

SUMMARIES OF THE ARTICLES IN ENGLISH

PHILOLOGY

P. 7. *Afanasyeva Elmira M.* Kemerovo State University. **THE PATRONYMIC MYTHOLOGEME IN THE LYCÉE LYRICS BY PUSHKIN.** The article is devoted to the investigation of the patronymic mythologeme in the lycée lyrics by A.S. Pushkin based on the analysis of the poems «Mon portrait» (1814) and «My epitaph» (1815). The initial stage of the name myth creation correlates to the state of self-derision and to the ironic modus. At the same time, the word 'Pushkin', used in the context of such topics as art, death and immortality, actualises the peculiarity of the author's fate. It determines the ontological nature of the patronymic.

Key words: A.S. Pushkin; lyrics; ontology of name.

P. 12. *Baydak Alexandra V.* Tomsk Polytechnic University. **ON DERIVATIONAL WORD FAMILY WITH THE MEANING 'LIFE' IN THE SELKUP LANGUAGE.** The paper represents one part of the analysis of the conceptual opposition of life / death in the Selkup language and culture. It is devoted to the analysis of two word families in the Selkup language with the stems that mean 'life': ily- and wargy-. Both stems are highly productive in word building of nouns, verbs, and their corresponding adjectival and adverbial forms. The analysis of the word families with the meaning 'life' brings to light certain characteristics and features of the same concept.

Key words: the Selkup language; word building; meaning.

P. 16. *Lyajrikh Yelena B.* Yelets State Bunin University. **CULTURAL SPACE OF 19TH CENTURY RUSSIA IN I.A. BUNIN'S «ARSENYEV'S LIFE» AND I.S. SHMELEV'S «SUMMER OF GOD» AUTOBIOGRAPHICAL NOVELS.** The author of the article considers the problem of the image of figurative space of Russian culture of the second half of the 19th century and its realisation in I.A. Bunin's «Arsenyev's Life» and I.S. Shmelev's «Summer of God» autobiographical novels. The realisation of Russian spiritual, material assets, patrimonial memory of people, orthodox culture and outlook, the originality of temporal settings of the texts, their artistic value are a circle of the questions mentioned in the research.

Key words: culture; space; autobiographical novel; Orthodoxy.

P. 19. *Osloпова Veronica Yu.* Omsk F.M. Dostoevsky State University. **THE NEW YEAR ADDRESS OF THE HEAD OF THE STATE TO THE PEOPLE AS A GENRE OF POLITICAL DISCOURSE.** In the article the genre features, cultural and historical characteristics of the New Year address of the head of the state are singled out and described, the genre history is described, and the comparison of this genre to the congratulation genre is made.

Key words: genre; political discourse; ritual.

P. 23. *Podvigina Larisa N.* Moscow State Open University, Prokopyevsk Branch. **THE HISTORY OF UKRAINIAN SURNAMES DERIVED FROM CALENDAR NAMES IN PROKOPIEVSK.** The article investigates the formation of the Ukrainian surnames derived from calendar names in Prokopyevsk. The analysis has shown that the majority of Ukrainian surnames were developing naturally through the patronymic stage. Baptismal names reflect language transformations in different epochs. A specific search of name forms most suitable for people's use was carried out.

Key words: anthroponemes; onomastics; regional approach; Ukrainian surnames.

P. 26. *Tubalova Inna V.* Tomsk State University. **POLYPHONIC REFLECTION WITHIN THE STRATEGY OF REFERENCE TO AN AUTHORITATIVE STATEMENT (ON THE MATERIAL OF SPOKEN-EVERYDAY DISCOURSE).** In the article one of the communicative (speech) strategies when the author of speech product addresses to 'another's voice', the strategy of reference to an authoritative statement, is considered. The process of the realised reference to 'another's word' by the author of speech product is designated as polyphonic reflection. The basis of the chosen approach makes the theoretical position about the parity importance of horizontal and vertical expansions of the speech stream, i.e. that the speech stream in a native language is formed not only (and not so much) as a result of linear arrangement of language units, but also as a polyquotation phenomenon. This approach to the analysis of the internal structure of a text allows to consider it as a polyphonic structure – a way of organising text information where its production and perception in the process of communication is carried out by referring to the semantic maintenance of sets of speech fragments, which were created and received certain semantic loading before their concrete-situational realisation in the text. Thus, the speech stream possesses the property of non-linearity. As a unit of this structural polyphonic inclusion, the speech fragment is considered burdened with some 'before-the-text' information, 'inherited' of previous texts, irrespective of the realised / unrealised character of its precedent phenomenon both by the author of the given text, and its addressee. In this article the object of research is cases of the realised reference of the author to 'another's word' fixed within the limits of spoken-everyday discourse. As a result the conclusion about high activity of quotation cognitive installations in everyday consciousness of a native speaker is made. Thus, reference to an authoritative statement in spoken-everyday discourse is one of the basic strategic decisions in which polyphonic reflection is shown. The material shows that the strategy of reference to an authoritative statement in spoken-everyday discourse is used when realising the purposes of achievement of the effect of persuasiveness, personal self-presentation, expression of various axiological sets. Its speech display is in the form of tactics of precise direct and contrast citing. When implementing this strategy the author of the speech product shows a high degree of sensibleness of another's speech essence of a communicative fragment of the prototext involved in polyphonic reflection.

Key words: communicative purpose; speech strategy; polyphonic reflection.

PHILOSOPHY, SOCIAL AND POLITICAL SCIENCES

P. 32. *Ilyin Igor Ye.* Yaroslav-the-Wise Novgorod State University. **THE PROBLEM OF CORRELATION OF MORAL AND LEGAL FIELDS IN RUSSIAN PHILOSOPHY IN 19TH AND 20TH CENTURIES.** The paper deals with the problem of negative

attitude to law in Russia. On the basis of the distinctive features of Russian law philosophy, it is said about the archetype character of the referred phenomenon. The author reveals cultural relationship between different doctrines in Russian law philosophy (legal, cultural, moral) in historical-philosophical aspect.

Key words: morality; law; culture; Christianity; ethics.

P. 36. *Ilyushin Sergey N.* Civil Defence Academy (Khimki). **POTENTIAL PHASE OF SOCIAL RISK AS A STAGE OF SYSTEM CRISIS.** The article is devoted to the analysis of social risk development and ways out of it. Special attention is given to the 'stage of potential risks' as a bifurcation period in the process of risk development, to its attributes and the most effective ways of social intensity limitation and social damages prevention. The author pays attention to the definition of 'acceptable risks' as a necessary condition of estimation and reduction of potential risks.

Key words: social risk; potential risk; social intensity.

P. 39. *Kariakin Yuriy V.* Tomsk Polytechnic University. **NEW EDUCATIONAL PARADIGM.** A view on the possible transformation of the traditional pedagogical paradigm of education into the system-defined synthetic bio-psycho-social one justified by global changes in science, education and culture has given.

Key words: education; pedagogical paradigm; bio-psycho-social paradigm.

