ABSTRACTS

Section of «Metallurgy»

UDC 669.184.125 Sigavev E., Bayduzh U., Chernyatevich I., Semyonova D. THE CALCULATION PARAMETERS APPLICATION COATING ON THE SKULL LINING. The results of measurements skull layer thickness formed by the slag bath blowing for BOF lining at different periods of campaigns. The method of calculating the position and parameters Laval nozzle lance to blow slag with a certain distribution of skull at the converter height.
Keywords: converter, slag, skull, interferometer, thickness, lance.

UDC 669.162 Kuznetsov M., Lebed Yu., Kryachko G. MELTING SLAG CAPACITY AND CAST IRON HEATING AT PULVERIZED COAL INJECTION INTO THE BLAST FURNACE. The use of classical triaxial diagrams of slag overheating and melting slag capacity to a state of regular flow shows that the transition to the technology of pulverized coal injection in the blast furnace hearth resulted in the reduction of slag basicity which is accompanied by heat supply decrease in the furnace hearth and the reduction of iron heating.
Keywords: melting slag capacity, blast furnace, heat supply, the injection of pulverized coal, iron heating.

UDC 504.064.4:669.181.28 Nevedomsky V., Chernyshev A.V., Chernyshov A.A., Gubskaya T. PRINCIPLE OF „ZERO WASTE” AT SLAG PROCESSING OF FERROALLOY PRODUCTION. The number of formation, chemical composition, physical and mechanical features of ferroalloy production waste has been considered in the article. The features of energy-saving manufacturing technologies of slag casting products and designs of the fiery liquid slag of silicium-manganese have been introduced. "ZERO WASTE» means zero loss, zero waste.
Keywords: slag, crystallization, slag casting, lining, abrasion.

Section of «Engineering. Mechanics»

UDC 621.923.4 Molchanov V. RESEARCH OF INFLUENCE OF PARTICULATE MATTERS IS ON ROUGHNESS SURFACES AT POLISHING OF THEORIES PROBABILITY METHODS. In activity the gear of effect of solid particles on surface layer is set up at grinding from the cleared LSS and from the LSS containing solid particles. Is established, that at grinding from the contaminated LSS the superposition of two distribution laws - distribution law of ordinates of asperities of the ground surface for want of solid particles in the LSS and distribution law of padding scores left by grit, contained in the LSS takes place.
Keywords: roughness, particulate matters, polishing.

UDC 621.914 Korotkov V. CONSTRUCTION OF ASYMPTOTIC OPTIMAL ALGORITHM CALCULATIONS OF TRAJECTORIES AS A BROKEN ORTHOGONAL ELEMENTS. The article describes variant of constructing asymptotically optimal algorithm calculate the movement trajectories of working units technological machines in the form of broken orthogonal elements. The algorithm can be used in manufacturing equipment software control systems.
Keywords: algorithm, the trajectories, orthogonal links.

UDC 621.914 Korotkov V. CONSTRUCTION OF THE ASYMPTOTIC OPTIMAL ALGORITHM OF PIECEWISE-LINEAR INTERPOLATION. In this article reviewed construction of asymptotically optimal algorithm interpolating curves by straight lines with a minimum quantity of units. Using the algorithm of automated programming systems increases the efficiency of solving the problems on the calculation of the path of movement of working bodies of the equipment with program management.
Keywords: asymptotic optimal algorithm, interpolation.

Section of «Radioelectronics»

UDC 621.396.67:001.57 Syanov A., Kosuhina E., Kosuhin A. NUMERICAL IN-VESTIGATION OF HORN ANTENNA PARAMETERS WITH FINITE ELEMENT METHOD USING. Numerical study of the horn antenna with electromagnetic characteristics of the dielectric lens, by the following finite element method, which was realized in the system of electrodynamics simulation, named AnsoftHFSS was considered in this research. The results of research are introduced in the form of antenna directivity diagrams.

Keywords: horn antenna, dielectric lens, finite element method, diagram of orientation, frequency descriptions.

UDC 621.373.52 Dernovoy V., Gnatyuk M., Sjanov A. RESEARCH OF DIRECT DIGITAL SYNTHESIS DEVICES. The paper considers the design and modeling of digital frequency synthesizer with a filtration of generated wave. As filter element were used 6 order elliptic filters. The simulation allowed to develop and research the experimental model based on modern digital frequency synthesis device. The simulation results confirm the efficiency of the proposed circuit for improve the amplitude frequency characteristic of synthesized signal and the possibility of using modern digital synthesis device as a variable-frequency oscillator in the radio-technical devices.

