ABSTRACT&REFERENCES

ANALYTICAL MODELING IN INFORMATION SYSTEM OF RESTAURANT BUSINESS COMPANIES UNDER UNCERTAINTY CONDITIONS

p. 6-11

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The necessity of using the methodology of factor-taxonomic analysis in the total of the restaurant business companies of Kharkov in the accounting management strategy under conditions of preserving the accuracy of its presentation is studied. The results of the analytical modeling of success are compared with the application of the proposed integrated-target approach, which calculates the taxonomic indicator of the level of economic development and the ratio of the levels of trade income and operating expenses by component parts of the turnover
Keywords: *restaurant business, information systems, taxonomic analysis, correction factor, analytical modeling*

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EVALUATION OF STATE SUPPORT FOR AGRICULTURAL PRODUCERS AND THE PRIORITIES OF REGIONAL DEVELOPMENT IN RECEIVING IT

p. 12-17

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The analysis of the budget allocation for state support of agricultural producers in the form of financial support for reducing of the cost of credits, for development of livestock and returnable financial assistance to farmers is presented; directions for its improvement are suggested. The necessity of taking into account the priorities and perspectives of regional development in the allocation of funds between regions and actors pretending to receive it is substantiated
Keywords: *agricultural producers, state support, returnable assistance, reducing of the cost of credits, budgetary subsidies*

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JUSTIFICATION OF THE WORKING SURFACE OF THE CONICAL ROLLERS OF ROW CROP SEED DRILLS

p. 18-22

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It is determined that the main factors that influence the rolling process are the design of the working body and the physical and mechanical properties of the soil. The process of soil compaction in interaction with the most common types of rollers of row crop seed drills is experimentally studied. It is established that the conical rollers meet the requirements of agrotechnics most fully. An improved design of the conical rollers of row crop seed drills is proposed
Keywords: *soil compaction, character of soil deformation, working surface of a conical roller*

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THE ALLOCATION OF SELF-SIMILAR STRUCTURES IN VOICE SIGNALS FOR SPEAKER IDENTIFICATION TASKS

p. 22-27

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The problem of allocation of identification characteristics of the speaker as parameters of the frequency basic tone and speaker recognition based on scaled and fractal transformation is investigated. The approach to allocation of unique individual self-similar structures is proposed and developed techniques of voice signal processing can use them to build speech recognition systems of voice signals and to create intelligent systems of interaction between user and computer
Keywords: *speech signal, self-similar structure, fractal dimension, speech segmentation, speaker recognition*

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COLLECTION OF QUESTIONNAIRE RESULTS, RECEIVED BY USING THE VISUAL ANALOG SCALE METHOD, FOR ITS FURTHER PROCESSING IN THE MEDICAL WEB APPLICATION

p. 27-30

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A number of existing approaches of examination of the patients that face the inability of proper nasal breathing are analyzed and its disadvantages are determined. As a result, a complex approach to evaluation and monitoring of the patient's well-being is created and then gradually tested in practice. The main advantages of the proposed approach and the ways of its market entry are determined. Usage of this approach increases the probability of proper cure prescription
Keywords: *rhinomanometry, complex method, evaluation of patient's well-being, visual analog scale, questionnaire*

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STRUCTURED METHODOLOGY FOR DEVELOPMENT OF THE SERVICE FOR PROVIDING REMOTE CONTROL OF INTELLIGENT HOME DEVICES USING INTERNET OF THINGS SOLUTIONS

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A number of existing methodologies for project development using IoT are analyzed and their shortcomings are highlighted. As a result, a structured approach to software development is created and then gradually tested in practice. The main advantages of the proposed methodology are singled out and the risks that are commonly associated with using of IoT technology are summarized. The use of proposed approach allows to minimize the risks and gives an opportunity for developers to freely implement their innovations
Keywords: IOT (internet of things), smart house, structured methodology, remote device control

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INDEXES AND METHOD OF SOFTWARE RELIABILITY ESTIMATION OF INFORMATION SYSTEMS

