

“Ministry of education and science of The RF”

“The SIO "Academy of cognitive natural sciences"”

**The fundamental scientific researches branches
of “The SF "SFA CMT" named after N.A. Prokopenko”**

Collection of scientific reports

Saint-Petersburg city
2017 y.

Vetrov A.N. The fundamental scientific researches branches of "The SF "SFA CMT" named after N.A. Prokopenko": Collection of scientific reports on the rights of monography ("Philosophy" ("Physical-mathematical sciences", "Technics" and "Economics")) 2017 y. – SPb.: "The SIO "Academy of cognitive natural sciences"", 2017. – 43 p.

In collection of scientific reports on the rights of monography presented immediate the fundamental scientific researches branch "Cognitive modeling in the mathematical sciences" ("OMN") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the physical sciences" ("OFN") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the nanotechnologies and information technologies" ("ONIT") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the exact sciences" ("OEMMPU") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the industry and chemical sciences" ("OHNM") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the biological sciences" ("OBN") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the physiology, fundamental medicine and public health services" ("OFFM") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the sciences about The Earth" ("ONZ") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the social sciences" ("OON") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the global problems and international relations" ("OGPMO") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the historical-philological sciences" ("OIFN") of "The SF "SFA CMT" named after N.A. Prokopenko", the fundamental scientific researches branch "Cognitive modeling in the sports sciences" ("OSN") of "The SF "SFA CMT" named after N.A. Prokopenko" and the fundamental scientific researches branch "Cognitive modeling in the military sciences" ("OVN") of "The SF "SFA CMT" named after N.A. Prokopenko".

Intended for scientists, staff of The SRI, teachers and students of The HEIs, and also qualified specialists-experts on scientific specialties:
05.13.01 – "The system analysis, control and information processing" (technics),
05.13.06 – "Automation of technological processes and manufactures" (industry),
05.13.10 – "Control and computer science in social systems" (technics),
19.00.02 – "Psycho-physiology 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" (accounting documents of (credit) organizations),
08.00.13 – "Mathematical and instrumental methods of economics" (the financial analysis),
01.02.01 – "Theoretical mechanics" (modeling of hybrid systems with difficult structure),
02.00.04 – "Physical chemistry" (multi-nucleus chemical elements and nuclear polymers)
and 03.00.03 – "Molecular biology" (modeling of desoxyribonucleic acid).

on the rights of monography

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The RF, Saint-Petersburg city

THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE MATHEMATICAL SCIENCES” (“OMN”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko”
 (“The SF "SFA CMT" named after N.A. Prokopenko” – The SF) as the first SF
in structure of “The SIO "Academy of cognitive natural sciences”” (“The SIO "ACNS””),
an additional component of science and education system 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 The SF]:
1) it is executed by the principle of “administrative-economy submission”;
2) works in 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 “The SPbSETU "LETI”” and The Government of The RF
for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
3) includes several various main divisions:
I. “The fundamental researches financing department
"The theory of the mathematics and complex system analysis
based on cognitive modeling technology”” (“SM”) (*)
*[the financing of fundamental researches and developments in 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 functions of valid variables,
t h e o r y o f f u n c t i o n s o f c o m p l e x v a r i a b l e s ,
t h e o r y o f o r d i n a r y d i f f e r e n t i a l e q u a t i o n s ,
theory of differential equations with private derivatives,
t h e o r y o f i n t e g r a t e d e q u a t i o n s ,
t h e o r e t i c a l m a t h e m a t i c a l m o d e l s
of objects, processes and phenomena of natural and technical sciences,
theory of 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 ways of representation of structure of cognitive models and problem environments,
theoretical basis of parametrical cognitive models block,
t h e o r y o f 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 o r e t i c a l m a t h e m a t i c s ;

the financing of fundamental researches and developments in area "The theoretical complex system analysis" ()* – theory of general questions of the complex system analysis, theory of tendencies, dependences and laws of the complex system analysis of objects, processes and phenomena, theory of cognitive modeling technology with dynamic cloning, verification and subverification, theory of iterative cycle and technique of use of cognitive modeling technology for the complex system analysis of difficult objects, processes and phenomena, theory of parametrical cognitive models block for the complex system analysis and increase of efficiency of functioning of difficult objects, processes and phenomena, theory of structure of cognitive model of the 0th, 1st, 2nd and 3rd generation, theory of ways of representation of structure of cognitive models and problem environments: formal classical of the 0th generation (logical and production models), nonformal classical of the 0th generation (semantic network, frame network and ontology), formal new of the 0th generation (calculus of theory of sets and corteges on domains and innovative calculus of theory of sets and graphs), nonformal new of the 0th generation (multilevel structural scheme and multilevel encapsulated pyramids combining theory of graphs and theory of sets), flat of the 1st generation (cognitive circle and cognitive disc), volumetric of the 1st generation (cognitive cylinder, cognitive cone and cognitive sphere), flat and volumetric of the 2nd generation (one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), hybrid of the 3rd generation (combinations of the existing cognitive models), theory of algorithms of formation of difficult cognitive models the 0th, 1st, 2nd and 3rd generations, theory of techniques of parameters research of difficult cognitive models of the 0th, 1st, 2nd and 3rd generations, theory of algorithms of a posteriori data processing of the complex system analysis, theory of software for automation of research tasks, theory of statistical substantiation of practical use of received results, theory of factors influencing to efficiency of functioning of difficult objects, processes and phenomena, theory of organization and plan of carrying out of experiment, theory of research of cognitive models parameters, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of statistical analysis methods of generated data sets, theory of analysis of productivity dynamics of training, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scale, factor analysis and bibliographical 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 multivariate code device, the theoretical complex system analysis modified model of reduced eye for research of visual acuity, field of vision, color perception and others parameters in Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis modified model of reduced ear for research of absolute sensitivity and thresholds of sensitivity in Descartes space of the 2 and 3 coordinates, the theoretical complex system analysis chemical element with 1, 2, 3, 4, 5 and more nucleus, the theoretical complex system analysis difficult multivariate hurricane and others].

