
ABSTRACTS

TECHNICAL SCIENCES

Abdulov A. R. Modern reclaiming complexes for furan mixtures treatment on in large machine-building enterprises // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The main methods of reclaiming of spent molding and core mixtures prepared by Furan process were analyzed. The main methods of reclaiming mixtures are mechanical, hydraulic and thermal. Considered reclaiming complexes, which are used in foundries in PJSC NKMZ and EMSS. In the company's recycling plant FAT, operating in interlocking-foundry number 1 PJSC NKMZ main device is a magnetic separator that allows to separate the chromite sand from quartz. In the installation firm IMF, which is designed for the regeneration of spent cold-mixes in the foundry PJSC EMSS is the main process air cleaning.

Vlasov A. F. Effect of heat treatment on the mechanical properties of electroslag metal // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Studied the tendency of metal crank shaft, obtainable by the method ESHL to floknoobrazovanie and defined thermal treatment of blanks elements of the crankshaft. The data-the influence of the different kinds of heat treatment on the mechanical properties of of electroslag metal. It is shown that the proposed new method for producing of electroslag metal using the developed "solid" start and exothermic flux of the economical methods existing of producing of electroslags metal. Experimentally established that the fatigue strength of the metal crank shaft gasmotorcompressors MK-8 of steel 34HN1M obtained by of electroslag casting correspond to values of the fatigue strength of steel used in machinery for the production of large parts of responsible appointment of forged steel smelting open.

Volkov D. A. Consolidation and electrical resistivity of metal powders with a non-conductive fillers with electric-surfacing wear-resistant alloy // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The paper considers the nature of the consolidation and changes in electrical resistivity of the metal powders with non-conductive fillers with functional filler with electric-surfacing depending on the pressure on the electrodes and the content of silicon carbide and boron carbide in the powder mixture. By means of the apparatus of mathematical statistics established the functional relationship between the content of the carbides in the powder mixture and the pressure on the electrodes, as well as the influence of these factors on the seal and the electrical resistivity of the powder charge with the electric-surfacing. The regression equations used to predict the electrical conductivity of the powder mixture, depending on its composition and pressure of the electrodes. Established limit pressure electric-welding to ensure a stable flow of the process.

Zharikov S. V., Grin A. G., Bogutskiy A. A., Nedodav R. S. Determination the evolution of gas from metal carbonates at melting of self-shielded powder wire // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The article describes the method of determining the amount of carbon dioxide produced by the dissociation of metal carbonates. Determined the quantity of carbon dioxide allocation during the dissociation of used carbonates to be used as the gassing of the core self-shielded powder wires. Based on the analysis results of calculation of the volume of carbon dioxide and data of temperature dissociation of carbonates determined the optimal composition of metal carbonates, providing high protective properties self-protective of exothermic powder wires in a wide temperature range.

Zagoryanskiy V. G., Zagoryanskiy O. V. Design of methodology of calculation of wringing out at rolling of multi-layered packages from high-alloy steels // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

When rolling wide sheets of high-alloy steels with thickness less than 13–15 mm has to apply pack rolling of the sheets between sheets of carbon steel. When rolling multi-layered packs a problem arises of minimizing uneven deformation. The paper analyzed the regularities and features pack rolling of wide sheets of high-alloy steels with thickness less than 13–15 mm. In the basis of the proposed method, known regularities of pack rolling and assigned assumptions are grounded. The proposed calculation method allows assigning initial and final dimensions of the package and layers and rational modes of wringing out based on their accordance with the certain ranges of a relative deformation of the package at the rolling.

Klimenko G. P., Javorovskaya J. I. Improving the quality of modular drilling heads // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Presented hierarchical structure of properties that make up the quality of the instrument. Investigated the quality of construction tools for deep drilling using qualimetric approach. Results of research working efficiency in a PJSC NKMZ. Analysis of cutting forces, acting on the tool, allowed us to find ways to improve their designs, reduce uneven

wear and improve their quality. Proposed and substantiated methods eliminate shortcomings, the use of which in the design of the head to reduce the resulting burden, to ensure uniformity and minimize wear of the guide plates, improve productivity and quality of drilling.

