

**The list and comparison of the scientific results (slides)
of dissertations of “AUT CMT SFA” Vetrov Anatoly Nikolaevich
on the theme “The environment of automated training with the properties of adaptation
based on the cognitive models”**

**on the competition of scientific degree of the candidate of technical sciences
(was created at “SPbSETU "LETI"” in 2005 y.,
was submitted to “SPbSU” in 2018 y. and defended in “SPbSU” in 2020 y.)
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and on the theme “The cognitive modeling technology
for the system analysis of the information-educational environments”
on the competition of scientific degree of the doctor of technical sciences
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№ s. by s.	The name and the year of creation of scientific result	№ of p. in the diss. on the comp. of sci. deg. of c.t.s.	№ of p. in the diss. on the comp. of sci. deg. of d.t.s.
1.	The first scientific result. The generalized structure of the adaptive information-educational environment and the principles (algorithms) of functioning of the components of the automated (remote) training system with the properties of adaptation based on the parametrical cognitive models block [slides 1.1-1.21 (1.1-1.8.3)] [see the bibliographic section of dissertation].		
1.1.	The generalized topological structure of the territorially distributed information-educational environment: on the example of the geographically distributed countries, regions and areas (the topology of “The state international organization “Academy of cognitive natural sciences”” (“SIO “ACNS””)) (2004 y.) [slide 1.1].	-	225 [+] [new]
1.2.	The typical scheme of information interaction of the information centre of educational establishment and the various automated workplaces of the subjects of training (at distance) (2003 y.) [slide 1.2 (1.2.1)].	75 [+]	278
1.3.	The typical scheme of remote information interaction of the different automated workplaces of the diverse subjects of training of the information-educational environment of the automated (remote) training system of the (various) educational establishments (2003 y.) [slide 1.3 (1.2.2)].	75 [+]	278



1.4.	The classification of the diverse subjects of training of the information-educational environment of the automated (r e m o t e) t r a i n i n g s y s t e m of the (various) educational establishments (2003 y.) [slide 1.4 (1.2.3)].	75 [+]	278
1.5.	The transformation of information in the technological process of the formation of knowledge (2003 y.) [slide 1.5 (1.2.4)].	75 [+]	278
1.6.	The classification of the practical methods of extraction and transmission of information (as the aggregate of knowledge) on the various subjects of studying (disciplines) (2003 y.) [slide 1.6 (1.2.5)].	75 [+]	278
1.7.	The modifications in the organization of the information-educational environment of the automated (remote) training system of the (modern) educational establishment for the support of accounting of the individual features of personality of the subjects of training (2005 y.) [slide 1.7 (1.3.1)].	83 [+]	286
1.8.	The modifications in the technological process of the controlled formation of knowledge at the realization of the automated personally-oriented training (2005 y.) [slide 1.8 (1.3.2)].	83 [+]	286
1.9.	The generalized scheme of comparison of modifications in the organization of information-educational environment and the technology of automated (remote) training for the realization of the contour of adaptation based on the innovative parametrical cognitive models block (2005 y.) [slide 1.9 (1.3.3)].	-	286 [+] [new]
1.10.	The structure of the information-educational portal of the scientific (educational) centre (2005 y.) [slide 1.10 (1.4.1)]: on the example of the information resources of "The scientific-educational consortium "System and financial analysis based on cognitive modeling technology" ("SEC "SFA CMT"") (in the international English language and the national Russian language) (2013 y.).	83 [+]	286 [www.acns.spb.ru, www.sfacmt.spb.ru, www.sfacmtfundspb.ru, www.eceast.spb.ru, www.sciiec.spb.ru] [324, 325, 330, 334, 456] [+] [new]
1.11.	The structure of the information-educational portal of teacher (scientist): on the example of the information resource – the scientific-educational portal of "the author of the unique technology" of cognitive modeling for the system, financial and complex analysis" ("AUT CMT SFA") Vetrov A.N. (in the international English language and the national Russian language) (2003 y.) [slide 1.11 (1.4.2)].	-	278 [+] [new]
