of theory of the linkage of pulmonology with resuscitation and intensive therapy, usage of theory of artificial (mechanical) ventilation of lungs, usage of theory of operations on the respiratory ways, usage of theory of diseases of the organs of rib cage and the methods of their treatment, usage of theory of thoracic surgery, usage of theory of resuscitation and intensive therapy and usage of the cognitive modeling technology in the applications of pulmonology;

t h e a p p l i e d s c i e n t i f i c r e s e a r c h e s i n a r e a " A p p l i c a t i o n s o f p h t h i s i o l o g y " – the section of the clinical medicine, studying the causes of occurrence, the regularities of spread and the mechanisms of development of the tuberculosis, caused by it the pathological processes in the organism of person and the methods of its prevention, diagnostics, treatment and rehabilitation of the patients of tuberculosis, usage of the theoretical bases of phthisiology, usage of theory of the anti-tubercular dispensaries, tuberculosis rooms, hospitals and sanatoriums, usage of theory of diagnostics, treatment, dispensary observation and prevention of the tuberculosis, usage of theory of consulting and methodical help to the other medical specialists, usage of theory of early detection and prevention of the tuberculosis, usage of theory of application of the conservative treatment and minimally-invasive procedures, usage of theory of phthisio-surgery, usage of theory of thoracic surgery, usage of theory of osseo-articular tuberculosis and orthopedics, usage of theory of treatment of the tuberculosis of uro-genital organs, usage of theory of phthisiatric urology and gynecology, usage of theory of treatment of the tuberculosis of eye and phthisiatric ophthalmology and usage of the cognitive modeling technology in the applications of phthisiatrics].

XVIII. “The applied scientific researches department “Applications of rheumatology (of the inflammatory and degenerative-dystrophic diseases of the joints, spine and the system diseases of connective tissue)”” (“APRHEUM (I and D-DDJS and SDCT)”) (*) [*the applied scientific researches in area “Applications of rheumatology”* – the specialization of the internal clinical medicine, which is engaged in the diagnostics and treatment of the rheumatic diseases, usage of the theoretical bases of rheumatology, usage of theory of the inflammatory and degenerative-dystrophic diseases of the joints and the system diseases of the connective tissue, usage of theory of collagenosises, usage of theory of the differential diagnostics of the diseases of rheumatology, usage of theory of traumatology-orthopaedics and the purulent-septic surgery, usage of theory of osteomyelitis, usage of theory of myositis, usage of theory of gonorrhoea arthritis, usage of theory of aseptic arthritis, usage of theory of endocrinology at the syndrome of Charcot, mellitus diabetes and hyper-calcemic crisis, usage of theory of nephrology at the nephrogenic gout, nephrogenic osteomalacia and nephrogenic osteoporosis, usage of theory of hematology, usage of theory of cross differential diagnostics, usage of theory of diseases of the blood at the acute lymphoblastic leukemia and the juvenile rheumatoid arthritis, usage of theory of cardiology at the rheumatic endocarditis, usage of theory of vascular and phlebological surgery, usage of theory of the sports medicine at the damage of muscles and the musculo-skeletal apparatus at the athletes and usage of the cognitive modeling technology in the applications of rheumatology].

XIX. “The applied scientific researches department “Applications of dentistry (of the diseases of the cavity of mouth, jaws and their border areas of the face and neck)”” (“APDENT (DCMJ and BAF and N)”) (*) [*the applied scientific researches in area “Applications of dentistry”* – the section of the clinical medicine, which is engaged in the studying of the teeth, their structure and functioning, their diseases, the methods of their prevention and treatment, and also the diseases of oral cavity, jaws and border areas of the face and neck, usage of the theoretical bases of dentistry, usage of theory of non-carious lesions of teeth, usage of theory of the hypoplasia of enamel, usage of theory of the fluorosis of enamel, usage of theory of the wedge-shaped defect of tooth, usage of theory of the pathological erasure of tooth, usage of theory of the necrosis of the hard tissues of tooth, usage of theory of the hyperesthesia of tooth, usage of theory of the erosion of enamel of the tooth, usage of theory of the acute and chronic injuries of tooth, usage of theory of caries and its complications, usage of theory of pulpitis and its complications, usage of theory of periodontitis and its complications, usage of theory of periostitis and its complications, usage of theory of the diseases of the oral mucosa (stomatitises), usage of theory of the traumatic stomatitises, usage of theory of the symptomatic stomatitises, usage of theory of the infectious stomatitises, usage of theory of the specific stomatitises, usage of theory of the catharal stomatitis, usage of theory of the ulcerative stomatitis, usage of theory of the acute and chronic aphthous stomatitis, usage of theory of heilitis, usage of theory of glossitis and usage of the cognitive modeling technology in the applications of dentistry].

XX. “The applied scientific researches department “Applications of traumatology, orthopedics and prosthetics (of the diseases of skeletal-muscular system)”” (“APTRORTH and PROSTH (DS-MS)”) (*)

[the applied scientific researches in area “ Applications of traumatology ” – the section of the clinical medicine, studying the impact on the organism of person of the various traumatic effects, the consequences of traumas and the methods of their treatment, usage of the theoretical bases of traumatology, usage of theory of differential diagnostics in the area of rheumatology and traumatology, usage of theory of traumatic orthopedics and neuro-surgery, usage of theory of the traumatic and post-traumatic conditions of the nervous system, usage of theory of septic surgery at the tetanus, sepsis, osteomyelitis and phlegmons, usage of theory of purulent and burn surgery at the endogenous and exogenous burns, usage of theory of sports medicine, usage of theory of vascular surgery, usage of theory of phlebology, usage of theory of infectology at the tuberculosis and syphilis of the musculo-skeletal system, usage of theory of toxicology at the toxic arthropathies, usage of theory of hematology at the hema-arthrosises, auto-fractures and pathological fractures, usage of theory of traumatic oncology, usage of theory of traumatic bio-physics, usage of theory of traumatic bio-cybernetics, usage of theory of traumatic military medicine and usage of the cognitive modeling technology in the applications of traumatology;

the applied scientific researches in area “ Applications of orthopedics ” – the section of the clinical medicine and the section of surgery, studying the prevention, diagnostics and treatment of deformations and the disorders of functions of the musculo-skeletal system, which are the result of congenital defects, malformations, the consequences of traumas or diseases, usage of the theoretical bases of orthopedics, usage of theory of injuries of the musculo-skeletal apparatus (bones, joints, muscles, ligaments and tendons), usage of theory of bio-mechanics of the musculo-skeletal apparatus, usage of theory of surgery of the spinal column, usage of theory of arthroscopic surgery, usage of theory of endoprosthesis of the joints, usage of theory of bone pathologies and usage of the cognitive modeling technology in the applications orthopedics;

the applied scientific researches in area “ Applications of prosthetics ” – the complex medical-technical discipline, which is engaged in the manufacture and application of prostheses and orthoses (corsets, bands, apparatuses, special shoes and steels) for the restore of the lost forms and functions of the musculo-skeletal system, usage of the theoretical bases of prosthetics, usage of theory of replacement of the lost or irreversibly damaged parts of body by the artificial substitutes, usage of theory of the process of social-labor rehabilitation of the person, usage of theory of diseases of the musculo-skeletal apparatus and usage of the cognitive modeling technology in the applications of prosthetics].

XXI. “The applied scientific researches department “Applications of therapy (of the relieving or eliminating of symptoms and manifestations of the disease or trauma)”” (“APTHER (REL or ELIMS and MD or TR)”) (*)

[*t h e a p p l i e d s c i e n t i f i c r e s e a r c h e s i n a r e a “ A p p l i c a t i o n s o f t h e r a p y ”* – the section of the clinical medicine, studying the internal diseases, their prevention and treatment, usage of the theoretical bases of therapy, usage of theory of therapeutic approaches, usage of theory of etiotropic therapy (anti-bacterial therapy at the infectious diseases), usage of theory of pathogenetic therapy (the replacement therapy by the insulin at the mellitus diabetes in the relation with the insufficient production of this hormone by the pancreatic gland and the inability to restore this function at the modern level of development of medicine), usage of theory of symptomatic (palliative) therapy (the application of analgesics at the pain, the anti-pyretic drugs at “the high temperature”), usage of theory of symptomatic therapy at the impossibility of radical cure (the terminal stage of oncological disease), usage of theory of the medical-social actions (the palliative help), usage of theory of conservative treatment, usage of theory of conservative (non-surgical) treatment by the chemical, physical and biological methods (pharmaco-therapy, chemo-therapy, phyto-therapy, immune-therapy and other methods), usage of theory of the physical conservative methods of treatment (physio-therapy, massage, physio-therapy exercises and hydro-therapy), usage of theory of the physical methods of treatment by means of the electro-magnetic and sound radiations (radio-therapy, UHF-therapy, magneto-therapy, medicinal drug electro-phoresis and lasero-therapy), usage of theory of surgical treatment (surgical therapy) and usage of the cognitive modeling technology in the applications of therapy].

XXII. “The applied scientific researches department “Applications of endocrinology (of the diseases of the internal organs and the disorders of hormonal cycles)”” (“APEND (DIO and DHC)”) (*) [*the applied scientific researches in area “Applications of endocrinology”* – studies the hormones and their impact on the biological construct of the organism (of the person), usage of the theoretical bases of endocrinology, usage of theory of the structure and functions of the glands of internal secretion (of the endocrine glands), usage of theory of the products of the glands of internal secretion (of the hormones), usage of theory of the formation and action of the hormones on the organism of animals and person, usage of theory of diseases caused by the violation of function of the glands of internal secretion or hormones, usage of theory of disorders in the endocrine system, usage of theory of endocrine cardiology, usage of theory of endocrine oncology, usage of theory of endocrine ophthalmology, usage of theory of endocrine gastro-enterology, usage of theory of endocrine nephrology, usage of theory of endocrine neurology, usage of theory of endocrine gynecology and usage of the cognitive modeling technology in the applications of endocrinology].

XXIII. “The applied scientific researches department “Applications of epidemiology (of the infectious diseases)”” (“APEPID (ID)”) (*) [*the applied scientific researches in area “Applications of epidemiology”* – the general-medical scientific direction, studying the regularities of occurrence and spread of the diseases of various etiology with the purpose of development of the preventive actions (the premorbid prevention, primary prevention, secondary prevention and tertiary prevention), usage of the theoretical bases of epidemiology, usage of theory of the regularities of occurrence and spread of the diseases of various etiology, usage of theory of the development of preventive actions (the premorbid prevention, the primary, secondary and tertiary prevention), usage of theory of morbidity, usage of theory of regularities of the epidemic process, usage of theory of the population approach at the studying of the (non)infectious diseases, usage of theory of determining of the medical and social-economic significance of the disease and its place in the structure of the pathology of the population, usage of theory of studying of the regularities of spread of the disease over time (by the years and months), by the territory and among of the various groups of population (the age, sex and professional), usage of theory of revealing of the causes and conditions, determining the observed character of spread of the disease, usage of theory of developing of the recommendations for the optimizing of prevention, usage of theory of developing of the prediction of spread of the studied disease, usage of theory of the epidemiological methods (the observation, examination, the historical and geographical description, comparison, experiment, the statistical and logical analysis) and usage of the cognitive modeling technology in the applications of epidemiology].