Kovalevska O. S. Neural networks for machine-tools with a parallel kinematics // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

This article shows the possibility of using models with neural chips to control the process of cutting machine tools with parallel kinematics. The analysis of systems programming neural chips. The advantages and disadvantages of the known algorithm for time series prediction. The way of creating a system of feedback based on the method of windows. The possibility of using Hopfield networks for network construction. Provided the use of a multi-step prediction with retraining network. Identified prerequisites for a successful application of this method to control the positioning accuracy of the machine tool with parallel kinematics.

Kovalevskyy S. V., Hushchyn O. V. Roller using specifics for finishing-strengthening treatment of external surfaces of rotary bodies // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Known methods of surface plastic deformation have obtained its further development which is based on the new engineering solutions that have been offered. In particular a method of surface plastic deformation of machine components working surfaces using a wedge roller has been introduced. The method presupposes the knurl roller mounting at the angle to the part's axis, and results in appearance of shearing stresses in the deformation zone. It is conducive to locked-up stresses of compression rising on the part's surface and augmentation of case depth. The calculation of the deflected mode is based on the slip-line field method when impressing a wedge indenter into a stiff-plastic half-space. The above mentioned method is adapted to implementation conditions of process in question as close as possible.

Kovalevsky S. V., Tulupov V. I., Tulupova E. V. Development and research of the method of control of machine parts based on the effect of acoustic emission // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Proposed in principle control parameter items can be used for practical purposes with sufficient accuracy. It is established that the information needed to determine the dimensions of parts on the basis of amplitude-frequency characteristics of the response signal with pulse action on the material parts of the electromagnetic field can significantly reduce the amount of information on the basis of a mathematical model of the processing of the response signal. It is proved that increasing the number of simultaneously controlled size does not significantly increase the complexity of the model and the number of elements. Implementation of the proposed principle of dimensional inspection of parts is possible with programmable microprocessors using verbal description for the industrial unit.

Kovalevskyy S. V., Hmelevaya U. A. Simulation processing technology working surfaces of parts using thermite mixtures // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Point impact energy sources can provide the desired quality of the surface layer A model of propagation of the combustion wave in the processing of the cylindrical surface of the shaft c The values of the velocity and flow of movement of the temperature source based on the use of cellular automata. Modeling of thermal processes in the outer layer of the parts has to find the key features and relationships between the characteristics termsomesey and achieve results for the different materials. Identified special processing modes satisfying the maximum surface temperature of the heating and the stability of its properties.

Lutaja A. V., Kovbasa A. A. Development of a software algorithm of automatic air humidity control // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The work of a humidity circuit of air in a premises using a laboratory bench – software and hardware complex KONTAR of the Moscow plant thermal automatics was discussed in the article. It equipped with real controllers, sensors and actuators used in the real systems of an climate control of air in a premises. Using an experimental model of the automated control system of the climate controlled of air in a premises the software algorithm of the automatic air humidity control has been developed. The software algorithm for improve the humidity of air in a premises has been developed using the damp sponge. The software algorithm for reducing the humidity of the air in a premises has been developed using the cooler. The developed algorithms can be used in automated control systems of real climate controls.

Makarenko N. A., Clerks I. E., Kovalenko A. V., Herman V. D. Improved soldering iron // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Developed and investigated technology to prepare iron products for the soldering process, which allows to reduce the soldering, solder and flux consumption, reduce energy and increase the strength of the solder joint, as well as enhance its integrity due to the effective removal of graphite with the surface to be soldered. Created device consisting of a power source and TIG torch natural air cooling current of 160 A distinctive feature of which is the replacement

of the tungsten rod for copper rod, sharpened at the end on the cone angle at the vertex equal to 20–30°. Industrial tests carried out in Ukraine, showed high technical and economic indicators of the developed technology and equipment for cast iron soldering glow discharge in oxygen.