1.12.	The structure of the automated training system with the properties of adaptation based on the parametrical cognitive models block (2005 y.) [slide 1.12 (1.5)].	83 [+]	286 [new]
1.13.	(The recommended formal description – the scheme of calculation) of the structure of the automated (remote) training system with the properties (elements) of adaptation based on the innovative parametrical cognitive models block (by means of the apparatus of classical theory of automated control) (2005 y.) [slides 1.13 (1.6.1-1.6.3)].	83 [+]	286 [new]

1.14.	The infological scheme, reflecting the algorithm (principle) of functioning of the main (basic) and applied (extended) diagnostic modules in the information-educational environment of the automated (remote) training system (2003 y.) [slide 1.14 (1.7.1)].	75 [+]	278
1.15.	The infological scheme, reflecting the algorithm (principle) of functioning of the innovative adaptive means of training (the electronic textbook of 2005 y. [slide 1.15.1 (1.7.2)] and the laboratory workshop of 2010 y. [slide 1.15.2 (1.7.2)] in the information-educational environment of the automated (remote) training system with the adaptation based on the parametrical cognitive models block.	83 [+]	286, 304 [new]
1.16.	The innovative architecture of the adaptive means of training (the electronic textbook of 2005 y. [slide 1.16.1 (1.7.3)] and the laboratory workshop of 2010 y. [slide 1.16.2 (1.7.3)]) in the information-educational environment of the automated (remote) training system.	83 [+]	286, 304 [new]
1.17.	The branched information structure of the subject of studying (discipline), displayed at the level of presentation of data by the means of using of the innovative adaptive means of training (the electronic textbook of 2005 y. [slide 1.17.1 (1.7.4)] and the laboratory workshop of 2010 y. [slide 1.17.2 (1.7.4)]) based on the parametrical cognitive models block.	83 [+]	286, 304 [new]
1.18.	The recommended schemes of the realization of branching for the linear and branched model of controlled process of the formation of knowledge of the contingent of trainees (1 – correct answer, 0 – wrong answer): at the left – linear model and at the right – branched model (2003 y.) [slide 1.18 (1.7.5)].	75 [+]	278
1.19.	The algorithm of processing of events, initiated by the user (the subject of training) in the innovative adaptive means of training (the electronic textbook of 2005 y. [slide 1.19.1 (1.7.6)] and the laboratory workshop of 2010 y. [slide 1.19.2 (1.7.6)]) based on the parametrical cognitive models block.	83 [+]	286, 304
1.20.	The semantic (structural) model of representation of the diverse information (of a sequences of diverse information fragments by the different way) in the innovative adaptive means of training (the electronic textbook of 2005 y. [slide 1.20.1 (1.7.7)] and the laboratory workshop of 2010 y. [slide 1.20.2 (1.7.7)]) based on the parametrical cognitive models block.	83 [+]	286, 304 [+] [new]
1.21.	The structurally-functional scheme of the adaptive representation of a sequence of information fragments processor in the subject of studying (2005 y.) [slides 1.21 (1.8.1-1.8.3)].	83 [+]	286 [new]

2.	The second scientific result. The cognitive modeling technology for the system analysis and increasing in the efficiency of functioning of the information-educational environment [slides 2.1-2.9 (2.1.1-2.7.2)] [see the bibliographic chapter of dissertation].		
2.1.	The generalized iterative cycle of the cognitive modeling technology for the system analysis of the information-educational environment of the automated (remote) training system (2004 y.) [slides 2.1 (2.1.1-2.1.2)].	41, 42 [+]	202, 203
2.2.	The technique of use of the cognitive modeling technology for the tasks of the system analysis of the information-educational environment of the automated (remote) training system (2004 y.) [slides 2.2 (2.2.1-2.2.2)].	41, 42 [+]	202, 203
2.3.	The recommended bases for the construction of the structure of the cognitive model of the zero generation (2004 y.) [slide 2.3].	78 [+]	281
2.3.1.	The formal models for the presentation of procedural data (the algorithms and procedures) (2004 y.) [slide 2.3.1 (2.3)].	78 [+]	281
2.3.1.1.	The representation of the structure of the parametrical cognitive model by means of the logical model (2004 y.) [slide 2.3.1.1].	78 [+]	281