P. 44. *Kirdiashkin Ivan V.* Tomsk State University of Control Systems and Radioelectronics. **YOUNG PEOPLE IN THE VIRTUAL REALITY OF POLITICS.** In this article virtual reality is considered as a technological project complementing the conventional spheres and regulators of political influence. The youth community adjusts the technologies and spaces of virtual reality created by young people to the norms, values, vital activity programmes and the demands of the real world.

Key words: virtual reality; politics; youth; political influence.

P. 47. *Nekhaeva Iraida N.* Omsk F.M. Dostoevsky State University. **CRITICAL ANALYSIS OF PECULIARITIES OF PHILOSOPHICAL RESEARCH OF ART (FROM BAUMGARTEN TO KANT).** The article contains a critical view on the process of understanding the art sphere in the field of modern art criticism and suggests philosophical research, a special form of intellectual attitude to art, as the basis of the given critical analysis.

Key words: sensual knowledge; philosophical way of research; language reality; analytical method; descriptive method.

P. 53. *Tourintseva Yelena .A.* Irkutsk State Pedagogical University. **RESEARCH OF GIRLS' OPINIONS OF MILITARY MEN AS PROSPECTIVE MARRIAGE PARTNERS.** On the basis of practical research the attitude of young women to military men as to potential marriage partners is studied.

Key words: family of military man; marriage choice; youth.

CULTUROLOGY

P. 57. *Aksyutin Yuriy M.* N.F. Katanov State University of Khakassia. **THE 'IMPERIAL CULTURE' TERM IN CONTEMPORARY PUBLIC AND RESEARCH PRACTICE.** This article is devoted to the term 'imperial culture', which is highly widespread in humanitarian study. As it is seen from contemporary public practice, this topic, due to Russian polytechnic structure, possesses considerable potential. This work contains researchers' ways of 'imperial culture' analysis, as well as the author's opinion on the topic. The article is dedicated to researchers of imperial history and culture.

Key words: imperial culture; value system; nation.

P. 61. *Badluyeva Veronica M.* Moscow State University. **PHILOSOPHY OF SYMBIOSIS OF KISHO KUROKAWA.** In this article the author investigates the essence of philosophy of symbiosis of the architect Kisho Kurokawa, its connection with Buddhist philosophy and traditional Japanese culture. According to the architect, philosophy of symbiosis will be the philosophy of the Age of Life, which will come after the 20th century Age of Machine.

Key words: symbiosis; philosophy; Kurokawa; Japan; architecture.

P. 65. *Bondarenko Yuliya A.* Russian State University for the Humanities. **INTERPRETATION OF AN ANTIQUE MYTH IN RUSSIAN SYMBOLISM.** In the article the features of reception of antique heritage and, in particular, an antique myth, by Russian symbolism are considered. Features of cultural dialogue of the Silver Age with Antiquity are shown, possibilities of this dialogue as they see to symbolists are opened. Special attention is given to various forms of myth reception – from simple plot-thematic reproductions to creative reconsideration, symbolical content and methods of new myth creation.

Key words: Silver age of Russian culture; symbolism; antiquity; Myth. Reflection.

P. 69. *Sergeyeva Maria N.* Tuvan State University (Kyzyl). **ON THE PROBLEM OF YOUTH ADAPTATION TO NEW INFORMATIONAL CULTURAL CONDITIONS.** In the given work an attempt is made to analyse the youth's adaptation problem in the conditions of informational culture in the fields of philosophy of culture, social culture, social psychology, library-bibliographic science. Informational culture comes from notions 'culture' and 'information'. In the given article we shall consider culture as a mechanism created by humankind (the document) with a purpose of producing and storing information. By information we shall understand an exchange of data (knowledge, values, sources), spread not only in space, but also in time. The accumulation of these notions founds the term 'informational culture', which can be considered in two aspects: the cultural-historical and the cultural-personal aspect (educational-interdisciplinary). Speaking about 'adaptational culture genesis' of the youth, the main factors of the process are social-economic conditions, natural-geographical remoteness of the territory, language level (national identity), person's needs of information that are his consciousness characteristic, intellect, creative ability, motivation and culture in general. When searching for mechanisms of the youth's adaptational processes to new informational cultural conditions we can point out the following main phases: destruction of the old program of homeostasis maintenance (behavioural adaptation); shaping of the new program (new structure of homeostatic regulation is

built); the phase of the permanent adaptation. Adaptation can be understood as a mechanism of informational cultural genesis, which allows a person to be included in different structural elements of informational-cultural environment, to find oneself in the dynamically changing world. In modern society the youth is the most capable psychological group of age with adaptational abilities developed enough for responding quickly and effectively to changes of cultural-informational conditions of the environment. But there are disadaptation processes, which first of all are connected with conditions of life and psychological development. These difficulties of the youth adaptation in modern cultural-informational conditions require forming informational culture in various educational institutions, as the state entrusts the given group with cultural-informational functions fundamental for social-economic development of the country. It is necessary to create new informational environment in social cultural institute, for the youth of our time knows how to orientate in the stream of electronic and analogue information, to exchange information, to overcome the communicative barriers and etc.

Key words: adaptation to new information; cultural condition of society.

P. 73. *Fomenko Andrey N.* Saint-Petersburg University of Technologies and Design. **AVANT-GARDE AND CRITICISM OF PHOTOGRAPHY.** At the beginning of its development photography was not regarded as an art medium and was associated with the world of science, engineering and 'material progress', which, according to Charles Baudelaire, was hostile to the nature of art. So the first attempts to integrate photography into the art system in the second half of the 19th century presupposed the correction of features of photo representation, which were considered anti-artistic. The art-photography used the traditional hand-made media – painting and graphic arts. At the age of avant-garde this strategy gave place to apologia of photo-medium, which was regarded as the basis of new poetics of fixing the facts and one of the means of cultural revolution. But we can find elements of criticism against photography by the use of photography in avant-garde too. The works by one of the leaders of Soviet and international photo-avant-garde, Alexandr Rodchenko, are a typical example of this paradoxical strategy. As shown in the article, the basis of poetics of the works is the subjectisation of the literal surface of the picture, which demonstrates its genetic connection with the aesthetics of modernism. In fact, the photographer run counter to his theoretical views. So, in his programmatic text «Ways of Modern Photography» Rodchenko upheld advantages of the unexpected angles of representation ('top-to-bottom' and 'bottom-to-top') and as an argument expressed an opinion that such angles often correspond to our perception of things. But practically Rodchenko used various devices including the unconventional angles without any realistic justification. This use of the device for the sake of the device itself was the reason of discussion between Rodchenko and Boris Kushner, a writer, and one of ideologists of constructivism. Thus rehabilitation and even apologia of photography in avant-garde went along with a deep-rooted distrust of it and with the tendency to apply the logic of modernist painting to it.

Key words: photography; modernism; soviet constructivism; photo-montage; factography.

P. 77. *Holtorf Cornelius J.* Linnaeus University (Kalmar, Sweden). **RADICAL CONSTRUCTIVISM. KNOWLEDGE BEYOND EPISTEMOLOGY.** In this article the main claims of radical constructivism and their influence upon epistemology and our representation of the past, in particular, upon archaeology are considered.