Keywords: frequency synthesizer, direct digital synthesis, electrical filter, signal spectrum.

UDC 539.216.2 Taran V., Turchenko Yu. RESEARCH OF BARIUM TITANATE SINGLE CRYSTALS GROWTH PROCESS FROM FUSION WITH THE SURPLUS OF THE RUTILE. The process of programmed growth of single crystals of barium titanate from the melt in the system $BaTiO_3 - TiO_2$ by pulling method on the oriented nucleus in the temperature range of 1430-1340^{0}C with pulling speed $\frac{dz}{dt} = 1 \div 0,25 \frac{mm}{hour}$ has been investigated. Temperature reducing rates and frontal crystal growth in accordance with the phase diagram have been agreed on.

Keywords: single crystal of barium titanate, cultivation, the phase diagram.

UDC 537.311.6 Bochkova T., Plyaka S., Truseeva N. THE RESEARCH OF BIS-MUTH ORTHOGERMANATE IMPEDANCE BY EQUIVALENT CIRCUITS METHOD. Using a computer approximation of impedance hodographs within the method of equivalent circuits it was found that the impedance spectrum of $Bi_4Ge_3O_{12}$ single crystals at temperatures above 600 K contains three semicircles. It corresponds to Voigt circuit from three RC parallel circuits. It is suggested that high-frequency process of charge transport is caused by the hole conduction through volume of the crystal sample and mid-frequency process is connected with the migration of the space charge which appears near contacts due to the depletion of the majority carriers as a result of the recombination.

Keywords: impedance hodograph, bismuth orthogermanate, charge transport.

UDC 681.5.015 Meshaninov S., Trikilo A., Kopytova K. INFORMATIONAL AND SYNERGETIC MODEL OF HUMAN'S HEALTH. Informational and synergetic model of human's health is developed, content and structure of the optimal model of human's health is discovered in the article. Usage of health status control algorithm allowed to create technology of conversion from current to wishful health status which corresponds public expectations and requirements to human's health.

Keywords: model of human's health, culture of health, algorithm for determining human's health.

Section of «Electromechanics. Electrical engineering»

UDC 621.313.322 Homenko V., Nizimov V. EXCITATION CIRCUIT OF SYN-CHRONOUS GENERATOR CONTROL WITH SHARPLY VARIABLE LOAD. The influence of capacitive energy storage in the excitation circuit of synchronous generator with relay excitation controller on the process of voltage output regulation of autonomous generating unit by means of consumer comparable capacity connection has been investigated in the article. It has been proved, that the speed response of voltage output regulation process with the energy store system is considerably higher in comparison with existing systems of excitation.
Keywords: synchronous generator, the capacitor store of energy, voltage regulation.

UDC 621.311.1:669.187.5 Khmel'nickiy E., Klyuev O., Baranova D. THE PROBABILISTIC CHARACTERISTICS OF ELECTRICAL PARAMETERS OF THE AGGREGATE «FURNACE-LADLE» AND THEIR USAGE FOR CONTROL OF A TECHNOLOGICAL PROCESS. The results of researches on definition of value of coefficient of an asymmetry current and supply voltage and their cumulative distribution functions are adduced. Is shows that as simple integrated criterion of control technological process of the aggregate «furnace-ladle» is possible to consider a minimum of a dispersion load current.
Keywords: the aggregate «furnace-ladle», coefficient of an asymmetry current and voltage, minimum of a dispersion load current.

UDC 62-83:681.513.5 Kluyev O., Sadovoy O. OPTIMIZATION POWER CHARACTERISTICS OF THE ASYNCHRONOUS GATED CASCADE. In the article is detected, that the basic power characteristics of the asynchronous gated cascade (AGC) can be optimized in static conditions by regulation of value of a module of flux linkage a stator and reactive component of a current rotor. The analytical expressions of functions of quality of extreme regulation AGC are obtained and their properties with the count of effect of a saturation of a magnetic circuit of the asynchronous machine are parsed. Is indicates, that is possible to do without step algorithms search of extremum, using instead of them functional converters, that is affirmed by a method of mathematical modelling.
Keywords: energy characteristics, criterion function, extreme control, reactive power, optimum value flux linkage.