2.3.1.2.	The representation of the structure of the parametrical cognitive model by means of the production model (2004 y.) [slide 2.3.1.2].	78 [+]	281
2.3.1.3.	The representation of the structure of the parametrical cognitive model by the means of use of the (difficult) calculus of the theory of sets and the corteges on domains (2004 y.) [slide 2.3.1.3].	78 [+]	281
2.3.2.	The nonformal models for the representation of declarative data (knowledge) (2004 y.) [slide 2.3.2 (2.3)].	78 [+]	281 [new]
2.3.2.1.	The recommended basis for the construction of the structure of cognitive model in the view of the oriented graph, combining the theory of sets (2004 y.) [slide 2.3.2.1].	78 [+]	281 [new]
2.3.2.2.	The recommended basis for the construction of the structure of cognitive model in the view of the structural scheme (without the connections between the inf. elements) (2004 y.) [slide 2.3.2.2].	78 [+]	281 [new]
2.3.2.3.	The representation of the structure of cognitive model by means of the frame model (2004 y.) [slide 2.3.2.3].	78 [+]	281 [new]
2.3.2.4.	The representation of the structure of cognitive model by means of the semantic network (2004 y.) [slide 2.3.2.4].	78 [+]	281 [new]
2.3.2.5.	The infological scheme of database for the representation of the structure of cognitive model (2004 y.) [slide 2.3.2.5].	78 [+]	281 [new]
2.3.3.	The hybrid models for the representation of data in the poorly formalized areas (2004 y.) [slide 2.3.3 (2.3)].	78 [+]	281 [new]

2.3.3.1.	The representation of the structure of the parametrical cognitive model by the means of use of the (difficult) classical calculus of the theory of sets and the theory of graphs (2004 y.) [slide 2.3.3.1].	-	281 [+] [new]
2.3.3.2.	The representation of the structure of the parametrical cognitive model by the means of use of the multilevel encapsulated pyramids, combining the theory of graphs and the theory of sets (2004 y.) [slide 2.3.3.2].	-	281 [+] [new]
2.4.	The recommended bases for the building of the structure of cognitive model of the first generation (2011 y.) [slide 2.4 (2.3)].	-	313 [+] [new]
2.4.1.	The hybrid models for the representation of data in the poorly formalized areas (2011 y.) [slide 2.4.1 (2.3)].	-	313 [+] [new]
2.4.1.1.	The representation of the structure of the parametrical cognitive model in the view of the cognitive ring (2011 y.) [slide 2.4.1.1].	-	313 [+] [new]
2.4.1.2.	The representation of the structure of the parametrical cognitive model in the view of the cognitive disc (2011 y.) [slide 2.4.1.2].	-	313 [+] [new]
2.4.1.3.	The representation of the structure of the parametrical cognitive model in the view of the cognitive cylinder (2011 y.) [slide 2.4.1.3].	-	311 [+] [new]
2.4.1.4.	The representation of the structure of the parametrical cognitive model in the view of the cognitive cone (2011 y.) [slide 2.4.1.4].	-	313 [+] [new]
2.4.1.5.	The representation of the structure of the parametrical cognitive model in the view of the cognitive sphere (2011 y.) [slide 2.4.1.5].	-	311 [+] [new]
2.5.	The recommended bases for the building of the structure of cognitive model of the second and third generations (2011 y.) [slide 2.5 (2.3)].	-	311 [+] [new]
2.5.1.	The hybrid models for the representation of data in the poorly formalized areas (2011 y.) [slide 2.5.1 (2.3)].	-	281 [+] [new]
2.5.1.1.	The representation of the structure of the parametrical cognitive model by the means of use of the one-, two-, three-, four-, five- and more-cognitive ring, cognitive disc, cognitive cylinder, cognitive cone and cognitive sphere (2011 y.) [slide 2.5.1.1 (2.3)].	-	311-315 [+] [new]
2.6.	The algorithm of formation of the structure of cognitive model for the system analysis of the information-educational environment of the automated (remote) training system (2004 y.) [slide 2.6 (2.4.1-2.4.2)].	78 [+]	281
2.7.	The technique of research of parameters of the innovative cognitive model of the subject of training (2004 y.) [slide 2.7 (2.5.1-2.5.2)].	78 [+]	281
2.8.	The technique of research of parameters of the innovative cognitive model of the means of training (2004 y.) [slide 2.8 (2.6.1-2.6.2)].	78 [+]	281
2.9.	The algorithm of processing of a posteriori data of testing of the contingent of trainees (2004 y.) [slides 2.9 (2.7.1-2.7.2)].	78 [+]	281

3.	The third scientific result. The innovative parametrical cognitive models block for the system analysis of the information-educational environment of the automated (remote) training system [slides 3.1-3.8] [see the bibliographic chapter of dissertation].		