II. “The fundamental researches financing department “The theory of the cybernetics and (Cognitive) computer science”” (“SPMI”) (*)
[the financing of fundamental researches and developments in area “Theoretical cybernetics” –
 theory of automatic control systems, theory of modeling, theory of cybernetic control systems, theory of information, theory of artificial intelligence, theory of discrete (final) automatic devices and formal languages, theory of reliability, theory of the applied system analysis, theory of cognitive modeling technology in theoretical cybernetics;
the financing of fundamental researches and developments in area “Theoretical Computer science” –
 theory of Computer science, theory of organization of information work, theory of documentary information sources, theory of analytical-synthetic processing of documentary information sources, theory of information search, theory of information service, theory of technical means of information processes support, theory of cognitive modeling technology in theoretical Computer science;
the financing of fundamental researches and developments in area “Theoretical Cognitive computer science” (*) –
 theory of modified stratified-step model of perception (psycho-physiology of perception), processing (cognitive psychology) and understanding (cognitive linguistics) of information fragments content, theoretical bases of Cognitive computer science and cognitive modeling technology in technical, economical, physical-mathematical and other sciences, theoretical bases of parametrical cognitive models block for the system analysis of information-educational environments (cognitive models of subject of training and means of training), theoretical bases of parametrical cognitive models block for the financial analysis of (credit) organizations (cognitive models for the vertical, horizontal and trend financial analysis of (credit) organizations and enterprises), theoretical bases of parametrical cognitive models block for the complex system analysis of objects, processes and phenomena of Cognitive computer science, theory of ways of representation of structure of cognitive models and problem environments, theory of adaptive automation means of information-educational environment (basic and applied diagnostic module, electronic textbook, laboratory practical work, electronic dean, electronic library and others), theory of technical means of adaptive information interaction support (adaptive representation of sequence of information fragments processor, question-answers structures sequence processing processor, linguistic processor and other processors), theory of technical means of the financial analysis support (automation means of formation of working plan of accounts based on normative-regulated plan of accounts of the accounting, automation means of formation of accounting balance and report about profits and losses of organization, automation means of the vertical, horizontal and trend financial analysis based on analytical coefficients system), theory of technical means of the complex analysis support (automation means of formation and research of cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, tree-, fore-, five- and more cognitive sphere and others)].

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE PHYSICAL SCIENCES” (“OFN”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko” (“The SF “SFA CMT” named after N.A. Prokopenko” – The SF) as the first SF in structure of “The SIO “Academy of cognitive natural sciences”” (“The SIO “ACNS””), an additional component of science and education system 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 The SF]:

- 1) it is executed by the principle of “administrative-economy submission”;
- 2) works in 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 “The SPbSETU “LETI”” and The Government of The RF for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
- 3) includes several various main divisions:
I. “The fundamental researches financing department “The theory of the physics, astronomy and space researches”” (“SOFA”) (*)
*[the financing of fundamental researches and developments in 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 high energy physics, theory of nuclear physics, theory of physics of gas 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 cognitive modeling technology in theoretical physics, theory of cognitive models of interaction between elementary particles and firm bodies, fields, liquids and gases, theory of cognitive model of modified volumetric planetary model of atom named after N.H.D. Bor, theory of cognitive models of temperature areas of plasma of atom and molecule, theory of cognitive model of optical environment of eye as optical device, theory of cognitive model of acoustical environment of ear as acoustical device, theory of cognitive model of waves distribution in environment;

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

II. “The fundamental researches financing department “The theory of the nuclear physics and physics of atomic nucleus” (“SYF”) (*)

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

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE NANOTECHNOLOGIES
AND INFORMATION TECHNOLOGIES” (“ONIT”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

The developed “The fundamental researches financing branch
" Cognitive modeling in the nanotechnologies
and information technologies " ” (“ O N I T ”)
treats to the fundamental researches financing divisions
of “The scientific fund "System and financial analysis
based on cognitive modeling technology" named after N.A. Prokopenko”
 (“The SF "SFA CMT" named after N.A. Prokopenko” – The SF) as the first SF
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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 “The SPbSETU "LETI”” and The Government of The RF
for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
3) includes several various main divisions:
I. “The fundamental researches financing department
"The theory of the electronics, radio-engineering and connection”” (“SVLTSEB”)
[the financing of fundamental researches and developments in area
“Theoretical electronics and radio-engineering” –
theoretical bases of electronical technics,
theory of radio-engineering, theory of materials for electronics and radio-engineering,
theory of technology and equipment for electronical and radio-engineering manufacture,
theory of designing and constructing
of electronical devices and radio-electronical equipment,
theory of electro-vacuum and gas-discharge devices and units,
theory of 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-electronical circuits,
theory of radio-waves distribution, theory of antennas, theory of wave transports,
theory of elements of micro-wave techniques, theory of radio-translation and radio-receiving devices,
theory of 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 units, details and elements of radio-electronical equipment,
theory of devices for radio-engineering measurements,
theory of systems and units of information display,
theory of cognitive modeling technology
in theoretical electronics and radio-engineering;

the financing of fundamental researches and developments in area
“ T h e o r e t i c a l c o n n e c t i o n ” –
theory of connection, theory of designing and constructing of connection devices,
theory of technology and equipment for assembly and adjustment
of connection equipment, systems of transfer and communication lines,
theory of multichannel connection, theory of networks and communication centres,
theory of services and connection services, theory of telegraph (cable) connection and equipment,
theory of systems and equipment of data transmission,
theory of tele-information services and equipment,
theory of tele-communication connection and equipment,
theory of transfer systems of moving images and sound,
theory of facsimile connection and equipment,
theory of radio-communication connection and radio-broadcasting,
theory of hyber-optic (LED) connection and equipment, theory of TV,
theory of optical connection in free space and equipment, theory of post connection,
t h e o r y o f 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 theoretical connection and terminal equipment of data transmission].

