

BUILDING AND ARCHITECTURE

Rassoha A. N.

PRESCRIPTION-TECHNOLOGICAL FACTORS INFLUENCE ON THE STRUCTURE AND PROPERTIES OF FURAN-EPOXY POLYMER SYSTEMS

The influence of prescription and technical factors such as the ingredients ratio, the molecular weight of furan and epoxy oligomer component system and the temperature of structuring on the structure, deformation, strength and sorption properties of building purpose furan-epoxy polymers is investigated.

Key words: fractal analysis of the structure, deformation and strength properties, sorption.

Lesovik V. S., Volodchenko A. A.

INFLUENCE OF RAW MATERIAL ON PROPERTIES OF NON-AUTOCLAVE SILICATE MATERIALS

It has been established that content of pellite fraction and X-ray amorphous raw materials to 20 wt. % in sand-clay rocks can be used for produced of non-autoclave silicate materials. This composition of sand-clay materials formation provides of a solid microstructure of cementitious compound. This composition can be used for production of effective building wall materials, by energy-saving technology.

Key words: sand-clay rocks, pellite fraction, nanodispersed raw materials, X-ray amorphous raw materials, lime, steam treatment, silicate materials.

Batrakova A. G.

APPLICATION GPR SOIL SURVEY FOR ASSESSING THE STRENGTH OF THE PAVEMENT

The results of the determination of moisture content of subgrade soils using GPR are presented. The approach to assessing the strength of the pavement on the base of GPR surveys to develop appropriate repair actions is also proposed. Methods for determination of moisture is tested on the roads which are in operation.

Key words: soil moisture, shear stresses, pavement.

Zhernovaya N. F., Doroganov E. A., Zhernovoy F. E., Stepina I. N.

MATERIALS STUDY, OBTAINED BY SINTERING IN THE SYSTEM OF "CLAY - GLASS"

In Russia, there is the annual increase amount of not used and the second used glass and the cost of its disposal also increases. In this regard, the relevance of research technology development of efficient building materials based on glass battlefield and clay as a plastic component of the charge is increasing. In this paper we use method of experimental design and the properties (volume shrinkage, density, water absorption, porosity, strength) material obtained by firing in the range from 800 to 1100°C of mixtures of clay and broken glass, the amount of which varied 80%. The resulting regression equations and nomograms can be used in development of ceramic and glass materials with desired properties, will quickly and efficiently create and improve new building materials for various purposes.

Key words: glass, clay, pressing, burning, property, the equation regression nomogram calculation, prediction.

Loganina V. I., Makarova L. V., Tarasov R. V., Sergeev K. A.

CHOICE OF OPTIMAL PARAMETERS SYNTHESIS TECHNOLOGY FOR FILLER DRY MIXES

We have studied the synthesis of a filler based on calcium hydro. The optimum mode of synthesis. A mathematical model of the composite strength of the lime with calcium hydro.

Key words: synthesis of calcium hydro model of strength, lime dry mix

Smirnova E. V., Vasyutkina D. I.

RESULTS OF COMPARATIVE ANALYSIS OF BUILDING MATERIALS ACOUSTIC FEATURES

The results of theoretic researches of sound-insulating and sound-absorbing ability of different porous building materials are shown.

Key words: acoustic, sound absorption, sound insulation, acoustic materials, sound conductivity, sound wave, coefficient of sound absorption.

Fanina E. A., Kalchev D. N.

INVESTIGATION OF ELECTRICAL CONDUCTIVITY OF COMPOSITES CARBON MATERIALS AND BARIUM TITANATE IN TECHNOLOGIES FUNCTIONAL MATERIALS AND PRODUCTS BUILDING APPOINTMENTS

The temperature regularities the electrical conductivity of the composites based on carbon materials and ferroelectric - barium titanate. It is shown that the electrical properties of heterogeneous systems based on dispersion of graphite and barium titanate depends on several key parameters. Important are such as the degree of aggregation of conductive particles, electrical conductivity and activation energy of the transition electric current carriers in the conduction band.

