

Land Sciences

E.V. Kozlova, Yu.N. Yakovleva

On the Results of Cartographic-Geodetic Studies of the Hydrographic Network on the Territory of the South Urals: Case Study of Lake Belye

Key words and phrases: lake hollows; Lake Belye; local structures; satellite images; tectonic processes; topographic maps, waterfront.

Abstract: In the present work the author studied the influence of latest and modern tectonic processes on the formation of lake hollows in the Southern Urals on the example of Lake Belye.

page 7-14

O.V. Kulagina, I.R. Baykov, R.A. Molchanova, A.R. Gataullina

Effective Use of Natural Gas Energy Flows with Negative Temperature Obtained in Expander- Generator Units

Key words and phrases: air cooler; energy efficiency; energy of gas overpressure; energy saving; expander-generator unit; gas-distribution station; gas cooling equipment; ice generator; refrigerant coolant; secondary energy resources; vapor-compression refrigerating unit.

Abstract: When using the energy of gas overpressure at the GDS, the second energy source is obtained for electricity generation - a stream of freeze, which can be used in the gas cooling equipment (GCE). Comprehensive use of the energy of natural gas overpressure on the gas-distribution station for electricity generation and its consumption in the refrigeration plant is the most energy efficient way of utilization of secondary energy resources in the major gas pipeline transportation. The refrigeration unit for storage of different products at different temperatures with a system of production and storage of edible ice has been considered in the paper.

page 15-20

Biotechnology and Medicine

K.A. Alimetova, S.A. Abusuev, M.G. Atayev

The Effectiveness of Preventing Endemic Goiter in Children Living in the Plains and Foothills of Dagestan

Key words and phrases: endemic goiter; incidence of goiter; iodine deficiency; ioduria; prevention.

Abstract: The paper presents the results of the 12 year study of iodine deficiency in children living in the plains and the foothills over the 12 years. Implementation of preventive measures among children living in the foothills and plains contribute to reduction in the incidence of goiter and increase in ioduria levels.

page 21-28

Pedagogy and Psychology

E.I. Andrianova

Rationale for the Module 'Pedagogical Monitoring of Preschool Education Programs' in the Master's Curriculum

Key words and phrases: basic professional educational programs; Master; modernization of education system; module; pedagogical monitoring.

Abstract: The paper discusses the content of the module 'Pedagogical monitoring of pre-school education program', which is one of the modules of the basic professional educational program of Masters majoring in Psycho-pedagogical education (Preschool teaching). This program was developed as part of the teacher education modernization. The content of the innovative educational module 'Pedagogical monitoring of preschool education program' was developed on the basis of the activity and competence approaches with the focus on the learning outcomes set out in compliance with the standards of teachers' work.

page 29-33

I.N. Emelyanova

Assessment Tools in the Context of Competence- Based Model of Education

Key words and phrases: assessment; competence-based education model; quality of teaching.

Abstract: The paper presents a comparative analysis of a traditional teaching model focused on knowledge and skills development and a competence-based model; the features and problems of assessing the quality of teaching in the implementation of a competence-based model are described.

page 34-36

O.V. Kirillova, T.V. Kirillova

System Methodology: a Systematic Approach to the Development of Scientific Cognition

Key words and phrases: content of education; system analysis; systematic approach; system methodology; theory of cognition.

Abstract: The paper describes a systematic approach in the development of scientific cognition; the authors analyze the views of various scholars, the specifics of ontological, epistemological, practical aspects of the system methodology.

page 37-39

S.A. Piyavskiy, E.I. Kolesnikov, T.V. Kolesnikova

Modeling of Students' Educational Interaction Regarding their Psychological Characteristics

Key words and phrases: competence; educational cooperation; information system; model; principles of educational interaction; student.

Abstract: The authors developed a model of educational interaction which is based on the results of psychological tests (motivation, self-control, responsibility, and leadership); the model permits optimization of students' learning activities. The optimal principles of interaction between the elements of the model (the analogy or addition of characteristics) were formulated. The formulae for the calculation of the coefficients comprising the influence of consistency of psychological characteristics and efficiency on the overall assessment of student interaction were proposed. The experiment was conducted in Samara State University of Architecture and Construction.

page 40-44

V.I. Serov

Psychology of Loss. Types of Psychological Defense, Adaptability of 5-year Students Majoring in Psychology at the Academy of the Federal Penitentiary Service of Russian in Pre- and Post- Correction

Key words and phrases: adaptability; adaptive response; borderline mental state; cadet; constitutional socio-psycho-physiological protection of an individual; correction model of socio-psycho-physiological space of an individual; personality; protective adaptive response; psychogenic loss; psychology of loss; types of psychological defense.