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

[*the financing of fundamental researches and developments in 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 elements, units and devices of automatics and computer engineering,
theory of input-output devices, theory of memory devices,
theory of technology and equipment for manufacture
of means of automatics and computer engineering,
theory of keyboard and calculating-tabulating machines,
t h e o r y o f a n a l o g c o m p u t e r s (A P C) ,
theory of digital computers and computer complexes (DPC),
theory of analog-digital (hybrid) computers and computer complexes,
theory of computer centres (CPC), theory of computer networks (NPC),
theory of software of computers, complexes and networks,
theory of automatic systems of measurement, regulation and control,
theory of systems of tele-control and tele-measurement,
theory of automated control systems of technological processes,
theory of automated systems of organizational management,
t h e o r y o f d e s i g n a u t o m a t i o n ,
theory of scientific researches automation,
t h e o r y o f 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 theoretical automatics and computer engineering;

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

III. “The fundamental researches financing department
“The theory of the nano-technologies for the mechanical engineering, instrument making,
polygraphy, reprography and foto-cinema-technics, easy and food-processing industry,
transport, architecture and construction”” (“SNT”) (*)
[the financing of fundamental researches and developments in area
“Theoretical nano-technologies for mechanical-engineering” –
 theory of nano-technologies for machines science and details of machines,
 for machine-building materials, for technologies of mechanical-engineering,
 for foundry manufacture, for forge-stamp manufacture,
 for assembly manufacture, for cutting materials,
 for electrical-physical-chemical processing,
 for thermal and strengthening powder materials,
 for manufacture of nonmetallic products,
 for machine-tool construction, for robotics, for tool manufacture,
 for mining mechanical-engineering, for metallurgical mechanical-engineering,
 for reactor construction, for turbine construction,
 for special power installations, for chemical and oil mechanical-engineering,
 for locomotive construction and carriage building, for engine construction, for motor car building,
 for ship building, for aircraft building, for space technics and rocket building,
 for hoisting-transport mechanical-engineering,
 for building and road mechanical-engineering, for communal mechanical-engineering,
 for tractor and agricultural mechanical-engineering,
 for mechanical-engineering of light industry,
 for polygraphic mechanical-engineering, for mechanical-engineering of food-processing industry,
 for mechanical-engineering of trade and public catering, for household machines and devices,
 for manufacture of weapon, for other branches of mechanical-engineering,
 theory of cognitive modeling technology
 in theoretical nano-technologies for mechanical engineering;
the financing of fundamental researches and developments in area
“Theoretical nano-technologies for instrument making” –
 theory of nano-technologies for theoretical bases of instrument making,
 for general production technology and equipment in instrument making,
 for designing and constructing of devices,
 for measurement devices of electrical and magnetical poles (sizes),
 for measurement devices of mechanical sizes, for measurement devices of time and frequency,
 for measurement devices of structure and physical-chemical properties of substances and materials,
 for devices of thermal-technical and thermal-physical measurements,
 for measurement devices of acoustical sizes and characteristics,
 for measurement devices of optical and lighting-technical sizes and characteristics,
 for measurement devices of ionization radiations,
 for devices of not destroying control of products and materials,
 for general structural elements, units of measuring devices and systems, means of office equipment,
 theory of cognitive modeling technology
 in theoretical nano-technologies for instrument making;

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

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

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

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

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

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
"COGNITIVE MODELING IN THE EXACT SCIENCES" ("OEMMPU")
OF "THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO"

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 N.A. Prokopenko" ("The SF "SFA CMT" named after N.A. Prokopenko" – The SF) as the first SF in structure of "The SIO "Academy of cognitive natural sciences" ("The SIO "ACNS"") , an additional component of science and education system 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 The SF]:

- 1) it is executed by the principle of "administrative-economy submission";
- 2) works in 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 "The SPbSETU "LETI" and The Government of The RF for the translation, carrying out of int. action and receiving of "The Nobel Prize");
- 3) includes several various main divisions:

I. "The fundamental researches financing department "The theory of the (theoretical) mechanics and gyroscopes" ("SM") (*)

[the financing of fundamental researches and developments in area "Theoretical mechanics" ()* – 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 complex and special sections of theoretical mechanics, theoretical bases of cognitive modeling technology in theoretical mechanics, theoretical bases of formation of parametrical cognitive models block for the complex system analysis of objects, processes and phenomena of theoretical mechanics, theory of ways of representation of structure of cognitive models and problem environments: formal classical of the 0th generation (logical and production models), nonformal classical of the 0th generation (semantic network, frame network and ontology), formal new of the 0th generation (calculus of theory of sets and corteges on domains and innovative calculus of theory of sets and graphs), nonformal new of the 0th generation (multilevel structural scheme and multilevel encapsulated pyramids combining theory of graphs and theory of sets), flat of the 1st generation (cognitive circle and cognitive disc), volumetric of the 1st generation (cognitive cylinder, cognitive cone and cognitive sphere), flat and volumetric of the 2nd generation (one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), hybrid of the 3rd generation (combinations of the existing cognitive models), theory of adaptive automation means of research of objects, processes and phenomena of theoretical mechanics, theory of technical means of the complex system analysis support of difficult objects, processes and phenomena of theoretical mechanics (automation means of formation and research of cognitive circle, cognitive disc, cognitive cylinder, cognitive cone, cognitive sphere, one-, two-, tree-, fore-, five- and more cognitive sphere and others), theory of statistical substantiation of practical use of received results, theory of factors influencing to efficiency of functioning of objects, processes and phenomena of theoretical mechanics, theory of organization and plan of carrying out of experiment, theory of research of parameters of parametrical cognitive models block, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of statistical analysis methods of generated data sets, theory of analysis of productivity dynamics of objects, processes and phenomena of theoretical mechanics, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographical lists;

the financing of fundamental researches and developments in area “ Theoretical mechatronics ” – 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 complex and special sections of theoretical mechatronics, theory of automation means and devices of mechatronics, theory of cognitive modeling technology in theoretical mechatronics (theory of hygroscope building)].

II. “The fundamental researches financing department “The theory of the mechanical-engineering, instrument making and metrology”” (“SPMPU”)

[the financing of fundamental researches and developments in 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 construction, theory of turbine construction, theory of special power units, 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 light industry, theory of polygraphic mechanical-engineering, theory of mechanical-engineering for food-processing industry, theory of mechanical-engineering for trade and public catering, theory of household machines and devices, theory of manufacture of weapon, theoretical bases of other branches of mechanical-engineering, theory of cognitive modeling technology in theoretical mechanical-engineering;

the financing of fundamental researches and developments in 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 devices for measurement of electrical and magnetical sizes, theory of devices for measurement of mechanical sizes, theory of devices for measurement of time and frequency, theory of devices for measurement of composition (structure) and physical-chemical properties of substances and materials, theory of devices for thermal-technical and thermal-physical measurements, theory of devices for measurement of acoustical sizes and characteristics, theory of devices for measurement of optical and lighting-technical sizes and characteristics, theory of devices for measurement of ionization radiations, theory of devices of not destroying control of products and materials, theoretical bases of general structural elements, units of measuring devices and systems, devices of interface and office equipment means, theory of cognitive modeling technology in theoretical instrument making;