Established that the concentration graphite in the region 0.18-0.2 wt. in composite coatings building purpose allows obtain systems with automatic regulation of the power of heat flows which meet the requirements the optimal parameters of microclimate.

Keywords: temperature regularities specific conductivity, ferroelectrics, chain structures of graphite dispersions, the activation energy of electrical conductivity.

Pavlenko N. V., Kapusta M. N., Miroshnikov E. V.

FEATURES OF REINFORCEMENT OF NON-AUTOCLAVED CELLULAR COMPOSITES BASED ON NANOSTRUCTURED BINDER

It was stated that when receiving micro- reinforced cellular composites based on nanostructured silica-binder the best features in comparison with the basalt fiber were showed by a polypropylene fiber with 6 mm length. As a result of reinforcement there are seen significantly reduced shrinkage, improved structure formation, intensified drying process.

Key words: micro- reinforced cellular, nanostructured binder, basalt fiber, polypropylene fiber, shrinkage, structure formation.

Klyuev S. V., Avilova E. N.

FINE-GRAINED FIBROUS USING POLYPROPYLENE FIBERS TO COVER HIGHWAY

The paper deals with the use of polypropylene fibers for fine particulate reinforcement of concrete. Experimental studies on composite samples of fibrous binder.

Key words: fine-grained concrete, technogenic sand, astringent material, steel fiber concrete, fiber

Degtev Y. V.

EVOLUTION OF THE SMALL ARCHITECTURAL FORMS IN RUSSIA

Organize, reconstruct and master the surrounding ambience on own yardstick tiller have begun immediately in two directions - with making the architecture small and greater forms.

The Small forms of the architecture bring the surrounding space to necessary Stimmung and mood. The Decorative elements, органично inserted in landscape of the garden, not only decorate him, but also carry the deep sense, promoting optimization of the system "Person-material-ambience dwell".

In connection with growing mass cottage construction, as well as longing to leave from aesthetic monotony of the large-panel buildings and standard small region, will take the big amount of the small architectural forms on base of the modern building materials.

Key words: small architectural forms, evolution, composite knit, modern building materials.

THE MECHANICAL EQUIPMENT AND MECHANICAL ENGINEERING

Gorshkov P. S., Nesmejanov N. P.

THE DESCRIPTION OF PROCESS OF CHANGE OF CONCENTRATION OF THE KEY COMPONENT WHEN RECEIVING DRY CONSTRUCTION MIXES

In article process of change of concentration of a key component of a loose material in spiral лопастном the mixer is described.

Keywords: spiral-lopastnoy mixer, dry construction mixes, key component, concentration, diffusive model.

Vorobjov N. D.**EQUATION OF GRINDING KINETICS ON SPECIFIC SURFACE**

Equation of grinding kinetics-change of specific surface of grinding materials in time, differentiating from famous equations by introduction of the third parameter of equation-extreme (theoretically achievable) specific surface is offered. The method of parameters definition of offered kinetics equation on results of experimental studies is developed. The results of calculations for fettling of type BROPEKS are given.

Key words: grinding, specific surface, kinetics equation.

Bogdanov V. S., Romanenko V. S.**KINETICS EQUATION OF GRINDING IN HORIZONTAL ROLLER MILL**

The paper presents the derivation of the kinetics of grinding in the horizontal roller mill. The mathematical relationship between the cost of energy expended in the process of crushing and grinding the result of a wide range of dispersion.

Key words: energy, the average particle size, surface area, tensile strength, the energy density, the thickness of the deformable layer, the volumetric shape factor, the average number of fragments, the energy density of plastic deformation, the surface density of the frictional forces and energies of formation and destruction of aggregates, the free energy per unit surface.