UDC 62-83 Derets A., Sadovoy O. SYNTHESIS OF FOURTH-ORDER SLIDING MODE CONTROL SYSTEM BY N-i SWITCHING METHOD WITH CONDITION OF UNCERTAIN MAXIMUM OF FIRST AND SECOND DERIVATIVES OF OPERATED COORDINATE. Conformably to fourth-order sliding mode control system was obtained the correlation for maximum values of first and second derivatives of operated coordinate with sudden change of master control. The bounds of control action range were defined, which provides realization of prescribed form of transient, optimal in time domain. The procedure of synthesis for sliding mode subordinated control system was expounded.
Keywords: sliding mode control system, optimality in the time domain, "N-i switching" method.

UDC 62-52 Sheremet O., Sadovoy O., Sokhina Y. SYNTHESIS OF TWO-COORDINATE ELECTROMECHANICAL SERVO SYSTEM ON THE BASE OF DISCRETE TIME EQUALIZER. The synthesis of two-coordinate servo system by the method of discrete time equalizer is carried out in this article. An inverse reference model of the control object with this approach is supplemented by a transfer function of typical dynamic link, which provides a modification of the structural schemes symmetry principle. It was found that the accuracy of the reference signal reproduction depends on the performance of discrete time equalizer and the error decreases by reduction of quantization period.
Keywords: quantization, transitive function, regulator, error.

Section of «Heat-power Engineering. Heat Engineering»

UDC 658.26 Klimov R. APPARATUS FOR EMULSIFICATION WATER-OIL FUELS. The article deals with an apparatus for hydrothermal emulsification of water-oil fuels, which brings together a range of the most efficient in terms of energy methods of crushing the dispersed phase, which use the phenomenon of adiabatic boiling of superheated liquids in a container together with a flat-vortex unit and implemented a three point devices.
Keywords: steam, pressure, temperature, fuel, boiling, apparatus, fluid.

UDC 536.21 Gorbunov A., Ukleina S. BY THE CALCULATION OF TEMPERATURE FIELDS AT VARIABLE HEAT TRANSFER COEFFICIENT AND TEMPERATURE. Based on the analysis of convective heating (cooling) the bodies of regular geometric shape in quasi-stationary stage derived integral equation, with which you can approximately solve the problem of heat conduction from the non-linearity in the boundary conditions. Developed engineering method for calculating the temperature fields at a variable rate of heat transfer and temperature. Comparison of the method with the exact numerical solution shows that the error in determining the temperature does not exceed 6% and it can be considered quite acceptable for engineering calculations. The formulas for the calculation of axial thermal stresses.
Keywords: convective heat (cooling), variable heat transfer coefficient and environmental temperature, the temperature field, quasi-stationary stage, thermal stresses.

UDC 621.1.018 Belonojko V., Chuhno S. TIMING HEATING OF DROP IS ON THE OVERHEATED SURFACE. In the article the terms of heat exchange are considered between the surface of detail and cooling liquid on the basis of analysis of the modes of its flow in the area of cutting, in the hydrodynamic affected zone and in the area of free stream.
Keywords: polishing, mode of flow, scope terms.

Section of «Information Technology»

UDC 519.71:330.142 Chupilko T., Chupilko S. MATHEMATICAL MODEL OF WORKING CAPITAL OPTIMIZATION OF COMMERCIAL ENTERPRISES. The mathematical model allows to explore various options for use of all resources of the enterprise, including financial. The problem of the optimal control by marginal income's trading firm is analyzed. The modeled parameters are: the volume of bulk purchases of goods, the prices and intensities of retail sales for some restriction on working capital, intensity of demand, volume of goods, the range of prices. Different methods connected with imitation modeling are used. In other cases we can allow some simplifications.
Keywords: mathematical modeling, working capital, trade enterprise, profit margins.

UDC 005.2:004.9 Karimov G.I. QUALITY MANAGEMENT BASED ON STANDARD INFORMATION TECHNOLOGIES. Based on analysis of the function of system of quality management and standard information technologies defined the place of function of quality control that implemented based on mathematical-statistical methods and standard software products. Defined the directions for future research in area of implemented computerized workplace analyst quality as computing centre of informational subsystem of operational quality management.
Keywords: quality management, quality control, standard information technologies, mathematical-statistical methods, system of quality management.