3.1.	The innovative structure of the parametrical cognitive model of the subject of training (the multilevel structural scheme, combining the theory of mathematical sets) [the theoretical structure of cognitive model with the wide scientific justification: cognitive informatics (computer science), psychophysiology of perception, cognitive psychology and applied (mathematical) linguistics] (the general-scientific presentation of 2004 y.) [slide 3.1] (the analytically-numerical presentation of 2005 y.) [slide 3.1].	77 [+]	280 [+] [new]
3.2.	The innovative structure of the parametrical cognitive model of the means of training (the multilevel structural scheme, combining the theory of mathematical sets) [the theoretical structure of cognitive model with the wide scientific justification: cognitive informatics (computer science), psychophysiology of perception, cognitive psychology and applied (mathematical) linguistics] (the general-scientific presentation of 2004 y.) [slide 3.2] (the analytically-numerical presentation of 2005 y.) [slide 3.2].	77 [+]	280 [+] [new]
3.3.	The structure of the modified model of reduced eye of human (the cognitive model of the optical and biological construct of the reduced eye of human) [the theoretical and experimental structure of cognitive model with the wide scientific justification: cognitive informatics (computer science), psychophysiology of perception, ophthalmology and micro-surgery of eye] (2005 y.) [slide 3.3].	-	226 [+] [new]
3.4.	The structure of the modified model of reduced ear of human (the cognitive model of the optical and biological construct of the reduced ear of human) [the theoretical and experimental structure of cognitive model with the wide scientific justification: cognitive informatics (computer science), psychophysiology of perception, otology and micro-surgery of ear] (2005 y.) [slide 3.4].	-	226 [+] [new]
3.5.	*The structure of the cognitive model of chemical element (nuclear polymer) with two nucleuses (plasmatic formations) in the view of the two-cognitive sphere [the experimental structure of cognitive model with the narrow scientific justification: cognitive informatics (computer science), physics of atomic nucleus, physics of plasma and physical chemistry; developed by "AUT CMT SFA" Vetrov A.N. by means of modeling and scientific visualization before the official decision about the acknowledgement of fact of the synthesis of the nuclear polymers with two nucleuses (or the areas of plasma) by "The international association of theoretical and applied chemistry": at-first,- for the purposes of potential possibility of realization of the complex analysis of the structure of the difficult chemical elements (nuclear polymers) as the plasmatic formations with the evidently (not evidently) pronounced two nucleuses (the areas of plasma); at-second,- for the support of potential possibility of studying (modeling) of the difficult physical phenomena of nuclear convergence and divergence (at the micro-level)] (2002 y.) [slide 3.5].	-	311 [+] [new]

3.6.	<p>*The structure of the cognitive model of chemical element (nuclear polymer) with three nucleuses (plasmatic formations) in the view of the three-cognitive sphere [the experimental structure of cognitive model with the narrow scientific justification: cognitive informatics (computer science), physics of atomic nucleus, physics of plasma and physical chemistry; developed by "AUT CMT SFA" Vetrov A.N. by means of modeling and scientific visualization before the official decision about the acknowledgement of fact of the synthesis of the nuclear polymers with three nucleuses (or the areas of plasma) by "The international association of theoretical and applied chemistry": at-first,- for the purposes of potential possibility of realization of the complex analysis of the structure of the difficult chemical elements (nuclear polymers) as the plasmatic formations with the evidently (not evidently) pronounced three nucleuses (the areas of plasma); at-second,- for the support of potential possibility of studying (modeling) of the difficult physical phenomena of nuclear convergence and divergence (at the micro-level)] (2002 y.) [slide 3.6].</p>	-	311 [+] [new]
3.7.	<p>*The structure of the cognitive model of chemical element (nuclear polymer) with four nucleuses (plasmatic formations) in the view of the four-cognitive sphere [the experimental structure of cognitive model with the narrow scientific justification: cognitive informatics (computer science), physics of atomic nucleus, physics of plasma and physical chemistry; developed by "AUT CMT SFA" Vetrov A.N. by means of modeling and scientific visualization before the official decision about the acknowledgement of fact of the synthesis of the nuclear polymers with four nucleuses (or the areas of plasma) by "The international association of theoretical and applied chemistry": at-first,- for the purposes of potential possibility of realization of the complex analysis of the structure of the difficult chemical elements (nuclear polymers) as the plasmatic formations with the evidently (not evidently) pronounced four nucleuses (the areas of plasma); at-second,- for the support of potential possibility of studying (modeling) of the difficult physical phenomena of nuclear convergence and divergence (at the micro-level)] (2002 y.) [slide 3.7].</p>	-	311 [+] [new]
3.8.	<p>*The structure of the cognitive model of chemical element (nuclear polymer) with five (and more) nucleuses (plasmatic formations) in the view of the five (and more)-cognitive sphere [the experimental structure of cognitive model with the narrow scientific justification: cognitive informatics (computer science), physics of atomic nucleus, physics of plasma and physical chemistry; developed by "AUT CMT SFA" Vetrov A.N. by means of modeling and scientific visualization before the official decision about the acknowledgement of fact of the synthesis of the nuclear polymers with five (and more) nucleuses (or the areas of plasma) by "The international association of theoretical and applied chemistry": at-first,- for the purposes of potential possibility of realization of the complex analysis of the structure of the difficult chemical elements (nuclear polymers) as the plasmatic formations with the evidently (not evidently) pronounced five (and more) nucleuses (the areas of plasma); at-second,- for the support of potential possibility of studying (modeling) of the difficult physical phenomena of nuclear convergence and divergence (at the micro-level)] (2002 y.) [slide 3.8].</p>	-	311 [+] [new]

	The fourth scientific result.		
