

## Biotechnology and Medicine

V.V. Sitnikova, L.Z. Gosteva

Amur State University, Blagoveshchensk

### **Social Partnership in Health Care: Theoretical Aspect**

*Keywords: social partnership; health; social partnership in health care; cooperation agreement; collective bargaining; mutual consultation; legal framework of social partnership in health care.*

page 7-9

*Abstract: Social partnership in health care is important from theoretical and practical perspectives. It has a borderline nature, i.e. it develops at the interface of medical and social activities. In this regard, in the study of social partnership in health care it is necessary to consider its subject matter and the mechanisms of its implementation through the prism of various social and medical aspects.*

## Pedagogical Sciences

Yu.A. Anischenko

Surgut Oil and Gas Institute – Branch of Tyumen State Oil and Gas University, Surgut

### **Continuing Education as a Factor of Raising Competitiveness of Labour Market**

*Keywords: manpower quality; competitiveness of manpower; continuing education; education.*

page 10-13

*Abstract: The paper reveals the concept of “labor market competitiveness” and enables to reveal the relationship of competitiveness and continuing education. Special attention is paid to the review of the interaction between business organizations and educational institutions.*

D.N. Devyatlovskiy

Lesosibirsk Branch of Siberian State Technological University, Lesosibirsk

### **Praxiological Personal Qualities of Students**

*Keywords: personal quality; praxiological personal qualities; professionally important qualities; student.*

page 14-16

*Abstract: This article is aimed at solving pedagogical problems related to the essence and content of praxiological personal traits of students. The author interpreted the essence of the concept “praxiological personal quality of students”, identified and described the totality of praxiological personal traits, which are aimed at making success of their professional activities.*

A.Z. Ibatova

Surgut Oil and Gas Institute – Branch of Tyumen State Oil and Gas University, Surgut

### **Levels and Criteria of Non-Linguistic Students’ Readiness to Professional Communication in a Foreign Language**

*Keywords: cognitive, motivational, operational criteria; levels and indexes of readiness to professional communication.*

page 17-20

*Abstract: The paper deals with basic indexes and characteristics of non-linguistic students’ readiness to professional communication in a foreign language.*

M.V. Lueva

Moscow Pedagogical University, Moscow

### **Coping Strategies of Younger Teenagers at Different Stages of Educational Process**

*Keywords: coping strategies; younger teenager; educational process; coping behavior.*

page 21-26

*Abstract: The article examines in detail the problem of coping behavior in the context of modern science; the author focuses on the aspects that influence the development of coping behavior. As part of the study the author deals with the concept of coping strategies, gives their definition and meaning in the human life. General ideas about education and its importance in the modern world are briefly given. In the study, the author uses methods of mathematical statistics, traces the possible changes in the strategies of behavior in adolescents at different stages of the educational process.*

E.Yu. Orekhova, N.A. Sergienko, I.V. Shukurova

Surgut State University, Surgut

**Preparing Students for Intercultural Communication through Learning a Foreign Language in Multicultural University**

*Keywords: dialogue of cultures; foreign language; linguistic-socio-cultural competence; multicultural education.*

*Abstract: This article deals with the peculiarities of the process of preparing students for intercultural communication through learning a foreign language in multicultural university.*

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## Culturology

A.N. Glebova

Lomonosov Moscow State University, Moscow

**To the Question of Genesis and Evolution of Peasant Community's Self-Government (Sociological Review of Theoretical Ideas)**

*Keywords: local self-government; community self-government; community; society; historical experience; social modernization; social care; peasant self-government.*

*Abstract: The article provides a brief overview of sociological theoretical concepts in historical context, examines the peasant community's self-government as a form of local self-government, which underwent a complex and contradictory path of absolute autonomy to the state of spineless tool of bureaucracy. The possibility of using the institute of self-government in modern socio-economic conditions justifies the need to study the experience of this form of governance.*

page 31-33

A.A. Zavyalov

Lobachevsky Nizhny Novgorod State University, Nizhny Novgorod

**Changes in Contemporary Media Ecology and their Influence on the Existing System of Interaction between Media and Politics**