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The problem of software reliability estimation (software) of information systems is considered. The existing approaches to the evaluation of program reliability, the main indicators characterizing the reliability of the programs, an analysis of the advantages and disadvantages of software reliability estimation methods are analyzed. Features of object-oriented software and factors influencing its reliability are considered. Indicators are proposed for reliability estimation of object-oriented software, as well as models for determination of their values
Keywords: software, information systems, reliability, index, method, object-oriented program system

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PARAMETRIC CLASSIFICATION OF PISTONS OF INTERNAL COMBUSTION ENGINES PARTS ACCORDING TO THE «HOLE AXIS SHIFT RELATIVE TO THE PISTON AXIS» CRITERION

p. 38-41

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As a result of the research, a classification rule has been established that allows to determine whether the piston belongs to the class of good, or to the class of rejection by the criterion "hole axis shift relative to the piston axis". The resulting classification rule has the form of a linear discriminant function and can be applied in decision support systems when choosing design solutions within the framework of a computer-integrated technology for cast piston design
Keywords: piston, decision support system, classification rule

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INVESTIGATION OF THE RESPONSE SURFACE DESCRIBING THE MATHEMATICAL MODEL OF THE EFFECTS OF THE AL/MG RATE AND TEMPERATURE ON THE Al-Mg ALLOY CASTABILITY

p. 42-45

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Ridge analysis is used to investigate the response surface describing the mathematical model of the influence of the Al/Mg ratio and temperature on the Al-Mg alloy castability during the low-pressure casting. It is shown that the suboptimal values of the technological regimes ensuring the maximum castability values of the Al-Mg alloy can be determined taking into account the limitations imposed on the technological process on the basis of a mathematical model constructed by implementing a second order central orthogonal composite design (COCD)
Keywords: *ridge analysis, suboptimal values, low-pressure casting, Al-Mg alloy, castability, response surface*

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THE ANALYSIS OF INTERCONNECTION BETWEEN PHONONS AND PHOTONS

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In this article some problems of the quantum theory of radiation are considered. The peculiarities of this work are in the developing of technique that allows to research the connection between the quanta and

the phonon, and also in the researching of the dependence of radiant energy from the frequency range and the temperature range, that allows to write down the expression of the connection between the number of phonon and quanta

Keywords: *interconnection between phonons and photons, theory of radiation, thermal radiation, quasi-particle, energy*

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DESIGNING OF THE BIOREACTORS WITH THE INTRODUCTION OF ENERGY BY MECHANICAL LOW-FREQUENCY OSCILLATIONS

p. 49-54

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The modern concept of designing of bioreactors with the introduction of low- frequency energy by mechanical oscillations of the working bodies of different designs is presented. The mixing processes in bioreactors are aimed at ensuring evenly distribution of heterogeneous dispersion – ideal mixing conditions and ensure optimum mass transfer mode. It is determined that the movement of small pulsations, which size relates to the transported objects, provides mass transfer processes of interacting phases

Keywords: *biotechnology, bioengineering, bioreactor, biological agent, mass transfer, low-frequency mechanical oscillations*

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DEVIANT DISCOURSE AND ITS TRANSFORMATION AT THE PRESENT STAGE

p. 55-58

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The problem of the polar manifestations of deviance in society is studied. It is established that effective means of correcting the various manifestations of deviance is the education system, the main task of which is formation of an independent creative and socially active personality. The essence and harmonizing peculiarities of positive deviance and its manifestations in society, as well as ways of correcting the deviant deviations by means of education are marked

Keywords: *deviance, polar deviance, positive deviance, society, education system, humanization, humanitarization*

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SOCIETY VIRTUALIZATION AS THE MAIN SOURCE OF MODERN UTOPIANISM

p. 59-62

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The article is devoted to major sources of utopia in the modern conditions of society virtualization. The author draws attention to the effectiveness of the study of this problem based on the simulacrum concept, according to which virtual reality appears as the organized space of simulacra, utopia is in turn defined as simulation of social reality. Then the joint roots of virtual reality and a modern utopia are opened

Keywords: *society virtualization, virtual reality, utopia, mediareality, simulacrum, social reality, transformation*

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