XXIV. “The applied scientific researches department “Applications of surgery, cardio-vascular surgery, neuro-surgery, pediatric surgery, transplantology and artificial organs”” (“APSURGC-VSURGN-SURGPSEGT and AO”) (*)

[the applied scientific researches in area “ Applications of surgery ” – the area of the clinical medicine, studying the acute and chronic diseases, which are treated by means of the operative (surgical) method, consisting of the several consecutive stages: the preparing of the patient to the surgery, anesthesia (narcosis), the surgery intervention and restoration of the integrity of the tissues, disturbed during the operation, usage of the theoretical bases of surgery, usage of theory of diagnostic operations, usage of theory of radical operations, usage of theory of palliative operations, usage of theory of emergency operations, usage of theory of urgent operations, usage of theory of scheduled operations, usage of theory of reconstructive surgery, usage of theory of minimally-invasive surgery, usage of theory of abdominal surgery, usage of theory of thoracic surgery, usage of theory of surgical urology, usage of theory of surgical andrology, usage of theory of surgical gynecology, usage of theory of neuro-surgery, usage of theory of surgical angiology, usage of theory of cardiac-surgery, usage of theory of surgical endocrinology, usage of theory of surgical traumatology, usage of theory of surgical orthopedics, usage of theory of plastic surgery, usage of theory of surgical combustiology, usage of theory of surgical transplantology, usage of theory of surgical ophthalmology, usage of theory of maxilla-facial surgery, usage of theory of purulent surgery, usage of theory of surgical oncology and usage of the cognitive modeling technology in the applications of surgery;

the applied scientific researches in area “ Applications of cardio-vascular surgery (cardiac-surgery and cardio-thoracic surgery) ” – the area of surgery and cardiology, eliminating the pathologies of the cardio-vascular system, usage of the theoretical bases of cardio-vascular surgery, usage of theory of the ways of treatment of the coronary disease of the heart, the infarction of myocardium and atherosclerosis, usage of theory of coronary bypass-surgery, usage of theory of transplantation of the heart, usage of theory of surgeries on the valves of the heart, usage of theory of the surgery of Bentall at the aneurysm of ascending aorta with the aortic insufficiency, usage of theory of the surgery “maze” at the fibrillation of auricles and usage of the cognitive modeling technology in the applications of cardio-vascular surgery;

the applied scientific researches in area “ Applications of neuro-surgery ” – the section of surgery, engaging in the questions of operative treatment of the diseases of the nervous system, including the head brain, spinal cord and the peripheral nervous system, usage of the theoretical bases of neuro-surgery, usage of theory of biological construct of the head brain and spinal cord, usage of theory of stereo-taxy, usage of theory of trepanation and usage of the cognitive modeling technology in the applications of neuro-surgery;

the applied scientific researches in area “ Applications of pediatric surgery ” – the area of the clinical medicine, studying the acute and chronic diseases of children, which are threatened at the help of the operative (surgical) method, usage of the theoretical bases of pediatric surgery, usage of theory of pediatric diagnostic operations, usage of theory of pediatric radical operations, usage of theory of pediatric palliative operations, usage of theory of pediatric emergency operations, usage of theory of pediatric urgent operations, usage of theory of pediatric scheduled operations, usage of theory of pediatric reconstructive surgery, usage of theory of pediatric minimally-invasive surgery, usage of theory of pediatric abdominal surgery, usage of theory of pediatric thoracic surgery, usage of theory of pediatric surgical urology, usage of theory of pediatric surgical andrology, usage of theory of pediatric surgical gynecology, usage of theory of pediatric neuro-surgery, usage of theory of pediatric surgical angiology, usage of theory of pediatric cardiac-surgery, usage of theory of pediatric surgical endocrinology, usage of theory of pediatric surgical traumatology, usage of theory of pediatric surgical orthopedics, usage of theory of pediatric plastic surgery, usage of theory of pediatric surgical combustiology, usage of theory of pediatric surgical transplantology, usage of theory of pediatric surgical ophthalmology, usage of theory of pediatric maxilla-facial surgery, usage of theory of pediatric purulent surgery, usage of theory of pediatric surgical oncology usage of the cognitive modeling technology in the applications of pediatric surgery;

the applied scientific researches in area “ Applications of transplantology ” – the section of the clinical medicine, studying the problems of transplantation of the organs (in particular, kidneys, liver and heart), and also the prospects of the creation of artificial organs, usage of the theoretical bases of transplantology, usage of theory of xeno-transplantation (of the transplantation of the organs and / or tissues from the animal of the another biological kind), usage of theory of allo-transplantation (transplantation, at which the donor of transplant is the genetically and immunologically another human organism), usage of theory of artificial organs, usage of theory of growth of organs from the stem cells, usage of theory of auto-transplantation (the recipient of transplant is his donor for himself) and usage of the cognitive modeling technology in the applications of transplantology;

the applied scientific researches in area “ Applications of artificial organs ” – the direction in the modern clinical medicine, which is engaged in the growing of organs of the biological construct of the organism, usage of the theoretical bases of artificial organs, usage of theory of promising bio-engineering technology, usage of theory of three-dimensional cell cultures (3D cell culture), usage of theory of organoids (organoids), usage of theory of studying and modeling of organo-genesis, usage of theory of modeling of tumors and various diseases, usage of theory of the technology of testing and screening on the organoids of the various medicinal drugs and toxic substances, usage of theory of experiments on the replacement of organs or the therapy of damaged organs by the transplants and usage of the cognitive modeling technology in the applications of artificial organs].

The applied scientific researches directions and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.3.3. The applied scientific researches direction “Applications of pharmacology and pharmaceutics” (“APPHARMAC and PHARMAC”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction “Applications of pharmacology and pharmaceutics”” (“APPHARMAC and PHARMAC”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of pharmacology, pharmaco-epidemiology, pharmacy, bio-chemical pharmacology, clinical pharmacology, molecular pharmacology, pharmaco-genomics and experimental pharmacology”” (“APPHPH-EPPHB-CHPHCLPHMPHGH-G and EXPPH”) (*)
[the applied scientific researches in area “Applications of pharmacology” – the medical-biological science about the medicinal substances and their action on the organism (the science about the physiologically active substances), usage of the theoretical bases of pharmacology, usage of theory of pharmacology, methods and equipment for the pharmacological researches, usage of theory of pharmaco-kinetics and pharmaco-dynamics of the drugs and substances, usage of theory of molecular pharmacology, usage of theory of bio-pharmacology, usage of theory of cytological pharmacology, usage of theory of embryological pharmacology, usage of theory of genetic pharmacology, usage of theory of virological pharmacology, usage of theory of micro-biological pharmacology, usage of theory of botanical pharmacology, usage of theory of physiological pharmacology of the plants, usage of theory of zoological pharmacology, usage of theory of ecological pharmacology, usage of theory of anthropology of pharmacology, usage of theory of physiological pharmacology of the person and animals, usage of theory of immunological pharmacology, usage of theory of toxicological pharmacology, usage of theory of radiation pharmacology, usage of theory of space pharmacology, usage of theory of bio-engineering pharmacology, usage of the cognitive modeling technology in the applications of pharmacology;

the applied scientific researches in area “Applications of pharmaco-epidemiology” – the synthetic area of knowledge for the studying of the application and action of the medicinal drugs on the large groups of people, usage of the theoretical bases of pharmaco-epidemiology, usage of theory of studying of the application and action of the medicinal drugs on the large groups of people, usage of theory of the methodological apparatus of pharmaco-epidemiology (pharmacology and epidemiology), usage of theory of pharmaco-supervision and usage of the cognitive modeling technology in the applications of pharmaco-epidemiology;

the applied scientific researches in area “Applications of pharmacy” – the complex of scientific-practical disciplines, studying the problems of creation, safety, research, storage, manufacture, dispensing and marketing of medicinal drugs, and also the search of the natural sources of the medicinal substances, usage of the theoretical bases of pharmacy, usage of theory of pharmaceutical chemistry, usage of theory of the technology of synthesis of the pharmaceutical drugs and medicinal forms, usage of theory of judicial chemistry, usage of theory of pharmaco-gnosy, usage of theory of the organization and economics of pharmacy, usage of theory of military pharmacy and usage of the cognitive modeling of technology in the applications of pharmacy;

the applied scientific researches in area “Applications of bio-chemical pharmacology” – the direction in the modern clinical medicine, which is engaged in the creation of the genetic and metabolic certification of the impact of chemical compounds, including the drugs, on the biological organisms with the purpose of development of the principles of individual prevention and therapy, usage of the theoretical bases of bio-chemical pharmacology, usage of theory of system biology, usage of theory of mathematical bio-physics, usage of theory of regulation of hemostasis and thrombosis, usage of theory of intra-cellular signaling, usage of theory of self-organization, usage of theory of regulation of mitosis, usage of theory of development of protein micro-arrays, usage of theory of devices for the diagnostic usage of the cognitive modeling technology in the applications of bio-chemical pharmacology;

the applied scientific researches in area “Applications of clinical pharmacology” – the direction in the modern clinical medicine, which studying the impact of medicinal drugs on the organism of the sick person, usage of the theoretical bases of clinical pharmacology, usage of theory of the requirements to the testing of new pharmacological drugs, usage of theory of development of the principles and methods of comprehensive study of the action of pharmacological drugs, usage of theory of pharmaco-dynamics (the studying of a set of effects of the medicinal substance and its mechanisms of action), usage of theory of pharmaco-kinetics (the studying of the ways of admission, distribution, bio-transformation and removal of medicinal drugs from the organism of the patient), usage of theory of adverse reactions, usage of theory of the features of action of the medicinal substances in the various conditions, usage of theory of the interaction of drugs at their together application, usage of theory of impact of the food on the pharmaco-kinetics of medicinal drugs, usage of theory of pharmaco-genetics (the determining of the genetic bases of reactions of the organism on the medicinal drugs) and usage of the cognitive modeling technology in the applications of clinical pharmacology;

the applied scientific researches in area “Applications of molecular pharmacology” – the modern medical-biological scientific direction about the medicinal substances and their action on the organism on the molecular level (the scientific direction about the physiologically active substances, acting on the molecular level), usage of the theoretical bases of molecular pharmacology, usage of theory of molecular pharmacology, methods and equipment for the pharmacological researches on the molecular level, usage of theory of pharmaco-kinetics and pharmaco-dynamics of the drugs and substances on the molecular level, usage of theory of molecular pharmacology, usage of theory of molecular bio-pharmacology, usage of theory of cytological molecular pharmacology, usage of theory of embryological molecular pharmacology, usage of theory of genetic molecular pharmacology, usage of theory of virological molecular pharmacology, usage of theory of micro-biological molecular pharmacology, usage of theory of botanical molecular pharmacology, usage of theory of physiological molecular pharmacology of the plants, usage of theory of zoological molecular pharmacology, usage of theory of ecological molecular pharmacology, usage of theory of anthropology of molecular pharmacology, usage of theory of physiological molecular pharmacology of the person and animals, usage of theory of immunological molecular pharmacology, usage of theory of toxicological molecular pharmacology, usage of theory of radiation molecular pharmacology, usage of theory of space molecular pharmacology, usage of theory of bio-engineering molecular pharmacology and usage of the cognitive modeling technology in the applications of molecular pharmacology;