UDC 004.031.43: 338.5 Babenko M., Bratuta M. THE USE OF THE COST DETERMINING OF SOFTWARE DEVELOPMENT METHODS AT NON-LOSS INFORMATION SYSTEMS ANALYSIS. The aim of the work is the use of cost determining of software development methods at non-loss information system analysis in order to increase the

accuracy of predicted cost estimation and project terms and risks reduction to raise finance to projects, improving the quality of software projects management in general. The designed software tool that implements the above methods to automate the analysis of non-loss information systems has been developed.

Keywords: information system, development costs, software, CVP-analysis, non-loss point.

UDC 004.7 Babenko M., Zhulkovskii O., Babenko Yu. CHARACTERISTIC FEATURES OF COMPUTER NETWORKS SIMULATION MODELING USE IN RESEARCH AND EDUCATIONAL PURPOSES. The article deals with some aspects of simulation modeling computer networks use in research and educational purposes. Necessary experiments to determine the boundary characteristics, the expansion possibilities, topology changes and network equipment modifications in order of its further improvement and development can be performed by means of this method.

Modeling of computer networks is especially useful in educational process.

Keywords: computer networks modeling, network design, network optimization.

UDC 004.9 Bozhukha L., Zinkoskiy D. ABOUT LATEST TECHNOLOGY SOFTWARE AND DISADVANTAGES THE DEVELOPMENT APPLICATION TIME-MANAGER. Was held an analysis of new technologies and considered problems of their use in the subject area scope of Android application development. While development were solved problems as rebooting device, triggering timer during phone's sleep mode, alarm-clock recovering after accidental device reboot, multithreading work with timers, handling device rotation, background work.

Keywords: time-manager, Android, multithreading, device reboot.

UDC 004.9:004.912 Dranishnikov L., Shkurko A. ANALYSIS AND INFORMATION EXTRACTION FROM TEXTS. The paper considers the problems of application and approaches of computational linguistics, in particular the extraction of facts from texts and evaluate the tone of the reviews. The described algorithm of primary processing of text. Developed software way to gather feedback from users of the social network about a specific product or company and to give conclusions on how users say about it. The software method is implemented in Python using an API of the social network platform Twitterra NLTK.

Keywords: computational linguistics, processing and text mining, sentimental analysis, information extraction from texts, analyze, and visualize data.

UDC 004.896:347132.15 Dranishnikov L., Denisenko V., Neiwert A. AUTOMATED SYSTEM of EARLY detection of THREATS of EMERGENCIES AND NOTIFICATION. Object of research – processes for the development of automated system of early detection of threats of emergencies and notification of on-site hazardous facility of the enterprise and the use of automated systems in the work of the dispatchers by using the hardware-software complex of the automated workplace of the Manager-operator.

Keywords: software, software application, programming language Java, software code, interface.

UDC 004 Zavgorodniy V., Yalova K. TECHNOLOGIES AND SOFTWARE OF E-LEARNING SYSTEM PROGRAM IMPLEMENTATION. The generalized model of modern e-learning system architecture is presented at the work. For each level of an architecture the software and technologies of its program implementation are established. For the purpose of definition the most attractive e-learning system results of the comparative analysis of e-learning free platforms are given. The complex of actions which can minimize negative influences during introduction and using e-learning systems in modern education establishments is defined and described.

Keywords: information technology, e-learning, web-platform, e-learning system.

UDC 519.688 Aksjonov V., Olijnyk L. USING PARAMETRIC PROGRAMMING IN CURRICULUM GENERATION PROCESS MODELING. Current research continues previous authors researches. Proposed modifications improving curriculum generation by adding elements of parametric programming. Provided examples of hours bounding rules.

Keywords: curriculum, linear programming, Gomori method, simplex method, parametric programming.

UDC 004.031.43 YASHYNA K. AUTOMATED CONTROL SYSTEM OF MODERN HIGHER EDUCATION INSTITUTION'S POSTGRADUATE STUDY DEPARTMENT. New automated control system of modern higher education institution's postgraduate study department description is given in the article. The software was developed using modern free technologies: database management system MySql 5.5, the programming language C ++, QTCreater SDK. Software research, objects and their interfaces, database design and research of ways for working with database are presented in the article.

Keywords: automated control system, MySql 5.5, QTCreater, MVC.