Markova M. A. Investigation of the deformed state of the workpiece when drawing hollow forgings without mandrel dies with bevels // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

In this paper a new process of forging hollow forgings by cut-out dies with bevels was proposed. Simulation of the forging process using finite element method has allowed to establish the strain distribution and forming of the workpiece for the new technology. Various angles of the dies bevels (equal to 10, 20 and 30 degrees) and the horizontal length of the dies were studied. At the dies bevel angles of 10° and the narrow deforming-edges there is an uniform distribution of the stain in the forging volume. Rational geometry of a tool for intensification of an elongation during forging hollow cylinders are truncated dies with the bevels angle 10–20° and the amount of feed $b/D = 0,1$. The waviness of the hole surface does not exceed the allowance for machining, that will ensure obtaining predetermined size without forging mandrel.

Medvedev V. S., Medvedev V. V., Ryumshin R. A., Plehanova L. V. Application of cognitive models for processing centers machine-tool device design // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The design method of machine-tool adaptations with the use of cognitive models is considered. Cognitive models allow to model intellection of man, optimize the variants of construction choice, accumulate new knowledge bases. They also provided the account of influence of different external factors on the construction of machine-tool adaptation on the stage of pre-project analysis. Attention is paid to the universal machine-tool adaptations design for lathe processing centers with possibility of replacement of part of mechanism. The chosen direction of development is perspective, because it allows substantial extension of machine-tool adaptations technological possibilities. It makes possible to create constructions allowing to take the purveyances of different configuration on outward and internal surfaces on the one base aggregate. The charts of constructions of machine-tool adaptations taking into account the set external factors are worked out.

Onischuk S. G., Tulupov V. I., Mirantsov S. L. New approaches in the design of engineering products based on the life cycle // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

This article discusses the improved durability of machine parts based on the life cycle of a product. The use of combined processing techniques allows forming the surface properties of the items which influence the rate of wear, fatigue strength under cyclic stress, the strength of pressing compounds corrosion resistance. Operation selection process is represented as a logical functions. In this case, the priority is the minimum complexity and cost of goods sold. Designing route process using directed graphs to reduce the complexity and production costs of engineering production.

Podlesny S. V. Modeling the dynamics of unipolar generator // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Unipolar machines have unique features. They allow a relatively simple and cost-effective means to generate pulse-free DC high value, opening up broad prospects for their practical use. The aim of this work is to create an integrated dynamic model of unipolar generator with a cylindrical rotor on the basis of electromechanical analogies Lagrange-Maxwell. In the model, representing a system of nonlinear differential equations, as interrelated mechanical properties (moment of inertia, angular velocity, etc.) And electromagnetic parameters of the device (the electromotive force, inductance, ohmic resistance, etc.). In general terms, found a solution to this system, allowing to carry out further analysis of the dynamics of the generator by specifying its specific parameters.

Popivnenko L. V., Eremkin E. A., Bochanov P. A. Methods of improvement of service characteristics of selflubricating sintered sliding bearings // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The new technology of improvement of service characteristics of selflubricating sintered sliding bearings was considered in the article. The essence of technology which use in the manufacturing of selflubricating sintered sliding bearings the organic pore-former with the required size fraction, which allows to obtain materials with controlled porosity and controllable pore size. Also proposed to increase the wear resistance working surfaces of friction pair into pores inject antifriction addition in oilimpregnating process. Grafitalia lubricant between the mating surfaces of friction decreases, reducing the coefficient of friction provides also wear a pair of friction decreases. Using the best combination of size of pores and the structural content of free graphite in the pores of the self-lubricating sintered bearings can extend the range of operating loads and sliding speeds of the friction pairs.