Key words: constructivism; knowledge; reality; archaeology.

HISTORY

P. 81. *Veremchuk Lyudmila P.* East Kazakhstan State University (Ust-Kamenogorsk, Kazakhstan). **THE SOCIAL REVOLUTION REGULARITY PROBLEM IN ALEXIS DE TOCQUEVILLE'S INTERPRETATION.** The article contains the analysis of social revolution and Alexis de Tocqueville's interpretation of the social revolution regularity problem in the society. The author tracks the difference of Tocqueville's ideas from the opinions of traditional historians and investigates the prerequisites of revolutionary transformations from the scientist's view.

Key words: A. Tocqueville; social revolution.

P. 84. *Vorobyov Nicolay V.* Tomsk State University. **LEGAL REGULATION OF THE ACTIVITY OF RUSSIAN URBAN AND LABOR CONSUMER COOPERATION IN 1917–1925.** In the article the development of Soviet cooperative legislation regulating the activity of urban and labour consumer cooperation is described. The legal base of urban and labour co-operatives functioning is analysed during the initial period of the Soviet regime, the years of 'military communism' and during the new economic policy period.

Key words: cooperation; legislation; Soviet Russia.

P. 90. *Dolgopiatov Andrey V.* Institute of Russian History, RAS (Moscow). **MIDDLE-CLASS HOMEOWNERSHIP IN TOWNS OF MOSCOW REGION AFTER 1861 REFORM.** The article focuses on the aspects of urban history connected with middle-class homeownership. This stratum was the crucial element of townfolk in the Russian Empire.

Key words: town; middle class; homeownership.

P. 94. *Lekarenko Oksana D.* Tomsk State University. **D. EISENHOWER'S ADMINISTRATION POLICY AND DRAFTING AND SIGNING OF THE EURATOM TREATY (1955–1957).** During the presidency of D. Eisenhower the struggle for non-proliferation of nuclear weapons complemented to the traditional motives of the American support of the European integration, which determined the special interest of American policy-makers in the creation of EURATOM. Owing to the US leading positions in the field of nuclear technologies the American support played an important role in signing the Rome treaties establishing the EEC and EURATOM.

Key words: D. Eisenhower; nuclear weapon; politics.

P. 102. *Mamytova Saulee N.* Pavlodar State University named after S. Toraigyrov. **HISTORICAL RESEARCHES ON RUSSIAN BUSINESSMEN IN KAZAKHSTAN IRTYSH REGION IN THE END OF 19TH – BEGINNING OF 20TH CENTURIES.** In the given article an attempt of the analysis of historical researches on the problem of business and national bourgeoisie in Kazakhstan in the end of the 19th – beginning of the 20th centuries is undertaken. The theses, which determine the historiographical characteristics of this problem at present stage are also formulated.

Key words: Russian businessmen; Kazakhstan Irtysh region.

P. 106. *Teryokhin Sergey A.* Ugra State University (Khanty-Mansiysk). **EXPERIMENTAL RESEARCHES IN THE FIELD OF ANCIENT NONFERROUS METALWORKING. ON THE MATERIALS OF THE KULAJ CULTURE (VASYUGAN STAGE).** The article deals with the results of the author's experimental researches in the field of nonferrous metal working of the Early Iron Age. The researches have been conducted on the basis of archaeological materials of the Vasyugan stage of the Kulaj culture and have touched upon problems of organization and practical reconstruction of bronze industry, creation of experimental models from determination of the composition and structure of forming materials to making products corresponding to historical models.
Key words: Kulaj culture; bronze industry; experimental researches.

LAW

P. 113. *Andryushchenko Yana V.* All-Russian State Tax Academy (Moscow). **THE NECESSITY OF TAX CONFLICTS SETTLEMENT AT THE PRE-TRIAL LEVEL.** The crisis realisation of tax conflicts is grounded. It was intensified by the fact that in the situation of Russian transitional social-economic system, taxes have disproportionately been claimed responsible before the society. The factors were defined that determine the necessity of a civilized way of development of tax conflicts settlement (in the form of disputes) on the one hand, and the pre-trial mechanism regulating of tax disputes, on the other one. The classification of the major 'disputable' moments of tax infringements is suggested.
Key words: the tax conflict; tax dispute; pre-trial regulating.

P. 117. *Vorobyova Natalya N.* Tomsk State University. **ORGANIZATION OF FINANCIAL ACTIVITY IN THE SUBJECT OF THE RUSSIAN FEDERATION: THEORETICAL AND LEGAL PERSPECTIVES.** In the article the questions of theory and practice of financial activity organization in the subjects of the Russian Federation are discussed. On the basis of the analysis of different scientific approaches to this matter the author states her own position. The proposals for perfection of organizational provision of financial activity at the regional level are expressed.
Key words: financial activity; organization; Subject of Russian Federation.

P.120 . *Kazakov Vladimir V.* Tomsk State University. **BUDGET AND TAX PROVISION FOR REGIONAL PUBLIC FORMATIONS DURING RECESSION.** Recession is a period when it is time to resume and search for opportunities for recovery. The only way out for Russia is a smooth transition to innovative economy. The author analyses changes in legislation in force and proposes amendments to the Budget and Tax Codes of the Russian Federation for the recovery of Russian economy and its transition to the new economic model.
Key words: Budget, region, recession, local self-government

P. 123. *Komarov Alexandr A., Ismagilov Fyodor V.* Omsk F.M. Dostoevsky State University, Tomsk State University. **PRESUMPTION OF CONSENT IN DOMESTIC TRANSPLANTOLOGY: LEGAL, MEDICAL, ETHICAL AND RELIGIOUS APPROACHES.** The most urgent problems of one of the mechanisms of receiving donor bodies – the presumption of consent – are considered. The conclusion is made that proposals to introduce the opposite mechanism, the asked consent, in the Russian legislation are hasty.
Key words: transplantology; transplant; body; donor; recipient.

P. 127. *Krivoshein Dmitry I.* Tomsk State University. **SOME ASPECTS OF FORMATION OF SCIENTIFIC AND CRIMINALISTICS KNOWLEDGE ABOUT SOCIAL-SPATIAL AND SOCIAL-TEMPORAL RELATIONS AND CONNECTIONS.** The present article continues a series of publications devoted to the study of social-spatial and social-temporal relations and connections and the process of their transformations into scientific and criminalistics knowledge.
Key words: criminalistics; scientific and criminalistics knowledge; space; time; relations and connections.

P. 131. *Kuzhuget Taan-ool K.* Tomsk State University. **USE OF EXPERT KNOWLEDGE AT TAX CRIMES INVESTIGATION.** In the article problems of use of special knowledge of experts at tax search are considered.
Key words: expert; tax; investigation.