Section of «Chemical technology. Biotechnology. Ecology»

UDC 661.632 Laricheva L., Voloshin M. THE RESEARCH OF PROCESSING LOW QUALITY PHOSPORITES INTO PHOSPHORIC ACID. The research of the acidic decomposition of aluminium and iron containing phosphorites for getting extracted phosporic acid has been conduted. It has been shown that at the temperature of 50-60°C having the excess of SO_3 in production acid at 3-4% of the mass and the recovery rate of P_2O_5 at 89-92% it is possible to obtain the phosphoric acid of 18-20% concentration. The phosphoric acid obtained can be processed into mineral fertilizers without preliminary evaporation which would result in turning the acid into the viscous mass unusable for further processing.

Keywords: acidic processing of phosphates, phosporic acid, sesquialteral iron oxide, sesquialteral aluminium oxide, decomposition degree.

UDC 628.16 Ivanchenko A., Yelatontsev D. STUDY TECHNOLOGY OF EXTRACTING SUSPENDED SOLIDS FROM MUNICIPAL AND INDUSTRIAL WASTEWATER BY COAGULATION. The urgency of solving the problem purification municipal and industrial wastewater is colloidal degree of dispersion is shown. The regularities coagulation process of wastewater inorganic reagents is obtained. The concentration of suspended solids and phosphates wines before and after coagulation are determined. Found that using chlorides of iron and aluminum is possible to achieve simultaneous removal of deep suspended solids wines and phosphates from municipal wastewater. The optimal dose for each coagulant is defined. For the treatment municipal effluents is optimal $AlCl_3$ dose 60 mg/dm^3 at process duration 30 minutes, industrial wastewater – $FeCl_3$ dose 60 mg/dm^3 and contact time 30 minutes. It is recommended to use coagulants intensify the process clarification in wastewater treatment technologies.

Keywords: reagent, coagulation, suspended solids, optimal dose, chemical treatment.

UDC 669.54:502 Protsenko A., Gulyaev V., Kolomeets V., Dmitrikov V. FLOW SHEET INTEGRATED WASTE MANAGEMENT CHROME-NICKEL GALVANIC PRODUCTION. A method of reagent joint waste galvanic production to return to the sphere of production of processed products. The method is energy and resource-saving, environ mentally friendly, eliminates the alienation of land. An improved methodology for the development of hard ware processing flow sheet electroplating waste.

Keywords: electroplating waste, resource-saving, circuit processing, recycling technology.

Abstracts

UDC 621:658 Gulyaev V., Kornienko I., Buliyov A., Yakovlev C., Dmitrienko V. STUDY OF SIMPLIFIED METHODS OF DYEING PLANT CELL (FOR EXAMPLE, ELODEЇ AND ONION EPITHELIUM). Research of simple methods of dyeing plant cell with application methylene blue and iodine. As a sample of the plant material was taken elodeya and onion epithelium. The results of the studies found that among the mere stains, it is better to use methylene blue.

Keywords: biology, microbiology, cell, organelles, core.

UDC 502:614.4 Troitska O., Bielokon K., Manidina Ye., Bakardgiev R. THE INCREASING OF ECOLOGICAL SAFETY LEVEL WHICH DEPENDS ON INDUSTRIAL ACTIVITY OF VETERINARY AND SANITARY UTILIZING PLANTS. This article proposes the complex research results of the corpus animal utilization influence on the environmental soil and water. This problem's solving will improve ecological safety level which depends on industrial activity of specialized recycling plants of corpus animal utilization.

Keywords: animal origin waste, veterinary and sanitary utilizing plants, corpus animal raw materials, ecological safety, recycling.

UDC 502.175+528.921 Galata A., Drozdova A. RESEARCH OF RADIATION STATE OF TERRITORY OF „ЧЕРЕМУШКИ" AND CREATIONS OF ELECTRONIC DATA BASES IN GIS. The dates of radio-ecological monitoring of territories of Dneprodzerzhinsk are considerate in the article. The database of radiation state of territories and maps are created with using the GIS technology. The mind value of level of radiation for study territory is defined. The maps of interpolation of level of gamma-underground by method of ordinary Cryging are created.

Keywords: radio-ecological monitoring, gamma- underground, geoinformation technology, mathematical-statistical methods, data bases, maps in GIS.