Kovalyuh S. V., Kovalyuh V. R., Zhuravlev Yu. V.**UNIVERSAL PIPE AND CONE MILL WITH CONTROLLED ELECTRIC**

Based on the analysis of classic drum and tube ball mills with a rigid structure, biconical and step mills with hard-variable structure, and the mill with an adjustable electric offers the modern concept of grinding, with a new system of views on the mechanism and technology of the grinding process. On its basis the universal tube-cone mill continuously-variable (integral) structure of a new generation of adjustable electric drive.

Keywords: ball mill, electric drive, grinding body performance.

Nuss M. V., Trubaev P. A., Klassen V. K.**CONTROL OF THE CEMENT ROTATE KILN**

The way of control is offered by technological work of the cement rotate furnace. The way is based on the analysis and management physical and chemical and heat transfer by processes of roasting of the clinker. The leading-out of recommendations about management of the furnace switches on two stages: definition of a technological condition of parts (zones) of the furnace and a finding of control actions on a vector of conditions of these parts. The structure of definition of necessary values of operating parameters is built on the basis of a decomposition principle, that is heat disproportionation between technological parts of the furnace unit. Illegible dependences (linguistic rules) for management of roasting process are resulted. The way of synthesis of illegible model and the determined dependences is resulted.

Key words: control, the fuzzy leading-out, rotate furnaces, clinker roasting

Shrubchenko I. V., Chernyaev A. S., Murygina L. V.**SOME FEATURES OF THE RECONSTRUCTION OF BANDAGE ROTATING DRUMS OF THE USE OF TECHNOLOGY MOBILE TECHNOLOGY**

The computing model for the description of process of formation of surfaces of a flap is offered at processing on which basis the program for modeling of process of processing of a face surface of a bandage and flap formation is developed. Results of modeling of processing of surfaces of a flap are presented. Diagrams allowing are received to estimate an expected error of processing and to define optimum parameters of angular positions of the processing tool and basic rollers.

Key words: Bandage, shaped flute, formation of a surface of the flap, computer modeling, mobile technologies.

Krivenko A. Yu.**THE SUBSTANTIATION THE RADIAL DESHLAMATOR'S PARAMETERS CONSIDERING THE SUBMISSION METHOD'S POWER SUPPLY WAYS**

The analytic and experimental researches of the radial deshlamator's construction options substantiation are conducted in the work. It is found that the solid phase's separation of the ore suspension components efficiency is achieved by forming the horizontally-oriented radial flow of the source supply. The construction

of the radial unit source power increases the trajectory length of the solid phase by 2.0 - 2.5 times and, therefore, increases the mass fraction of the useful component in the sludge by 1.5 - 2.0%.

Key words: deslamator, magnetite suspension device power source, condensed product, the trajectory of the particles

ECONOMICS AND PLANT MANAGEMENT

Komissarov S.A.

THE DEVELOPMENT OF THE METHODOLOGICAL APPROACHES TO THE ASSESSMENT OF BUSINESS RISKS IN INVESTMENT TO INNOVATIONS

Some specific features of business risks have been specified. The current classifications of investment and innovative risks have been studied. The necessity for the ranking of financing source risks and objects of small business innovations has been substantiated. Some methodological approaches to the elaboration of the investment and innovative strategy of a small business based on the criterion investment and innovative risk optimization have been characterized.

Key words: business, small business, a business risk, risk innovative assets, risk innovative sources of investment financing.

Abdyukova E. I.

TECHNIQUE OF SELECTION OF FACTORS ON INFLUENCE DEGREE ON FINANCIAL RESULT OF REGIONAL BANK

Interaction of commercial bank with the external and internal environment is considered. The analysis of factors of influence which define the financial policy of the organization is carried out. The algorithm of revealing of the significant factors which distinctive feature is the account of regional signs and applicability for an environment estimation in other regions is offered. It is established that the offered technique of selection of factors allows to carry out the analysis most full and qualitatively.

Keywords: the factor, an estimation, the analysis, environment, interaction, commercial bank.

Vostretsov A. I.