P. 133. *Popov Konstantin V.* Tomsk State University. **ON PAROLE INSTITUTION DEVELOPMENT IN THE FIRST YEARS AFTER 1917 REVOLUTION.** The development of the parole institution in the first years after the revolution of 1917 did not occur as a system. It was caused, first of all, by passing of various regulatory legal acts by the authorized bodies of the new political regime timed to certain events instead of creating and following a certain social-political program to encourage persons serving sentences to behave correctly.
Key words: conditionally-early parole; a crime; punishment; an execution of the punishment; correctional facilities; clearing of punishment serving; the pardon.

P. 136. *Popova Olesya A.* Tomsk State University. **CLASSIFICATION OF PERSONAL FEATURES REFLECTED IN HANDWRITING.** The Article is devoted to a complex of reasons (including their structure) that influence individuality of movements in writing.
Key words: handwriting; handwriting science; diagnostics; person; personal features.

P. 140. *Fedorova Yuliya M.* Tomsk State University. **LEGAL EFFECT OF EDUCATIONAL SERVICES CONTRACT VIOLATION.** In the following article the author reviews the typical legal effect of educational services contract violation foreseen by contracts and normative acts in force. The author comes to the conclusion that stimulation measures prevail over civil responsibility.
Key words: high school; responsibility; educational services; student.

ECONOMICS

P. 143. *Aksyonov Yevgeniy P.* Kuzbass State Technical University (Kemerovo). **SCIENTIFIC KNOWLEDGE AS THE MAIN FACTOR OF ECONOMIC GROWTH.** The questions of scientific knowledge as the main factor of economic growth, the dialectical connection between intellect, ideology, science, social-economical development, culture are researched in the article.

Key words: scientific knowledge, ideology, culture, economic growth.

P. 149. *Babun Roald V., Kazakov Vladimir V.* Kemerovo State University (Novokuznetsk Branch), Tomsk State University. **FINANCIAL PROVISION FOR LOCAL GOVERNMENT ACTIVITY AT THE PRESENT STAGE.** The article describes new approaches to financial provision of local government activity under the conditions of the economic crisis and the transition to the innovative way of development in Russia.

P. 155. *Volgina Natalya A.* Peoples' Friendship University of Russia (Moscow). **FOREIGN TNCs IN RUSSIAN OIL AND GAS INDUSTRY.** Foreign companies play a special role in Russian oil and gas industry. At the beginning of 1990s there was a great demand for foreign capital because Russian oil companies did not have enough financial resources for exploitation of large-scale projects. A number of federal statutes were implemented in order to regulate the inflows of foreign investment in Russian oil and gas sector. By 2008 the volume of foreign direct investment (FDI) inward stock in oil and gas exceeded \$30 billion, and its share in total inflows accounted for 25%. Taking into consideration this indicator of FDI, we could conclude that foreign investors showed profound interest in making business in this sector. However more than 90% of FDI inflows originate from offshore jurisdictions (first of all from Netherlands, Cyprus and British Virgin Islands), where Russian capital outside Russia is accumulated. It means that international production in Russian oil and gas to a great extent is controlled by Russian capital and it is essentially Russian production. Almost all large petroleum TNCs operate in Russian market, including British Royal Dutch/Shell and British Petroleum, American ConocoPhillips, Chevron Texaco Co and Exxon Mobil, Italian Eni Group, French Total, Norwegian Statoil Hydro, and Chinese Sinopec. Despite the fact that spheres of activities of these TNCs are quite different in Russia, their positions in Russian market are more significant in the upstream segment, i.e. oil and gas exploration. The most widespread form of contract agreements with foreign TNCs in Russian oil and gas sector are joint ventures – their part in the total amount of concluded contracts exceeds 98% (the remaining part of 2% was accounted for production sharing agreements). In almost all joint ventures Russian partners have more than 50% of stock that is a reflection of government policy to retain total control over oil and gas companies in upstream segments. Foreign TNCs account for only 7–12% of oil production in Russia, so the opinion of TNCs' occupation of Russian market is exaggerated. Foreign companies' influx into Russian oil and gas industry played a positive role from the point of view of financial resources inflows. However from the point of view of modern technologies inflows, contribution of foreign TNCs could be more substantial. The causes of this situation are connected with a number of factors, including lack of a well-thought long-term policy for attracting foreign capital, clear and stable legislation, including the tax one, and an adequate mechanism of enforcement as well as a high level of bureaucracy and corruption in Russian society.

Key words: TNCs; foreign direct investment; oil and gas industry; Russia; joint ventures.

P. 160. *Ishchuk Tatiana L.* Tomsk State University. **INDICATORS OF REGIONAL STRATEGY OF HIGHER PROFESSIONAL EDUCATION DEVELOPMENT.** This article discusses the features of regional economic policy in higher education. A distinctive feature of the development of education in the world now is the major concern of governments of most countries about the problems of quality and efficiency. To assess the quality of higher education development strategy the author analysed indicators reflected in the federal program of education development for 2006–2011. The conclusion was made about the need to build a new state (regional) economic development strategy for education.

Key words: higher education; development strategy; quality indicators.

P. 165. *Kaznacheyeva Natalya L., Samuseva Sofia B.* Siberian State University of Telecommunications and Informatics (Novosibirsk). **ON SOCIAL DIALOGUE BETWEEN LABOUR AND CAPITAL DURING RECESSION.** Russia has found itself in the system crisis. One of the main elements of the crisis is socio-economic recession manifested in socio-labour relationships degradation. To overcome the unstable balance between labour and capital it is necessary to determine the development priority in the direction of social world and its institutional forms, as well as social dialogue as a factor of socio-economic progress and social solidarity. Social dialogue between labour and capital acts as one of the most important components of social world and supposes a harmonious combination of interests of the employee, the employer and the state. The present recession expansion towards almost all the economic spheres increases unemployment and simultaneously reduces the possibility of second- and self-employment. Moreover, more unemployment is caused by small business destruction, which is caused in its turn by credit limitations. The crisis of labour and capital solidarity is expressed mostly through disputed collaboration, the protection of one's own interests by means of strikes and other methods of social protest. In order for contractors of labour relations to act as social partners while working out the institutional mechanism, it is necessary to proceed from human individual phenomenon. From this position, the owner of capital has to obtain another ideology of making of labour demand and consider it to be not only a production factor, but also individuality. To precipitate the overcoming of the recession and its consequences the workers the transition to the social world depends on, of special social and economic mentality, progressive, initiative, passionate, capable of social dialogue are in great demand. Today we face another worker type, which is not ready for the modern labour market both socially and psychologically; most of the capital owners have no well-formed market mentality as well. Social partnership with institutional registration, such as trade union and businessmen associations, calls to achieve social piece, to form and integrate the interests of all the participants of the labour market social cooperation and to settle contradictions that could appear between them. The socio-economic balance must be achieved on democratic basis, on a system of arrangements, negotiations, contracts, agreements. On this very basis the crisis of solidarity could be overcome and the compromise of labour and capital is to be achieved. The balance of labour and capital is one of the conditions to overcome the economic disaster. There are socio-labour relations contradictions and competition in the social world. Only under these conditions, it is possible to achieve an actual civilized social dialogue that helps to avert the most acute crisis version development and not to lose long-term development perspectives.