the applied scientific researches in area “Applications of pharmaco-genomics” – the branch of pharmaceutics and pharmacology, which researching the impact of genetic variation of each person in his response on the certain medicinal drug (pharmaco-genomics links the expression of the particular gene or single-nucleotide polymorphism in the genome of person with the efficiency or toxicity of the medicinal drug in order, that to develop the rational means of optimizing of pharmaco-therapy), usage of the theoretical bases of pharmaco-genomics, usage of theory of pharmaco-genomics, usage of theory of the genotypes of people, usage of theory of providing of the maximal efficiency at the minimal side effects, usage of theory of creation of “the personified medicine”, usage of theory of optimizing of the genetic characteristics of person, usage of theory of applied application of the genome of person, usage of theory of research of the interaction of the single gene with the medicinal drugs, usage of theory of treatment of the cancer of mammary gland, usage of theory of treatment of the virus of deficiency of the immune system, usage of theory of treatment of leukemia, theory of revealing of the potential adverse reactions in the response to the action of medicinal drugs and usage of the cognitive modeling technology in the applications of pharmaco-genomics;

the applied scientific researches in area “Applications of experimental pharmacology” – the modern medical-biological scientific direction about the experimental medicinal substances and their action on the organism (the scientific direction about the experimental physiologically active substances), usage of the theoretical bases of experimental pharmacology, usage of theory of experimental pharmacology, methods and equipment for the pharmacological experimental researches, usage of theory of pharmaco-kinetics and pharmaco-dynamics of the experimental drugs and substances, usage of theory of experimental molecular pharmacology, usage of theory of experimental bio-pharmacology, usage of theory of cytological experimental pharmacology, usage of theory of embryological experimental pharmacology, usage of theory of genetic experimental pharmacology, usage of theory of virological experimental pharmacology, usage of theory of micro-biological experimental pharmacology, usage of theory of botanical experimental pharmacology, usage of theory of physiological experimental pharmacology of the plants, usage of theory of zoological experimental pharmacology, usage of theory of ecological experimental pharmacology, usage of theory of anthropology of experimental pharmacology, usage of theory of physiological experimental pharmacology of the person and animals, usage of theory of immunological experimental pharmacology, usage of theory of toxicological experimental pharmacology, usage of theory of radiation experimental pharmacology, usage of theory of space experimental pharmacology, usage of theory of bio-engineering experimental pharmacology and usage of the cognitive modeling technology in the applications of experimental pharmacology].

The applied scientific researches directions and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.3.4. The applied scientific researches direction

“Applications of sports medicine” (“APSPM”)

of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction “Applications of sports medicine”” (“APSPM”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of medicine of competitions, sport and sports sciences”” (“APMCSP and SPS”)
[*the applied scientific researches in area “Applications of physical training and sport in medicine”* – the complex medical-biological scientific direction, studying the changes in the organism at the activities of sport (the desirable and pathological), usage of the theoretical bases of physical training and sport in medicine, usage of theory of physical training and sport, usage of theory of the medical-biological bases of physical training and sport, usage of theory of the material-technical base of physical training and sport, usage of theory of the methodological bases of the kinds of sport, theory of sports competitions and usage of the cognitive modeling technology in the applications of physical training and sport].

The applied scientific researches directions and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.3.5. The applied scientific researches direction “Applications of military medicine” (“APMILM”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction “Applications of military medicine”” (“APMILM”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS””) as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of medicine and medical education in the armed forces”” (“APM and NEDUC in MF”) [*the applied scientific researches in area “Applications of military medicine”* – usage of the theoretical bases of military medicine, usage of theory of medical exercises about the war and army, usage of theory of history of military medicine, usage of theory of military medical education and training of personnel, usage of theory of military medical politics, usage of theory of military medical doctrines, usage of theory of military medical science, usage of theory of military-applied medical science, usage of theory of military medical technics and technology, usage of theory of medicine in the armed forces, usage of theory of economics of military medicine usage of the cognitive modeling technology in the applications of military medicine].

The applied scientific researches directions and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.3.6. The applied scientific researches direction

“Applications of chemistry and chemical technologies in medicine” (“APCHEM and CHEMT in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction “Applications of chemistry and chemical technologies in medicine” (“APCHEM and CHEMT in M”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of chemistry, chemical technology and chemical industry in medicine”” (“APCHEM CHEMT and CHEMIND in M”)
*[the applied scientific researches in area “ Applications of chemistry ” (*) –*
usage of the theoretical bases of chemistry, usage of theory of general-laboratory chemical equipment, usage of theory of equipment, usage of theory of physical chemistry, usage of theory of non-organic chemistry, usage of theory of complex compounds, usage of theory of analytical chemistry, usage of theory of organic chemistry, usage of theory of bio-organic chemistry, usage of theory of natural organic compounds and their synthetic analogs, usage of theory of chemistry of high-molecular compounds, usage of theory of biological chemistry and usage of the cognitive modeling technology in the applications of chemistry (usage of theory of modeling of the structure of the (non-)organic chemical elements and chemical elements with 1, 2, 3, 4, 5 or more nucleuses);

the applied scientific researches in area
“Applications of chemical technology and chemical industry” –
usage of the theoretical bases of chemical technology and chemical industry,
usage of theory of processes and apparatuses of chemical technology, usage of theory of chemical raw materials,
usage of theory of technology of non-organic substances and products,
usage of theory of production of silicate and refractory non-metallic materials,
usage of theory of industrial organic synthesis,
usage of theory of industrial synthesis of organic dyes and pigments,
usage of theory of technology of photographic materials,
usage of theory of technology of chemical-pharmaceutical means,
usage of theory of technology of fragrant substances,
usage of theory of technology of pesticides and disinfecting substances,
usage of theory of technology of natural high-molecular compounds,
usage of theory of technology of synthetic high-molecular compounds,
usage of theory of technology of plastics, usage of theory of technology of production of rubbers and products from them,
usage of theory of technology of varnish-paint materials and organic coatings,
usage of theory of technology of chemical fibers and threads,
usage of theory of technology of chemical reactants and especially clear substances,
usage of theory of technology of production of the products of household chemistry,
usage of theory of technology of auxiliary materials
and usage of the cognitive modeling technology in the applications
of chemical technology and chemical industry].

The applied scientific researches directions and departments of “SEC”
allow to develop the main and derivative scientific results of CMT.

5.3.7. The applied scientific researches direction

“Applications of biology, physiology and bio-physiological technologies in medicine” (“APBIOLPHYS and B-PHYST in M”) of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction "Applications of biology, physiology and bio-physiological technologies in medicine"” (“APBIOLPHYS and B-PHYST in M”) treats to the applied scientific researches divisions of “The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after academician Burdenko N.N.” (“SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO "Academy of cognitive natural sciences"” (“SIO "ACNS"”) as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU "LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department "Applications of general biology"” (“APGENB”) [*the applied scientific researches in area “Applications of biology”* – usage of the theoretical bases of biology, usage of theory of biology, usage of theory of methods and equipment for the biological researches, usage of theory of molecular biology, usage of theory of bio-physics, usage of theory of cytology, usage of theory of embryology, usage of theory of genetics, usage of theory of parasitology, usage of theory of virology, usage of theory of micro-biology, usage of theory of botany, usage of theory of physiology of plants, usage of theory of zoology, usage of theory of ecology, usage of theory of anthropology, usage of theory of physiology of person and animals, usage of theory of morphology of person and animals, usage of theory of immunology, usage of theory of pharmacology, usage of theory of toxicology, usage of theory of radiation biology, usage of theory of space biology, usage of theory of bionics, usage of theory of bio-cybernetics, usage of theory of bio-engineering and usage of the cognitive modeling technology in the applications of biology (usage of theory of modeling of the biological construct of the organism of the organic individual)].

II. "The applied scientific researches department "Applications of physical-chemical bio-technology" ("APPHYS-CHEMB-T") (*)
[the applied scientific researches in area " Applications of bio - technology " (*) –
 usage of the theoretical bases of bio-technology,
 usage of theory of raw materials and producers for the bio-technological production,
 usage of theory of radio-biology, usage of theory of bio-physics, usage of theory of molecular biology,
 usage of theory of bio-chemistry, usage of theory of bio-technologies and bio-nano-technologies,
 usage of theory of molecular genetics, usage of theory of bio-engineering,
 usage of theory of mathematical biology and bio-informatics,
 usage of theory of bio-technological processes and apparatuses,
 usage of theory of cell engineering, usage of theory of technological bio-energetics,
 usage of theory of applied genetic engineering, usage of theory of engineering enzymology,
 usage of theory of the immune-bio-technological methods of the analysis,
 other theories and problems of bio-technology (genetic engineering)
 and usage of the cognitive modeling technology in the applications of bio-technology
 (usage of theory of modeling of the structure of the desoxyribonucleic
 acid based on the cognitive cylinder)] .

III. "The applied scientific researches department "Applications of physiology, bio-physiology and private physiology (of sensory systems)" ("APPHYSB-PHYS and PRPHYS (SS)) (*)
[the applied scientific researches in area " Applications of physiology " (*) –
 usage of the theoretical bases of physiology, usage of general questions of theoretical physiology,
 usage of theory of methods and equipment for the physiological researches,
 usage of theory of physiology, usage of theory of molecular physiology,
 usage of theory of physiological cytology,
 usage of theory of physiological embryology, usage of theory of physiological genetics,
 usage of theory of physiology of viruses, usage of theory of micro-physiology,
 usage of theory of physiology of organic individuals, usage of theory of physiology of plants,
 usage of theory of zoological physiology, usage of theory of ecological physiology,
 usage of theory of anthropology of physiology, usage of theory of physiology of person and animals,
 usage of theory of physiological immunology, usage of theory of physiological pharmacology and toxicology,
 usage of theory of radiation physiology, usage of theory of space physiology,
 usage of theory of physiological cybernetics
 and usage of the cognitive modeling technology in the applications of physiology;

the applied scientific researches in area “Applications of bio-physiology and public-health-service” () – usage of the theoretical bases of bio-physiology and public-health-service, usage of general questions of theoretical bio-physiology and public-health-service, usage of theory of bio-medical-physiological disciplines: usage of theory of private physiology of analyzers and sensory systems, usage of theory of bio-physiological materials, means and products, usage of theory of bio-physiological technics, usage of theory of clinical physiology, usage of theory of physiological bio-pharmacology and bio-epidemiology, usage of theory of other branches of bio-medicine and public-health-service, usage of theory of social physiology, usage of theory of organization and management of public-health-service, usage of theory of modified model of reduced eye, usage of theory of software for the automation of research tasks of the physiological, psychological and linguistic parameters of the parametrical cognitive models block in medicine, usage of theory of statistical substantiation of the practical use of received results, usage of theory of the physiological, psychological and linguistic factors influencing to the efficiency of functioning of the information-educational environment and the increase of productivity of the automated training system with the properties of adaptation based on the cognitive models, usage of theory of organization and plan of carrying out of experiment, usage of theory of research of the physiological, psychological and linguistic parameters of the cognitive models of the subject of training and the means of training, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of methods of the statistical analysis of generated data sets, usage of theory of the analysis of the dynamics of resultativity of the objects, processes and phenomena in bio-physiology and public-health-service, usage of theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists, usage of theory of the complex analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in Descartes space of the 2 and 3 coordinates and usage of the cognitive modeling technology in the applications of bio-physiology and public-health-service].*