FEATURES OF THE ANALYSIS OF CROSS-BORDER MOVEMENT OF CELL VOSPROIZVODSVTENNOGO POTENTIAL OF THE REGION (ON THE EXAMPLE OF LABOR BUILDING REPUBLIC OF BASHKORTOSTAN)

Potential progress of the economy, along with other elements of the reproductive capacity can be incremented by external sources. This article presents an analytical framework of the study of the motion components of the potential (for example, import and export potentials).

Keywords: potential progress of the economy, cross-border movement, export potential, import capacity

Vsyakih Yu. V., Vsyakih M. V.

THE POTENTIAL OF USING UNIVERSAL ELECTRONIC CARDS AS AN INVESTMENT VEHICLE

Respond to the requirements of the national economy in the flow of investment resources to date remains the most pressing and do not have specific solutions. Attracting foreign investment requires considerable confidence of foreign partners in the stability of the situation in the country, guarantee the reliability of the expected "return" on investment and growth in the future attractiveness of the economy as a whole. Formation of such a set of factors that provide the background of investment attractiveness of the state, appears complicated, time-consuming process, and it is fair to point out that Russia was at the beginning of this path. Partly solve this problem in the power position of activation of the population, as a participant in the investment process with a significant amount of free savings. One reason for restricting the activities of citizens in the investment field, is the lack of availability and popularity of investment instruments. The solution here may be with a universal electronic card an additional set of functional ability.

Key words: Universal electronic card, investments, securities, stock market.

Golubyatnikova J. J.**ESTIMATION OF THE RISK OF THE LOSS OF THE SOLVENCY OF THE ENTERPRISE**

This article analyses the procedure of the estimation of the risk of the loss of solvency of the enterprise, which includes the preparation of initial data according to the on-balance-sheet items, evaluation and comparison of the assets and liabilities, the determination of the dynamics of solvency, grading the risk with regard to the turnover of net working assets. This research estimates the type of risk based on financial indices of accounting of enterprise in question, which will enable the owner while creating the risk base to obtain precise information in order to make correct decisions under the conditions of uncertainty.

Key words: the method of estimation, financial indices, the estimation of the risk of the loss of solvency

Usmanov D. I.**SOME PRIORITIES FOR INSTITUTIONAL DEVELOPMENT OF REGIONAL ECONOMY RUSSIA**

This article identifies the key issues of regional institutions. The critical analysis of the potential economic risks associated with the lack of efficiency of existing core development institutions. To address the identified problems have been proposed in concentrated form a core set of factors for some priority areas of institutional development of the regional economy of Russia. The same was specified and completed conceptual framework and classification of institutional factors.

Key words: institutional factors, development institutions, the group of institutional factors, integration scheme, the institutional environment, institutional changes, the local regional markets.

Koneva O. I., Doroshenko, Y. A.**METHODOLOGICAL ASPECTS OF THE INDUSTRIAL ENTERPRISES OPERATIONS STRATEGIES ELECTION**

The article presents a review of theoretical approaches to the definition of operational strategy. The basic direction of the changes occurring in an industrial plant as a result of the implementation of strategic production decisions. The criteria of choice of operating strategies are presented in the paper. The article examines a technique of operating strategies choice based on indices that take into account the degree of use of equipment, uniform loading of workers, infra-balanced output and other factors. Compensatory and nekompensatornye rules solutions for the problem of operating strategy choosing are discussed in the paper.

Key words: operating strategy, the criteria for the choice of strategy, decision-making, decision rules

Tanicheva T. S.**FACTORS OF GROWTH OF EFFICIENCY OF ENTERPRISE ACTIVITY IN MODERN CONDITIONS**

Identified the main factors of growth of efficiency of enterprise activity in modern conditions. It is established that as a result of the development and realization of organizational-technical measures may improve the performance of the firm. Proposed the use of a classification of factors of efficiency at the firm level, which includes two groups: 1) the arrangements for the growth of the result of the activities of the organization; 2) measures for the economical use of resources.