Key words: social dialogue; socio-labour relations; labour and capital; social peace.

P. 171. *Konkova Yelena A., Rybko Pavel P.* Kemerovo State University (Anzhero-Sudgenskiy Branch), Kaskad-Energo company. **LABOR COMPENSATION MANAGEMENT ON BASIS OF THEORY OF WORK ALIENATION (AS APPLIED IN JOINT STOCK COMPANY «KASKAD-ENERGO»).** The article concerns Karl Marx's theory of work alienation. The authors analyse the efficiency of its applying in a certain firm. The build-up methods of labour compensation fund are developed for industrial enterprises.
Key words: work alienation; build-up methods; labour compensation.

P. 174. *Krasnovskaya Anna R., Koval Nina A.* Tambov State University named after G.R. Derzhavin. **PSYCHOLOGICAL STRUCTURE OF DECISION MAKING UNDER THE SITUATIONS OF ECONOMIC RISK.** The article explores types of decisions made in the situations of economic risk, including orientating, executive and evaluative decisions. The psychological structure of these decisions and their role in managing risks are considered.

Key words: economic risk; decision making; structure of decisions in the situation of economic risks.

P. 179. *Kuklina Tatiana V.* Tomsk State University. **TAX ADMINISTRATION IN RUSSIAN FEDERATION: DEFINITION, PRINCIPLES AND MAIN PROBLEMS.** Tax administration as the process of country's tax system management today is broadly used in the main trends of tax policy of the RF on medium-term prospect. The variety of interpretations of the term, the absence of its legislative form generates the need of a further study of this process. The purpose of the article is to describe the essence of tax administration and the principles of its realization. The article offers a three-aspect interpretation of tax administration: financial, legal and managerial. Summing up the given aspects, it is defined that tax administration is task-oriented actions of the state accredited organs on tax process management within the existing state financial-economic policy between the participants of taxation, including functions of tax collection, tax control and criminal proceedings for tax offences and work with taxpayers. The author emphasises cardinal principles of tax administration: legality, objectivity, unity and efficiency. Clear, systematic execution of these principles determines the quality of tax administration, realization of which at present is associated with certain problems. The author offers to group all the problems of tax administration in three blocks: legal, organizational and psychological. The main negative moments in tax administration are:

- the gaps in tax legislation and its ambiguous interpretation;
- the absence of coordinated work on information volume between tax service and other information providing organizations;
- the absence of the extensive use of electronic technology at tax administration realization.
- low tax culture of Russian taxpayers and rejection to realise the importance of tax payments.

The Tax policy of the RF is directed to building an efficient tax system, which requires solving the problems of tax administration.

Key words: tax administration; tax policy; tax system.

P. 182. *Lavrov Alexandr A.* Tomsk State University. **FEATURES OF FUNCTIONING OF HI-TECH CLUSTERS IN CHINA AND JAPAN.** To make Russia capable of competing with the advanced countries in the near future is possible by maintenance of competitive advantages in certain branches of national economy at local, regional, and later at federal and international levels. It is possible only with the development and perfection of the national innovative system of Russia. At present, creation of technically innovative zones is of priority value in many countries, including Russia. Consideration of system characteristics of the special economic zone allows to identify it as an independent element, which is integrated into the economic system with a mission in the system to create a set of positive economic and social effects, which can show at any level of the hierarchy of the economic system. Having selected development of science and techniques as a priority direction of economic reforms, China and Japan have created a powerful scientific-mental potential where development zones of development of new and high technology have played a significant role. The innovative economic zones as effective tools of regional development have extended in the countries of Asia. However, their formation and development has peculiar features. In particular, in Japan and China the state actively participates in formation and development of zones of scientific and technical type. Innovative zones, being a version of free economic zones, represent territories of compact accommodation of national and / or foreign research centres and producing companies that use a uniform system of privileges, both of direct and indirect character. Studying the global experience of creation of zones has great value for formation of an effective institution of innovative zones in Russia. The analysis of the global experience of functioning of innovative zones has shown that though having essential distinctions, they have common features and tendencies. So they have similar purposes of increasing competitiveness of national industry, strengthening communications of science and innovators with manufacture, activating foreign trade activities and regional development. The common features are shown in their status, namely, the combination of the approach of creation of the zones within public, private or shared property. It would be especially desirable to note that private capital is actively involved in creation of infrastructure, and zones are a place of active connection of university science with manufacture. Experience of the Chinese and Japanese hi-tech zones shows a variety and flexibility of privilege policies for participants of a zone, methods of clusters formation and their development.

Key words: cluster; zoning; innovations.

P. 186. *Lazicheva Yelena A.* The State Duma of Tomsk Oblast. **RESEARCH OF THE ESSENCE OF FINANCIAL FLOWS.** The objective need in the increase of the role of regional finances at the current stage of market relations in Russia demands systematisation of financial flows in regions of the Russian Federation and an efficient model of financial management at the regional level. Solving of these problems leads to the task of intentional definition of regional financial management based on research of the essence of financial flows as a general object of state financial management. The review of three main scientific concepts of interpretation of the essence, characteristics and functions of finances allows to draw a conclusion that the meaning of finances as an instrument and object of management of socio-economic processes ensures the distributional nature of financial relations – by means of regulation of distributional processes it is possible to change the production volume, the economic growth rate and by this to manage economic and social development on the territory. In the system of state financial management, financial flows are the movement of finances as a result of distributional processes accompanied by the formation and utilization of target financial funds, that defines them as process financial flows. The nucleus of process financial flows is formed by budgetary financial flows being an efficient instrument of impact on the economic model in financial relations of all participants of the social process of production. The author treats the regional finances as the finances of the financial relations subjects in the region: the state power authorities of the subject of the Russian Federation, the local authorities, the agents of economic management and the population of the region. Taking into consideration the key position of the regional and local budgets within the finances of regional state power authorities and the regional finances in whole, a hierarchy of levels of management of regional finances comprises the state power authorities of the region of the Russian Federation and the local authorities. The

classification of process regional flows as 'internal – external' as to the region in general and 'incoming – outgoing' as to each participant of financial relations, suggested by the author, sequentially performed identification of the list of regional process financial flows. It lets determine the objective and strategy of their management. As a result management of regional finances is the impact on the internal financial regional flows to increase their volume by means of budgetary financial flows management with splitting up the competences on the levels of regional budgetary system.

Key words: financial flows; cash flows; process financial flows; budgetary flows; regional finances.