Sahaida P. I. Development of program-methodical complex decision support based on the multidimensional representation of operational data in the integrated CAD-system // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Based on the multidimensional representation of aggregated (consolidated) data analyst can identify trends needs to change consumables and labor resources on capacity utilization, reduction or increase in the demand for products and engineering services. Development of methodology for the design of software and methodical complex (SMC)

with the use of information and logical models of business processes and domain made it possible to identify the objectives of the process and operational analysis specialists that offer this process. Using a modeling language UML use cases possible to determine the SMC classes of software and the logic of their interaction. With the use of the results developed software.

Serenko V. A., Lavrov E. V., Ivanov V. P. Kinematics pore formation in the weld // Scientific Herald des DSEA. – 2014 – № 3 (15E).

To prevent porosity in welds, and improve the mechanical properties of welded joints developed a kinematic model of pore formation during welding (surfacing), taking into account the hydrodynamics of liquid metal in the weld pool and the behavior of gas bubbles in conditions of a non-stationary temperature of the melt. Differential equations to determine the probability of occurrence of pores in the seam. The questions of the impact of non-uniformity of temperature in different parts of the weld pool on the kinetics of pore formation.

Tkatschenko M. A., Tkatschenko J. W., Gladyschewa O. V. Die Optimierung der Zerspannungswerte unter Berücksichtigung der Zuverlässigkeit des Schneidwerkzeuges // Scientific Herald des DSEA. – 2014 – № 3 (15E).

Sind die Ergebnisse der Forschung in Bedingungen der Unternehmen für Schwermaschinenbau des Betriebens der Schneidwerkzeuge bei der Bearbeitung von verschiedenen Werkstoffen angeführt. Es ist bewiesen, dass die Effizienz des Prozesses der Bearbeitung der Werkstücke auf schweren Drehmaschinen in einem größeren Ausmaß durch die Geschäftsordnung des Betriebens von Werkzeugen und deren Zuverlässigkeit bestimmt wird. Wurde das Modell der Zuverlässigkeit des Drehmeißels entwickelt, mit derer Hilfe es die Projektierung von Schneidwerkzeugen mit dem angegebenen Maß der Zuverlässigkeit und der Standdauer möglich ist, was erlaubt ist, die rationale Schnittdaten bei der Verarbeitung auf schweren Drehbänken zu berechnen. Als Ergebnis der Forschung auf der Grundlage des entwickelten mathematischen Modells der Zuverlässigkeit und der Analyse der Bedingungen des Betriebens von Schneidwerkzeugen auf schweren Drehmaschinen sind rationale Schnittdaten beim Drehen unter Berücksichtigung der Zuverlässigkeit und der Prognostizierung der Nachhaltigkeit des Drehmeißels berechnet, die Korrekturfaktoren für die Einreichung beim Betreiben der bausteinartigen Drehmeißel entwickelt.

Chigarev V. V., Golub D. M., Volkov D. A. Influence of slag composition basics of flux-cored wires fillers on the loss of electrode metal // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

It is notice, that stability of arc build-up welding process and the magnitude of the loss electrode metal described by general relative loss of filler metal factor ψ and spatters loss factor ψ_{p6} . Influence of quantity and structure of gas-slag-forming part of a filler of a self-protective flux-cored wire is studied, current and tension on an arch on loss-factors ψ and ψ_{p6} surfacing at build-up welding of the high-carbonaceous complex alloyed alloys. Applied simplex and trellised planning to processing of experimental data. By means of coefficients of the equations of regression the assessment of influence of gas-slag-forming components of fillers self-protective flux-cored wires on loss-factors ψ and ψ_{p6} is made. The analysis of the equations of regression received at research of three-component gas-slag-forming bases on condition of achievement of the minimum losses of electrode metal at a build-up welding allowed to establish the maintenance of each of components as a part of a filler.