*Keywords: interaction between authorities and media; globalization of media industry; interactive participation of audience; new media environment; media ecology; media space; public network; models of media; digital media.*

*Abstract: This article discusses the problem of changes in the media ecology and system of interaction between media and politicians. Particular attention is paid to how and by what means of coding, media influences the society. Media ecology studies in Russian political science and communicativistics are still in their infancy in comparison with foreign studies. The article to some extent fills this gap. The purpose of this article is to determine which model is built on the interaction between the media and politics, and what changes occur in the modern media ecology. Through research, it was possible to identify that globalization of media contributes to the convergence of media with different spheres of human activity. It is concluded that media space is transformed from the national to the international level, where the "new media" give a central role to the society.*

page 34-41

A.A. Kazakova

Lomonosov Moscow State University, Moscow

**Global and International Inequality in Globalized World: Controversial Trends**

*Keywords: BRICS; globalization; inclusive growth; human development; "rise of the South"; quality of life; social inequality; standards of living.*

*Abstract: The turn of the century has been marked with global crisis of egalitarianism. The dismantling of the welfare state in developed capitalist societies, the market transition in post-socialist states and the neo-liberal adjustments in developing countries have become the components of the global trans-nationalization of capital which escapes state regulation and redistribution. At the same time some emerging economies have seemingly benefited from the globalization process what may be regarded as a new trend of international income convergence. The paper presents these controversial trends in international and global inequality and the problems of their sociological interpretation, accentuating the necessity to transcend the economy-centric approach.*

page 42-45

*I.V. Kalashnikova, S.A. Malinin*

*Klin Branch of Russian State Social University, Klin*

***The Value of I.A. Ilyin's Ideas for Modern Russia***

*Keywords: authority; democracy; liberal-conservative direction; "organic state"; law; transformation.*

page 46-49

*Abstract: The paper considers I.A. Ilyin's views on politics and rights which contain the potential for the development of new ideas in relation to the Russian society and the state, which are still relevant.*

*A.V. Shchipkov*

*Online Magazine "Religion and Media", Moscow*

***The Typology of Conservative Directions in Modern Russia***

*Keywords: antique conservatism; Eurasianism; Communism conservative; liberal-conservative; national conservatism; interrupted tradition; system "center – periphery"; situational conservatism; religious conservatism.*

page 50-52

*Abstract: This paper describes the types of conservative thought in Russia, evaluates them according to the degree of productivity. Productive conservatism is defined as a system, the opposite of liberal political model "center – periphery".*

## **Machine Building and Engineering**

*T.B. Alov, E.M. Aslanova, M.T. Belova*

*Berbekov Kabardino-Balkaria State University, Nalchik,*

*Financial University under the Government of the Russian Federation, Moscow*

***Building of Production Functions of Irrigation Systems***

*Keywords: production function; irrigation system; model; planning; optimization.*

page 53-55

*Abstract: The paper proposes three modifications of the optimization model of building production functions of irrigation systems. A comparative analysis of the obtained models has been made. The application of a particular statement depends on information provision and the nature of the fluctuations of the natural moisture.*

*A.S. Vasilyev, I.R. Shegelman, P.O. Shchukin*

*Petrozavodsk State University, Petrozavodsk*

***The Analysis of Intellectual Property Objects for Product Quality Improvement Using Rock Crushing***

*Keywords: rock formation; crushing; cube-shaped crushed stone; patent search.*

page 56-58

*Abstract: The patent search has shown that there is lack of new innovative solutions allowing for the transfer to fundamentally new level of engineering and technological solutions to produce cube-shaped crushed stone by solid rock crushing.*

*N.A. Kurmazova*

*Trans-Baikal State University, Chita*

***Application of Dust Suppression Devices on Coal Cuts (Illustrated by "Vostochny" Cut in Trans-Baikal Region)***

*Keywords: coal mine; dust; layout and equipment; pollutants; snow-making plants; specifications*

page 59-62

*Abstract: The paper presents the results of the use of snow-making plant for dust control on coal cut "Vostochny" in the Trans-Baikal region. The Trans-Baikal region is characterized by continental climate with little snow in winter; the coal mine "Vostochny" is the oldest mining enterprise, insufficiently equipped with modern appliances and emissions of pollutants affecting the health of people in the nearby village Golubichnaya. The use of modern technology in the coal cut will be the best solution for dust control, improve working conditions and prevent the removal of coal by wind flow.*