Keywords: factors; efficiency; entrepreneurial activity; technical organizational socio-economic activities.

CHEMICAL TECHNOLOGY ECOLOGY

Koledaeva T. A., Barbanyagre V. D.**INTEROPERABILITY IN SYSTEM $\text{CaCO}_3\text{-LiF}$**

Found in the system $\text{CaCO}_3\text{-LiF}$ when heated in an open space interact with lithium fluoride, calcium carbonate is Li_2CO_3 reaction product with two solid solution of $\text{CaCO}_3\text{-}2\text{CaCO}_3\text{-Li}_2\text{CO}_3$, which melts at 650°C and is able to take one mole LiF with formation of calciumlithiumfluoridecarbonate solid solution of $2\text{CaCO}_3\text{-Li}_2\text{CO}_3\text{-LiF}$ with the rentgenometrichesky characteristic of calcite, piknometrichesky density 3300 kg/m^3 and melting point 570°C .

After decomposition of carbonate phases ($850\text{-}950^\circ\text{C}$) change the acid-base balance in the system and is reaction $\text{Li}_2\text{O} + \text{CaF}_2 \rightarrow 2\text{LiF} + \text{CaO}$. However, the dissociation equilibrium Li_2CO_3 slow that contributes to two low-melting compounds (carbonate and lithium fluoride) in the temperature range $950\text{-}1100^\circ\text{C}$.

Keywords: solid solution, calcium carbonate, lithium fluoride, lithium carbonate, exchange reaction, the portland clinker.

Besedin P. V., Panova O. A., Ivleva I. A.

ANALYSIS OF INFLUENCE OF PLASTICIZING REAGENTS ON ENDOTERMICHESKY AND EKZOTERMICHESKY PROCESSES WHEN HEATING A CEMENT RAW MIX TO 1000 °C

Results of the thermogravimetric analysis of influence of various softeners on the physical and chemical processes proceeding at heating of a raw mix to 1000 °C. The comparative analysis of endotermichesky and ekzotermichesky effects of proceeding reactions is provided when heating a raw mix with inclusion of softeners and without them. It is shown that introduction of softeners allows to lower in addition energy consumption on roasting of a clinker not only at the expense of decrease in humidity шлама, but also at the expense of burning out of an organic component of softeners.

Keywords: softeners, raw mix, clinker, differential and thermal analysis, energy saving.

Lomachenko D.V., Shapovalov N. A, Yashurkaeva L. I., Grebenyuk A. A.

CEMENT GRINDING WITH ADDITIONS BASED ON A ORGANIC SYNTHESIS PRODUCTION

This article describes the effects of adsorption and surface-active properties of modifying additives on the properties of cement and other model systems, and the relationship between these properties and processes of grinding cement. Found that supplementation with greater surface activity at the interface of the solid-gas have greater effects on the processes of grinding cement.

Key words: Cement grinding, surface-activity properties, adsorption

ECOLOGY

Seydafari R. A.

AGE DYNAMICS OF LEAF AREA OF TILIA CORDATA IN VARIOUS TYPES OF TECHNOGENIC CONDITIONS

For the first time of Bashkir Urals the data on the age dynamics of leaf area of Tilia cordata in various types of technogenic conditions were obtained. It was established that under the influence of industrial pollution the area of the leaves varies in different age periods and depending on the prevailing type of contamination. The adaptive significance of changes in leaf area was analyzed. It is shown that geomorphic conditions have practically no influence on the size of the leaves of Tilia cordata.

Key words: Tilia cordata, technogenesis, petrochemical pollution, polymetallic pollution, leaf area, adaptation.

Vasyutkina D. I.

IN-PLANT NOISE AND ITS INFLUENCE ON MAN'S ORGANISM

The questions of noise action on man's organism, depending on noise influence, noise intensity, noise spectrum, age and experience of workers in conditions of noise are analyzed and programme steps of hearing keeping are offered.