Zelenska V. A. Studying question adventive kinds of plants in the conditions of industrial platforms of the enterprises of ferrous metallurgy // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

This article contains the information about adventive kinds of plants from structure of flora of seven industrial platforms of metal works of Donetsk area (systematically, ekologo-biomorphological and phytocenosis aspects are discussed here). The author analyzes intensity of processes of intrusion and expansion of these kinds of plants, and also their adaptable potential in specific conditions technogenic ecotops. We have noticed, that the group adventive plants is numerous, enough various on specific structure and phytocenosis roles. Ability to adaptation at adventive grassy plants is shown in domination of sexual reproduction and formation of a considerable quantity of seeds.

ECONOMIC SCIENCES

Akimova O. V., Merzliakov Y.Y. The essence and the economic value of the fixed agricultural tax // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The article deals with the tax regulations of the activities of agricultural enterprises in Ukraine, as well as with the impact of changes in tax legislation on the overall tax burden in agricultural sector. We analyzed possibilities of removal of shortcomings when applying of the fixed agricultural tax (FAT), namely: non-compliance with the principle of equality of taxpayers; the independence of the taxation from the financial circumstances of the payer, the imperfection of the base of the pecuniary valuation of land, as well as the method of calculating the value of agricultural land. Also we justified the apprehension of the abolishment of the advantages of FAT, as an alternative tax system, which significantly simplifies the mechanism of calculation and payment of taxes, according to new legislation.

Bersutsky A. Y., Kamenskaya O. A. Features of estimation of human capital are in strategic development of industrial enterprise // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

In the article the methodical fitting is grounded to for complex integral estimation of high-quality and quantitative indexes of human capital on materials of generalization of literary information the estimation of human capital is presented within the framework of the balanced system of indexes of industrial enterprise. The balanced system of indexes is not an analytical model by which it is possible to expect the having a special purpose values of strategic indexes of human capital. However much SSP helps in the decision of this problem by consideration causally-consequence connections between strategic aims. Within the framework of the balanced system of indexes the leaders of industrial enterprises use classic approach in determination of strategy – «from above-downward», which foresees the concentration of efforts on external market conditions, namely on the followings factors: requirements of suppliers and buyers, appearance of substitutes of products and technology, et al. Such approach requires the careful estimation of internal possibilities of enterprise, measured the level of preparation and qualification of human capital of enterprise.

Bolotina E. V. The concepts researching of globalization // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

This article discusses the main conceptual approaches to the study of the concept of "globalization" in understanding foreign scientists, namely systematization of existing points of view on the nature of globalization and detailed review of the various parties. The nature of globalization can be considerate as a revolution globalizm, evolution globalizm and anti-globalizm in the foreign reserchings. The scientific novelty is associated with an appeal to non-linear methodology to the principles of synergetic nonlinear analysis of the problems of social-economic development and rational assessment of the institutionalism. The synergetic paradox is reduced to that from the point of view of synergetic economy instability and nonlinearity creative a development of source, and it contradicts the theory of economic balance and growth which main sense is reduced to overcoming of the crisis state of the economy. Overcoming of this contradiction demands the research of the interaction of synergetic elements and classical approaches to the analysis of economic dynamics through the prism of economy institutionalization.

Bolotina E. V. The Ukraine in "globalization world" // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

In the paper describes the main features of globalization. Analyze it in both positive and negative effects on the development of countries. The author was recommended on key areas of adaptation of Ukrainian economy to the world market. The essence of integration of the Ukraine in EU are in article, the main advantages and shortcomings, geographical and geopolitical position of the country and also the factors influencing integration process are considered. The peculiarities of the modern economy of the Ukraine dictate the positive arguments of collaborate with EU. European integration a. EU member's is strategy aim of Ukraine, which realization interests by the nation about formation of the social-orientate economy a. development democracy state. Europeans integration consolidates the positions in system of the international relations. The main social and economic problems of integration are defined. The ways are offered of the problems solution.

