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THE FUNDAMENTAL SCIENTIFIC RESEARCHES BRANCH  
“THEORY OF SOCIAL-SCIENCE AND TECHNOLOGIES OF SOCIAL SCIENCES  
IN MEDICINE” (“TSOC-S AND TSOCS IN M”)

OF “SEC "SFA CMT" OF "RA(M)S" N. A. ACAD. BURDENKO N.N.” (PART 2)

The developed “The fundamental scientific researches branch  
"Theory of social-science and technologies of social sciences  
in medicine"” (“TSOC-S and TSOCS in M”)  
treats to the fundamental scientific researches divisions  
of “The scientific-educational centre "System and financial analysis based on  
cognitive modeling technology" of "RA(M)S" named after acad. Burdenko N.N.”  
 (“SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.” – SEC) as the first SEC  
in the structure of “SIO "Academy of cognitive natural sciences”” (“SIO "ACNS””)  
as the add. component of the system of science and education of the modern country  
for the creation, distribution and use of the main and derivative  
scientific results of the cognitive modeling technology (CMT) (www.vetrovan.(spb.)ru)  
[see the fundamental scientific researches branches and departments of SEC]:  
1) it is executed by the principle of “administrative-economy submission”;  
2) works in the several main directions, which allow to provide  
the development of the fundamental main and derivative scientific results  
(my second report on SRW from 2006-2008(9) y. was submitted  
to “SPbSETU "LETI”” and “The Government of RF”  
for the translation, carrying out of int. action and receiving of “The Nobel prize”);  
3) includes the several various main divisions:  
II. “The fundamental scientific researches department  
"Theory of economics and economic sciences, organization, management, statistics  
and the financial analysis based on the cognitive modeling technology  
in medicine”” (“TECON and ECONSOMS and FAB on CMT in M”) (\*)  
*[the fundamental scientific researches in the area  
“Theoretical economics and economic sciences in medicine”* –  
the theoretical bases of economics and economic sciences in medicine,  
the economic theories in medicine, theory of the history of economic thought in medicine,  
theory of accounting-economic sciences in medicine,  
theory of the science of management of economics in medicine,  
theory of economic history in medicine, theory of world economy in medicine,  
theory of the international economic relations in medicine,  
theory of the economic development and growth in medicine,  
theory of the forecasting and planning of economics in medicine,  
theory of economic cycles and crises in medicine,  
theory of productive forces and scientific-technical progress in medicine,  
theory of the social-economic structure in medicine,  
theory of the reproductive structure of economics in medicine,  
theory of accumulation and consumption in medicine, theory of well-being in medicine,  
theory of the territorial structure of economics in medicine,  
theory of regional and urban economics in medicine,  
theory of the branch structure of economics in medicine,  
theory of financial science in medicine, the monetary and tax theories in medicine,  
theory of the credit-financial institutions in medicine  
and the cognitive modeling technology  
in the theoretical economics and economic sciences in medicine;

*the fundamental scientific researches in the area “Theoretical organization and management in medicine”* – the theoretical bases of organization and management in medicine, theory of the methodology of management in medicine, theory of state and administrative management in medicine, theory of the organization of management by economics in medicine, theory of social management in medicine, theory of prediction in medicine, theory of futurology in medicine, theory of strategic management in medicine, theory of strategic planning in medicine and the cognitive modeling technology in the theoretical organization and management in medicine;

*the fundamental scientific researches in the area “Theoretical statistics in medicine”* – the theoretical bases of statistics in medicine, the general theory of statistics in medicine, theory of economic statistics in medicine, theory of branch statistics in medicine, theory of social statistics in medicine, theory of international statistics in medicine, theory of statistics of the separate countries and social-economic systems in medicine, theory of organization and management by statistics in medicine, theory of the methods and means of collection, processing and analysis of the statistical information in medicine and the cognitive modeling technology in the theoretical statistics in medicine;

*the fundamental scientific researches in the area “Theoretical financial analysis, monetary circulation and credit in medicine”* (\*) – the theoretical bases of the financial analysis, monetary circulation and credit in medicine, theory of tendencies, dependencies and regularities of the financial analysis of the objects, processes and phenomena in medicine, theory of the system, information and cognitive approaches in economics and medicine, theory of the structure and dynamics of financial market functioning in medicine, theory of the global goals of standardization of accounting and the problems of unification of reporting in medicine, theory of the institutional subjects regulating the creation, distribution and use of the international standards in medicine, theory of the principles of creation, distribution and use of the international standards of the financial and accounting reporting in medicine, theory of the basic methods of transformation of the financial reporting in medicine, theory of formation of the accounting balance sheet by the international standards of financial reporting in medicine, theory of the qualification tests of the professional participants of the financial system of the country in medicine, theory of the administrative-legal forms of the existence of the economy subject in medicine, theory of the features of the procedure of the financial analysis of the economy subject in medicine, theory of the organizational structure of enterprise, (credit) organization and its features in medicine (the educational establishment of the system of education and the information-educational environment in medicine), theory of inflationary impairment, discounting and compounding of the monetary flows in the economic system of the country in medicine, theory of the indices of dynamics of the financial market and instruments in medicine, theory of dynamics and communication in medicine, theory of the investment and innovation politics of the economy subject in medicine in the financial system of the country, theory of the organizational, technological, scientific, methodological, regulatory-legal, information, hardware, software, algorithmic, raw materials, warehouse, personnel and economic preparation of production in medicine,