Key words: noise, noise spectrum, noise intensity, hearing loss, poor hearing, professional risk, barotrauma

Starostina I. V., Pendyrin E. A., Tolitchenko A. V.

STUDY OF PHYSICAL AND CHEMICAL PROPERTIES OF PRODUCTION FERROVANADIUM SLUDGE WASTE

We study the technological properties and mineralogical composition of the waste sludge production and current production of vanadium sludge products. The main uses of sludge waste

Key words: sludge, heterogeneous systems, colloidal particles, gypsum-containing material, mineral composition, plasters.

Faskhutdinova Z. T., Shaikhiev I. G., Abdullin I. Sh., Sverguzova S.V.

EFFECT OF THE PARAMETERS OF RF PLASMA LOW PRESSURE ON THE REMOVAL EFFICIENCY OF UGAR FROM THE WATER SURFACE OIL TP-22

Sorption characteristics of the waste walk-tomentose production (ugar) in relation to the grade of compressor oil TP-22. It is shown that the treatment of ugar with plasma high-low pressure helps to increase oil absorption and hydrophobicity. We found that plasma treatment does not alter the structure of biopolymers keratin wool and cellulose components that make up ugar, but only changes the structure of the surface.

Key words: turbine oil, the departure walk-tomentose production, removal from the water surface, the modification of the plasma.

Radoutsky V. Y., Shaptala V. G.

OPTIMAL DISTRIBUTION OF MEANS AND FORCES, INTENDED FOR LIQUIDATION OF EMERGENCIES RESULTS

In the article the questions of optimal distribution of liquidation tasks between separate life-saving formations at liquidation of emergencies results with use of mathematic modeling are considered.

Key words: emergency, formations, wrecking, liquidation time, grouping, algorithm, loading vector, mathematic model.

Lubenskaya O. A., Klimova E. V., Khramtsov B. A.

ASSESSMENT OF EMERGENCY AND ACCIDENT AT QUARRYING WAY

Based on statistics analyzed the general state of accidents and injuries in the mining industry. Calculated the share of accidents and injuries in recent years. Consider measures to improve state policy in the field of industrial safety.

Key words: mining and rock industry, accident, dangerous occurrence, severity of injury, the share of injuries, safety management system.

INFORMATION TECHNOLOGY AND OPERATING SYSTEMS

Pint E. M., Romanenko I. I., Petrovnina I. N., Yelichev K. A.

FULL ALGORITHM RATIONAL METHOD RECOGNIZED BY THE COMPUTER PRINTED CHARACTERS WITH DIFFERENT FONTS, AND OTHER CHARACTERS

Created by the original device of perception and recognition of characters in different fonts and symbols. Developed a rational method for recognition of computer characters in different fonts and symbols, and, as a consequence, computer programs that implement this method.

Key words: appliance, software, matrix, printed mark, operator.

TRANSPORT AND POWER

Zhidkov V. A.

REMOVAL AND PREVENTION OF FAILURES IN THE INFORMATION TECHNOLOGY EQUIPMENT IN POWER SYSTEM

This article is an analysis of technological disruptions in the information technology equipment used in power system. It presents different ways in the software and hardware to eliminate and prevent failures. Conclusions are made about the direction of further development of outage management systems (OMS) as a component of the concept of «Smart grids».

Key words: technological violation, power system, information technology, outage management systems (OMS), Smart Grid, monitoring system.

Osipov O. V.

OPTIMAL PLACEMENT HEAT SOURCES IN INHOMOGENEOUS MEDIA

We propose and justify a new numerical method for solving the problem of the optimal choice of the density of heat sources in a heterogeneous environment. A description of developed-tion algorithms and numerical results.

Key words: heterogeneous medium density heat sources, the inverse problem of heat conduction Green's function, finite-dimensional approximation, the simplex method, the thermal balance.

Vinogradov A. A., Ziabkina O. N.