The applied scientific researches directions and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.3.8. The applied scientific researches direction “Applications of mathematics and mathematical technologies in medicine” (“APMATH and MATHT in M”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction “Applications of mathematics and mathematical technologies in medicine” (“APMATH and MATHT in M”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of medical mathematics and the complex system analysis based on the cognitive modeling technology”” (“APMMATH and DSAB on CMT”) (*)
[the applied scientific researches in area “Applications of medical mathematics” () – usage of the theoretical bases of medical mathematics, usage of general questions of theoretical medical mathematics, usage of theory of mathematical logic and theoretical bases of mathematics in medicine, usage of theory of numbers in medicine, usage of theory of medical algebra, usage of theory of medical topology, usage of theory of medical geometry, usage of theory of the mathematical analysis in medicine, usage of theory of the functions of valid variables in medicine, usage of theory of the functions of complex variables in medicine, usage of theory of ordinary differential equations in medicine, usage of theory of differential equations with the private derivatives in medicine, usage of theory of integrated equations in medicine, usage of theory of mathematical models of the objects, processes and phenomena of natural sciences and technical sciences in medicine, usage of theory of the equations of mathematical physics in medicine, usage of theory of variation calculus in medicine, usage of the mathematical theory of optimal control in medicine, usage of theory of the functional analysis in medicine, usage of theory of calculus mathematics in medicine, usage of theory of probability and mathematical statistics in medicine, usage of theory of the combinatory analysis in medicine, usage of theory of graphs in medicine, usage of theory of mathematical cybernetics in medicine, usage of theory of the ways of representation of the cognitive models and problem environments in medicine, usage of theory of the parametrical cognitive models block in medicine and usage of the cognitive modeling technology in the applications of medical mathematics;*

the applied scientific researches in area “Applications of the complex system analysis in medicine” ()* – usage of the theoretical bases of the complex system analysis in medicine, usage of general questions of the theoretical complex system analysis in medicine, usage of theory of tendencies, dependences and regularities of the complex system analysis of the objects, processes and phenomena in medicine, usage of theory of the cognitive modeling technology with the dynamic cloning, verification and subverification in medicine, usage of theory of the iterative cycle of the cognitive modeling technology in medicine, usage of theory of the technique of use of the cognitive modeling technology for the complex system analysis of the difficult objects, processes and phenomena in medicine, usage of theory of the parametrical cognitive models block for the complex system analysis and the increase of functioning efficiency of the difficult objects, processes and phenomena in medicine, usage of theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd generation in medicine, usage of theory of the ways of representation of the structure of the cognitive models and problem environments in medicine: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of algorithms of formation of the structure of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, usage of theory of techniques of research of parameters of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, usage of theory of algorithms of processing of a posteriori data of the complex system analysis of the problem spheres in medicine, usage of theory of software for the automation of the tasks of research in medicine, usage of theory of the statistical substantiation of practical use of the received results in medicine, usage of theory of factors influencing on the efficiency of functioning of the difficult objects, processes and phenomena in medicine, usage of theory of organization and plan of carrying out of the experiment in medicine, usage of theory of research of the parameters of the cognitive models in medicine, usage of theory of preliminary processing of a posteriori results of diagnostics in medicine, usage of theory of choice of the methods of the statistical analysis of the formed data sets in medicine, usage of theory of the analysis of dynamics of the resultativity of training in medicine, usage of theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in medicine, usage of theory of the complex system analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color-perception in Descartes space of the 2 and 3 coordinates and usage of the cognitive modeling technology in the applications of the complex system analysis in medicine].

II. "The applied scientific researches department "Applications of medical cybernetics and (cognitive) informatics" ("APMCYB and (CONG)INF") (*)
[the applied scientific researches in area "Applications of medical cybernetics" – usage of the theoretical bases of medical cybernetics, usage of theory of the automatic control systems in medicine, usage of theory of modeling in medicine, usage of theory of the cybernetic control systems in medicine, usage of theory of information in medicine, theory of artificial intelligence in medicine, usage of the applied theory of discrete (finite) automats and formal languages in medicine, usage of the applied theory of reliability in medicine, usage of theory of the applied system analysis in medicine and usage of the cognitive modeling technology in the applications of medical cybernetics; the applied scientific researches in area "Applications of medical informatics" – usage of the theoretical bases of medical informatics, usage of theory of medical informatics, usage of theory of the organization of information activity in medicine, usage of theory of the documentary sources of information in medicine, usage of theory of analytic-synthetic processing of the documentary sources of information in medicine, usage of theory of information search in medicine, usage of theory of information service in medicine, usage of theory of the technical means of support of the information processes in medicine and usage of the cognitive modeling technology in the applications of medical informatics; the applied scientific researches in area "Applications of medical cognitive informatics" () – usage of the theoretical bases of medical cognitive informatics, usage of theory of the layer-step model of perception (psycho-physiology of perception), processing (cognitive psychology) and understanding (applied linguistics) of the content of information fragments in medicine, usage of the theoretical bases of the parametrical cognitive models block for the system analysis of the information-educational environments in medicine (the cognitive models of the subject of training and the means of training), usage of the theoretical bases of the parametric cognitive models block for the financial analysis of the (credit) organizations in medicine (the cognitive models for the vertical, horizontal and trend financial analysis), usage of the theoretical bases of formation of the parametrical cognitive models block in medicine, usage of theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd generation in medicine,*

usage of theory of the ways of representation of the structure of the cognitive models and problem environments in medicine: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models), usage of theory of the algorithms of formation of the structure of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, usage of theory of the techniques of research of the parameters of the difficult cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, usage of theory of the adaptive automation means of the information-educational environment in medicine (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean's office, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction in medicine (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and others), usage of theory of the technical means of support of the financial analysis in medicine (the automation means of formation of the working plan of accounts based on the normative-regulated plan of accounts of the accounting, the automation means of formation of the accounting balance and the report about profits and losses of organization, the automation means of the vertical financial analysis of the organization, the automation means of the horizontal financial analysis of the organization, the automation means of the trend financial analysis of the organization, based on the analytical coefficients system), usage of theory of the technical means of support of the complex analysis in medicine (the automation means of formation and research of the cognitive circle, the automation means of formation and research of the cognitive disc, the automation means of formation and research of the cognitive cylinder, the automation means of formation and research of the cognitive cone, the automation means of formation and research of the cognitive sphere, the automation means of formation and research of the one-, two-, three-, four-, five- and more cognitive sphere and others) usage of the cognitive modeling technology in the applications of medical cognitive informatics].

The applied scientific researches directions and departments of "SEC" allow to develop the main and derivative scientific results of CMT.

5.3.9. The applied scientific researches direction “Applications of nano-technologies and information technologies in medicine” (“APNANO-T and INFT in M”) of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”

The developed “The applied scientific researches direction “Applications of nano-technologies and information technologies in medicine”” (“APNANO-T and INFT in M”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of medical electronics, radio-technics and connection”” (“APMELR-T and CONN”) [the applied scientific researches in area “Applications of medical electronics and radio-technics” – usage of the theoretical bases of medical electronic technics, usage of theory of medical radio-technics, usage of theory of materials for the medical electronics and radio-technics, usage of theory of technology and equipment for the medical electronic and radio-technical production, usage of theory of designing and constructing of the medical electronic devices and radio-electronic equipment, usage of theory of medical electrical-vacuum and gas-discharge devices and units, usage of theory of medical accelerators of charged particles and plasma, usage of theory of medical solid-state devices, usage of the theoretical bases of quantum medical electronics, usage of theory of medical holography, usage of the theoretical bases of medical cryo-electronics, usage of theory of medical radio-electronic schemes, usage of theory of propagation of radio-waves in the biological construct of the organism, usage of theory of medical antennas, usage of theory of medical waveguides, usage of theory of elements of the medical microwave-technics, usage of theory of medical radio-transmitting and radio-receiving devices, usage of theory of medical radio-technical systems of sensing, location and navigation, usage of theory of medical television (TV) technics, usage of theory of recording and reproducing of the signals in medicine, usage of theory of medical electrical-acoustics, usage of theory of ultra-sound and infra-sound medical technics, usage of theory of infra-red medical technics, usage of theory of nodes, details and elements of the medical radio-electronic equipment, usage of theory of devices for the radio-technical measurements in medicine, usage of theory of medical systems and devices of the displaying of information and usage of the cognitive modeling technology in the applications of medical electronics and radio-technics;

the applied scientific researches in area “Applications of communication in medicine” – usage of the theoretical bases of communication in medicine, usage of theory of designing and constructing of the medical devices of communication, usage of theory of technology and equipment for the assembly and adjustment of the medical equipment of communication, the systems of transmission and the lines of communication, usage of theory of multi-channel communication in medicine, usage of theory of networks and nodes of communication in medicine, usage of theory of the medical services and the facilities of communication in medicine, usage of theory of medical telegraph (cable) communication and equipment, usage of theory of medical systems and equipment of the transmission of data, usage of theory of medical tele-information services and equipment, usage of theory of medical telephone communication and equipment, usage of theory of medical systems of the transmitting of moving images and sound, usage of theory of medical facsimile communication and equipment, usage of theory of medical radio-communication and radio-broadcasting, usage of theory of medical light-guiding communication and equipment, usage of theory of television (TV) in medicine, usage of theory of medical optical communication in the free space and medical equipment, usage of theory of medical postal communication and usage of the cognitive modeling technology in the applications of communication in medicine].