Abstract: This paper analyzes the ways of diagnosing and correcting losses experienced by 5-year male students majoring in psychology; the author examines the situations that lead to a transition from a normal person's mental state to a borderline case. The transition is accompanied by sociogenic, psychogenic and physiogenic losses, resulting in psychological defense. The object of the study is the borderline mental state of an individual; the subject is the dynamics of defense of an individual from sociogenic, psychogenic, and physiogenic losses under the influence of correction. The application of the correction indicated the revitalization of traumatic events in young men with the subsequent possibility of reducing psychogenic losses in the post-correction period. If corrective measures are applied at an earlier stage, psychogenic losses can either increase or decrease.

page 45-53

O.L. Shepelyuk

Experimental and Research Activities of Students in the Course 'Oil and Gas Chemistry'

Key words and phrases: experimental research; federal government standards; oil and gas chemistry; student scientific circles.

Abstract: The paper discusses the issues of developing experimental research skills of students on the course of oil and gas chemistry in the learning process and extracurricular research work; principles of their scientific research activities have been studied.

page 54-56

Professional Training

T.A. Fugelova

From Design Technology of University Educational Process to Occupational Mobility of Future Professionals

Key words and phrases: creative workshop; occupational mobility; reflection; technology of professional design.

Abstract: The need for innovative development of society poses pedagogical community to prepare specialists who are ready and able to professional mobility. Under professional mobility we mean the willingness to change, innovations in professional activities on the basis of integration of personal and social values, abilities for professional creativity, self-development of professionalism and skill building and career building. The problem lies in the mastery of technology of professional mobility development through the use of the resources of the educational environment of the technical University.

page 57-59

History, Philosophy and Sociology

K.E. Bagirova

Education in the Knowledge Society: Peculiarities, Problems, Perspectives

Key words and phrases: Bologna process; information society; knowledge society; modern educational systems.

Abstract: The paper attempts to analyze the peculiarities, problems and perspectives related to the functioning of Education Institute in the knowledge society. Not only does it consider the theories of Russian sociologists but also those by foreign ones. Special attention is drawn to the current state of education in Russia.

page 60-68

D.A. Mkrtychyan, E.A. Shakaryan, A.Yu. Lombrozo

The State of Contemporary Armenian Diaspora in the Middle East and South East Europe

Key words and phrases: Armenia; Armenian church; Armenian Diaspora; Armenians in Turkey; Armenian political parties; Diaspora; Diaspora self-government; forced resettlement of Armenians; genocide; Iraq; Middle East and South East Europe; Syria.

Abstract: The paper deals with the genesis and development of the Armenian Diaspora in the Middle East and South East Europe at the end of XX century and the beginning of XXI century. The authors analyze the reasons which lie behind the appearance of Armenians in the abovementioned regions and consider contemporary state and prospects of Diaspora development. Special emphasis is placed on events which have occurred as a result of the Arab spring and forced local people to seek refuge in other countries.

page 69-75

L.V. Morozov

To the Question of Peasant Land Tenure in the Penza Province in Second Half of XIX – Early XX Century

Key words and phrases: arable; land; peasants; tithe.

Abstract: The paper deals with the movement of peasant land tenure in the Penza province in the second half of XIX – early XX century. The peculiarities of the increase in the arable land at the expense of forests and other land to overcome land hunger have been discussed.

page 76-78

E.G. Renev

Izhevsk People's Army on Mobilization Model

Key words and phrases: Izhevsk uprising; military science; mobilization rates; modern historiography; People's Army.

Abstract: The paper discusses the possible size of the Izhevsk anti-Bolshevik uprising army. To estimate the size of the army the author used the Izhevsk People's Army documents and considered the mobilization factors (models) used in the military science. The results obtained are significantly different from those generally accepted in modern historiography.

page 79-81

A.T. Tsarikayev, Z.V. Sosranova, Z.E. Dzottsoeva

North Ossetia during the New Economic Policy (Modern Historiography)

Key words and phrases: historiography; New Economic Policy; North Ossetia; region; regional researchers.

Abstract: The complex of modern scientific works on problems of the new economic policy in North Ossetia is analyzed in this paper. The authors give an assessment of the extent

page 82-87

of the study of its main aspects in the regional historiography and define prospects of further studies of the New Economic Policy.