Gribkova S. N., Gapeeva I. V., Morgounov A. N. Investments in development of labor potential of the company and the evaluation of their effectiveness // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The article provides an overview of current trends and directions concerning the capacity of the labor potential of the industrial enterprise. The brief analysis of market demands for construction and installation work in the conditions of LLC "Ukrelektrosetstroy". Based on the analysis found reserves of increase of the labor potential in the enterprise. Namely, it is proposed to implement two projects of investment in improving professional qualification of the staff. The project "Training for drivers" will complement the team with highly qualified personnel, to ensure the interchangeability of workers, but at the same time, do not increase the staff. Project "Creation of the classroom" will train young professionals who are not dependent on foreign educational institutions; quickly select personnel without the help center for employment or recruitment agencies. Indicators of economic efficiency of both projects are positive. Just as a result of planned improvement in many technical and economic performance.

Darchenko N. D., Pantya E. A. Some motivation aspects for the efficiency labor potential of enterprise // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The decisive role of an effective process of formation, development and utilization of labor potential in the dynamic development of the economy is awarded. The main tendencies and problems of the labor potential of Ukraine is considered. Motivation plays an important role in improving efficiency. It is shown that a stable and prosperous enterprise in modern conditions provided rationally formed wage system and work motivation by promoting more complete utilization of labor potential employees. Proposed the basic principles of such a system.

Dobykina E. K., Mishura V. B. Actuality and estimation of enterprise potential // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The terms of hard competition do actual the necessity of the optimal forming of potential of subjects of market activity and regular estimation of level of his realization. The level of achieving of enterprise can be executed with the use of rating estimation on the basis of graphic method "square of potential". The offered methodology allows to give a complex estimation to the structure, balanced, to reduce present backlogs, to work out reasonable administrative decisions in the aspect of his further development and perfection.

Drachuk Y. Z., Kosarev V. V. Identifying and addressing the economic risks of industrial tests of new mining equipment // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The directions and the importance of taking into account the economic risks of industrial tests of new mining equipment, where the introduction of innovations requires a restructuring of the existing production-cooking perepod employees, capital expenditures and at the same time is a risk to get the desired result and incur losses where scientific elaboration and refinement of the first phase of implementation new techniques require experience-term testing in a production environment with experience of leading academics and practitioners who can serve as a scientific basis for the further development of normative and methodological support mo-modernization of coal production, modernization of the coal industry.

Dubinsky E. C. Study of the modern state system and asset management of industrial enterprises of Ukraine // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The essence of the fixed assets from the point of view of accounting and tax accounting, which enables to obtain a more complete understanding of this concept. Analyzed accounting and analytical provision of a control system the main capital. Defined the functions of asset management, which require managers of certain management actions, namely: planning, organization, motivation and control. Justified ensuring effective management of fixed assets in the enterprise. It is proved that the improved efficiency of use of the asset can be achieved due to their extensive use, primarily due to the increase of the coefficient shift operation of the equipment.

Erfort I. Yu., Erfort Yu. A., Kondratuk A. A. Factor analysis of the efficiency by type of economic activity in Ukraine // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The analysis of economic players' efficiency of operation and general activities is carried out. The rate of total assets return and the rate of owed assets return are chosen as key characteristics of efficiency. The influence of different factors on the efficiency of total and owned asserts is determined and compared by type of economic activity in Ukraine. The distribution on groups of total assets values is carried out by level of return. The influence of the turnover rate of total assets and the rate of operating activity return on the rate of total asserts return is determined by type of economic activity in Ukraine. The factor analysis of the rate of owned capital return is conducted by such factors as net-income share, capital multiplier, turnover rate of total assets and rate of operating activity. The drop of enterprises' scope of activity is analyzed as a reason of efficiency decreasing in 2013 compared to 2012.

Yeletskih S. J. Developing an effective strategy for managing the financial stability of the company // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

We suggest the imitative model for financially stable management of the enterprise development. Based on the scenary analysis of the net profits distribution over the different investment areas and staff financial incentives and also optimizing the debt-to-equity ratio, the model allows to find the most effective strategy for enterprise operation with respect to criteria of financial stability. The model takes into account the impact of random events that affect the efficiency of the company.