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

III. “The fundamental researches financing department “The theory of the power engineering and electrical-engineering” (“SE”)

[the financing of fundamental researches and developments in area “Theoretical power-engineering” – theory of power resources, theory of power balance, theory of electrical-power engineering (industry), theory of thermal-power engineering (industry), theory of heating engineering, theory of atomic engineering (industry), theory of water-power engineering (industry), theory of helium-power engineering (industry), theory of wind-power engineering (industry), theory of direct transformation of energy, theory of cognitive modeling technology in theoretical power-engineering;

the financing of fundamental researches and developments in area “Theoretical electrical-engineering” – the theory of electrical-engineering, theory of electro-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-thermy, theory of electrical-welding equipment, theory of wire and cable, theory of electrical isolators, theory of light engineering, theory of electrical-technical equipment of special purpose, theory of cognitive modeling technology in theoretical electrical-engineering].

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE INDUSTRY
AND CHEMICAL SCIENCES” (“OHNM”)

OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko”
 (“The SF "SFA CMT" named after N.A. Prokopenko” – The SF) as the first SF
in structure of “The SIO "Academy of cognitive natural sciences"” (“The SIO "ACNS"”),
an additional component of science and education system 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 The SF]:
1) it is executed by the principle of “administrative-economy submission”;
2) works in 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 “The SPbSETU "LETI"” and The Government of The RF
for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
3) includes several various main divisions:
I. “The fundamental researches financing department
"The theory of the easy, food, forestry and wood processing industry,
the architecture and construction, the agriculture, forestry,
water, fish economy and aqua-culture"” (“SNM”) (*)
***[the financing of fundamental researches and developments in area
“Theoretical light industry” –***
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 industry of artificial leather and film materials,
theory of shoe industry, theory of leather-haberdashery industry,
theory of bristle-brush manufacture, theory of accessories manufacture,
theory of cognitive modeling technology
i n 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 area
“Theoretical food processing industry” –***
theory of food raw material and auxiliary materials,
theory of 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 high-alcohol drinks industry,
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 soft (without alcohol) drinks industry,
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 manufacture of eggs and egg products,
theory of dairy (milk) industry, theory of creamery (butter-fatty) industry,
theory of cognitive modeling technology
i n 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 area “Theoretical forestry and wood processing industry” – theory of wood science, theory of forestry-cutting works, theory of forestry transportation, theory of forestry-timber works, theory of technology and equipment for wood processing, theory of sawmill wood processing manufacture, theory of joiner-building products manufacture, theory of manufacture of plywood and plates, theory of furniture manufacture, theory of matches manufacture, theory of wooden container manufacture, theory special wood processing manufactures, theory of pulp - paper industry, theory of cognitive modeling technology in theoretical wood processing industry;

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

the financing of fundamental researches and developments in area "Theoretical agriculture and forestry"

theory of agricultural biology, theory of soil science, theory of agriculture, theory of agricultural land improvement, theory of agro-chemistry, theory of plant science, theory of agricultural plants protection, theory of animal industry, theory of veterinary science, theory of preparation of agricultural production, theory of hunting and hunting economy, theory of forestry, theory of economics and organization of agriculture, theory of mechanization and electrification of agriculture, theory of cognitive modeling technology

the financing of fundamental researches and developments in area "Theoretical water economy"

theoretical scientific bases of water economy, theory of water economy, theory of water-economy construction, theory of hydraulic-engineering and hydraulic-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 quality of water, theory of tests, measurements and control in water economy, theory of mechanization and automation in water economy, theory of complex use of water resources, theory of cognitive modeling technology

the financing of fundamental researches and developments in area "Theoretical fish economy and aqua-culture"

theory of biological resources of The World ocean and internal reservoirs, theory of aqua-culture, theory of fish culture, theory of industrial fishery, theory of technical operation of fishing industry fleet, theory of technical operation of fish seaports, theory of technology of processing of raw materials of a water origin, theory of equipment for fish-processing industry, theory of cognitive modeling technology

in theoretical fish economy and aqua-culture].
The fundamental researches financing department
The theory of the chemistry, chemical technology and chemical industry ("SCHN")

the financing of fundamental researches and developments in area "Theoretical chemistry"

theory of laboratory based 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 natural organic compounds and their synthetic analogues, theory of chemistry of high-molecular compounds, theory of biological chemistry, theory of cognitive modeling technology

the financing of fundamental researches and developments in area "Theoretical chemical technology and chemical industry"

theory of processes and devices of chemical technology, theory of chemical raw materials, theory of technology of nonorganic substances and products, theory of fertilizers manufacture, theory of manufacture of silicate and refractory nonmetallic 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 explosive substances and chemical protection means, theory of storage and destruction of chemical weapon, theory of technology of chemical-pharmaceutical means, theory of technology of fragrant substances, theory of technology of pesticides and disinfectant substances, theory of processing of natural gases, oil, gas condensate, their products and analogues, motor fuel and lubricant materials, theory of technology of firm combustible minerals processing, theory of timber-chemical manufactures, theory of natural high-molecular compounds technology, theory of synthetic high-molecular compounds technology, theory of plastics technology, theory of technology of production of rubbers and products from them, theory of technology of varnish-paint materials and organic coverings, theory of technology of chemical fibers and strings, theory of technology of chemical reactants and especially clean substances, theory of technology of production of household chemical goods products, theory of auxiliary materials technology, theory of cognitive modeling technology

in theoretical chemical technology and chemical industry].
The fundamental researches financing branches and departments of The SF
allow to the financing of development, production and promotion
of the main and derivative scientific results of CMT.