Philology

A.A. Karimova, O.V. Khasanova

Bilingualism Realization in the Theory and Practice of Translation Competence Formation

Key words and phrases: artificial bilingualism; bilingualism; editing of the translated text; language competence; language interference; translation activity; translation competence.

Abstract: The paper considers the interrelation of actual problems of bilingualism and the problems of translation activities. The translation process being the act of communication presupposes the use of two languages on a rather high level. Thus, it is important to determine the ways of increasing the translation language skills during translation work. Language learning for the translation purposes can also be described from the artificial bilingualism viewpoint. The problem of language interference as connected with artificial bilingualism is also highlighted in the paper. Our conclusion is that in the translation process one can not only master foreign language skills but improve the mother tongue abilities while editing the translated text

page 88-93

Mathematical Methods and Models

A.R. Abdullaev, I.L. Derevyankin

About One Parametrical Market Model of Transition Economy

Key words and phrases: model of transition economy; model solvability.

Abstract: In the work the one-parametrical macroeconomic market model of a transition economy which reduces to a differential equation of Van der Pol of the second-order equation is considered. The solvability of the model is studied through the methods of the theory of functional-differential equations. The obtained results are analyzed from the perspective of the initial model. The coherence with the relevant provisions of transition processes of macroeconomic is noted.

page 94-97

Yu.A. Gorbunov, L.N. Krotov, E.L. Krotova

Application of Statistical Approach to the Problem of Intruder Detection in Automated System: Alternatives and Prospects

Key words and phrases: computer security; Cox processes; mathematical modeling; stochastic processes.

Abstract: The paper discusses possible options for improving the models of legitimate user by extending classes of alternatives in the transition to strictly stable distributions. The authors discuss the complexity of such a transition and possible solutions.

page 98-101

Yu.A. Martynova, Ya.A. Martynov

Origin-Destination Matrix Acquisition Based on the Analysis of Electronic Maps Geo-Data

Key words and phrases: electronic map; gravity model; origin-destination matrix; passenger traffic; transport system.

Abstract: The techniques of constructing an origin-destination matrix based on the coupons, tables, electronic travel documents and using special fixation devices of passengers are considered. The description of the gravitational and entropic methods of recovery of the origin-destination matrix is given. A new algorithm for origin-destination matrix acquisition based on the data obtained from electronic maps is proposed.

page 102-105

A.A. Mikhailov

Parameters Affecting Thickness Distribution of Cylindrical Part Outer Surface Coating

Key words and phrases: cylindrical parts; interference coating; optical element.

Abstract: A possibility of obtaining various thickness distributions of the resulting coating on optical cylindrical parts is considered. Variation of the location and some parameters and movements of parts in the mathematical model gives different results, some of which may be useful in practice.

page 106-109

Electronics, Measuring Equipment, Radiotechnics and Communication

I.A. Shashkova, N.M. Skornyakova

Visualization of Liquid Vapor by Background Oriented Schlieren

Key words and phrases: Background Oriented Schlieren (BOS); liquid vapor; visualization.

Abstract: Visualization of evaporation process was carried out for volatile polluting liquid by means of Background Oriented Schlieren (BOS) on the example of acetone. The possibility of detecting indoor vapors of volatile substances by means of BOS was demonstrated.

page 110-113

Information Science

V.S. Simankov, A.N. Cherkasov

Methodological Aspects of Decision-Making Support for the Operation of Situational Center Intellectual System

Key words and phrases: algorithm; alternatives; control action; criteria; decision analysis; decision making; problem; target.

Abstract: The paper describes the algorithms of automation and intellectualization of decision-making support, operation of the systems and participants of problem solving situations within the framework of the situational center.

page 114-122

Economic Sciences

M.A. Baldaeva

Factors of Transformation of Municipal Property in the Russian Federation

Key words and phrases: factors of transformation; income derived from utilization of the national and municipal property; municipal property; national property; property; transformation of property.

Abstract: In this paper the most important theoretical bases of “the property”, “the municipal property” and “transformation of property” concepts are covered. The dynamics of income from the use of property owned by the national and municipal property on the example in Republic of Buryatia as of 2011, 2012, 2013 years is presented. The main factors of transformation of municipal property are presented.

page 123-125

Zh.D. Gomboeva, A.Yu. Stepanova

Municipal Economic Policy: Case Study of the Republic of Buryatia

Key words and phrases: management; municipality; socio-economic system; strategy.