Zarevchatska T. V., Belik V. V. Personal income tax: comparison of ukrainian austrian approaches // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The role of tax on personal income in the formation of tax revenue in the budget of Ukraine is analyzed. Substantiated that the tax on income is the main instrument of state regulation of the economy. It is noted that nowadays in Ukraine analysis and use of the experience of developed European countries of tax policy are particularly relevant. Peculiarities of taxation of incomes in Austria are investigated. Personal income taxation in Ukraine and Austria are compared. On concrete examples tax and the tax burden in accordance with domestic and Austrian law are calculated. It was revealed that the tax burden on income in Austria is higher than in Ukraine. At the same time, the citizens of Austria receive in the form of social benefits reimbursed more money compared to the citizens of Ukraine, and the actual tax burden on personal income tax for citizens of Austria is slightly lower than calculated.

Zarevchatskaya T. V., Bruslavets Y. V. The possibility of using the experience of taxation of Spain in Ukraine // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The article deals with current issues of taxation, the analysis of the Spanish experience of taxation, compares the basic tax rates in Ukraine and Spain, set the similarities and differences between Ukrainian and Spanish tax system, is an example of calculating the tax on personal income in accordance with Spanish and Ukrainian systems taxation, defined ways of improving the domestic tax system. It was revealed that the formation of the ways to overcome the crisis in Ukraine, an important aspect is not so much the volume of taxes on the population as their rational use and direction in favor of citizens through the implementation of the social function of taxes.

Kolomiyets V. M. Institutional approaches to the evaluation of the competitiveness of the personnel of industrial enterprises: methodological aspects // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The research task to summarize methodological approaches to assessing the competitiveness of enterprise personnel, propose a model of evaluation of the staff approaches. The study summarizes the methods of evaluation of the personnel of enterprises, the mathematical model of calculation criteria of competitiveness of personnel at the facility. The mathematical model takes into account the competitive advantages of the personnel, the sources of their formation, factors external and internal environment of the enterprise. Within the research the calculation criteria of competitiveness employee, based on the definition of competitiveness as the ability of staff personnel to realize their competitive advantage.

Milyavsky M. Yu., Kulish A. S., Korobka I. S. Machine-building corporations as objects of corporate control // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Presents the definition of the specificity of the organization of corporate governance engineering company and peculiarities of formation of corporate engineering sector. Shows the characteristics of the formation of the strategy of corporate control activity of the enterprises of machine-building industry. The differences of the machine-building Corporation from the engineering enterprise. Disclosed economic principles, composition, and process for corporate control activity of the enterprises of machine-building industry. What makes the control of the corporate culture, to increase the efficiency of the operation of the Corporation, as the main condition for the realization of economic interests of the owners.

Milyavsky M. Yu., Kulish A. S., Korobka I. S. Essence and stages of planning of service of internal audit to the aircorporation on the basis of business-risks // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Essence and stages of planning of public accountant activity are investigational in the conditions of aircorporations. Character is certain corporate and another risks, a structure and order of planning of activity of service of internal audit are reasonable in aircorporations taking into account factors "natural" and business of risks. A research aim is a ground of plan of public accountant activity in the conditions of aircorporation on the basis of risk management. The stages of planning of public accountant activity are certain in the conditions of aircorporations. The "natural" are described and business risks related to activity of aircorporations. The structure of production plan is reasonable in air corporations on the basis of account of risk factors.

Mykhaylychenko N. M. Accounting function as one of the first functions of controlling // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

This article explores the role and place of the accounting functions of the controlling stake in the functions that the system provides controlling for maximizing the effectiveness of management at all levels of the entity. Quality management - a necessary condition for the overall efficiency of the enterprise, so it is necessary to ensure the implementation meta function of management, implemented in the system controlling: a complex service in relation to the management functions, among which we can separate the functions of management accounting, information function, the function of planning and regulatory function of coordinating and integration. Implementation of controlling advisable to begin with the implementation of accounting functions, which makes this issue urgently relevant.