II. “The applied scientific researches department “Applications of medical automatics, computing technics and the system analysis based on the cognitive modeling technology” (“APMAUTCT and SAB on CMT”) (*)

[the applied scientific researches in area “Applications of medical automatics and computer engineering” – usage of the theoretical bases of medical automatics and computer engineering, usage of theory of automatic control in medicine, usage of the theoretical bases of programming in medicine, usage of the theoretical bases of computer engineering in medicine, usage of theory of the elements, units and devices of automatics and computer engineering in medicine, usage of theory of the devices of input-output in medicine, usage of theory of the memory devices in medicine, usage of theory of technology and equipment for the production of the medical means of automatics and computer engineering, usage of theory of the keyboard and counting-perforating machines in medicine, usage of theory of the analog calculating machines (ACM) in medicine, usage of theory of the digital calculating machines and calculating complexes (DCM) in medicine, usage of theory of the analog-digital (hybrid) calculating machines and calculating complexes in medicine, usage of theory of calculating centers (CC) in medicine, usage of theory of calculating networks (CN) in medicine, usage of theory of the software of the calculating machines, complexes and networks in medicine, usage of theory of the systems of automatic control, regulation and measurement in medicine, usage of theory of the systems of tele-control and tele-measurement in medicine, usage of theory of the automated control systems of the technological processes in medicine, usage of theory of the automated organizational managerial control systems in medicine, usage of theory of design automation in medicine, usage of theory of the automation of scientific researches in medicine and usage of the cognitive modeling technology in the applications of medical automatics and computer engineering;

the applied scientific researches in area “Applications of the system analysis in medicine” ()* – usage of the theoretical bases of the system analysis in medicine, usage of theory of tendencies, dependencies and regularities of the system analysis of the objects, processes and phenomena in medicine, usage of theory of the cognitive modeling technology with the dynamic cloning, verification and subverification in medicine, usage of theory of the iterative cycle of the cognitive modeling technology in medicine, usage of theory of the technique of use of the cognitive modeling technology in medicine, usage of theory of the parametrical cognitive models block for the system analysis of the information-educational environments in medicine and the improving of functioning efficiency of the automated training system with the properties of adaptation based on the cognitive models in medicine (the cognitive models of the subject of training and the means of training), usage of theory of the ways of representation of the structure of the cognitive models and problem environments in medicine: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithms of formation of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, usage of theory of the techniques of research of the parameters of the cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, usage of theory of the algorithms of the analysis of the a posteriori results of research in medicine, usage of theory of the adaptive automation means of the information-educational environment in medicine (the main and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean's office, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction in medicine (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and others), usage of theory of statistical justification of the practical use of the obtained results in medicine, usage of theory of the factors affecting on the efficiency of formation of knowledge in the information-educational environment in medicine and the effectiveness of functioning of the complex objects, processes and phenomena in medicine, usage of theory of organization and plan of the carrying out of experiment in medicine, usage of theory of research of the parameters in medicine, usage of theory of the preliminary processing of a posteriori results of diagnostics in medicine, usage of theory of selection of the methods of the statistical analysis of the formed samples of data in medicine, usage of theory of the analysis of dynamics of the resultativity of training in medicine, usage of theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in medicine and usage of the cognitive modeling technology in the applications of the system analysis in medicine].

III. “The applied scientific researches department
“Applications of nano-technologies for the mechanical-engineering, instrument-making,
polygraphy, reprography and photo-cinema-technics, the light and food-processing industry,
transport, architecture and construction in medicine””
(“APNANO-T for M-EI-MPRPH-S-TL and FITA and C in M”) (*)
*[the applied scientific researches in area
“Applications of nano-technologies for the mechanical-engineering in medicine”* –
usage of the theoretical bases of nano-technologies for the mechanical-engineering in medicine,
usage of theory of medical nano-technologies for the machine-science and details of machines in medicine,
for the machine-building materials in medicine,
for the technologies of mechanical-engineering in medicine,
for the foundry production in medicine,
for the forging-stamping production in medicine,
for the assembly production in medicine,
for the cutting of materials in medicine, for the electrical-physical-chemical treatment in medicine,
for the thermal and reinforcing powder materials in medicine,
for the production of non-metallic products in medicine,
for the machine-tool-engineering in medicine, for the robotics in medicine,
for the instrumental production in medicine,
for the mining mechanical-engineering in medicine, for the metallurgical mechanical-engineering in medicine,
for the boiler-building in medicine, for the turbine-building in medicine,
for the special power units in medicine,
for the chemical and oil mechanical-engineering in medicine,
for the locomotive-building and carriage-building in medicine,
for the engine-building in medicine, for the automobile-building in medicine,
for the ship-building in medicine, for the aircraft-building in medicine,
for the space technics and rocket-building in medicine,
for the lifting-transportational mechanical-engineering in medicine,
for the construction and road mechanical-engineering in medicine,
for the communal mechanical-engineering in medicine,
for the tractor and agricultural mechanical-engineering in medicine,
for the mechanical-engineering of light industry in medicine,
for the polygraphic mechanical-engineering in medicine,
for the mechanical-engineering of the food-processing industry in medicine,
for the mechanical-engineering of trade and public catering in medicine,
for the household machines and devices in medicine,
for the production of weapons in medicine, for the other branches of mechanical-engineering in medicine
and usage of the cognitive modeling technology in the applications
of nano-technologies for the mechanical-engineering in medicine;

the applied scientific researches in area “Applications of nano-technologies for the instrument-making in medicine” – usage of the theoretical bases of nano-technologies for the instrument-making in medicine, usage of theory of medical nano-technologies for the theoretical bases of instrument-making in medicine, for the general technology of production and equipment in the medical instrument-making, for the designing and constructing of devices in medicine, for the devices of measuring of the electrical and magnetic values in medicine, for the devices of measuring of the mechanical values in medicine, for the devices of measuring of the time and frequency in medicine, for the devices of measuring of the composition and physical-chemical properties of the substances and materials in medicine, for the devices of thermal-technical and thermal-physical measurements in medicine, for the devices of measuring of the acoustic values and characteristics in medicine, for the devices of measuring of the optical and lighting-technical values and characteristics in medicine, for the devices of measuring of the ionizing radiations in medicine, for the devices of non-destructive control of the products and materials in medicine, for the general structural elements and units of measuring devices, systems and the means of office-equipment in medicine and usage of the cognitive modeling technology in the applications of nano-technologies for the instrument-making in medicine;

the applied scientific researches in area “Applications of nano-technologies for the polygraphy, reprography and photo-cinema-technics in medicine” – usage of the theoretical bases of nano-technologies for the polygraphy, reprography and photo-cinema-technics in medicine, usage of theory of medical nano-technologies for the polygraphy, reprography and photo-cinema-technics in medicine and usage of the cognitive modeling technology in the applications of nano-technologies for the polygraphy, reprography and photo-cinema-technics in medicine;

the applied scientific researches in area “Applications of nano-technologies for the light industry in medicine” – usage of the theoretical bases of nano-technologies for the light industry in medicine, usage of theory of medical nano-technologies for the textile industry in medicine, for the knitting industry in medicine, for the garment industry in medicine, for the leather industry in medicine, for the fur industry in medicine, for the industry of artificial leather and film materials in medicine, for the shoe industry in medicine, for the leather-haberdashery industry in medicine, for bristle-brush production in medicine, for the production of furniture in medicine and usage of the cognitive modeling technology in the applications of nano-technologies for the light industry in medicine;

the applied scientific researches in area
“Applications of nano-technologies for the food-processing industry in medicine” –

usage of the theoretical bases of nano-technologies for the food-processing industry in medicine, usage of theory of medical nano-technologies for the food raw materials and auxiliary materials in medicine, for the processes and apparatuses of food productions in medicine, for the elevator and flour-cereal industry in medicine, for the combi-feed industry in medicine, for the bread-baking and macaroni industry in medicine, for the confectionery industry in medicine, for the sugar industry in medicine, for the starch-molasses industry in medicine, for the barmy industry in medicine, for the beer-brewing industry in medicine, for the spirit industry in medicine, for the industry of high-alcoholic beverages in medicine, for the wine-making industry in medicine, for the industry of non-alcoholic beverage in medicine, for the canning, vegetable-drying and food-concentrate industry in medicine, for the food-taste industry in medicine, for tobacco industry in medicine, for the meat and poultry-processing industry in medicine, for the production of eggs and egg products in medicine, for the dairy industry in medicine, for the oil-fat industry in medicine and usage of the cognitive modeling technology in the applications of nano-technologies for the food-processing industry in medicine;

the applied scientific researches in area
“Applications of nano-technologies for the transport in medicine” –

usage of the theoretical bases of nano-technologies for the transport in medicine, usage of theory of medical nano-technologies for the railway transport in medicine, for the automobile transport in medicine, for the water transport in medicine, for the air transport in medicine, for the pipeline transport in medicine, for the industrial transport in medicine, for the urban transport in medicine, for the interaction of the different kinds of transport in medicine, for the mixed transportations in medicine, for the other kinds of transport in medicine and usage of the cognitive modeling technology in the applications of nano-technologies for the transport in medicine;

the applied scientific researches in area “Applications of nano-technologies for the architecture and construction in medicine” ()* – usage of the theoretical bases of nano-technologies for the architecture and construction in medicine, usage of the engineering-theoretical bases of construction and architecture in medicine, usage of theory of building materials and products in medicine, usage of theory of building constructions in medicine, usage of theory of technology of construction-installation works in medicine, usage of theory of technology of production of building materials, products, machines, mechanisms, equipment and tools, used in the construction and industry of building-materials in medicine, usage of theory of engineering surveys in the medical construction, usage of theory of architectural-construction design in medicine, usage of theory of district planning in medicine, usage of theory of town-planning in medicine, usage of theory of the objects of construction and engineering support of the objects of construction in medicine, usage of theory of tendencies, dependencies and regularities in the medical architecture and construction, usage of theory of the cognitive modeling technology with the dynamic cloning, verification and subverification in the medical architecture and construction, usage of theory of the iterative cycle of the cognitive modeling technology in the medical architecture and construction, usage of theory of the technique of use of the cognitive modeling technology in the medical architecture and construction, usage of theory of the parametrical cognitive models block for the architecture and construction in medicine (buildings and constructions based on the cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), usage of the theoretical bases of formation of the parametrical cognitive models block in the medical architecture and construction, usage of theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd generation in the medical architecture and construction, usage of theory of the ways of representation of the structure of the cognitive models and problem environments in the medical architecture and construction: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithms of formation of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations in the medical architecture and construction, usage of theory of the techniques of research of the parameters of the cognitive models of the 0th, 1st, 2nd and 3rd generations in the medical architecture and construction, usage of theory of the algorithms of the analysis of a posteriori results of research in the medical architecture and construction, usage of theory of the adaptive automation means of the architecture and construction in medicine (the automation means of formation and research of the cognitive circle, the automation means of formation and research of the cognitive disc, the automation means of formation and research of the cognitive cylinder, the automation means of formation and research of the cognitive cone, the automation means of formation and research of the cognitive sphere, the automation means of formation and research of the cognitive sphere and others), usage of theory of statistical justification of the practical use of the received results in medical architecture and construction, usage of theory of the factors affecting on the efficiency of architecture and construction of the buildings and constructions in medicine, usage of theory of the organization and plan of carrying out of the experiment in the medical architecture and construction, usage of theory of research of the parameters of the parametrical cognitive models block in the medical architecture and construction, usage of theory of preliminary processing of a posteriori results of the diagnostics in the medical architecture and construction, usage of theory of selection of the methods of the statistical analysis of the formed samples of data in the medical architecture and construction, usage of theory of the analysis of the dynamics of resultativity of the architecture and construction in medicine, usage of theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in the medical architecture and construction and usage of the cognitive modeling technology in the applications of nano-technologies for the architecture and construction in medicine].