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE BIOLOGICAL SCIENCES” (“OBN”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko” (“The SF “SFA CMT” named after N.A. Prokopenko” – The SF) as the first SF in structure of “The SIO “Academy of cognitive natural sciences”” (“The SIO “ACNS””), an additional component of science and education system 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 The SF]:

- 1) it is executed by the principle of “administrative-economy submission”;
- 2) works in 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 “The SPbSETU “LETI”” and The Government of The RF for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
- 3) includes several various main divisions:
 - I. “The fundamental researches financing department “The theory of the biology and pharmacology”” (“SOB”) [*the financing of fundamental researches and developments in area “Theoretical biology”* – theory of biology, theory of methods and equipment for 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 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 biological cybernetics, theory of bio-engineering, theory of cognitive modeling technology in theoretical biology, theory of modeling of biological construct of organic individual organism;

the financing of fundamental researches and developments in area “ Theoretical pharmacology ” – theory of pharmacology, theory of methods and equipment for pharmacological researches, theory of 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 genetical 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 person (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 cognitive modeling technology in theoretical pharmacology] .

II. “The fundamental researches financing department “The theory of the physical-chemical bio-technology”” (“SFCHB”) (*)

[the financing of fundamental researches and developments in area “ Theoretical bio-technology ” ()* – theory of raw materials and producers for 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 immunological-bio-technological methods of analysis, other theories and problems of bio-technology (genical engineering), theory of cognitive modeling technology in theoretical physical-chemical bio-technology and genical engineering, theory of modeling of desoxyribonucleic acids structure based on multidimensional cognitive cylinder] .

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE PHYSIOLOGY,
FUNDAMENTAL MEDICINE AND PUBLIC HEALTH SERVICES” (“OFFM”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko”
 (“The SF "SFA CMT" named after N.A. Prokopenko” – The SF) as the first SF
in structure of “The SIO "Academy of cognitive natural sciences"” (“The SIO "ACNS"”),
an additional component of science and education system 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 The SF]:
1) it is executed by the principle of “administrative-economy submission”;
2) works in 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 “The SPbSETU "LETI"” and The Government of The RF
for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
3) includes several various main divisions:
I. “The fundamental researches financing department
"The theory of the physiology, bio-physiology and private physiology"” (“SF”) (*)
*[the financing of fundamental researches and developments in 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 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 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 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 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 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 other branches of bio-medicine and public health services,
theory of social physiology, theory of organization and management of public health services,
t h e o r y o f 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 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 software for automation of research tasks
of physiological, psychological and linguistical parameters
of parametrical cognitive models block in medicine,
theory of statistical substantiation of practical use of received results,
theory of physiological, psychological and linguistical factors influencing
to efficiency of functioning of information-educational environment
and increase of productivity of automated training system
with properties of adaptation based on cognitive models,
theory of organization and plan of carrying out of experiment,
theory of research of physiological, psychological and linguistical parameters
of cognitive models of subject of training and means of training,
theory of preliminary processing of a posteriori results of diagnostics,
theory of choice of statistical analysis methods of generated data sets,
theory of analysis of productivity dynamics of bio-physiology and public health services,
theory of dispersion, regression, discriminant, cluster analysis,
multidimensional scaling, factor analysis and bibliographical lists,
theory of the complex analysis of modified model of reduced eye
for research of visual acuity, field of vision, color perception and other parameters
i n 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 modified model of reduced ear
for research of absolute sensitivity and thresholds of sensitivity
i n 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 researches financing department “The theory of the medicine, public health services, labor safety, environment preservation and ecology of person”” (“SFM”) (*)
[the financing of fundamental researches and developments in 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 other branches of medicine and public health services, theory of social hygiene, theory of organization and management of public health services, theory of cognitive modeling technology in theoretical medicine and public health services;
the financing of fundamental researches and developments in area “Theoretical labor safety” (*) –
 theory of organization and management of labor safety, working conditions, industrial sphere and safety precautions, theory of professional illnesses and their preventive support, theory of accidents on manufacture and their prevention, theory of work capacity and examination of work capacity, theory of labor safety on categories of workers, theory of work safety on manufactures of increased danger, theory of cognitive modeling technology in theoretical labor safety, theory of cognitive model of subject of training;
the financing of fundamental researches and developments in area “Theoretical preservation of environment and ecology of person” –
 theory and methods of studying and preservation of environment and person, theory of ecological bases of use of natural resources, theory of international cooperation, theory of environmental contamination, theory of pollution, theory of pollution and protection of atmosphere, theory of pollution and protection of land waters, seas and oceans, theory of protection of ground, theory of protection of bowels, theory of ecological bases of ability to live of person, theory of influence of anthropogenous changes of environment on health and social-labor potential of person, on condition of natural ecosystems, populations and organisms of vegetative and fauna world, theory of protection of vegetative and fauna world, theory of anthropogenous influence on landscape, theory of protection and optimization of landscape, theory of reserved affair, theory of protected natural territories and water areas, theory of acts of nature and accidents of anthropogenous origin, theory of ecological safety of person, theory of rational use and reproduction of natural resources by person, theory of preservation of environment and natural resources in separate regions and countries, theory of waste management, theory of small-waste and without waste technology, theory of protection of person from noise, vibrations, electric and magnetic fields and radiations, theory of cognitive modeling technology in theoretical preservation of environment and ecology of person].

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE SCIENCES ABOUT THE EARTH” (“ONZ”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko”
 (“The SF "SFA CMT" named after N.A. Prokopenko” – The SF) as the first SF
in structure of “The SIO "Academy of cognitive natural sciences"” (“The SIO "ACNS””),
an additional component of science and education system 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 The SF]:
1) it is executed by the principle of “administrative-economy submission”;
2) works in 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 “The SPbSETU "LETI"” and The Government of The RF
for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
3) includes several various main divisions:
I. “The fundamental researches financing department
"The theory of the geo-physics, geology, mining and metallurgy"” (“SGGGGN”)
*[the financing of fundamental researches and developments in 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 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,
t h e o r y o f 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 theoretical geo-physics, geology, mining and metallurgy;

the financing of fundamental researches and developments in 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 geological-geo-physical researches of 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 mineralogical-petrographical and geo-chemical laboratory researches, theory of anthropogenic period, theory of neo-tectonics, theory of geo-morphology, theory of ore minerals geology, theory of nonmetallic minerals geology, theory of geology of fields of oil, gas and condensates, theory of geology of deposits of coal, bituminous breeds and peat, theory of methods of search and investigation of minerals deposits, theory of technics and technology of geological-prospecting works, theory of hydro-geology, theory of engineering geology, theory of frozen condition of ground, theory of cognitive modeling technology in theoretical geology ;

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

the financing of fundamental researches and developments in 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 manufacture of ferrous metals and alloys, theory of manufacture of nonferrous metals and alloys, theory of powder metallurgy, theory of metallurgy of semi-conductors, theory of rolling manufacture, theory of drawing and hardware manufacture, theory of pipes manufacture, theory of metallurgical science, theory of technical analysis in metallurgy, theory of cognitive modeling technology in theoretical metallurgy] .