P. 190. *Petinenko Irina A.* Tomsk State University. **THE PROBLEMS OF MARKET PRICING AND TRAINING RUSSIAN ECONOMISTS.** In the condition of globalisation the development of Russian economy puts the problem of training of high quality specialists. They have to know the laws of the functioning of modern economy and be able to make effective decisions. Russian economy and its elements develop in contradiction. On the one hand, the market laws are the reality in our economy: the private property, the competition, the consumer behaviour, the supply-and-demand equilibrium, cost minimization, profit maximization. On the other hand, the implementation of these laws has positive and negative displays. Market pricing is an example of this development. The function of market prices is realized in two periods. The first period (1990s) forms the basics of Russian market pricing, when the society had no theoretical and practical knowledge about this phenomenon. There is a common opinion that market prices will solve the problems preserved from socialism. The process of pricing developed in the conditions of high inflation, poor state regulation. Profit maximization put mistrust between the sellers and the buyers; cost minimization did not form the process of cost economy and so on. The low level use of ethical relations attracts attention. These contradictions develop in the conditions of global economic recession. The existing practice of the prices functioning does not help to train high quality specialists. The West transnational corporations are examples of civilized behaviour. These subjects interact with Russian companies as competitors or in joint ventures and encourage the development of market in Russia. At present the quality of the state regulation is changing. These processes give hope that economists with new reason will form ethical pricing in Russia.

Key words: pricing; profit; teaching of the economists.

P. 193. *Przhetskaya Natalya V.* Don State Technical University (Rostov-on-Don). **MARKETING INSTRUMENTS OF CORPORATE UNIVERSITIES COMPETITIVENESS MANAGEMENT IN 'NEW ECONOMY'.** The major factor defining the development of modern economy is the formation of development of innovative administrative experience on the basis of expansion of the sphere of management by people, organizations and their intellectual capital, which is formed in the knowledge control system as a new kind of administrative activity including a powerful marketing component. The defining role in the formation of conditions of development of economy of innovative type is played by the system of education, including corporate one. Corresponding means, methods and resources are necessary for realizations of Russia's national interests in the system of international division of labour. In aggregate the given set should define the conceptual integrity the basis of which is made up by international competitiveness. The modern market of educational services is characterised by competition strengthening which has been affected by a set of factors. The competition market is characterised by a high degree of variability and uncertainty of factors of environment, an increase in quantity of innovative processes and reduction of innovative cycles, instability of resource maintenance, world economic integration, an increase of level of requirements of the population to quality of life. In such conditions a necessity of search of new tools of organization competitiveness management as of a mechanism of maintenance of effective long-term functioning is obvious. Competitiveness of a corporate university is a set of properties allowing to some extent to satisfy concrete requirement of consumers of educational services in comparison with other institutes at educational market. In the conditions of market economy the competition between economic agents of the market of educational services increases, and success of educational activity is in many respects defined by the scientific and pedagogical potential and competitiveness of graduates at labour market. Competitive advantages of a corporate university depend on the qualitative or quantitative characteristics of functioning of the educational institution that allow satisfying the requirements of the companies on the basis of development of human capital in comparison with similar organizations in the same market more completely. Marketing tools of studying of demand are directed to constant search and strengthening of competitive advantages of corporate universities and elimination of lacks allows providing competitiveness of social investments of the company.

Key words: marketing instruments; competitiveness; «new economy».

PSYCHOLOGY AND PEDAGOGICS

P. 197. *Bliznetsova Otyabrina I, Shapenkova Irina P.* Nizhnevartovsk State University for the Humanities. **DIAGNOSTICS OF A FINE ARTS SCHOOL STUDENT PERSONALITY'S VALUES AND MEANINGS.** The authors have considered the existing diagnostics techniques for determining the sphere of personality's values and meanings. The article provides the results of a research where the hierarchy of values of students of a fine arts school and a comprehensive one have been studied, and the authors show contradictoriness of the research results. The article also provides the initial variant of methodology for studying the sphere of personality's values and meanings based on the suggested hypothesis of its level structure.

Key words: sphere of personality's values and meanings; hierarchy of values; structure of sphere of personality's values and meanings; diagnostic techniques of sphere of personality's values and meanings.

P. 201. *Gluhova Yevgeniya S., Shcheglova Eleonora A.* Tomsk State University. **RESEARCHES OF FEATURES OF SMOKING AS A FORM OF THE LEARNT HELPLESSNESS DISPLAY IN YOUTH ENVIRONMENT.** In the article the results of the research of prevalence and features of smoking in the youth environment are given. The facts are cited that confirm distinctions in motives of starting smoking in various youth groups and testify that smoking is a form of display of the syndrome of learnt helplessness.

Key words: learnt helplessness; self-realisation potential; everyday psychology; psychological assistance.

P. 207. *Lukjanchenko Irina V.* Kuzbass State Pedagogical Academy (Novokuznetsk). **WE TRAIN IN ELITE DIALOGUE.** The necessity of senior pupils' training for bases of elite speech culture is grounded in the article. The program of an elective course 'We go out': communicative bases of secular dialogue, is offered here. The author offers the content of the course. The results of taking it are the schoolchildren's skills to organize elite dialogues and their participating in them, the ability to use key genres of secular reception (secu-

lar conversation, a compliment, etc.). The logic of teaching the basic topics of the elective course is considered in the article, the system of tasks is analysed, criteria for estimation of secular speech culture are formulated.

Key words: secular dialogue; elite speech culture; secular reception; speech genre.

P. 211. *Pluzhnikov Ilya V.* Moscow State University. **EMOTIONAL INTELLIGENCE IMPAIRMENTS IN AFFECTIVE SPECTRUM DISORDERS AND SCHIZOPHRENIA.** The article is devoted to an urgent problem of clinical psychology – psychological factors and mechanisms of symptom formation of psychopathology in connection with the intensively developing concept of emotional intelligence. Emotional intelligence is understood as a special meta-ability consisting of hierarchically organized abilities of perception, understanding and regulation of emotional conditions, which realizes its functions through a special activity. The main objective of the activity is the most exact and effective reflection of one's and another's emotions so that people successfully manage purposes and problems of another, more general activity (for example, professional, activity of dialogue, experience). The research objective is the analysis of the structure, features and infringements of emotional intelligence among patients with affective spectrum disorders (depression, anxiety and somatoform disorders) and schizophrenia in comparison with emotional intelligence of healthy examinees. The main research methods are experimental (the author's techniques directed to estimating perception of emotions), psychodiagnostic (the Mayer-Salovey-Caruso Emotional Intelligence Test – MSCEIT) and mathematical-statistical. The received results visually show that with mental disorders total disintegration of emotional intelligence is not observed: separate components of the given functional system remain safe, and concrete infringements of emotional intelligence, as viewed within the syndrome analysis approach accepted in Russian tradition, can be qualified as primary and / or secondary. It was shown that with depression and anxiety disorders the main emotional intelligence impairment is a deficit of emotional regulatory systems. With somatoform disorders the regulatory component of emotional intelligence is also disturbed, but the symptoms of emotion dysregulation are rather secondary to the stronger impairments of emotion understanding with their perception intact. The data conforms the conception of alexithymia as a phenomenon inherent in psychosomatic patients. With schizophrenia the primary impairment is a deficit of the emotional intelligence perception component. Accordingly, comprehension and regulation impairments are secondary. In whole, methodical instruments used in current work and the syndrome-analysis principles realized in data interpretation show their adequacy in researching emotional intelligence characteristics and impairments (in the sphere of mental disorders). From a practical point of view it is necessary to notify that primary and secondary impairments of the emotional intelligence activity can become 'targets' for psychotherapy influence.