4.	The complex of programs for the automation of research tasks of the information-educational environment of the automated (remote) training system, including the innovative adaptive means of training (the electronic textbook and laboratory workshop – the individually-oriented generation of educational influences by means of the adaptive representation of a sequence of information fragments processor), the basic diagnostic module (the estimation of level of residual knowledge of trainee) and the applied diagnostic module (the diagnostics of parameters of the cognitive model of the subject of training) [slides 4.1-4.49 (4.1.1-4.20.1)] [see the bibliographic chapter of dissertation].		
4.1.	The generalized structurally-functional scheme of the complex of programs for the automation of research tasks of the information-educational environment of the automated (remote) training system (2004 y.) [slides 4.1 (4.1.1-4.1.2)].	83 [+]	286 [new]
4.2.	The algorithm of primary initialization of database and switching of the modes of functioning of the complex of programs for the automation of tasks of the system analysis of the information-educational environment of the automated (remote) training system (2003 y.) [slides 4.2 (4.2.1-4.2.2)].	75	278 [+]
4.3.	The algorithm of authentication of a user in the automated training system (2003 y.) [slide 4.3 (4.3.1)].	75 [+]	278
4.4.	The interface of the complex of programs in the mode of main button form: the basic diagnostic module (2003 y.) [slide 4.4 (4.3.2)].	75	278 [+]
4.5.	The infological scheme of database of the adaptive means of training (the electronic textbook of 2005 y. [slide 4.5 (4.3.3)] and the laboratory workshop of 2010 y. [slide 4.5 (4.3.3)]).	83	286, 304 [+] [new]
4.6.	The algorithm of filling of content of the adaptive means of training (the electronic textbook of 2005 y. and the laboratory workshop of 2010 y.) on the basis of the information (semantic) model of the subject of studying [slides 4.6 (4.4.1-4.4.2)].	83 [+]	286, 304 [+] [new]
4.7.	The algorithm of extraction of information fragments of the adaptive means of training (the electronic textbook of 2005 y. and the laboratory workshop of 2010 y.) on the basis of the adaptive representation of information fragments processor [slides 4.7 (4.5.1-4.5.2)].	83 [+]	286, 304 [+] [new]
4.8.	The algorithm of functioning of the adaptive electronic textbook jointly with the diagnostic module (realized the more precise definition of the level of statement of material of the subject of studying) (2005 y.) [slides 4.8 (4.6.1-4.6.2)].	83	286 [+] [new]
4.9.	The interface of the adaptive electronic textbook of 2005 y. (the laboratory workshop of 2010 y.) in the mode of administrating: the review and modification of the parameters of the subjects of studying (discipline) [slide 4.9 (4.7.1)].	83 [+]	286, 304 [+] [new]
4.10.	The interface of the adaptive electronic textbook of 2005 y. (the laboratory workshop of 2010 y.) in the mode of administrating: the review and modification of the parameters of units of the subject of studying [slide 4.10 (4.7.2)].	83	286, 304 [+] [new]
4.11.	The interface of the adaptive electronic textbook of 2005 y. (the laboratory workshop of 2010 y.) in the mode of administrating: the review and modification of the parameters of modules of unit of the subject of studying [slide 4.11 (4.7.3)].	83	286, 304 [+] [new]
4.12.	The interface of the adaptive electronic textbook of 2005 y. (the laboratory workshop of 2010 y.) in the mode of administrating: the review and modification of the parameters of page of module of unit of the subject of studying (the localization of interface in the international English language) [slide 4.12 (4.7.4)].	83 [+]	286, 304 [+] [new]
4.13.	The interface of adaptive electronic textbook of 2005 y. (the laboratory workshop of 2010 y.) in the mode of administrating: the review and modification of the parameters of page of module of unit of the subject of studying (the localization of interface in the national Russian language) [slide 4.13 (4.7.5)].	83	286, 304 [+] [new]

4.14.	The administrating of database with the values of parameters of the parametrical cognitive models block: the review and modification of the parameters of the cognitive model of the subject of training (2005 y.) [slide 4.14 (4.8.1)].	83	286 [+] [new]
