CONTENTS

INTELLIGENT CONTROL SYSTEMS, ROBOTICS, MECHATRONICS AND ELECTRIC POWER COMPLEXES Improvement of the steelmaking control system PC "Mayster" on the PJSC "Zaporizhstal" Adamovych N.V., Kharchenko O.V
Digital substation in Ukraine in 2024 Bondar O.V., Korol V.M., Koyfman O.O
Ways of increasing the efficiency of the benzene scrubber at the account of modernizing the management system in the conditions of coke chemical production Buryk V.Ye., Holotiuk M.V
Development of algorithmic software for detecting interference in the operation of methane concentration sensors Vovna O.V., Kaydash H.S
Reputation control as a strategic resource for industrial enterprises: current challenges and perspectives Davydenko O.V., Koyfman O.O
Simulation of the automation module of the automation mechanism of autoflying valves of the martenivsky furnace Druz Ye.A., Holotiuk M.V., Bundza O.Z
Improving the dynamic accuracy and speed of a task-based transient process using a two-pass input Isaiev A.B
Smart grid as a direction to improve the stability of the electric power systems in Ukraine Kinshakov V.Yu., Rukhlov A.V
Modernization of the weighing system for determining the mass of lime, sludge and coal Lyvada V.V., Koyfman O.O
The system of automatic control of the hydraulic press of the shop of magnesium products Lykhoman K.V., Koyfman O.O. 43

The relevance of implementing an intelligent decision support system for enterprise resource optimization Miroshnychenko S.O., Koyfman O.O., Miroshnychenko V.I	. 45
Improvement of the existing functionality for forecasting finished goods inventory at the enterprise warehouses based on the stock forecasted report ERP ODOO Miroshnychenko S.O.	. 48
Walking robots. Problems and directions of development Nalobina O.O., Shymko A.V., Bundza O.Z	. 51
Modernization of the process of lumping raw rolls in the technological line of the LURGI-552 firing machine in order to improve their quality Nikitin A.A., Bundza O.Z., Holotiuk M.V	. 55
The problem of resonance phenomena on 35 KV buses of a ferro-alloy production in the presence of distributed generation from solar power plants Papaika Yu.A., Lukianenko O.S.	. 58
Modernization of the automatic control system of the methodical 6-zone furnace with stepping beams Pokotylova O.V., Simkin O.I., Tsibik M.S.	. 61
Determination of the control process parameters of the frequency regulated electric drive of the bridge crane Razzhyvin O.V., Astafurov A.Yu.	. 63
Analysis of the degree of informativeness of the database description of the state of automation objects Razzhyvin O.V., Ryabchenko A.A., Pokotylova O.V	. 69
Modeling of the system of starting and protecting electric engines of landing guns in the conditions of an operating pulp-pumping station Semeniuk M.S., Holotiuk M.V., Nalobina O.O.	.74
Key Issues in Supporting Automated Control Systems of Technological Processes Simkin O.I., Leonov A.A.	.77
Automated Control System for the Crushing Circuit of a Crushing Plant Simkin O.I., Uzlov Y.V	. 79
Charging stations for electric vehicles: infrastructure, technologies, prospects Snihovvi D.V., Rukhlova N.Yu.	. 82

Modernization of the control system of coagulation and pellet firing by measuring the moisture content of raw pellets before the firing process Stebelko I.Ye., Koyfman O.O
Research of the control system of the electric drive of the lift mechanism of the bridge crane beam Subotin O.V., Minayenko O.G
Features of wireless control of industrial equipment on the background of manufacturing plants Subotin O.V., Petrukhin Ya.I., Sergienko V.Yu
Reduction of downtime of heating machines due to failure of heating carriage wheels Sukhorukov S.M., Bundza O.Z., Holotiuk M.V
Application of industrial robots in metallurgy Tinina M.R., Suprun Ya.V97
Study of the efficiency of the metal trading organization Tkachenko O.Yu., Holotiuk M.V., Nalobina O.O
Feed drive model of the roller bit drill Khilov V.S102
Modernization of the control systems of the bridge crane of the marteniv workshop Tsymbal B.M., Arkhipov I.I
Improvement of the design of on-load tap-changer for power transformers Tsymbal B.M., Voronenko T.V
Modernisation of the rolling element of the high-voltage cell kru-2-10 Tsymbal B.M., Moiseiev V.I111
Modernization of the start-up control system of electric motors of high-pressure pumps of the marteniv workshop Tsymbal B.M., Sychov V.V.
Automation of the accounting and control of the geometric parameters of the spicy cart of the burning machine LURGI 552 Chervyakov A.M., Bundza O.Z., Holotiuk M.V