Abstract: The paper considers the issues of economic policy of municipalities, as well as peculiarities of municipalities in the Republic of Buryatia.

page 126-128

E.I. Kulikova

The Role and Importance of Investment in the Development of Russian Regions

Key words and phrases: equity; Federal district; investment; investment climate; socio-economic system; standard of living.

Abstract: The paper substantiates the role and importance of investment in the development of regional economy. On the basis of the analysis of the dynamics of regional development indicators the author proves that the key role in the investment process is played by a favorable investment climate, and proposes measures for its improvement in the Russian regions.

page 129-133

N.V. Maslova

Innovation in HR Management and Organization of Work as a Factor in Improving the Competitiveness of Enterprises

Key words and phrases: HR innovation; human resources; innovations in HR management; impact of HR innovation on competitiveness; innovative approach to HR management.

Abstract: In the paper, the author defines the role of human innovation to increase the competitiveness of modern enterprises, offers a systematization of existing innovations in personnel management, and also indicates the differences between traditional and innovative

page 134-137

approaches to management of human resources.

S.S. Panteleev

The Conception of Industrial “Product-Service” System

Key words and phrases: industrial systems; production management.

Abstract: The author analyzes an Industrial product-service system (IPSS) as a new instrument, which gains competitive advantage to the machinery manufacturer. The author analyzed the main stages of IPSS development. The study showed that integration of products and services led to the improvement of producer-customer relationship; a switch from transaction based relationship to long-term contract based relationship was observed. After the IPSS implementation a company can be characterized as a symbiosis of products (machinery) and services (further maintenance), which satisfies individual needs of customers during full life-cycle of a product. IPSS can have different configurations that meet the requirements of a wide range of consumers.

page 138-140

N.F. Kolodina, I.V. Trofimov, A.P. Klimova

The Analysis of the Real Estate Market in Orenburg

Key words and phrases: development; market of real estate; potential; region.

Abstract: This paper presents an analytical review of the real estate market in the Orenburg region; its potential and possible development directions have been defined.

page 141-147

G.F. Feygin

Creation of Supranational System of Economic Regulation

Key words and phrases: globalization; integration; international economic organizations; national economic sovereignty; regional economic blocks.

Abstract: In the paper three levels of regulation of economic activities (global, regional and national) are presented. The focus is on the relation of these levels within the complicated process of creation of supranational system of economic regulation. The perspectives of national sovereignty of modern countries are estimated.

page 148-154

Legal Science

V.N. Nemechkin

Topical Issues of Development of Clinical Legal Education in the Finno-Ugric Countries (Hungary, Finland and Estonia)

Key words and phrases: international experience; legal advice; legal clinics; legal education.

Abstract: The paper considers the peculiarities of the organization and functioning of legal clinics, free legal advisory consultancies in the Finno- Ugric countries. The author explores the process of development of legal education with an emphasis on the development of future lawyers' practical training based on clinical training. Also, the author focuses on the study of experience in the development of clinical legal education in Hungary, Finland and Estonia.

page 155-157

T.V. Khudoykina, E.F. Usmanova

Developing Communication Skills in Clinical Legal Education

Key words and phrases: clinical legal education; communication skills; lawyer.

Abstract: The paper discusses the process of developing communication skills in clinical legal education, emphasizes the importance of communicative qualities for future lawyers. Peculiarities of communicative interaction in professional legal activities have been studied.

page 158-160

Art History

E.V. Bessarabova

The Use of National Elements in Modern Costume Design

Key words and phrases: composition tools; national element; perception of external factors; properties of composition; sub-ethnos.

Abstract: When creating new forms of costume, it is necessary to consider preferences of the target audience. Therefore, a design process should take into account all internal and external factors that can influence the perception of the finished product. For the analysis of the impact of internal factors the author selected the national costume of the Crimean Tatars, with regard to the regional specificities, ethno-cultural and religious traditions. The analysis of composite

page 161-163

properties regarding the ethnic division into sub-ethnos highlighted the main characteristic features of each of the categories. The samples of costumes with a national element have been created.

I.V. Lepikhova

Mentality and Film Studies: the Experience of Exploring People's Worldview through the Prism of Cinema

Key words and phrases: cinema; film criticism; history; identity; mentality; mindset; Russian people; unconscious.

Abstract: This paper addresses the history and methodological foundations of exploring people's mentality by means of cinema. While linguistic studies into mentality have become a popular scientific dimension, the research based on movie material is still in its infancy, although the works by S. Kracauer have already provided a rationale for the significance of exploring cinema for the understanding of the psychology of masses.

page 164-167