4.15.	The administrating of database with the values of parameters of the parametrical cognitive models block: the review and modification of the parameters of the cognitive model of the means of training (2005 y.) [slide 4.15 (4.8.2)].	83	286 [+] [new]
4.16.	The interface of the adaptive electronic textbook of 2005 y. (the laboratory workshop of 2010 y.) in the mode of adaptive training: the textual representation of information fragment (text) [slide 4.16 (4.9.1)].	83 [+]	286, 304 [+] [new]
4.17.	The interface of the adaptive electronic textbook of 2005 y. (the laboratory workshop of 2010 y.) in the mode of adaptive training: the graphic representation of information fragment (flat scheme) [slide 4.17 (4.9.2)].	83 [+]	286, 304 [+] [new]
4.18.	The structural-functional scheme of the basic diagnostic module in the information-educational environment of the automated (remote) training system (2003 y.) [slide 4.18 (4.9.3)].	75	278 [+]
4.19.	The infological scheme of database of the basic diagnostic module in the information-educational environment of the automated (remote) training system (2003 y.) [slide 4.19 (4.9.4)].	75	278 [+]
4.20.	The algorithm of functioning of the mode of administrating of the basic diagnostic module (2003 y.) [slides 4.20 (4.10.1-4.10.2)].	75 [+]	278
4.21.	The algorithm of functioning of the mode of diagnostics in the form of testing of the basic diagnostic module (2003 y.) [slides 4.21 (4.11.1-4.11.2)].	75 [+]	278
4.22.	The interface of the basic diagnostic module in the mode of administrating (2003 y.) [slide 4.22 (4.12.1)].	75 [+]	278
4.23.	The interface of the basic diagnostic module in the mode of diagnostics (the version for the carrying out of express diagnostics, without the use of graphical images) (2003 y.) [slide 4.23 (4.12.2)].	75 [+]	278
4.24.	The structural-functional scheme of the applied diagnostic module in the information-educational environment of the automated (remote) training system (2003 y.) [slide 4.24 (4.12.3)].	75	278 [+]
4.25.	The infological scheme of database of the applied diagnostic module in the information-educational environment of the automated (remote) training system (2003 y.) [slide 4.25].	75	278 [+]
4.26.	The algorithm of functioning of the applied diagnostic module in the mode of administrating of the question-answers structures of the methods of research (tests) of the individual features of the contingent of examinees (2003 y.) [slides 4.26 (4.13.1-4.13.2)].	75 [+]	278
4.27.	The algorithm of functioning of the applied diagnostic module in the mode of diagnostics of the individual features of the contingent of examinees (2003 y.) [slides 4.27 (4.14.1-4.14.2)].	75 [+]	278
4.28.	The interface of the applied diagnostic module in the mode of administrating of the question-answers structures of the method of research of the color perception of Rabkin E.B. (2005 y.) [slide 4.28 (4.15.1)].	85 [+]	288
4.29.	The interface of the applied diagnostic module in the mode of diagnostics of the color perception by means of the method of research of Rabkin E.B. (2005 y.) [slide 4.29 (4.15.2)].	85 [+]	288
4.30.	The interface of the applied diagnostic module in the mode of administrating of the typical question-answers structures of different subtests of the verbal reasoning, verbal abstraction, verbal combinatorics, conceptual judgment, arithmetic counting, arithmetic inductive reference, the concentration of attention and mnemonics, planar imagination and volumetric thinking by the means of use of the various blocks of questions "The logical selection, the addition of sentences", "The searching of common signs, the exclusion of word", "The search of verbal analogies", "The classification of concepts, generalization", "The arithmetic tasks", "The numerical rows", "The attention and memory (mnemonics)", "The flat figures" and "The cubes" of the method of research of Amthauer R. (2005 y.) [slide 4.30 (4.15.3)].	85	288 [+] [new]

4.31.	The interface of the applied diagnostic module in the mode of administrating of the question-answers structures of the subtest of plane thinking by means of the eighth block of questions "Plane figures" of the method of research of Amthauer R. (2005 y.) [slide 4.31 (4.16.1)].	85	288 [+]
4.32.	The interface of the applied diagnostic module in the mode of diagnostics of the plane thinking by means of the eighth block of questions "Plane figures" of the method of research of Amthauer R. (2005 y.) [slide 4.32 (4.16.2)].	85	288 [+]
