

“the author of the unique technology” of cognitive modeling” Vetrov Anatoly Nikolaevich
www.vetrovan.(spb.)ru
RF, Saint-Petersburg city

THE APPLIED SCIENTIFIC RESEARCHES DIRECTION
“COGNITIVE MODELING IN THE BIOLOGICAL
AND MEDICAL SCIENCES” (“NBME”)

OF “SIO "ACADEMY OF COGNITIVE NATURAL SCIENCES””

The developed “The applied scientific researches direction
“Cognitive modeling in the biological and medical sciences”” (“NBME”)
treats to the applied scientific researches divisions
of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS””)
as the main component of the system of science and education of the modern country
for the creation, distribution and use of the main and derivative
scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru)
[see the applied scientific researches directions and departments of “SIO "ACNS””]:
1) it is executed by the principle of “administrative-economy submission”;
2) works in the several main directions, which allow to provide
the development of the applied main and derivative scientific results
(my second report on SRW from 2006-2008(9) y. was submitted
to “SPbSETU "LETI”” and “The Government of RF”
for the translation, carrying out of int. action and receiving of “The Nobel prize”);
3) includes the several various main divisions:
I. “The applied scientific researches department
“Applications of biology, ecology and physiology of plants”” (“SBE”)
*[the applied scientific researches in the area
“ Applications of biology ”* –
usage of theory of the methods and equipment of biological researches,
usage of theory of biology of plants,
usage of theory of molecular biology of plants,
usage of theory of bio-physics of plants, usage of theory of cytology of plants,
usage of theory of embryology of plants, usage of theory of genetics of plants,
usage of theory of virology of plants, usage of theory of micro-biology of plants,
usage of theory of botany of plants, usage of theory of physiology of plants,
usage of theory of zoology of plants, usage of theory of ecology of plants,
usage of theory of anthropology of plants,
usage of theory of communication of physiology of plants, person and animals,
usage of theory of communication of morphology of plants, person and animals,
usage of theory of immunology of plants,
usage of theory of pharmacology of plants, usage of theory of toxicology of plants,
usage of theory of radiation biology of plants,
usage of theory of space biology of plants,
usage of theory of bionics of plants, usage of theory of bio-cybernetics of plants,
usage of theory of bio-engineering of plants,
usage of theory of the cognitive modeling technology
in the applications of biology;

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

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

II. "The applied scientific researches department "Applications of bio-technology, bio-medicine, ergonomics and labor safety of organic individuals" ("SB") (*)
[the applied scientific researches in the area "Applications of bio-technology" (*) – usage of theory of raw materials and producents for the bio-technological manufacture, usage of theory of bio-technological processes and devices, usage of theory of cellular engineering, usage of theory of technological bio-energetics, usage of theory of genetic engineering, usage of theory of enzymological engineering, usage of theory of the immuno-bio-technological methods of analysis, usage of theory of the other problems of bio-technology, usage of theory of the cognitive modeling technology in the applications of physical-chemical bio-technology and genetic engineering, usage of theory of modeling of the structure of desoxyribonucleic acid based on the multidimensional cognitive cylinder;
the applied scientific researches in the area "Applications of bio-medicine and public-health-services" (*) – usage of theory of medical-biological disciplines, usage of theory of bio-medical materials, means and products, usage of theory of bio-medical technics, usage of theory of clinical bio-medicine, usage of theory of bio-pharmacology, usage of theory of bio-hygiene and bio-epidemiology, usage of theory of the other branches of bio-medicine and public-health-services, usage of theory of social bio-hygiene, usage of theory of organization and management of public-health-services, usage of theory of the modified model of reduced eye, usage of theory of the modified model of reduced ear, usage of theory of software for the automation of research tasks of the physiological, psychological and linguistic parameters of the parametrical cognitive models block, usage of theory of the statistical substantiation of practical use of the received results, usage of theory of the physiological, psychological and linguistic factors influencing to the efficiency of functioning of the information-educational environment and the increase of resultativity of the automated training system with the properties of adaptation based on the cognitive models, usage of theory of organization and plan of carrying out of the experiment, usage of theory of research of the physiological, psychological and linguistic parameters of the cognitive models of the subject of training and the means of training, usage of theory of preliminary processing of a posteriori results of diagnostics, usage of theory of choice of the statistical analysis methods of the generated data sets, usage of theory of the analysis of dynamics of the resultativity of bio-medicine and public-health-services, usage of theory of the dispersion, regression, discriminant, cluster analysis, multivariate scaling, factor analysis and bibliographic lists, usage of theory of the complex analysis of the modified model of reduced eye for the research of acuity of vision, field of vision, color perception and other parameters in the Descartes space of the 2 and 3 coordinates, usage of theory of the complex analysis of the modified model of reduced ear for the research of absolute sensitivity and thresholds of sensitivity in the Descartes space of the 2 and 3 coordinates;
the applied scientific researches in the area "Applications of labor safety" – usage of theory of organization and management of labor safety and working conditions, usage of theory of industrial sphere, usage of theory of safety precaution, usage of theory of professional illnesses and their preventive-support, usage of theory of accidents on manufacture and their prevention, usage of theory of work-capacity, usage of theory of examination of work-capacity, usage of theory of labor safety on the categories of workers, usage of theory of work safety on the manufactures of increased danger, usage of theory of the cognitive modeling technology in the applications of labor safety];
 The applied scientific researches directions and departments of "SIO "ACNS" allow to develop the main and derivative scientific results of CMT.