The applied scientific researches directions and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

**5.3.10. The applied scientific researches direction
“Applications of social-science and technologies of social sciences
in medicine” (“TSOC-ST and TSOCs in M”)
of “SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.”**

The developed “The applied scientific researches direction “Applications of social-science and technologies of social sciences in medicine”” (“TSOC-S and TSOCs in M”) treats to the applied scientific researches divisions of “The scientific-educational centre “System and financial analysis based on cognitive modeling technology” of “RA(M)S” named after academician Burdenko N.N.” (“SEC “SFA CMT” of “RA(M)S” n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO “Academy of cognitive natural sciences”” (“SIO “ACNS”)” as the add. component of the system of science and education of the modern country for the creation, distribution and use of the main and derivative scientific results of the cognitive modeling technology (CMT) (www.vetrovan.spb.ru) [see the applied scientific researches directions and departments of “SEC”]:

- 1) it is executed by the principle of “the administrative-economy submission”;
- 2) works in the several main directions, which allow to provide the development of the applied main and derivative scientific results (my second report on SRW from 2006-2008(9) y. was submitted to “SPbSETU “LETI”” and “The Government of RF” for the translation, carrying out of int. action and receiving of “The Nobel prize”);
- 3) includes the several various main divisions:
I. “The applied scientific researches department “Applications of social sciences, philosophy, science-study, politics and political sciences, sociology, (cognitive) psychology, state, law and jurisprudential sciences, patent business, invention and rationalization in medicine”” (“APSOCSPHS-STP and PSS(C)PSL and JSPBI and R in M”) (*)
[the applied scientific researches in area “Applications of social sciences in medicine” – usage of the theoretical bases of social sciences in medicine, usage of theory of social sciences and ideology in medicine, usage of theory of the history of social sciences in medicine, usage of theory of the modern condition of social sciences in medicine, usage of theory of scientific societies, conventions, congresses, conferences and symposiums on the social sciences in medicine, usage of theory of international cooperation in the area of social sciences in medicine, usage of theory of the organization of scientific-research work in the area of social sciences in medicine, usage of theory of information activity in social sciences in medicine, usage of theory of the terminology of social sciences in medicine, usage of theory of the promotion and popularization of social sciences in medicine, usage of theory of the teaching of social sciences in medicine, usage of theory of mathematical modeling in the social and humanitarian sciences in medicine, usage of theory of the personnel of social-scientists in medicine and usage of the cognitive modeling technology in the applications of social sciences in medicine;

the applied scientific researches in area “Applications of philosophy in medicine” – usage of the theoretical bases of philosophy in medicine, usage of theory of the general problems of modern philosophy in medicine, usage of theory of general-philosophical problems in medicine, usage of theory of logic in medicine, usage of theory of philosophy and methodology of science in medicine, usage of theory of social philosophy in medicine, usage of theory of ethics in medicine, usage of theory of aesthetics in medicine, usage of theory of philosophy of religion and atheism in medicine, usage of theory of history of philosophy in medicine and usage of the cognitive modeling technology in the applications of philosophy in medicine;

the applied scientific researches in area “Applications of science-study in medicine” – usage of the theoretical bases of science-study in medicine, usage of theory of the development of medicine as the science, usage of theory of science and society in medicine, usage of theory of the sociology of science in medicine, usage of theory of scientific work and scientific creativity in medicine, usage of theory of the organization of science in medicine, usage of theory of politics in the area of medicine as the science, usage of theory of the technique and technics of research work in medicine, usage of theory of the economics of medicine as the science, usage of theory of scientific personnel in medicine, usage of theory of international cooperation in medicine as the science, usage of theory of medicine as the science and the scientific-research work in the separate countries and usage of the cognitive modeling technology in the applications of science-study in medicine;

the applied scientific researches in area “Applications of politics and political sciences in medicine” – usage of the theoretical bases of politics and political sciences in medicine, usage of theory of the methodology of political researches in medicine, usage of theory of the history of political doctrines in medicine, usage of theory of political systems in medicine, usage of theory of internal policy in medicine, usage of theory of international relations in medicine, usage of theory of foreign (external) policy and diplomacy in medicine and usage of the cognitive modeling technology in the applications of politics and political sciences in medicine;

the applied scientific researches in area “Applications of sociology in medicine” – usage of the theoretical bases of sociology in medicine, usage of theory of the general problems of modern sociology in medicine, usage of theory of the methodology of sociology in medicine, usage of theory of the technique and technics of sociological researches in medicine, usage of theory of society as the system in medicine, usage of theory of social relations and processes in medicine, usage of theory of social classes, communities and groups in medicine, usage of theory of sociology of the spheres of social life in medicine, usage of theory of social phenomena and institutions in medicine, usage of theory of the sociology of personality and behavior in medicine, usage of theory of the historical and regional sociology in medicine, usage of theory of the applied sociology in medicine, usage of theory of the history of sociology in medicine and usage of the cognitive modeling technology in the applications of sociology in medicine;

the applied scientific researches in area “Applications of (cognitive) psychology in medicine” ()* – usage of the theoretical bases of (cognitive) psychology in medicine, usage of theory of general psychology in medicine, usage of theory of the psychology of development in medicine, usage of theory of age psychology in medicine, usage of theory of comparative psychology in medicine, usage of theory of social psychology in medicine, usage of theory of applied psychology in medicine, usage of theory of the layered-step model of processing (cognitive psychology) of the content of information fragments in medicine, usage of the theoretical bases of cognitive psychology and the cognitive modeling technology in medicine, usage of the theoretical bases of formation of the parametrical cognitive models block in the theoretical (cognitive) psychology in medicine, usage of theory of the structure of the cognitive model of the 0th, 1st, 2nd and 3rd generation in the theoretical (cognitive) psychology in medicine, usage of theory of the ways of representation of the structure of the cognitive models and problem environments in the theoretical (cognitive) psychology in medicine: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithms of formation of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations in the theoretical (cognitive) psychology in medicine, usage of theory of the techniques of research of the parameters of the cognitive models of the 0th, 1st, 2nd and 3rd generation in the theoretical (cognitive) psychology in medicine, usage of theory of the algorithms of the analysis of a posteriori results of research in the theoretical (cognitive) psychology in medicine, usage of theory of the adaptive automation means of the information-educational environment in the theoretical (cognitive) psychology in medicine (the basic and applied diagnostic module, the electronic textbook, the laboratory practical work, the electronic dean's office, the electronic library and others), usage of theory of the technical means of support of the adaptive information interaction in the theoretical (cognitive) psychology in medicine (the adaptive representation of sequence of information fragments processor, the question-answers structures sequence processing processor, the linguistic processor and others), usage of theory of technical means of support of the system analysis in the theoretical (cognitive) psychology in medicine (the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive circle, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive disc, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive cylinder, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive cone, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the cognitive sphere, the automation means of formation and research of the psychological parameters of the cognitive model in the view of the one-, two-, three-, four-, five- and more cognitive sphere and others) and usage of the cognitive modeling technology in the applications of (cognitive) psychology in medicine;

the applied scientific researches in area “Applications of state management, law and jurisprudential sciences in medicine” – usage of the theoretical bases of state management, law and jurisprudential sciences in medicine, usage of theory of country and law in medicine, usage of theory of the history of country and law in medicine, usage of theory of the history of political and legal doctrines in medicine, usage of theory of constitutional (state) law in medicine, usage of theory of municipal law in medicine, usage of theory of administrative law in medicine, usage of theory of information law in medicine, usage of theory of financial law in medicine, usage of theory of entrepreneurial law in medicine, usage of theory of civil law in medicine, usage of theory of civil-processual law (civil process) in medicine, usage of usage of theory of arbitration-processual law (arbitration process) in medicine, usage of theory of patent law in medicine, usage of theory of the law of industrial property in medicine, usage of theory of copyright and adjacent rights in medicine, usage of theory of succession law in medicine, usage of theory of family law in medicine, usage of theory of agrarian law in medicine, usage of theory of legal problems of the protection of environment in medicine, usage of theory of ecological law in medicine, usage of theory of land law in medicine, usage of theory of forest law in medicine, usage of theory of water law in medicine, usage of theory of air-protection law in medicine, usage of theory of the legislation about the subsoils in medicine, usage of theory of the legislation about the fauna world in medicine, usage of theory of labor law in medicine, usage of theory of the law of social support in medicine, usage of theory of law-enforcement bodies in medicine, usage of theory of criminal law in medicine, usage of theory of criminal-processual law (criminal process) in medicine, usage of theory of criminology in medicine, usage of theory of criminal-enforcement law in medicine, usage of theory of penitentiary in medicine, usage of theory of criminalistics in medicine, usage of theory of judicial statistics in medicine, usage of theory of international law in medicine, usage of theory of international private law in medicine, usage of theory of country and the law of separate countries in medicine and usage of the cognitive modeling technology in the applications of state management, law and jurisprudential sciences in medicine; *the applied scientific researches in area “Applications of patent business, invention and rationalization in medicine”* – usage of the theoretical bases of patent business, invention and rationalization in medicine, usage of theory of patent-information activity in medicine, usage of theory of invention and rationalization in medicine, usage of theory of patent-license work in medicine, usage of theory of the technical-economic analysis on the patent materials in medicine, usage of theory of inventive law in medicine usage of the cognitive modeling technology in the applications of patent business, invention and rationalization in medicine].

II. “The applied scientific researches department “Applications of economics and economic sciences, organization, management, statistics and the financial analysis based on the cognitive modeling technology in medicine”” (“APECON and ECONSOMS and FAB on CMT in M”) (*)
[the applied scientific researches in area “Applications of economics and economic sciences in medicine” – usage of the theoretical bases of economics and economic sciences in medicine, usage of the economic theories in medicine, usage of theory of the history of economic thought in medicine, usage of theory of accounting-economic sciences in medicine, usage of theory of the science of management of economics in medicine, usage of theory of economic history in medicine, usage of theory of world economy in medicine, usage of theory of the international economic relations in medicine, usage of theory of the economic development and growth in medicine, usage of theory of the forecasting and planning of economics in medicine, usage of theory of economic cycles and crises in medicine, usage of theory of productive forces and scientific-technical progress in medicine, usage of theory of the social-economic structure in medicine, usage of theory of the reproductive structure of economics in medicine, usage of theory of accumulation and consumption in medicine, usage of theory of well-being in medicine, usage of theory of the territorial structure of economics in medicine, usage of theory of regional and urban economics in medicine, usage of theory of the branch structure of economics in medicine, usage of theory of financial science in medicine, usage of the monetary and tax theories in medicine, usage of theory of the credit-financial institutions in medicine and usage of the cognitive modeling technology in the applications of economics and economic sciences in medicine;
the applied scientific researches in area “Applications of organization and management in medicine” – usage of the theoretical bases of organization and management in medicine, usage of theory of the methodology of management in medicine, usage of theory of state and administrative management in medicine, usage of theory of the organization of management by economics in medicine, usage of theory of social management in medicine, usage of theory of prediction in medicine, usage of theory of futurology in medicine, usage of theory of strategic management in medicine, usage of theory of strategic planning in medicine and usage of the cognitive modeling technology in the applications of organization and management in medicine;

the applied scientific researches in area “Applications of statistics in medicine” – usage of the theoretical bases of statistics in medicine, usage of the general theory of statistics in medicine, usage of theory of economic statistics in medicine, usage of theory of branch statistics in medicine, usage of theory of social statistics in medicine, usage of theory of international statistics in medicine, usage of theory of statistics of the separate countries and social-economic systems in medicine, usage of theory of organization and management by statistics in medicine, usage of theory of the methods and means of collection, processing and analysis of the statistical information in medicine and usage of the cognitive modeling technology in the applications of statistics in medicine;