Key words: emotional intelligence; affective spectrum disorders; schizophrenia; syndrome analysis.

P. 214. *Tsiring Diana A.* Chelyabinsk State University. **CORRELATION OF PERSONAL HELPLESSNESS AND PSYCHOLOGICAL PHENOMENA ADJACENT TO IT.** Personal helplessness is viewed as a systematic quality of an object, defined by the symptom complex of certain personal characteristics, arising from interaction of internal and external conditions (system of family interrelations, experience of uncontrolled, traumatic events), which specifies the low level of subjectiveness, i.e. low ability of a man to modify reality, to manage events of personal life, to make and achieve goals, overcoming different kinds of hardships. Personal helplessness lies on one of the continuum poles, the opposite pole of which is the systematic quality of a subject, specified as self-dependence. Self-dependence is characterized by a high level of subjectiveness. Personal helplessness is associated with learned helplessness as a quality and condition. Learned helplessness is traditionally viewed as a condition arising as a reaction to uncontrolled events and showing in the expectation of unaccountability of future events and results of activity. Personal helplessness is a stable formation (while learned helplessness is a temporary one), it includes symptom complex of personal characteristics, which creates disposition to frequent and easy emergence of the learned helplessness condition. Learned helplessness can be an attribute to animals and people, personal helplessness is a totally human characteristic. Supposing that (as M. Seligman suggests) learned helplessness is a link in the chain of the whole process of depression progress, personal helplessness can be viewed as one of the main risk factors of learned helplessness development and, henceforth, probable depression. Personal helplessness promotes victimization due to the passivity of a helpless man, his increased dependence on others, predisposition to the sense of guilt, anxiety, however, it is not sufficient to form victimity. Victimity and helplessness can be connected with inability to cope with stress-inducing situations adaptively. All the four analysed psychological events have 'zones of intersection', which make them similar and interdependent. However, it is necessary to clearly differentiate between the specified phenomena, this will help to understand the nature of each of them and the character of connections between depression, learned helplessness, victimity, on the one hand, and personal helplessness, on the other hand.

Key words: subjectiveness; learned helplessness; personal helplessness; victimity; depression.

P. 219. *Shesterkina Lyudmila P.* South Ural State University. **PECULIARITIES OF PEDAGOGICAL DESIGNING OF TEACHERS AND STUDENTS' JOINT CREATIVITY IN JOURNALISTIC EDUCATION.** The article urgency consists in the fact that the author investigates ways of reaching primary goals of effective training of students-journalists for the professional activity in mass media in pedagogical, professional-creative and educational aspects. The aspiration of the author to comprehend theoretical bases of the journalistic education in complex with the practical part of educational process in university media structures within a pedagogical project of teachers and students' joint creativity defines the scientific novelty of the article. Theoretical importance consists in the author's complex consideration and investigation of pedagogical, journalistic, organizational contexts of education. The research is important practically, for, within the common pedagogical process, the practical platform for pedagogical innovation is created, profound knowledge in the field of journalism is given to students, conditions for disclosing creative abilities of students and mastering their professional skills are formed. The author's theses and conclusions meet the leading tendencies of development of modern journalistic education.

Key words: education; creativity; project; technique; journalistic; telecast; broadcasting company SUSU-TV.

BIOLOGY

P. 224. *Babeshina Larisa G., Dmitruk Vadim V.* Siberian State Medical University (Tomsk), Samara State Medical University. **THE COMPARATIVE ANATOMIC-MORPHOLOGICAL ANALYSIS OF SPHAGNUM MOSSES IN TOMSK REGION.** Comparative anatomic-morphological researches of 7 kinds of sphagnum mosses, which are most widespread in Tomsk region, were carried out.

Their individual diagnostic attributes with the purpose of defining the authenticity of raw material and the possible additives are revealed. No qualitatively significant differences with attributes of similar kinds of the European and Arctic flora of Russia were found.

Key words: anatomic-morphological analysis; diagnostic attributes; sphagnum mosses; Tomsk region.

P. 232. *Yegorova Irina N., Mukhamadiyarov Rinat A.* Kemerovo State Medical Academy. **THE CONTENT OF HEAVY METALS IN LEAVES OF PLANTAGO MAJOR IN KEMEROVO REGION.** The influence of technogenic pollution on medical plants causes accumulation of various toxins in the parts used medicinally. The prospect of preparation of crude drugs near sources of emission increases due to urban growth, the increase of the number of vehicles, the expansion of production areas. This is relevant for Kuzbas, which is a major industrial centre of Western Siberia. The level of accumulation of heavy metals in plants depends not only on their amount in the ground, but also on the degree of air pollution by industrial waste, transport, etc. One of the ways of getting heavy metals into the human body is herbs that serve as raw material for medicine production. However, the content of heavy metals in medicinal plants, including wild ones, is still not standardized, so many researchers for hygienic evaluation of raw medicinal plants use indicators selected for biologically active additives to vegetable food. The leaves and roots of Plantain major L. were the object of our research. Collecting of the plant material was produced in summer in natural phytocenosis remote from roads and industrial enterprises. The ground samples from the top layers where roots of the researched type are located were simultaneously selected. Heavy metal content was determined by the atomic absorption spectrometry for AAS-3. The data were processed using standard statistical methods. The content of eight heavy metals in the samples was determined: cobalt, copper, manganese, zinc, lead, cadmium, nickel, mercury. The test results showed that the content of heavy metals in *Plantago major* L. leaves is within the range of admissible for the biologically active additives to vegetable food SanPin (Health Rules and Regulations) 2.3.2.560-2002. Thus, in Kemerovo region, stocking *Plantago major* L. leaves is permitted, provided strict compliance with the rules of provision of medicinal plant materials.

Key words: *Plantago major*; heavy metals; harvesting.

P. 234. *Isakova Vera G.* Institute for Biological Problems of Cryolithozone, SB RAS (Yakutsk). **BRYOFLORES OF "TUOSTAKH" RESOURCE RESERVE (THE YANA RIVER BASIN, NORTHEASTERN YAKUTIA).** Bryofloristic study was first made in the Yana river basin at the foothills of the Chersky Mountains within the area of the resource reserve «Tuostakh». 90 species and 3 varieties of cormophyte mosses belonging to 57 genera and 29 families were found. The paper considers the bryological description of the main types of habitats.

Key words: Yakutia; resource reserve; cormophyte mosses.

P. 237. *Kurovskiy Aleksandr V.* Tomsk State University. **ECOLOGICAL-PHYSIOLOGICAL ASPECTS OF CALCIUM REQUIREMENTS OF HERBS.** With the help of ion-metric methods of analysis, accumulation of ionised calcium in herbs that grow in the local biotope on the territory of the Siberian botanical garden was investigated. Laboratory experiments showed the kinetics of Ca^{2+} uptake from nutrient solutions by *Urtica dioica* L., *Leonurus cardiaca* L., *Lycopersicon esculentum* ssp. *intermedium* Luckwill, L. The content of ionised calcium differs in herbs that grow in identical soil conditions. Essential distinctions are shown in distribution of ions of calcium in the bodies of plants of different groups. Different types of absorption of ions of calcium by herbs are established.