theory of the bases of the financial analysis and the estimation of quality of the activity of the enterprise, (credit) organization and other organization in medicine, theory of the requirements and composition of the financial reporting of the (non)production organizational structures in medicine, theory of the additional elements of the accounting and financial reporting of the enterprise and (credit) organization in medicine, theory of the consumers of the financial reporting in medicine, theory of the elements of the financial reporting related with the changes of financial-economy activity in medicine, theory of the concept of the simple and consolidated accounting and financial reporting in medicine, theory of the methods of the financial analysis of the different forms of reporting in medicine, theory of the structure of accounts of the accounting and financial analysis in medicine, theory of the vertical, horizontal and trend financial analysis based on the system of analytical coefficients in medicine, theory of the scheme of carrying out of the audit inspection, financial analysis and audit in medicine, theory of the external and internal control of activity of the different enterprises and (credit) organizations in medicine, theory of the kinds of banking operations in medicine, theory of the structure of the accounting balance sheet (form №1) in medicine, theory of the explanatory note to the accounting balance sheet in medicine, theory of the report about profits and losses (form №2) in medicine, theory of the explanatory note to the report about profits and losses in medicine, theory of the report about the change of capital (form №3) in medicine, theory of the report about the movement of monetary means on the accounts (form №4) in medicine, theory of the explanatory note to the report about the movement of monetary means on the accounts in medicine, theory of the application to the accounting balance sheet (form №5) in medicine, theory of the report about the targeted use of the received means (form №6) in medicine, theory of the audit conclusion about the results of activity of the enterprise, (credit) organization and the organization of the federal reserve system of USA in medicine, theory of the analysis of the sustainability of the enterprise, (credit) organization and commercial bank in medicine, theory of the basic analytical coefficients of the financial analysis in medicine, theory of the structure of the accounting balance sheet and the report about profits and losses of the enterprise and (credit) organization for the introducing of the system of analytical coefficients in medicine, theory of the cognitive modeling technology with the dynamic cloning, verification and subverification in medicine, theory of the iterative cycle of the cognitive modeling technology in medicine, theory of the technique of use of the cognitive modeling technology in medicine, theory of the technique of formation of the regulatory-legal basis for the financial analysis of the enterprise and (credit) organization in medicine, theory of the technique of formation of the information basis for the financial analysis of the enterprise and (credit) organization in medicine, theory of the technique of the additional check of the information basis of the financial analysis in medicine, theory of the technique of creation and modification of the working plan of accounts and the model of accounting in medicine, theory of the technique of carrying out of the financial analysis of the condition of the enterprise and (credit) organization in medicine, theory of the parametrical cognitive models block for the financial analysis and the increasing of functioning efficiency of the objects, processes and phenomena in medicine, theory of the structure of the cognitive model for the vertical, horizontal and trend financial analysis of the enterprise and (credit) organization in medicine,

theory of the ways of representation of the structure of the cognitive models and problem environments in medicine: the formal classical of the 0<sup>th</sup> generation (the logical and production models), the non-formal classical of the 0<sup>th</sup> generation (the semantic network, the frame network and ontology), the formal new of the 0<sup>th</sup> generation (the calculus of theory of sets and corteges on domains and the innovative calculus of theory of sets and graphs), the non-formal new of the 0<sup>th</sup> generation (the multi-level structural scheme and the multi-level encapsulated pyramids combining theory of graphs and theory of sets), the flat of the 1<sup>st</sup> generation (the cognitive circle and the cognitive disc), the volumetric of the 1<sup>st</sup> generation (the cognitive cylinder, the cognitive cone and the cognitive sphere), the flat and volumetric of the 2<sup>nd</sup> generation (the one-, two-, three-, four-, five- and more cognitive circle, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere), the hybrid of the 3<sup>rd</sup> generation (the combinations of the existing cognitive models), theory of the algorithms of formation of the structure of the cognitive models of the 0<sup>th</sup>, 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> generations in medicine, theory of the techniques of research of the parameters of the cognitive models of the 0<sup>th</sup>, 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> generations in medicine, theory of the algorithms of the analysis of a posteriori results of research in medicine, theory of the formation and calculation of the aggregates of the accounting balance sheet of the (non)production enterprise and (credit) organization in medicine, theory of the calculation of the parameters of the cognitive model for the vertical, horizontal and trend static and dynamic financial analysis of the enterprise and (credit) organization in the conditions of certainty and uncertainty in medicine, theory of software for the automation of research tasks in medicine, theory of the statistical justification of practical use of the received results in medicine, theory of the factors affecting on the efficiency of functioning of the enterprise and (credit) organization in medicine, theory of the organization and plan of carrying out of the experiment in medicine, theory of the research of the parameters of the cognitive model for the vertical, horizontal and trend financial analysis in medicine, theory of the preliminary processing of a posteriori results of diagnostics in medicine, theory of selection of the methods of the statistical analysis of the formed selections of data in medicine, theory of the analysis of the dynamics of resultativity of the financial-economy activity in medicine, theory of the dispersion, regression, discriminant, cluster analysis, multidimensional scaling, factorial analysis and bibliographic lists in medicine and the cognitive modeling technology in the theoretical financial analysis, monetary circulation and credit in medicine; ***the fundamental scientific researches in the area "Theoretical other branches of economics in medicine"*** – the theoretical bases of other branches of economics in medicine, theory of the production of musical instruments in medicine, theory of the production of fine art products in medicine, theory of jewelry industry in medicine, theory of the production of toys in medicine, theory of the production of sports products in medicine, theory of the production of writing goods in medicine and the cognitive modeling technology in the theoretical other branches of economics in medicine].

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