the applied scientific researches in area “Applications of the financial analysis, monetary circulation and credit in medicine” ()* – usage of the theoretical bases of the financial analysis, monetary circulation and credit in medicine, usage of theory of tendencies, dependencies and regularities of the financial analysis of the objects, processes and phenomena in medicine, usage of theory of the system, information and cognitive approaches in economics and medicine, usage of theory of the structure and dynamics of financial market functioning in medicine, usage of theory of the global goals of standardization of accounting and the problems of unification of reporting in medicine, usage of theory of the institutional subjects regulating the creation, distribution and use of the international standards in medicine, usage of theory of the principles of creation, distribution and use of the international standards of the financial and accounting reporting in medicine, usage of theory of the basic methods of transformation of the financial reporting in medicine, usage of theory of formation of the accounting balance sheet by the international standards of financial reporting in medicine, usage of theory of the qualification tests of the professional participants of the financial system of the country in medicine, usage of theory of the administrative-legal forms of the existence of the economy subject in medicine, usage of theory of the features of the procedure of the financial analysis of the economy subject in medicine, usage of theory of the organizational structure of enterprise, (credit) organization and its features in medicine (the educational establishment of the system of education and the information-educational environment in medicine), usage of theory of inflationary impairment, discounting and compounding of the monetary flows in the economic system of the country in medicine, usage of theory of the indices of dynamics of the financial market and instruments in medicine, usage of theory of dynamics and communication in medicine,

usage of theory of the investment and innovation politics of the economy subject in medicine in the financial system of the country, usage of theory of the organizational, technological, scientific, methodological, regulatory-legal, information, hardware, software, algorithmic, raw materials, warehouse, personnel and economic preparation of production in medicine, usage of theory of the bases of the financial analysis and the estimation of quality of the activity of the enterprise, (credit) organization and other organization in medicine, usage of theory of the requirements and composition of the financial reporting of the (non)production organizational structures in medicine, usage of theory of the additional elements of the accounting and financial reporting of the enterprise and (credit) organization in medicine, usage of theory of the consumers of the financial reporting in medicine, usage of theory of the elements of the financial reporting related with the changes of financial-economy activity in medicine, usage of theory of the concept of the simple and consolidated accounting and financial reporting in medicine, usage of theory of the methods of the financial analysis of the different forms of reporting in medicine, usage of theory of the structure of accounts of the accounting and financial analysis in medicine, usage of theory of the vertical, horizontal and trend financial analysis based on the system of analytical coefficients in medicine, usage of theory of the scheme of carrying out of the audit inspection, financial analysis and audit in medicine, usage of theory of the external and internal control of activity of the different enterprises and (credit) organizations in medicine, usage of theory of the kinds of banking operations in medicine, usage of theory of the structure of the accounting balance sheet (form №1) in medicine, usage of theory of the explanatory note to the accounting balance sheet in medicine, usage of theory of the report about profits and losses (form №2) in medicine, usage of theory of the explanatory note to the report about profits and losses in medicine, usage of theory of the report about the change of capital (form №3) in medicine, usage of theory of the report about the movement of monetary means on the accounts (form №4) in medicine, usage of theory of the explanatory note to the report about the movement of monetary means on the accounts in medicine, usage of theory of the application to the accounting balance sheet (form №5) in medicine, usage of theory of the report about the targeted use of the received means (form №6) in medicine, usage of theory of the audit conclusion about the results of activity of the enterprise, (credit) organization and the organization of the federal reserve system of USA in medicine,

usage of theory of the analysis of the sustainability of the enterprise, (credit) organization and commercial bank in medicine, usage of theory of the basic analytical coefficients of the financial analysis in medicine, usage of theory of the structure of the accounting balance sheet and the report about profits and losses of the enterprise and (credit) organization for the introducing of the system of analytical coefficients in medicine, usage of theory of the cognitive modeling technology with the dynamic cloning, verification and subverification in medicine, usage of theory of the iterative cycle of the cognitive modeling technology in medicine, usage of theory of the technique of use of the cognitive modeling technology in medicine, usage of theory of the technique of formation of the regulatory-legal basis for the financial analysis of the enterprise and (credit) organization in medicine, usage of theory of the technique of formation of the information basis for the financial analysis of the enterprise and (credit) organization in medicine, usage of theory of the technique of the additional check of the information basis of the financial analysis in medicine, usage of theory of the technique of creation and modification of the working plan of accounts and the model of accounting in medicine, usage of theory of the technique of carrying out of the financial analysis of the condition of the enterprise and (credit) organization in medicine, usage of theory of the parametrical cognitive models block for the financial analysis and the increasing of functioning efficiency of the objects, processes and phenomena in medicine, usage of theory of the structure of the cognitive model for the vertical, horizontal and trend financial analysis of the enterprise and (credit) organization in medicine, usage of theory of the ways of representation of the structure of the cognitive models and problem environments in medicine: the formal classical of the 0th generation (the logical and production models), the non-formal classical of the 0th generation (the semantic network, the frame network and ontology), the formal new of the 0th generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0th generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1st generation (the cognitive circle and the cognitive disc), the volumetric of the 1st generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2nd generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3rd generation (the combinations of the existing cognitive models),

usage of theory of the algorithms of formation of the structure of the cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, usage of theory of the techniques of research of the parameters of the cognitive models of the 0th, 1st, 2nd and 3rd generations in medicine, usage of theory of the algorithms of the analysis of a posteriori results of research in medicine, usage of theory of the formation and calculation of the aggregates of the accounting balance sheet of the (non)production enterprise and (credit) organization in medicine, usage of theory of the calculation of the parameters of the cognitive model for the vertical, horizontal and trend static and dynamic financial analysis of the enterprise and (credit) organization in the conditions of certainty and uncertainty in medicine, usage of theory of software for the automation of research tasks in medicine, usage of theory of the statistical justification of practical use of the received results in medicine, usage of theory of the factors affecting on the efficiency of functioning of the enterprise and (credit) organization in medicine, usage of theory of the organization and plan of carrying out of the experiment in medicine, usage of theory of the research of the parameters of the cognitive model for the vertical, horizontal and trend financial analysis in medicine, usage of theory of the preliminary processing of a posteriori results of diagnostics in medicine, usage of theory of selection of the methods of the statistical analysis of the formed selections of data in medicine, usage of theory of the analysis of the dynamics of resultativity of the financial-economy activity in medicine, usage of theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in medicine and usage of the cognitive modeling technology in the applications of the financial analysis, monetary circulation and credit in medicine; *the applied scientific researches in area “Applications of the other branches of economics in medicine”* – usage of the theoretical bases of the other branches of economics in medicine, usage of theory of the production of musical instruments in medicine, usage of theory of the production of fine art products in medicine, usage of theory of jewelry industry in medicine, usage of theory of the production of toys in medicine, usage of theory of the production of sports products in medicine, usage of theory of the production of writing goods in medicine and usage of the cognitive modeling technology in the applications of the other branches of economics in medicine].

The applied scientific researches directions and departments of “SEC” allow to develop the main and derivative scientific results of CMT.

5.4. The local and international scientific newspapers and journals of “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

“The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (medical) sciences" named after academician Burdenko N.N.” (“SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” – “SEC”) as the first SEC in the structure of “SIO "ACNS”” (www.vetrovan.spb.ru) includes the various scientific newspapers and journals with the scientific results.

The scientific newspapers and journals of “SEC” (together with “SIO "ACNS””) are intended for the promotion of the main and derivative scientific results of the system, financial and complex analysis at the micro-level in medicine – the 45 fundamental scientific researches sections (departments) on the 10 fundamental scientific researches branches of “SEC” are connected with the 26 fundamental scientific researches sections (departments) on the 13 fundamental scientific researches branches of “SIO "ACNS””, and also with the sections (departments) on the branches of “RA(M)S”; the 45 applied scientific researches sections (departments) on the 10 applied scientific researches directions of “SEC” are connected with the 27 applied scientific researches sections (departments) on the 9 applied scientific researches directions of “SIO "ACNS””, and also the sections (departments) on the directions of “RA(M)S”:

I. The local scientific newspapers (SN) and scientific journals (SJ) of “SEC” (1 SN and 1 SJ).

1.1. SN “News of SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” (in the nat. language).

1.2. SJ “Proceedings of SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” (in the nat. language).

II. The international scientific journals (ISJ) of “SEC” (5 ISJ).

2.1. ISJ “Bulletin of SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” (in the nat. and int. language).

2.2. ISJ “Cognitive medicine” (in the nat. and int. language) (* – together with “SIO "ACNS””).

2.3. ISJ “The cognitive modeling technology for the microscopic system analysis” (in the national and international language) (*).

2.4. ISJ “The cognitive modeling technology for the microscopic financial analysis” (in the national and international language) (*).

2.5. ISJ “The cognitive modeling technology for the microscopic complex analysis” (in the national and international language) (*).

III. The regional (RFSJ) and international fundamental scientific journals (IFSJ) of “SEC” (13 branch (R)IFSJ).

- 3.1. (R)IFSJ “The fundamental scientific researches (FSR) in the modern medicine” (“Theory of preventive medicine”), (the multi-section – the 7 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.2. (R)IFSJ “FSR in the modern medicine” (“Theory of clinical medicine”), (the multi-section – the 24 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.3. (R)IFSJ “FSR in the modern medicine” (“Theory of pharmacology and pharmaceutics”), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.4. (R)IFSJ “FSR in the modern medicine” (“Theory of sports medicine”), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.5. (R)IFSJ “FSR in the modern medicine” (“Theory of military medicine”), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.6. (R) I F S J “ F S R i n t h e m o d e r n m e d i c i n e ” (“Theory of chemistry and chemical technologies in medicine”), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.7. (R) I F S J “ F S R i n t h e m o d e r n m e d i c i n e ” (“Theory of biology, physiology and bio-physiological technologies in medicine”), (the multi-section – the 3 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.8. (R) I F S J “ F S R i n t h e m o d e r n m e d i c i n e ” (“Theory of mathematics and mathematical technologies in medicine”), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.9. (R) I F S J “ F S R i n t h e m o d e r n m e d i c i n e ” (“Theory of nano-technologies and information technologies in medicine”), (the multi-section – the 3 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 3.10. (R) I F S J “ F S R i n t h e m o d e r n m e d i c i n e ” (“Theory of social-science and technologies of social sciences in medicine”), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).

IV. The regional (RASJ) and international applied scientific journals (IASJ) of “SEC” (the 9 branch (R)IASJ).

- 4.1. (R)IASJ “The applied scientific researches (ASR) in the modern medicine” (“Applications of preventive medicine”), (the multi-section – the 7 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.2. (R)IASJ “ASR in the modern medicine” (“Applications of clinical medicine”), (the multi-section – the 24 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.3. (R)IASJ “ASR in the modern medicine” (“Applications of pharmacology and pharmaceuticals”), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.4. (R)IASJ “ASR in the modern medicine” (“Applications of sports medicine”), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.5. (R)IASJ “ASR in the modern medicine” (“Applications of military medicine”), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.6. (R)IASJ “ASR in the modern medicine” (“Applications of chemistry and chemical technologies in medicine”), (the multi-section – the 1 section, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.7. (R)IASJ “ASR in the modern medicine” (“Applications of biology, physiology and bio-physiological technologies in medicine”), (the multi-section – the 3 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.8. (R)IASJ “ASR in the modern medicine” (“Applications of mathematics and mathematical technologies in medicine”), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.9. (R)IASJ “ASR in the modern medicine” (“Applications of nano-technologies and information technologies in medicine”), (the multi-section – the 3 sections, the regional printing and electronic in the national language and the international electronic in the international language).
- 4.10. (R)IASJ “ASR in the modern medicine” (“Applications of social-science and technologies of social sciences in medicine”), (the multi-section – the 2 sections, the regional printing and electronic in the national language and the international electronic in the international language).