Monitoring of the casting process and correction of rhomboid defects in continuously cast billets Shyrokykh D.I., Miroshnychenko V.I
Concept of the iron ore concentrate dewatering control process Yarovyi K.V
Automatic control of electric transport in underground mining of minerals according to the criterion of minimum specific energy consumption Yatsiuk D.S
INNOVATIONS IN CIVIL AND OCCUPATIONAL SAFETY Technogenic threats and resilience of the steel industry Volodchenkova N.V., Kruzylko O.Ye., Rekova N.Yu
Creating a safe environment in dead-end workings Volodchenkova N.V., Cheberiachko Yu.I., Bedniuk O.V131
Integrated solutions to improve the environmental safety of the railway division of the mining and processing plant Grishchenko K.Yu
Prospects and obstacles to the implementation of human centric lighting in Ukraine Demchuk H.V., Kashtanov S.F
Foundry production of Ukraine on the way to victory and the post-war development of Ukraine's economy Demchuk H.V., Liutyi R.V
Theoretical principles of forecasting occupational health and safety indicators Kruzylko O.Ye., Volodchenkova N.V., Zabolotnii O.M
Peculiarities of attestation of workplaces of a mining enterprise Maistrenko V.V., Repin M.V147
Features of implementing NPAOP to the standards of an engineering company Merkulov S.V
International experience of the organization for the protection of the population from emergency situations on the example of Japan Miniallo D O

Features of the practical application of the OSHA visual inspection training game play tool for identification of hazards Repin M.V., Cheberiachko Yu.I., Alekseeva M.M
Analysis of harmful and dangerous factors associated with technological processes at the mining and beneficiation plant Saveikin V.S
Research of the consequences and indicators of the impact of noise on human beings from the use of attack means by the russian troops Svirzhevskyi P.V., Tsymbal B.M
Interactive online risk assessment platforms for improving employee health and safety Tkalych I.M
Improving the safety level of the railway departmental security force Tsymbal B.M., Marchenko A.V
Development and implementation of a crane operator's workspace audit system Cheberyachko S.I., Cheberiachko Yu.I., Vasylchenko M.O
Features of using the dialux program when designing lighting in the office Cheberyachko S.I., Cheberiachko Yu.I., Niuskov A.V
Analysis of working injuries statistics at metallurgical enterprises for 2019-2023 Cheberyachko S.I., Cheberiachko Yu.I., Osipenko N.G
Analysis of labor protection requirements for a conveyor operator Cheberyachko S.I., Cheberiachko Yu.I., Tregub I.A
MODERN ECO-FRIENDLY PRACTICES AND PROSPECTS FOR ENVIRONMENTAL PROTECTION Assessment of the environmental hazard of Prydniprovsk TPP coal combustion waste Berezniak O.O., Borysovska O.O., Berezniak O.O
Development of innovative technological measures to minimize the impact of hydrotechnical structures of a mining and processing plant on natural water resources (case study: PJSC "Inguletsky mining and processing plant")
Volkova A.O 187

The prospects of using the constructed wetland for decontamination of the aquatic ecosystems from radiation pollution Yesipova N.B.	190
Overview of some of the results of the educational technical and environmental practice at a steelmaking enterprise Zhelezniak Ye.M., Repin M.V., Maksymova N.M	193
Analysis of the system of standards and standards for environmental protection Zhelezniak Ye.M., Cheberiachko Yu.I., Maksymova N.M	195
Evaluation of the environmental efficiency of the improvement of the coke gas purification system from hydrogen sulfide at coke chemical production Kopiika I.V.	199
Development and implementation of an effective automated monitoring system within the sanitary protection zone in accordance with European standards Lobko M.R.	
Aridization of the lands of Ukraine Miniailo D.O	202
Overview of the factors of the influence of military actions on the environment Navolniev I.Yu., Maksymova N.M	206
Impact of mining operations on the development of man-made fractures in crystalline rocks Pikarenia D.S., Orlinska O.V.	211
Ecological and economic feasibility study of the implementation of the ACS in transport for reduction of emissions into the atmosphere Pinchuk O.M., Maksymova N.M.	215
Normative and methodological aspects of metrological support for environmental monitoring of industrial emissions Podobnyi A.D., Cheberiachko Yu.I., Maksymova N.M	218
On the importance of cultivating environmental awareness among vocational education students Romashyna V.V., Davydov S.M	220
Ways to reduce dust emissions at a concrete production plant Stepanenko O.M.	223