II. “The fundamental researches financing department “The theory of the oceanology, structure and physics of atmosphere, geodesy, cartography and geography of The Earth and planets”” (“SOFAG”) [*the financing of fundamental researches and developments in 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 aerial-photograph and photo-metrology, theory of topography, theory of photo-topography, theory of cartography, theory of oceanology, theory of mapping of underwater world of The Earth and planets, theory of cognitive modeling technology in theoretical oceanography; *the financing of fundamental researches and developments in 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 structure of atmosphere, theory of aerial-photograph and photo-metrology, theory of topography, theory of photo-topography, theory of cartography, theory of planetodesy of atmospheres, theory of atmosphere mapping of The Earth and planets, theory of cognitive modeling technology in theoretical structure of atmosphere; *the financing of fundamental researches and developments in 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 questions of atmosphere of The Earth and planets, theory of general problems of atmosphere physical experiment, theory of physics of elementary particles of atmosphere, theory of atmosphere fields, theory of physics of atmosphere gases and liquids, theory of thermo-dynamics and statistical physics of atmosphere, theory of physics of atmosphere micro-disperse firm bodies, theory of physics of atmosphere plasma, theory of physics of atom and molecule of atmosphere, theory of atmosphere optics, theory of atmosphere radio-physics, theory of atmosphere acoustics, theory of cognitive modeling technology in theoretical physics of atmosphere; *the financing of fundamental researches and developments in 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 supreme geodesy, theory of applied geodesy, theory of aerial-photograph and photo-metrology, 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 cognitive modeling technology in theoretical geodesy and cartography; *the financing of fundamental researches and developments in 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 economical and social geography, theory of regional geography, theory of medical geography and theory of toponymics, theory of cognitive modeling technology in theoretical geography].

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE SOCIAL SCIENCES” (“OON”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko” (“The SF “SFA CMT” named after N.A. Prokopenko” – The SF) as the first SF in structure of “The SIO “Academy of cognitive natural sciences”” (“The SIO “ACNS””), an additional component of science and education system 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 The SF]:

- 1) it is executed by the principle of “administrative-economy submission”;
- 2) works in 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 “The SPbSETU “LETI”” and The Government of The RF for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
- 3) includes several various main divisions:

I. “The fundamental researches financing department “The theory of the social sciences, philosophy, science of science, 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 area “Theoretical social sciences” – theory and ideology of social sciences, theory of social sciences history, theory of modern condition of social sciences, theory of scientific societies, conventions, congresses, conferences and symposiums on social sciences, theory of international cooperation in field of social sciences, theory of organization of scientific-research work in field of social sciences, theory of information work in social sciences, theory of terminology of social sciences, theory of propagation and popularization of social sciences, theory of social sciences teaching, theory of mathematical modeling in social and humanitarian sciences, theory of staff of social scientists, theory of cognitive modeling technology in theoretical social sciences;
the financing of fundamental researches and developments in area “Theoretical philosophy” – theory of 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 philosophical history, theory of cognitive modeling technology in theoretical philosophy;

the financing of fundamental researches and developments in area “Theory of science of science” – theory of science development, theory of science and society, theory of sociology of science, theory of scientific work and scientific creativity, theory of organization of science, theory of politics in field of science, theory of technique and technics of 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 separate countries, theory of cognitive modeling technology in theory of science of science;

the financing of fundamental researches and developments in area “Theoretical politics and political sciences” – theory of methodology of political researches, theory of history of political doctrines, theory of political systems, theory of internal policy, theory of international relations, theory of foreign (external) policy and diplomacy, theory of cognitive modeling technology in theoretical politics and political sciences;

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

the financing of fundamental researches and developments in 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 cognitive modeling technology in theoretical (cognitive) psychology, theory of modified stratified-step model of processing (cognitive psychology) of information fragments content, theoretical bases of cognitive psychology and cognitive modeling technology, theoretical bases of parametrical cognitive models block for the system analysis of information-educational environments (cognitive models of subject of training and means of training), theory of ways of representation of structure of cognitive models and problem environments: formal classical of the 0th generation (logical and production models), nonformal classical of the 0th generation (semantic network, frame network and ontology), formal new of the 0th generation (calculus of theory of sets and corteges on domains and innovative calculus of theory of sets and graphs), nonformal new of the 0th generation (multilevel structural scheme and multilevel encapsulated pyramids combining theory of graphs and theory of sets), flat of the 1st generation (cognitive circle and cognitive disc), volumetric of the 1st generation (cognitive cylinder, cognitive cone and cognitive sphere), flat and volumetric of the 2nd generation (one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), hybrid of the 3rd generation (combinations of the existing cognitive models),

theory of adaptive automation means of information-educational environment (basic and applied diagnostic module, electronic textbook, laboratory practical work, electronic dean, electronic library and others), theory of technical means of adaptive information interaction support (adaptive representation of sequence of information fragments processor, question-answers structures sequence processing processor, linguistical processor and other processors), theory of technical means of the complex analysis support (automation means of formation and research of psychological parameters of cognitive model as 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 area “Theoretical state management, law and jurisprudence sciences”*** – theory of state and law, theory of history of state and law, theory of history of political and law doctrines, theory of constitutional (state) law, theory of municipal law, theory of administrative law, theory of information law, theory of financial law, theory of enterprise 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 industrial property law, theory of copyright and adjacent rights, theory of succession law, theory of family law, theory of agrarian law, theory of law problems of environment preservation, theory of ecological law, theory of ground law, theory of forestry law, theory of water law, theory of airspace protection law, theory of legislation about bowels, theory of legislation about fauna world, theory of labor law, theory of social support law, theory of law institutions, 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 separate countries, theory of cognitive modeling technology in theoretical state management, law and jurisprudence sciences; ***the financing of fundamental researches and developments in area “Theoretical patent business, invention and rationalization”*** – theory of patent-information work, theory of invention and rationalization, theory of patent-license work, theory of technical-economical analysis on patent materials, theory of invention right, theory of cognitive modeling technology in theoretical patent business, invention and rationalization].