Key words: herbs; ionised calcium; identical soil conditions.

P. 241. *Tishchenko Marina P.* Central Siberian Botanical Garden, SB RAS (Novosibirsk). **MEADOWS OF SOUTH-WESTERN PART OF TOMSK REGION.** The data on the diversity of meadow vegetation in the southwest part of Tomsk region are presented. The brief characteristics of 7 groups of meadow communities are given. 5 of these communities are secondary meadows formed at places of forests and 2 groups are aboriginal steppe meadows of extrazonal habitats. Upland meadows at ploughed fields are the most widespread in the region. These meadows are formed at drained habitats and are represented by communities with domination of *Phleum pratense* and *Agrostis gigantea*. Meadows at formerly fallow lands have low phytocoenotic diversity and similar species quantity. It is connected with their common origin and with the resemblance of habitat conditions. The floristic differences between groups of meadows are caused by way and intensity of agricultural use. Steppe meadows were found only in the south part of the region. These communities are placed at steep slopes of south expositions. They differ from real meadows by predomination of meadow-steppe species and by high species diversity. Near villages, steppe meadows are used as pastures and are more or less degraded.

Key words: upland meadows; Tomsk region; south taiga; sub-taiga.

P. 246. *Yamburov Mikhail S.* Siberian Botanical Garden of Tomsk State University. **MORPHOLOGICAL FEATURES OF MUTATIONAL AND PATHOGENIC 'WITCHES' BROOMS' IN SIBERIAN FIR.** The shoot morphostructure and the system of branching of two heterogeneous 'witches' brooms, pathogenic and mutational, were investigated. It has been established that at the stage of formation of the pathogenic 'witches' broom' system of branching, latent buds are of major importance, with mutational 'witches'-broom' those are the lateral buds of regular branching.

Keywords: 'witches' broom', pathogenic, mutation, shoot structure, Siberian fir, *Abies sibirica*, rust fungi, *Melampsorella caryophyll-lacerum*.

SCIENCES ABOUT EARTH

P. 251. *Gorbatenko Valentina P., Yershova Tatiana V., Konstantinova Darya A.* Tomsk State University, Tomsk State Pedagogical University. **SPATIAL DISTRIBUTION OF LIGHTNING DISCHARGES DENSITY TO GROUND IN WESTERN SIBERIA.** The estimation of lightning discharge density average distribution was done on the territory of West Siberia based on the results of satellite surveillance of lightning. The correction methods devised on the basis of comparing the satellite and ground observations of lightning discharge on the territory of Germany were used. The results of comparison with maps of thunderstorm activity created by other methods are given.

Key words: spatial distribution; lightning discharges density.

P. 256. *Danilov Vladislav V., Istomin Andrey D., Noskov Mikhail D.* Siberian Chemical Combine (Seversk), Seversk State Technological Academy. **MULTILEVEL DIGITAL MODEL OF SEDIMENTARY LAYER OF THE SIBERIAN CHEMICAL COMBINE**

AREA. The multilevel hierarchical digital model of the liquid radioactive wastes deep underground disposal area at the Siberian Chemical Combine, which consistently describes various parts of the area with different detail levels, is presented. The hierarchical model consists of the spatially embedded models of three ranks. Structures, construction principles and matching schemes of different rank models are considered. The hierarchical model can be used for lithologic structure analysis of a deep underground disposal area, predictive calculation of reservoir bed evolution and underground water pollution.

Key words: multilevel hierarchical digital model; liquid radioactive wastes; underground injection.

P. 262. *Litvinova Olga S., Gulyaeva Nina V.* Novosibirsk State Pedagogical University. **ATMOSPHERIC CIRCULATION OF THE EXCESSIVE MOIST AND DRY PERIODS IN THE OB-IRTYSH INTERFLUVE.** The variability of precipitation results from the specific character of atmosphere circulation, which interacts with the underlying surface. The present work contains the analysis of the relation between the anomalies of annual precipitation totals, warm and cold periods in the Ob-Irtysh interfluves, the forms of atmosphere circulation by G.Ya. Wangerheim – A.A. Girs, Ye.N. Blinova zone circulation index (I_E) and North-Atlantic variation (I_{NAO}) in the 20th – 21st centuries. To reveal anomalously humid and dry periods, the long-term observation data collected from 17 meteorological stations located in the south-east of Western Siberia (southern taiga, forest-steppe and steppe areas) in 1936–2006 were used. The year (and year periods – warm and cold) was characterized excessively humid if the precipitation total exceeded 120% from average perennial index ($\sum O \geq 120\%$), and dry if the precipitation total was 80% and below average perennial index ($\sum O \leq 80\%$). Precipitation anomalies were calculated regarding the average perennial index computed for the period under study (1936–2006). The correlation analysis between W, E, C circulation forms and precipitation anomalies at $I_{NAO} > 0$ and $I_{NAO} < 0$ in southern taiga and steppe varied a lot from month to month. The strongest relation of the formation of the anomalously humid cold periods in the area under study was observed at $I_{NAO} < 0$ under the development of W and C circulation forms. The strongest relation of the formation of the anomalously dry cold periods was registered under the development of E circulation form. The strongest relation of the formation of the anomalously humid warm periods in southern taiga was observed at $I_{NAO} > 0$ under the development of W and E circulation forms. The strongest relation of the formation of the anomalously humid warm periods in steppe was observed at $I_{NAO} > 0$ under the development of E circulation form. The dry warm periods in the area under analysis were registered at $I_{NAO} > 0$ under the development of C circulation form.

Key words: climate; atmosphere circulation; precipitation.

P. 267. *Miharevich Marina V., Baryshnikova Olga N.* Altai State University (Barnaul). **LANDSCAPE STRUCTURE EVOLUTION OF THE FOREST-STEPPE ZONE OF THE SOUTHEAST OF WESTERN SIBERIA IN HOLOCENE.** The stages of development of landscape structure of the Southeast of Western Siberia in Holocene are observed. The basic tendencies of development and the role of the anthropogenic factor in the change of landscapes in the forest-steppe are examined.

Key words: evolution; landscape; anthropogenic influence; Holocene.

P. 271. *Chechel Larissa P., Zamana Leonid V.* Institute of Natural Resources, Ecology and Cryology SB RAS (Chita). **BASIC GEOCHEMICAL TYPES OF TUNGSTEN DEPOSITS DRAINAGE WATERS OF SOUTHEAST TRANSBAIKALIA.** The chemical composition of tungsten deposits drainage waters in the mountain-taiga and forest-steppe landscapes is explored. Their equilibrium with the secondary minerals most widespread in the hypergenesis zone is studied. Three geochemical types of waters are defined.

Key words: tungsten deposits; drainage water; equilibrium.