Review of methods to reduce dust emission from tailing dam surfaces Tishina V.M
Development of hydrogen energy in Japan Fomin A.V
Eco-innovations and compliance of metallurgical production — modern paradigms of innovative activity management Fonarova T.A., Bushuiev M.B., Petrenko V.O
Formation of sustainable development of land use in agricultural enterprises as a condition for the revitalization of the Dnipro basin and reservoirs Shara S.Yu
USING ICT IN ENGINEERING, BUSINESS AND EDUCATION Creation and study of models using Python Velychko V.Ye., Fedorenko O.H
Implementation of the "Flipped Classroom" technology in teaching mathematical disciplines Hlazova V.V., Kaidan N.V., Krasnoshchokova N.M
On the issue of applied orientation of teaching disciplines with a mathematical component at "Technical university "Metinvest polytechnic" Hrudkina N.S., Kaidan N.V., Starov D.S., Chekhuta O.V
Formation of research competence of applicants in the process of teaching probability theory and mathematical statistics Hrudkina N.S
Supporting the research activities of educators through visual display of the features of the Van der Poel equation Dmytryshyn I.S
Application of machine learning for clustering of company clients Ivanchenko N.O., Podskrebko O.S
Virtual simulators as an element of information technology application in teaching physics Kaidan V.P., Pokhytun O.O. 259
Data modeling in mathematical disciplines using Microsoft Excel Kaidan N.V., Pofalit A.V. 263

Thermal engineering calculations and results visualization using Matlab and Python Miroshnychenko S.O
Implementation of minecraft education edition as an element of gamification in teaching mathematical disciplines Fedorenko O.H., Kaidan N.V., Andrusyk A.A
A project of organizing a system for determining the environmental situation in the area of nuclear power plants Fil B.M., Kaidan Ye.V
Using Google applications in teaching disciplines of the professional training cycle Shchensnevych O.V., Shchensnevych Yu.Yu
Using artificial intelligence on the example of ChatGPT in the educational process Shchensnevych Yu.Yu., Shchensnevych O.V., Kaydan Ye.V280
Using the interactive table of chemical elements when learning chemistry Yusina G.L
MODERN TOOLS IN BUSINESS PERFORMANCE MANAGEMENT Methods of increasing the effectiveness of teamworrk Andreieva K.S., Smyrnova I.I
Improving the system of search, optimization and technical decision-making – value engineering for the creation of an optimal budget and schedule for the implementation of large-scale industrial projects Bespalov K.I., Gonchar V.V
A mixed strategy for planning the maintenance of mining dump trucks adapted to their individual technical condition and operating conditions Hashytskyi S.A
Research of the business process of supply organisation and identification of shortcomings in supply chain management Dzhuman L.O
Modern tools for predictive business analytics Zherlitsyn D.M

Analysis and visualization of exchange rate dynamics using Power BI to improve decision-making efficiency Kostenko I.S., Andreieva K.S	3
Obstacles to the implementation of ESG – sustainable development programs and projects in Ukraine and the world Latysheva O.V	6
Smart mentoring: integration of artificial intelligence in mentoring activities to enhance human resource management effectiveness Lomonosov O.S., Smyrnova I.I	0
Analysis of Problematic Aspects of Product Stock Management in Warehouses Ponomarov D.A., Shevchenko N.Yu	3
Shortcomings and reasons for failures in the work of project managers and executors Rovenska V.V	7
Well-being in HRM as a key to ensuring increase in operational efficiency Smyrnova I.I	1
The role of the steel industry in ensuring sustainable development of Ukraine Trusova A.O	4
Opportunities to enhance operational efficiency of Ukrainian mining and metallurgical enterprises through the implementation of investment projects (case study: PJSC "Inguletsky mining and processing plant") Fanyo D.M., Latysheva O.V	9
Cost management in implementing new production processes for the launch of new products (case study Metinvest-Promservice, LLC) Kharchenko O.S., Isachenko D.Yu	4
Marketing and corporate social responsibility: analysis of interconnections and impact Kharchenko O.S., Stebunov O.O	7
Hyperpersonalization marketing strategy in the age of artificial intelligence Kharchenko O.S	0
Improving of finished steel exporter's operational efficiency based on analysis and forecasting of EU market demand Tsymbol A V	4

Influence of ecological backpack components on iron ore production cost Cherevatskyi D.Yu., Bash V.O., Bojko O.V	348
The Dynamics of Prosumerism in the European Electricity Sector Cherevatskyi D.Yu., Cheyliakh D.D., Kolibaba M.V	352
Use of ERP systems to optimize the planning of production programs and increase operational efficiency Chernyshev S.P., Shevchenko N.Yu	355
Application of market trend and dynamics analysis methods to enhance enterprise operational efficiency Churilova H.A	359
Transformation of approaches to organizational design under the influence of the fourth industrial revolution Shkrabak I.V	361