QUALITY INDICATORS OF ELECTRIC ENERGY CAUSED BY USE OF LIGHT-EMITTING DIODE LAMPS

The electrical energy as a commodity is used in all spheres of human activity, has a set of specific properties and is directly involved in creating other types of products, affecting their quality. Quality parameters of electrical energy are determined by the totality of its characteristics, in which the power-consuming equipment can work normally and perform the functions inherent in them. Part of the quality of electrical energy characterizes the steady state consumers of electrical energy (EE) and gives a quantitative estimate of the consumption process of EE.

Key words: quality of electrical energy of the harmonic components of current and voltage, current waveform (waveform), the coefficient of waveform distortion.

Bogdanovich S. V.

PASSENGER FLOW FORECASTING SYSTEM ON THE BASIS OF ARCHIVAL AND STATISTICAL DATA OF "EXPRESS-3" ACS SUBSYSTEMS

Were established that creation for the administrative personnel of JSC "Passenger traffic" of a program complex «Operative regulation of the passenger train's scheme and optimization of the park of cars using» (PC "ORS-PC") allows on predicted value of train's population density at the moment of departure in run to define the optimum train's scheme on the basis of continuous monitoring of train's population density during certain moments of time.

Introduction of the PC "ORS-PC" will lead to increase of efficiency of JSC "Passenger traffic" rolling stock's park using, and also the maximum satisfaction of the population demand in passenger traffic with taking into account of seasonal and intra monthly passenger traffics fluctuation.

Key words: passenger flow, forecasting, density of population, capacity, requirement for park of car.

PROBLEMS OF HIGHER EDUCATION

Kireev M. N., Skokov A. L.

ROLE OF EDUCATIONAL WORK IN THE PROCESS OF PROFESSIONAL FORMATION OF MODERN SPECIALIST

The article reveals the problem of searching of optimal ways of formation during the educational process of modern specialist with high level of development of personal qualities.

Key words: educational system, management of educational process, values, educational sphere, social background, educational paradigms.

Brykova L. V., Gaevoi A. P.

BUSINESS GAME AS METHOD OF FORMATION OF STUDENTS GRAPHIC CULTURE ON ENGINEERING DRAWING LESSONS

The problem of formation of graphic culture by students of technical college is analyzed in article. There is a definition of this concept. Structural components and levels formation of graphic culture by the future engineers are allocated. One of the form of the organization of practic, which promote the development of all components of graphic culture students is considered - business game «This is design office».

Keywords: graphic culture, educational technology, professional-tion directed learning, role play.

Kilpyakova I. S., Zamanova I. F.

BUSINESS GAME AS ONE OF THE INTERACTIVE TECHNOLOGIES IN THE IMPLEMENTATION OF COMPETENCE-BASED APPROACH TO THE TRAINING OF MANAGERS OF LIBRARY AND INFORMATION ACTIVITIES

Realization of competence-based approach is illuminated in preparation of managers of library-informative activity through the use in the educational process of interactive technologies (business games).

Key words: Professional competence, competence-based approach, interactive technology, business game, the assessment of knowledge, evaluation of student work.

Lomakin V. V., Trukhachev S. S., Asadullaev R. G., Kosonogova M. A.

INTERACTIVE DYNAMIC MODEL OF TRAINING ON THE BASIS OF INTELLECTUAL SYSTEM OF SUPPORT OF DECISION-MAKING AND MULTIDIMENSIONAL KNOWLEDGE BASES

Is offered technique of construction of the interactive dynamic training, allowing to raise informative activity of students, by formation of an individual trajectory of training, on the basis of application of intellectual system of support of decision-making and multidimensional knowledge bases.

Keywords: personal-focused training, adaptive software, interactive dynamic model of training, personal trajectory of training, intellectual algorithm for the forming of a training course.

Tolmacheva E.V.