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

the financing of fundamental researches and developments in area “The theoretical financial analysis, monetary circulation and credit” (*) – theory of tendencies, dependences and laws of the financial analysis of objects, processes and phenomena, theory of system, information and cognitive approaches in economics, theory of structure and dynamics of financial market functioning, theory of global purposes of standardization of accounting and problems of unification of accounting documents, theory of institutional subjects of regulating of creation, distribution and use of international standards, theory of principles of creation, distribution and use of international standards of financial and accounting documents, theory of basic methods of financial documents transformation, theory of formation of accounting balance under international standards of financial documentation, theory of qualifying tests of professional participants of financial system of the country, theory of administrative-legal forms of existence of managing subject, theory of features of the financial analysis procedure of managing subject, theory of organizational structure of enterprise and its features (educational organization of educational system and information-educational environment), theory of inflationary depreciation, discounting and compounding of money streams in economical system of the country, theory of indexes of dynamics of financial market and tools, theory of dynamics and communications of managing subjects, theory of investment and innovative politics of managing subject in financial system of the country, theory of organizational, technological, scientific, methodical, normative-legal, information, hardware, software, brainware, raw, warehouse, personnel and economical preparations of manufacture process and basis of the financial analysis and estimation of quality of activity of credit and other organization, theory of requirements and structure of financial documents of (non)industrial organizational structures, theory of additional elements of accounting and financial documents of credit organization, theory of consumers of financial documents, theory of elements of financial documents connected with changes of financial-economy activity, theory of simple and consolidated accounting and financial documents, theory of methods of the financial analysis of different forms of documents, theory of accounts structure of the accounting and financial analysis, theory of the vertical, horizontal and trend financial analysis based on analytical coefficients system, theory of circuit of auditor check procedure, the financial analysis and audit, theory of external and internal control of different organizations activity, theory of kinds of bank operations, theory of structure of accounting balance (form №1), theory of structure of explanatory note to accounting balance, theory of structure of report about profits and losses (form №2), theory of structure of explanatory note to report about profits and losses, theory of structure of report about change of capital (form №3), theory of structure of report about movement of money resources under accounts (form №4), theory of structure of explanatory note to report about movement of means, theory of structure of appendix to accounting balance (form №5), theory of structure of report about target use of received means (form №6), theory of structure of auditor conclusion about results of activity of enterprise, (credit) organization, organization of The Federal reserved system of The USA,

theory of analysis of stability of credit organization and commercial bank, theory of basic analytical coefficients of the financial analysis, theory of structure of accounting balance and report about profits and losses of enterprise for introduction of analytical coefficients system, theory of cognitive modeling technology with dynamic cloning, verification and subverification, theory of iterative cycle and technique of use of cognitive modeling technology, theory of techniques of formation of normative-legal and information basis for the financial analysis of organization, theory of technique of additional check of information basis of the financial analysis, theory of techniques of creation and modification of working plan of accounts and model of accounting, theory of technique of carrying out of the financial analysis of condition of organization, theory of parametrical cognitive models block for the financial analysis and increase of efficiency of functioning of objects, processes and phenomena, theory of structure of cognitive model for the vertical, horizontal and trend financial analysis of (credit) organization and enterprise, theory of ways of representation of structure of cognitive models and problem environments (formal and non-formal classical and new of 0th generation, flat and volumetric of the 1st generation and 2nd generation and hybrid of the 3rd generation), theory of algorithm of formation of cognitive model structure, theory of technique of research of cognitive models parameters, theory of algorithm of analysis of a posteriori results of research, theory of formation and accounting of accounting balance units of industrial and nonindustrial organization, theory of calculation of cognitive models parameters for the vertical, horizontal and trend static and dynamic financial analysis of enterprise and (credit) organization in conditions of definiteness and uncertainty, theory of software for automation of research tasks, theory of statistical substantiation of practical use of received results, theory of factors influencing to efficiency of functioning of (credit) organization and enterprise in economical system, theory of organization and plan of carrying out of experiment, theory of research of cognitive models parameters for the vertical, horizontal and trend financial analysis, theory of preliminary processing of a posteriori results of diagnostics, theory of choice of statistical analysis methods of generated data sets, theory of analysis of productivity dynamics of financial-economy activity, theory of dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factor analysis and bibliographical lists; ***the financing of fundamental researches and developments in area “Theoretical other branches of economics”*** – theory of manufacture of musical instruments, theory of manufacture of photo-art products, theory of jeweler industry, theory of manufacture of toys, theory of manufacture of sport products, theory of manufacture of writing goods, theory of cognitive modeling technology in theoretical other branches of economics].

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
"COGNITIVE MODELING IN THE GLOBAL PROBLEMS
AND INTERNATIONAL RELATIONS" ("OGPMO")
OF "THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO"

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 N.A. Prokopenko"
("The SF "SFA CMT" named after N.A. Prokopenko" – The SF) as the first SF
in structure of "The SIO "Academy of cognitive natural sciences" ("The SIO "ACNS")",
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of the fundamental main and derivative scientific results
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(my second report on SRW from 2006-2008(9) y. was submitted
to "The SPbSETU "LETI" and The Government of The RF
for the translation, carrying out of int. action and receiving of "The Nobel Prize");
3) includes several various main divisions:
I. "The fundamental researches financing department
"The theory of the demography, pedagogics and national education, standardization,
complex studying of separate countries and regions,
general and complex problems of natural, exact, technical,
public and applied sciences and manufacture branches" ("SGP")
***the financing of fundamental researches and developments in area
"Theoretical demography"*** –
theory and methodology of demographical science,
theory of general problems of population, theory of population statistics,
theory of history of population, theory of historical demography,
theory of population moving, theory of geographical demography, theory of The World's population,
theory of cognitive modeling technology
in theoretical demography;
***the financing of fundamental researches and developments in area
"Theoretical pedagogics and national education"*** –
theory of general pedagogics, theory of history of education and pedagogics,
theory of personnels, theory of education system,
theory of preschool education, theory of preschool pedagogics,
theory of comprehensive school, theory of pedagogics of comprehensive school,
theory of out-of-school (additional) education and teaching,
theory of out-of-school pedagogics, theory of special (correctional) schools,
theory of defectology, theory of initial vocational-technical education,
theory of pedagogics of professional school,
theory of average vocational education,
theory of pedagogics of average vocational education,
theory of supreme vocational education,
theory of pedagogics of supreme professional school,
theory of education of adults, theory of improvement of professional skill, theory of self-education,
theory of family education, theory of family pedagogics,
theory of specialized branches of education,
theory of technical means of training and training equipment,
theory of national education and pedagogics in separate countries,
theory of cognitive modeling technology
in theoretical pedagogics and national education;