UDC 502.7:614.72 Kabysh S., Voloshin M. IMPROVEMENT OF CONDITION OF ATMOSPHERIC AIR KAMYANSKE IN THE FRAMEWORK OF THE ADOPTED ENVIRONMENTAL PROGRAMS. Identifies the main polluters of atmospheric air of city Kamyanske. Made a review of existing government programs to improve environmental situation in the city. Analyzed the dynamics of air pollution with harmful substances for the last 6 years. Determined that the emissions of polluting substances into the atmosphere Kamyanske gradually reduced, but concentrations of some harmful substances exceed the maximum allowable. It is necessary to improve the environmental monitoring system to obtain a systematic and timely information on condition of atmospheric air in Kamyanske.

Keywords: air pollution, government environmental programs, environmental monitoring.

Section of «Life Safety»

UDC 629.039.58. Makhovsky V., Kryukovskaya O. EXPLOSIVE GRANARY. In this work describes the main danger of granaries (warehouses and silos) which are caused by the presence in the technological equipment of grain of corn, wheat, rye, barley, oats, sunflower, and the possibility of the formation of explosive dust-air mixture inside the equipment, as well as in industrial environments, as well as the creation of explosive concentration of the gas mixture during grain storage in silos. We investigated and quantified the extent of possible accidents that may occur during the reception and saving crops as an example elevator "BALOVSKY COMBINE BREAD" Ltd.

Keywords: granaries, danger, emergency.

UDC 628.511.1 Gasilo Ju., Romanjuk R., Makarenko P. ASSAYING REQUIREMENTS OF POSSIBILITY APPLICATION WITHOUT PRESSURE TRANSPORTATION FOR DISALIGNMENT OF MATERIALS WHICH GENERATE DUST. Advantages and deficiencies principal views of transport which apply to disalignment of loose materials are

analyzed. It is erected, that by the trustiest, simple in the manufacturing, not demanding major expenses and, under requirements sampling of optimum parameters the transportation, the least forming a dust at disalignment of materials are without pressure hydraulic and gravitational types of transport. Is analyzed theoretical and experimental researches agency of a slope to route launder on carrying ability of a stream. Requirements of possibility of existence without pressure transportation of loose materials are erected. Are analyzed not a solution of question which complicate development without pressure hydraulic and gravitational transports for disalignment of materials on manufacture.

Keywords: dust, transportation, exploration, dependence, theory, method.

UDC 331.46 Levchuk K., Kopil E. OCCUPATIONAL INJURIES IN UKRAINE: CAUSES AND WAYS TO PREVENT. The basic causes of occupational injuries in the workplace. The main factors that cause high rates of occupational injuries in Ukraine. The state of occupational injuries 2011-2014 years by industries and regions of Ukraine. The groups of occupations for which it was registered the most cases of fatal injuries. Designed prevention of occupational injuries in the workplace. It proposes steps of prevention of occupational injuries in the enterprise.

Keywords: trauma, occupational injuries, production, labor, industry, the level of injury.

Section of «Education»

UDC 378.016:004 Karimov I. CONCEPT OF BASIC TRAINING IN INFORMATICS AT THE TECHNICAL UNIVERSITY. Based on the analysis of the present status and existing trends, suggested approach to the organization of basic training in Informatics at the Technical University, which allows to take into account the pre-college training of the students to implement uniform approaches for all technical specialities and enhance the professional orientation training.

Keywords: computer science, computer training, competence, technical specialty.

UDC 005.5 Karimov G., Marchenko S., Ityakin O., Zhytkevich N. WAYS OF INFORMATION SUPPORT IMPROVING IN EDUCATIONAL INSTITUTION. The management information systems used in educational institutions are analyzed. On its basis the strategic decisions block place in the whole system is determined. Its goals and objectives are clarified. The educational institution management strategic task realization flow chart is suggested.

Keywords: information support, educational institution, management, strategic decision, specialty efficiency.

UDC 378.147.31 Taran V., Gubarev S., Holubnycha A. DETAILED ELABORATION OF THE LEARNING PROCESS OF FORWARD MOTION VARITIES THROUGH ACCELERATION FACTOR IN THE STUDYING OF MECHANICS BRANCH IN THE COURSE OF GENERAL PHYSICS. A representational variant of detailed elaboration of logical learning of optional alternatives subjects of bodies forward motion has been offered. A holistic didactic approach of model-visual study of forward motion characteristics based on the features of full acceleration vector has been developed. An appropriate classification trajectory form has been provided.

Keywords: mechanics, velocity growth, acceleration vector, trajectory, motion.