Nechvoloda L. V., Tovkaylo E. Y The use of modern information technologies for the automation of sales forecasting of organizations providing communication services // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The effective operation of enterprises and organizations in a market economy is largely dependent on how significantly they foresee the far and near prospect of its development, that is, from the prediction. Therefore, forecasting sales – a major component of the success of the organization. This article provides a critical analysis of currently existing software products used for sales forecasting, and proves the necessity of creating a system based on their weaknesses. Since sales organizations providing telecommunications services are subject to significant seasonal fluctuations, it is proposed to forecast sales with the use of methods that take into account seasonal variations.

Olkhovskaya O. L., Goreslavets A. N., Bozhenka A. L. Development of information systems for personnel department // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The information system is developed for automation of human resources work, which will allow optimize the daily work of human resources staff, personal cards of workers engaged in the conduct by a reception, translation and discharge of workers, registration of vacations and business trips, conduct of orders and current document. It will provide the formation of a more complete information base about the staff of enterprise in all aspects, will reduce the search time information in the staff; will promote speed of preparation of orders in an enterprise, scheduling vacations and state of organization; will reduce the search time in the receipt of current information. The system is intended for automation of staff management in enterprise, institutions and organizations of ownership various forms.

Podlesny S. V. Cognitive-a synthesis approach to management theory // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The complexity and diversity of facilities management, lack of sufficient quantitative information-rmatsii, process variability over time cause the use of different approaches. Anti-contradiction existing management techniques and conditions of the external environment requires the provision went under-bone and adaptability to external conditions, including the long-term, strategic period. CCA-particularly important at the present time there is a problem not just better management and optimization of management. As one of the ways to solve this problem, we propose the use of cognitive-a synthesis approach to management theory, developed on the basis of no opposition, and the harmonious combination of structural and substrate-optimal strategy, SWOT-analysis, a fairly general management theory and cognitive approach. Using the proposed approach allows new problems of various objects and build effective systems of optimal control.

Polovyan A. V., Polovyan N. S. Evaluation razmerov tenevoy economy for Reduction of risks ekonomycheskoj security // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

The shadow economy is an essential part of the market economy. For real-foot reduction of the shadow economy is important to know the objective basis of its origin, development mechanisms, providing both theoretical analysis economic relations for the operation of the black market and analyze the current state of the economic situation. Analysis of the existing methods for measuring the volume of the shadow economy makes it possible to determine the benefits of the model approach over other methods. The main advantage of using simulation methods for estimating the shadow economy in the region is a variation of a set of explanatory variables and indicators.

Radomska T. A. automation process control in modern enterprises in the introduction of IFRS // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Despite a rich market of information technologies in Ukraine the level of computerization of accounting in comparison with other countries is quite low, which leads to the almost complete absence of theoretical and practical developments with control and audit in the environment of electronic data processing. Therefore the main task of scientific research in this area is the definition of priority areas of computerization of the control processes in enterprises, the most important of which are: development of effective methods of internal and external control and audit in the environment of electronic data processing, taking into account the peculiarities of the domestic regulatory framework of the current accounting practices and characteristics of the transition to IFRS domestic enterprises.

Serdiuk O. N. Analysis of loan portfolio and financial performance of credit operations JSC "Sberbank" // Scientific Herald of the DSEA. – 2014. – № 3 (15E).

Assessed the quality of the loan portfolio and the impact of individual factors on the interest income from credit operations PJSC "Oschadbank." To assess the impact on interest income from lending interest expense of raising funds and profitability of lending operations applied the proposed factor model. It was found that the increase in interest income from credit operations positively influenced by the increase in interest expense on the mobilization of resources, reduction in the profitability of lending operations had a negative impact.