4.33.	The interface of the applied diagnostic module in the mode of administrating of the question-answers structures of the subtest of figurative creativity by means of the method of research of Torrance E.P. (2005 y.) [slide 4.33 (4.17.1)].	85 [+]	288
4.34.	The interface of the applied diagnostic module in the mode of diagnostics of the figurative creativity by means of the method of research of Torrance E.P. (2005 y.) [slide 4.34 (4.17.2)].	85 [+]	288
4.35.	The mathematical model of the spherical perimeter of Forster K.F.R. (2005 y.) [slide 4.35 (4.18.1)].	-	298 [+] [new]
4.36.	The features of a posteriori data of research of the achromatic and chromatic field of vision of the examinee (2005 y.) [slide 4.36 (4.18.2)].	-	298 [+] [new]
4.37.	The interface of the applied diagnostic module in the mode of administrating of the question-answers structures of the method of research of the achromatic and chromatic field of vision of the examinee by means of the computer perimetry: the parameters of the method of research (2005 y.) [slide 4.37 (4.19.1)].	-	298 [+] [new]
4.38.	The interface of the applied diagnostic module in the mode of administrating of the question-answers structures of the method of research of the achromatic and chromatic field of vision of the examinee by means of the computer perimetry: the parameters of display (2005 y.) [slide 4.38 (4.19.2)].	-	298 [+] [new]
4.39.	The interface of the applied diagnostic module in the mode of administrating of the question-answers structures of the method of research of the achromatic and chromatic field of vision of the examinee by means of the computer perimetry: the parameters of database (2005 y.) [slide 4.39 (4.19.3)].	-	298 [+] [new]
4.40.	The interface of the applied diagnostic module in the mode of diagnostics of the achromatic and chromatic field of vision of the examinee by means of the computer perimetry (2005 y.) [slide 4.40 (4.20.1)].	-	298 [+] [new]
4.41.	The structural-functional scheme of the innovative electronic dean's office based on the parametrical cognitive models block (2010 y.) [slide 4.41 (4.21.1)].	-	306 [+] [new]
4.42.	The infological scheme of database of electronic dean's office of the automated (remote) training system with the properties of adaptation based on the cognitive models (2010 y.) [slide 4.42 (4.21.2)].	-	306 [+] [new]
4.43.	The interface form of the innovative electronic dean's office in the mode of administrating of database: the basic parameters of account and the estimation of knowledge of the trainee (2010 y.) [slide 4.43 (4.21.3)].	-	306 [+] [new]
4.44.	The interface form of the innovative electronic dean's office in the mode of administrating of database: the nominal values of parameters of the cognitive model of the subject of training and the cognitive model of the means of training (2010 y.) [slide 4.44 (4.21.4)].	-	306 [+] [new]
4.45.	The interface form of the innovative electronic dean's office in the mode of viewing of the content of database: the main parameters of account and the estimation of the trainee (2010 y.) [slide 4.45 (4.21.5)].	-	306 [+] [new]
4.46.	The interface form of the innovative electronic dean's office in the mode of viewing of the content of database: the nominal values of parameters of the cognitive model of the subject of training and the cognitive model of the means of training (2010 y.) [slide 4.46 (4.21.6)].	-	306 [+] [new]
4.47.	The semantic model of saving, extracting and searching of the information for the innovative adaptive electronic library based on the innovative parametrical cognitive models block (2012 y.) [slide 4.47 (4.22.1)].	-	316 [+] [new]
4.48.	The structure of the information model of information resource of the adaptive electronic library (2012 y.) [slide 4.48 (4.22.2)].	-	316 [+] [new]
4.49.	The structure and linkage of information elements of the adaptive electronic textbook in the adaptive electronic library (2012 y.) [slide 4.49 (4.22.3)].	-	316 [+] [new]

	The fifth scientific result.		
5.	The statistical justification of the practical use of the received results by means of the preliminary (primary) processing of a posteriori data, the secondary mathematical processing of selections of a posteriori data: some results of the dispersion, regression, discriminant and cluster analysis, the multidimensional scaling and the factorial analysis) (*) [slides 5.1-5.7 (5.1-5.6.2)] [see the bibliographic chapter of dissertation].		