The scientific newspapers and journals allow directly to propagandize the main and derivative fundamental and applied scientific results of CMT.

The conclusion

In the result of scientific-research work, carried out by the author:

1. The several noncommercial organizations (establishments) were developed:
 - “The noncommercial organization (establishment) “state international organization "Academy of cognitive natural sciences"” (“SIO "ACNS"”);
 - “The noncommercial organization (establishment) “scientific-research institute "System and financial analysis based on cognitive modeling technology" of "RA(N)S" named after Veniaminov V.N.” (“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”);
 - “The noncommercial organization (establishment) “scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A.” (“SF "SFA CMT" n. a. Prokopenko N.A.”);
 - “The noncommercial organization (establishment) "Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A.” (“SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.”);
 - “The noncommercial organization (establishment) “scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after academician Burdenko N.N.” (“SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”).
2. The divisions of the noncommercial organizations (establishments) were formed:
 - the administrative-scientific divisions;
 - the scientific-organizational divisions;
 - the administrative-economy divisions;
 - the scientific researches and education management divisions;
 - the fundamental (scientific) researches (developments) (financing) (exhibitions) divisions (at the microscopic level);
 - the applied (scientific) researches (developments) (financing) (exhibitions) divisions (at the microscopic level);
 - the divisions of the scientific fund of the noncommercial organization;
 - the scientific centre divisions of the noncommercial organization;
 - the scientific-historical divisions of the noncommercial organization;
 - the scientific-public divisions of the noncommercial organization;
 - the divisions of the local and international scientific newspapers and journals.

The bibliographic section

1. Vetrov A.N. SIO “Academy of cognitive natural sciences” / A.N. Vetrov // “Actual problems of economics and new technologies of teaching (Smirnov readings)”, the section “Educational politics and new technologies of teaching”: the materials of “The XIIth international scientific-practical conference” (“IHEAS”), RF, Saint-Petersburg city, the 22nd of March 2013 y. – SPb.: “IBI”, 2013. – 3 p. (+ 52 slides).
2. Vetrov A.N. The scientific-research institute “System and financial analysis based on cognitive modeling technology” of “RA(N)S” named after Veniaminov V.N. / A.N. Vetrov // “Actual problems of economics and new technologies of teaching (Smirnov readings)”, the section “Educational politics and new technologies of teaching”: the materials of “The XIIth international scientific-practical conference” (“IHEAS”), RF, Saint-Petersburg city, the 22nd of March 2013 y. – SPb.: “IBI”, 2013. – 3 p. (+ 52 slides).
3. Vetrov A.N. The divisions of fundamental and applied scientific researches (at the microscopic level) of “SIO “ACNS”” and “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” / A.N. Vetrov // “Actual problems of economics and new technologies of teaching (Smirnov readings)”, the section “Educational politics and new technologies of teaching”: the materials of “The XIIth international scientific-practical conference” (“IHEAS”), RF, Saint-Petersburg city, the 22nd of March 2013 y. – SPb.: “IBI”, 2013. – 4 p. (+ 15 slides).
4. Vetrov A.N. The local and international scientific newspapers and journals of “SIO “ACNS”” and “SRI “SFA CMT” of “RA(N)S” n. a. Veniaminov V.N.” / A.N. Vetrov // “Actual problems of economics and new technologies of teaching (Smirnov readings)”, the section “Educational politics and new technologies of teaching”: the materials of “The XIIth international scientific-practical conference” (“IHEAS”), RF, Saint-Petersburg city, the 22nd of March 2013 y. – SPb.: “IBI”, 2013. – 3 p. (+ 20 slides).
5. Vetrov A.N. The topology of organization of the integration environment of “SIO “ACNS”” / A.N. Vetrov // “Modern education: contents, technologies, quality”, the section “Perspective technologies of training”: the materials of “The XIXth international scientific-methodical conference” (“IHEAS”), RF, Saint-Petersburg city, the 24th of April 2013 y. – SPb.: “SPbSETU “LETI””, 2013. – 2 p. (+ 8 slides).
6. Vetrov A.N. The conception of organization of the integration environment of “SIO “ACNS”” / A.N. Vetrov // “Modern education: contents, technologies, quality”, the section “Perspective technologies of training”: the materials of “The XIXth international scientific-methodical conference” (“IHEAS”), RF, Saint-Petersburg city, the 24th of April 2013 y. – SPb.: “SPbSETU “LETI””, 2013. – 2 p. (+ 70 slides).
7. Vetrov A.N. The scientific fund “System and financial analysis based on cognitive modeling technology” named after Prokopenko N.A. / A.N. Vetrov // “Quality management in modern High school (HEI)”, the section “Educational politics and new technologies of teaching”: the materials of “The XIth international scientific-methodical conference” (“IHEAS”), RF, Saint-Petersburg city, the 30th of October 2013 y. – SPb.: “IBI”, 2013. – 3 p. (+ 51 slides).

8. Vetrov A.N. The fundamental researches financing divisions (at the microscopic level) of "SF "SFA CMT" n. a. Prokopenko N.A." / A.N. Vetrov // "Quality management in modern High school (HEI)", the section "Educational politics and new technologies of teaching": the materials of "The XIth international scientific-methodical conference" ("IHEAS"), RF, Saint-Petersburg city, the 30th of October 2013 y. – SPb.: "IBI", 2013. – 3 p. (+ 15 slides).
9. Vetrov A.N. The applied researches financing divisions (at the microscopic level) of "SF "SFA CMT" n. a. Prokopenko N.A." / A.N. Vetrov // "Quality management in modern High school (HEI)", the section "Educational politics and new technologies of teaching": the materials of "The XIth international scientific-methodical conference" ("IHEAS"), RF, Saint-Petersburg city, the 30th of October 2013 y. – SPb.: "IBI", 2013. – 3 p. (+ 15 slides).
10. Vetrov A.N. The local and international scientific newspapers and journals of "SF "SFA CMT" n. a. Prokopenko N.A." / A.N. Vetrov // "Quality management in modern High school (HEI)", the section "Educational politics and new technologies of teaching": the materials of "The XIth international scientific-methodical conference" ("IHEAS"), RF, Saint-Petersburg city, the 30th of October 2013 y. – SPb.: "IBI", 2013. – 3 p. (+ 18 slides).
11. Vetrov A.N. "Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A." / A.N. Vetrov // "Actual problems of economics and new technologies of teaching (Smirnov readings)", the section "Educational politics and new technologies of teaching": the materials of "The XIIIth international scientific-practical conference" ("IHEAS"), RF, Saint-Petersburg city, the 22nd of March 2014 y. – SPb.: "IBI", 2014. – 3 p. (+ 51 slides).
12. Vetrov A.N. The fundamental researches (financing) exhibitions divisions (at the microscopic level) of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." / A.N. Vetrov // "Actual problems of economics and new technologies of teaching (Smirnov readings)", the section "Educational politics and new technologies of teaching": the materials of "The XIIIth international scientific-practical conference" ("IHEAS"), RF, Saint-Petersburg city, the 22nd of March 2014 y. – SPb.: "IBI", 2014. – 3 p. (+ 15 slides).
13. Vetrov A.N. The applied researches (financing) exhibitions divisions (at the microscopic level) of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." / A.N. Vetrov // "Actual problems of economics and new technologies of teaching (Smirnov readings)", the section "Educational politics and new technologies of teaching": the materials of "The XIIIth international scientific-practical conference" ("IHEAS"), RF, Saint-Petersburg city, the 22nd of March 2014 y. – SPb.: "IBI", 2014. – 3 p. (+ 15 slides).

14. Vetrov A.N. The local and international scientific newspapers and journals of "SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A." / A.N. Vetrov // "Actual problems of economics and new technologies of teaching (Smirnov readings)", the section "Educational politics and new technologies of teaching": the materials of "The XIIIth international scientific-practical conference" ("IHEAS"), RF, Saint-Petersburg city, the 22nd of March 2014 y. – SPb.: "IBP", 2014. – 3 p. (+ 18 slides).
15. Vetrov A.N. "The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "RA(M)S" named after acad. Burdenko N.N." / A.N. Vetrov // "Actual problems of modern science and technology: cognitive approach", the section "Theory of medicine, public-health-service, labor safety, environment preservation and ecology of person": the materials of "The Vth international scientific conference on fundamental sciences" ("SIO "ACNS""), RF, Saint-Petersburg city, the 01st-31st of March 2019 y. – SPb.: "SIO "ACNS"", 2019. – 3p.
16. Vetrov A.N. The divisions of fundamental scientific researches (at the microscopic level) of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." / A.N. Vetrov // "Actual problems of modern science and technology: cognitive approach", the section "Theory of medicine, public-health-service, labor safety, environment preservation and ecology of person": the materials of "The Vth international scientific conference on fundamental sciences" ("SIO "ACNS""), RF, Saint-Petersburg city, the 01st-31st of March 2019 y. – SPb.: "SIO "ACNS"", 2019. – 3p.
17. Vetrov A.N. The divisions of applied scientific researches (at the microscopic level) of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." / A.N. Vetrov // "Actual problems of modern science and technology: cognitive approach", the section "Theory of medicine, public-health-service, labor safety, environment preservation and ecology of person": the materials of "The Vth international scientific conference on fundamental sciences" ("SIO "ACNS""), RF, Saint-Petersburg city, the 01st-31st of March 2019 y. – SPb.: "SIO "ACNS"", 2019. – 3p.
18. Vetrov A.N. The local and international scientific newspapers and journals of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." / A.N. Vetrov // "Actual problems of modern science and technology: cognitive approach", the section "Theory of medicine, public-health-service, labor safety, environment preservation and ecology of person": the materials of "The Vth international scientific conference on fundamental sciences" ("SIO "ACNS""), RF, Saint-Petersburg city, the 01st-31st of March 2019 y. – SPb.: "SIO "ACNS"", 2019. – 3p.

© Vetrov Anatoly Nikolaevich, 2013 y., 2014 y., 2022 y.

“The scientific-educational consortium
"System and financial analysis
based on cognitive modeling technology":
“SIO "ACNS”,
“SRI "SFA CMT" of "RA(N)S" n. a. Veniaminov V.N.”,
“SF "SFA CMT" n. a. Prokopenko N.A.”,
“"SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.””
and “SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.”

The scientific monography on the rights of manuscript

The scientific editor Vetrov A.N.

The translators Vetrov A.N., Vetrova E.I.

Accepted to printing 01.07.22 y. Format A4.

Paper offset. Printing digital. 39,81 pr. sh.

Set “Times New Roman”. Circulation ____ copies Order 001.

© Vetrov A.N., 2013 y., 2014 y., 2022 y.
RF, Saint-Petersburg city, www.vetrovan.spb.ru