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

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

the financing of fundamental researches and developments in area "Theoretical general and complex problems of natural and exact sciences" – theory of general and complex problems of natural and exact sciences, theory of cognitive modeling technology in theoretical general and complex problems of natural and exact sciences;

the financing of fundamental researches and developments in area "Theoretical general and complex problems of technical, applied sciences and manufacture branches" – theory of materiology (material science), theory of general technology of production, theory of designing, theory of constructing, theory of 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 manufacture, theory of staff, theory of control and quality management, theory of installation, theory of 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 industrial art, theory of ergonomics, theory of information protection, theory of cognitive modeling technology in theoretical general and complex problems of technical and applied sciences and manufacture branches;

the financing of fundamental researches and developments in area "Theoretical complex problems of social sciences" – theory of social-political idea, theory of global problems, theory of work, theory of cognitive modeling technology in theoretical complex problems of social sciences].

II. “The fundamental researches financing department
“The theory of the 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 consumer services at international level”” (“SMO”)
[the financing of fundamental researches and developments in area
“Theoretical culture and cultural science” –
 theory, methodology and philosophy of culture,
 theory of history of culture, theory of history of culture studying,
 theory of culture in the modern world, theory of organization and management in field of culture,
 theory of international cooperation in field of culture,
 theory of hardware of establishments of culture,
 theory of social-cultural activity in sphere of leisure,
 theory of library affair, theory of library science,
 theory of bibliography, theory bibliography science,
 theory of museum affair, theory of museology (museum science),
 theory of monuments protection of history and culture,
 theory of archival affair, theory of archival science,
 theory of culture of separate countries and peoples,
 theory of cognitive modeling technology
 in theoretical culture and cultural science;
the financing of fundamental researches and developments in area
“Theoretical art and art science” –
 theory and methodology of art and problems of art science,
 theory of history and modern condition of art,
 theory of art science and photo-art critics, theory of art in the modern world,
 theory of organization and management in field of art,
 theory of international cooperation in field 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 separate countries and peoples,
 theory of cognitive modeling technology
 in theoretical art and art science;
the financing of fundamental researches and developments in area
“Theoretical mass communication,
journalism and mass media means” –
 theory of mass communication means,
 theory of open network information resources (Internet and WWW),
 theory of journalism, theory of mass media means,
 theory of seal (press), theory of television (TV), theory of radio,
 theory of use of technical means for mass communication,
 theory of cognitive modeling technology
 in theoretical mass communication,
 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 ;

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

the financing of fundamental researches and developments in area “Theoretical internal trade and tourist-excursion service” – theory of 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 cognitive modeling technology in theoretical internal trade and tourist-excursion service;

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

the financing of fundamental researches and developments in 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 municipal transportation, theory of interaction of different types of transport, theory of mixed transportations, theory of other types of transport, theory of cognitive modeling technology in theoretical transport;

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

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE HISTORICAL-
PHILOLOGICAL SCIENCES” (“OIFN”)

OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko”
 (“The SF "SFA CMT" named after N.A. Prokopenko” – The SF) as the first SF
in structure of “The SIO "Academy of cognitive natural sciences"” (“The SIO "ACNS””),
an additional component of science and education system 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 The SF]:
1) it is executed by the principle of “administrative-economy submission”;
2) works in 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 “The SPbSETU "LETI”” and The Government of The RF
for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
3) includes several various main divisions:
I. “The fundamental researches financing department
"The theory of the history and historical sciences"” (“SI”)
*[the financing of fundamental researches and developments in 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 The 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 separate processes, parties and phenomena of human activity,
theory of archeology, theory of ethnography and historical anthropology,
theory of auxiliary historical disciplines, theory of history of separate countries,
theory of cognitive modeling technology
in theoretical history and historical sciences].

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

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE SPORTS SCIENCES” (“OSN”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko” (“The SF "SFA CMT" named after N.A. Prokopenko” – The SF) as the first SF in structure of “The SIO "Academy of cognitive natural sciences"” (“The SIO "ACNS””), an additional component of science and education system 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 The SF]:

- 1) it is executed by the principle of “administrative-economy submission”;
- 2) works in 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 “The SPbSETU "LETI”” and The Government of The RF for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
- 3) includes several various main divisions:
I. “The fundamental researches financing department "The theory of the competitions, sport and sports sciences”” (“STSSSN”)
[the financing of fundamental researches and developments in area “Theoretical physical training and sport” – theory of physical training and sport, theory of medical-biological bases of physical training and sport, theory of material-technical base of physical training and sport, theory of methodical bases of kinds of sport, theory of sport competitions, theory of cognitive modeling technology in theoretical physical training and sport].

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

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THE FUNDAMENTAL RESEARCHES FINANCING BRANCH
“COGNITIVE MODELING IN THE MILITARY SCIENCES” (“OVN”)
OF “THE SF "SFA CMT" NAMED AFTER N.A. PROKOPENKO”

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 N.A. Prokopenko”
 (“The SF "SFA CMT" named after N.A. Prokopenko” – The SF) as the first SF
in structure of “The SIO "Academy of cognitive natural sciences"” (“The SIO "ACNS””),
an additional component of science and education system of the modern country
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[see the fundamental researches financing branches and departments of The SF]:
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(my second report on SRW from 2006-2008(9) y. was submitted
to “The SPbSETU "LETI”” and The Government of The RF
for the translation, carrying out of int. action and receiving of “The Nobel Prize”);
3) includes several various main divisions:
I. “The fundamental researches financing department
"The theory of the architecture, construction, technics, history, education,
politics and economics in the armed forces”” (“STASTIOPEVS”)
*[the financing of fundamental researches and developments in 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,
t h e o r y o f a r m s a n d m i l i t a r y t e c h n i c s ,
theory of armed forces, theory of military economics,
t h e o r y o f 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 o r e t i c a l m i l i t a r y s c i e n c e] .

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

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