I.R. Shegelman, P.O. Shchukin, O.N. Galaktionov, Yu.V. Sukhanov, A.S. Vasilyev, A.M. Krupko  
Petrozavodsk State University, Petrozavodsk

**To the Question of Development of Crushing Technological Systems Simulation Model**

Keywords: rocks; crushing technology systems; finite element method.

page 63-65

Abstract: This paper addresses the issue of the formation of a simulation model, which determines the impact of the developed new technical solutions to improve the yield of marketable products (crushed stone) and lower energy costs.

## Computer Science, Computer Engineering and Control

I.I. Komarov, R.A. Yuryeva, A.L. Drannik, O.S. Maslennikov

St. Petersburg National Research University of Information Technologies, Mechanics and Optics, St. Petersburg

**Statement of the Problem of Ensuring Information Security of Swarm Robotic Systems**

Keywords: swarm robotics systems; information security; multiagent technologies

page 66-72

Abstract: The paper analyzes algorithms for swarm robotics systems, examines their sustainability in terms of information security; the authors developed methods and tools for the detection of destructive impact on swarm robotics systems implemented without removing components from standard operating procedure.

A.I. Kremer, V.G. Rudalev, A.A. Minakova

Voronezh Branch of Russian New University, Voronezh,  
Voronezh State University, Voronezh

**The Study of Filtering Algorithms for Biological Populations Structure**

Keywords: Kalman filtering algorithms; biological populations; demographic statistics.

page 73-80

Abstract: Kalman filtering algorithms are studied in the problems of assessment and forecasting of age and sex structure of the population. The authors discuss the results of the construction of special demographic pattern with its further application to incomplete and inaccurate entry of current monitoring data.

N.K. Maltseva, O.Yu. Lashmanov, A.V. Nuzhin

St. Petersburg National Research University of Information Technologies, Mechanics and Optics, St. Petersburg

**Increasing the Accuracy of Measuring the Reflectance of Laser Mirrors**

Keywords: laser mirrors; estimation error; multiple reflections; reflection coefficient.

page 81-85

Abstract: The paper considers the option of measuring the reflection coefficient of laser mirrors on the circuit with multiple reflections. Standards with known coefficients of reflection are not required for measurements. It is shown that the estimation error is reduced in proportion to the number of reflections from the surface of the controlled mirror.

R.A. Yuryeva, I.I. Komarov, A.L. Drannik, O.S. Maslennikov, D.A. Egorov, Yu.M. Yeliseyev

St. Petersburg National Research University of Information Technologies, Mechanics and Optics, St. Petersburg

**Swarm Robotics Design Features in Solving Modeling Problems of Information Security**

Keywords: swarm robotics; information security; modeling.

page 86-90

Abstract: The paper describes the limitations caused by design features of swarm robots, the possibility to eliminate them at the program level is investigated. A significant part of the above modification provides portability of solutions not only in software simulation, but also in physical prototypes implementation.

## Economic Sciences

R.K. Akhmedov

Azerbaijan University of Cooperation, Baku (Republic of Azerbaijan)

**The Role of Government Regulation in the Development of Cooperative Ties in Agricultural**

page 91-95

### **Sector**

*Keywords: cooperation; regulation; government support; production and processing.*

*Abstract: The paper deals with cooperative ties and the necessity of their development in the agricultural sector. It is known that state regulation and state support of the agrarian sector covers a variety of areas. Here, we describe all the stages, starting from the acquisition of the necessary technology and equipment to providing financial and credit assistance to economic entities. The author considers it necessary to focus regulation on stimulating the development of cooperative relations. According to the author, the governmental support should be temporary, after the economic entities have organized their regular activities, they should support each other. This should be based on the voluntary participation and mutual benefits, which is possible on the basis of cooperation. In this aspect, the article makes relevant proposals and recommendations for the development of cooperative ties in the agricultural sector.*