5.1.	The scheme, reflecting the sequence of actions (stages) for the support of researches of the cycle of adaptive automated (remote) training (2005 y.) [slide 5.1].	diss. [+]	226 [+] [new]
5.2.	The summary results of the mathematical processing of a posteriori data (2003-2005 ac. y.) [slides 5.2.1-5.2.4] and (2006-2008 ac. y.) [slides 5.2.5-5.2.8].	57, 58 [+]	259, 260, 261 [+] [new]
5.3.	The results of the regression analysis: the equations of multiple regression (2003-2005 ac. y.) [slides 5.3.1-5.3.3] and (2006-2008 ac. y.) [slides 5.3.4-5.3.6].	57, 58 [+]	259, 260, 261 [+] [new]
5.4.	The results of the discriminant analysis: the own values for the formed canonical discriminant functions (2003-2005 ac. y.) [slide 5.4.1] and (2006-2008 ac. y.) [slide 5.4.1a] and the position of centroids of classes in the space of two discriminant functions (2003-2005 ac. y.) [slide 5.4.2] and (2006-2008 ac. y.) [slide 5.4.2a].	57, 58 [+]	259, 260, 261 [+] [new]
5.5.	The results of the multidimensional scaling of a posteriori data (2003-2005 ac. y.) [slide 5.5.1] and (2006-2008 ac. y.) [slide 5.5.1a].	57, 58 [+]	259, 260, 261 [+] [new]
5.6.	The results of the factorial analysis of a posteriori data (2003-2005 ac. y.) [slide 5.6.1 (5.5.2)] and (2006-2008 ac. y.) [slide 5.6.1a (5.5.2a)].	57, 58 [+]	259, 260, 261 [+] [new]
5.7.	The dynamics of the indicators of efficiency (resultativity) of the technological process of the controlled formation of knowledge of the contingent of trainees (examinees) (2003-2005 ac. y.) [slides 5.7.1-5.7.2 (5.6.1-5.6.2)] and (2006-2008 ac. y.) [slides 5.7.3-5.7.4 (5.6.3-5.6.4)].	57, 58 [+]	259, 260, 261 [+] [new]

6.	The sixth scientific result. The structure of "The scientific-educational consortium "System and financial analysis based on cognitive modeling technology"", including the scientific organizations [slides 6.1-6.5] [see the bibliographic chapter of dissertation].		
6.1.	The topology (2004 y.) [slide 6.1.1] and the structure of "The state international organization "Academy of cognitive natural sciences"" ("SIO "ACNS"") (2013 y.) [slide 6.1].	46 [+]	225, 324 [+] [new]
6.1.1.	The scientific portal – the information resource of "SIO "ACNS"" (2013 y.) [www.acns.spb.ru].	-	324 [+] [new]
6.2.	The topology (2004 y.) [slide 6.1.1] and the structure of "The scientific-research institute "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (natural) sciences" named after Veniaminov V.N." ("SRI "SFA CMT" of "RA(NS)" n. a. Veniaminov V.N.") (2013 y.) [slide 6.2].	46 [+]	225, 325 [+] [new]
6.2.1.	The scientific portal – the information resource of "SRI "SFA CMT" of "RA(NS)" n. a. Veniaminov V.N." (2013 y.) [www.sfacmts.spb.ru].	-	325 [+] [new]
6.3.	The topology (2004 y.) [slide 6.1.1] and the structure of "The scientific fund "System and financial analysis based on cognitive modeling technology" named after Prokopenko N.A." ("SF "SFA CMT" n. a. Prokopenko N.A.") (2013 y.) [slide 6.3].	46 [+]	225, 330 [+] [new]
6.3.1.	The scientific portal – the information resource of "SF "SFA CMT" n. a. Prokopenko N.A." (2013 y.) [www.sfacmtfund.spb.ru].	-	330 [+] [new]
6.4.	The topology (2004 y.) [slide 6.1.1] and the structure of ""Saint-Petersburg exhibition centre named after Brezhnev L.I." at "Exhibition of achievements of science and technology named after Sobchak A.A."" ("SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A.") (2013 y.) [slide 6.4].	46 [+]	225, 334 [+] [new]
6.4.1.	The scientific portal – the information resource of ""SPbEC n. a. Brezhnev L.I." at "EAST n. a. Sobchak A.A."" (2013 y.) [www.eceast.spb.ru].	-	334 [+] [new]
6.5.	The topology (2004 y.) [slide 6.1.1] and the structure of "The scientific-educational centre "System and financial analysis based on cognitive modeling technology" of "The Russian academy of (medical) sciences" named after academician Burdenko N.N." ("SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N.") (2013 y.) [slide 6.5].	46 [+]	225, 456 [+] [new]
6.5.1.	The scientific portal – the information resource of "SEC "SFA CMT" of "RA(M)S" n. a. acad. Burdenko N.N." (2013 y.) [www.sciee.spb.ru].	-	456 [+] [new]

The applicant of scientific degree, ""The author of the unique technology" of cognitive modeling for the system, financial and complex analysis" ("AUT CMT SFA")
[according to the items 1542, 1543, 1544, 1545, 1546, 1547 and 1551 of "CC of RF" (since 07.06.2004 y., "IHEAS")],
"The founder of the new scientific direction "Cognitive informatics (computer science),
cognitive modeling technology for the system and financial analysis""
[according to the decision of "The Presidium of "RANS"" (the protocol №699 from the 08.06.2018 y.)],
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