PROJECT METHOD AS A MEANS OF FORMATION FOREIGN STUDENTS' MANAGERS PROFESSIONAL COMMUNICATIVE COMPETENCE

In this article the questions connected with methods of training, directed on development and formation of foreign students' managers professional communicative competence are considered. It is given an example of realization of a project method in the course of foreign students training.

Key words: professional-based training, professional competence, professional communicative competence, project method.

SCIENCES AND HUMANITIES

Degtyareva E. S.

KNOWLEDGE AS SPIRITUAL PRODUCTIVE FORCE (ECONOMIC SOCIOLOGICAL ASPECT)

Based on the study of economic sociological literature this article examines the influence of knowledge on the rational organized production. It is emphasized that rationality of modern production is based on rationalism of capitalists.

Key words: knowledge, rationalization, labor, production, capital.

Olkhova O. N.

ETHNIC COMPONENT OF THE CHROMATICS IN O. SLAVNIKOVA'S ART PROSE

Article is devoted to questions of studying of a lingvotsvetovy picture of the world in Olga Slavnikova's art prose. The color picture of the world of the writer is ethnically caused, as reflects features of clothes and a life of Russian people.

Key words: chromatics, the picture of the world, linguistic picture of the world, colour the picture of the world, an ethnic component.

Turanina N. A.

NOMINEES OF FLORA AND FAUNA IN ART COMPARISONS OF POETESSES OF THE BEGINNING OF THE XX-TH CENTURY.

In article results of the analysis of the comparative designs, containing nominees of wildlife, in a context of female poetry of the beginning of the XX-th century are presented. The general individually-author's features of use of investigated lexicon as a part of comparison are revealed.

Keywords: Nominees, компаративные designs, semantics, structure, the analysis.

Emelianov V. Y.

COMPARATIVE ANALYSIS AND CONCEPTUAL TYPOLOGY APPROACH TO UNDERSTANDING THE MAN AND HIS SPIRITUAL IN THE PHILOSOPHICAL AND ANTHROPOLOGICAL CONTEXT

The necessity of the philosophical-anthropological approach to the study of spirituality. Based on the concept of "promise of existence" given typology of conceptions of man in philosophical anthropology. We study specific aspects of the philosophical concepts that manifest themselves in different concepts of a theoretical understanding of spirituality.

Having the concept of spirituality as an intention to comprehend and implement the highest expediency, we proposed and substantiated the typology of basic concepts of spirituality.

Key words: spirituality, promise, purpose, usefulness, the concept of human spirituality, personal value system, the hierarchy of values, the highest values.

Pronkin V. I.

AVANT-GARDISM IN VISUAL ART, ITS EVOLUTION AND INFLUENCE AT THE DEVELOPMENT OF CULTURE OF THE MANKIND

The author researches the phenomenon of avant-gardism of visual art with the position of the development of nature and man, examining avant-gardism as mechanism of the gnosiological and industrial progress in the culture of the mankind. Such point of view gives the opportunity to determine the conception of avant-gardism with the new points of view and to overview its genesis and evolution, to distinguish its principal historical types. It showed that phenomenon of avant-gardism is not only the phenomenon of end of 19 the beginning of 20 centuries but article of all Ochs at the development of man. It allowed not to trace the influence of historical types of avant-gardism at the culture of mankind but to proceed its evolution in new avant-garde, concrete binocular art, creating avant-garde esthetics of XXI century.

Key words: avant-gardism, abstractionism, genesis, evolution, primitive abstract art, global avant-gardism, monocular, new avant-garde, concrete art, esthetics of future.

Fomenko Yu. V., Demenko V. V.

PROSPECTS FOR INNOVATION TRANSPORTATION AND LOGISTICS CLUSTER OF BELGOROD

The article considers the relevance of the operation and further development of the transport and logistics cluster region, which plays a key role in promoting economic growth and competitiveness of the Belgorod region, both among Russian regions and foreign markets.

Key words: transportation and logistics cluster, transport, infrastructure, investment, logistics systems, multi-modal transportation and logistics area.