*E.S. Budkina*

*Financial University under the Government of the Russian Federation, Moscow*

#### ***The Analysis of Bankruptcy Probability Using the Methodology of the Ministry of Economic Development***

*Keywords: bankruptcy; insolvency; probability of bankruptcy; solvency; financial stability.*

page 96-98

*Abstract: In this paper the author described the features and practices of using the methodology recommended by the Ministry of economic development of the Federal tax service for accounting and analysis of financial condition and solvency of strategic enterprises and organizations.*

*G.D. Gadzhieva*

*Institute of Control Systems of the National Academy of Sciences of Azerbaijan, Baku (Republic of Azerbaijan)*

#### ***Econometric Valuation of the Relationship between Inflation and Exchange Rate in Azerbaijan Republic***

*Keywords: inflation; exchange rate; broad money supply, AZN nominal effective exchange rate; oil price; budget expenditures.*

page 99-102

*Abstract: The paper proposes econometric model of the relationship between inflation and exchange rate in Azerbaijan. The model is based on monthly figures for the last 8 years. In the constructed model the author used 12-month changes of the indicators obtained by the explanatory variable for the purpose of deviation from the seasonal problems. The broad money supply and the price of oil in the world market were included in the model as an explanatory variable. The mechanism of the effect of these changes on inflation was shown in graphs.*

*V.F. Yershov*

*Moscow State Regional University, Moscow*

#### ***Banking system of Russia as a Factor of Social and Economic Integration in the Former Soviet Union***

*Keywords: banking system of Russia; financial markets of the CIS; financial integration; Eurasian Economic Union.*

page 103-106

*Abstract: The paper is devoted to the development of business cooperation between the Russian Federation and the CIS countries in the sphere of interbank interaction and implementation of new investment programs in the former Soviet Union. The main attention is paid to the analysis of the role of Russia as a moderator of financial and economic integration of the CIS countries. The author comes to the conclusion that the constructive interbank cooperation is a factor of formation of a new economic pole of the world in which the leading positions are taken by the Russian banking organizations.*

*A.V. Komarova*

*Lipetsk Institute of Cooperation - Branch of Belgorod University of Cooperation, Economics and Law, Lipetsk*

#### ***Historical Features of the Formation and Development of State Treasury System to Control Public Revenues and Expenditures in Russia***

*Keywords: financial and control agency; multi-level system of budget management;*

page 107-110

*rationalization and unity of budget; redistribution of responsibilities between government institutions.*

*Abstract: The formation of Russian statehood required the creation of adequate historical conditions and financial control institutions - State Treasury System. The Treasury ensures the effective interaction of the central government and the regions, the balance between the single methodology of budget management and control over specific functions inherent in every Russian province.*

*E.E. Ladygina, V.A. Dikareva, E.N. Andruschak  
Moscow State Construction University, Moscow*

***Information Support of Marketing Decisions***

*Keywords: company management; marketing studies; marketing information; strategy of development.*

*Abstract: The paper deals with the questions of information and analytical support of marketing decisions. Marketing studies, being a universal instrument of collection and processing of necessary information, serve as the starting point of forecasting, planning and management of economic entities and economic processes and contribute to the introduction of marketing concept in the company management.*

page 111-113

*A.O. Ryzhkov, T.L. Bezrukova  
Voronezh State Forest Technical Academy, Voronezh*

***Method of Calculating Fiscal Impact on the Existing Tax Incentives to Stimulate R & D***

*Keywords: R & D; productivity, factors; incentives.*

*Abstract: This paper presents a methodology for calculating the fiscal impact on the existing tax incentives to stimulate innovation activity of organizations. The advantages and disadvantages of this method have been discussed.*

page 114-116

*E.V. Sukhanov*

*Branch of the Russian Academy of National Economy under the President of the Russian Federation, Lipetsk*

***Strategic Objectives of Economic Development of the Lipetsk Region***

*Keywords: social and economic policy; social welfare; investment appeal; competitive economy.*

*Abstract: The paper considers reference points of social and economic policy in the region which will allow for more effective use of available potential and increase returns from investment of capital.*

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