

# CONTENTS

<b>Geology</b> .....	5
<b>A. D. Maussymbayeva, V. M. Yurov, V. S. Portnov, M. Rabatuly, G. M. Rakhimova.</b> Assessment of the influence of the surface layer of coals on gas-dynamic phenomena in the coal seam .....	5
<b>L. Shumlianska, P. Pigulevskiy, V. Vilarrasa.</b> Three-dimensional density model of the mantle beneath the Ukrainian shield . . . .	12
<b>S. Bolatbekuly, G. Umirova, M. Zakariya, R. Temirkhanova, K. Togizov.</b> Formation of prospecting criteria for copper-porphyry deposits based on the construction of reference models. ....	19
<b>Mining</b> .....	25
<b>I. I. Denysiuk, I. A. Skurativska, I. V. Bielinskyi, O. M. Syzonenko, I. M. Hubar.</b> Influence of relaxation on filtering microflows under harmonic action on the layer. ....	25
<b>S. M. Hapiciev, O. V. Skobenko, N. V. Khoziaikina, S. V. Podkopaiev, D. A. Chepiga.</b> Assessment of the state of the rock mass around the crosscuts under additional deformation disturbances .....	32
<b>A. Sładkowski, S. Kuzmin, A. Utegenova, I. Stolpovskikh, D. Kramsakov.</b> Container technology for transporting rock masses in quarries. ....	38
<b>Solid State Physics, Mineral Processing</b> .....	45
<b>I. O. Vakulenko, S. O. Plitchenko.</b> Influence of hot plastic deformation on properties of the carbon steel. ....	45
<b>D. L. Bondzyk, O. V. Baranyuk, M. V. Vorobyov, M. V. Chernyavskyy, O. V. Kosyachkov.</b> CFD-modeling of critical deviations of combustion processes in pulverized coal boilers. Part 1. Construction of the TPP-210A boiler calculation model .....	52
<b>M. Louz, R. Issaadi, M. Ferfar, M. W. Naceur.</b> Gold recovery from waste fine carbon using acetone as solvent (Amesmessia gold mine, Algeria) .....	60
<b>Geotechnical and Mining Mechanical Engineering, Machine Building</b> .....	67
<b>Yu. O. Zhulay, O. D. Nikolayev.</b> Drilling wells taking into account the dynamic properties of rocks. ....	67
<b>V. H. Puzyr, S. V. Mykhalkiv, O. A. Plakhtii.</b> A hybrid ICEEMDAN and OMEDA-based vibrodiagnosis method for the bearing of rolling stock .....	74
<b>V. P. Shpachuk, O. O. Chuprynin, T. O. Suprun.</b> Characteristics of elasticity, frequency, and stability of plate connecting assemblies for vibrating machines .....	82
<b>Electrical Complexes and Systems</b> .....	88
<b>M. A. Kovalenko, I. Ya. Kovalenko, I. V. Tkachuk, A. G. Harford, D. V. Tsyplenkov.</b> Mathematical modeling of a magnetic gear for an autonomous wind turbine .....	88
<b>O. Bialobrzheskiy, O. Todorov, A. Postil, M. Bezzub, A. Sulym.</b> Cable line equivalent circuit parameters determination using the instantaneous power components .....	96
<b>Power Supply Technologies</b> .....	104
<b>O. S. Beshta, O. O. Beshta, S. S. Khudolii, T. O. Khalaimov, V. S. Fedoreiko.</b> Electric vehicle energy consumption taking into account the route topology. ....	104
<b>Environmental Safety, Labour Protection</b> .....	113
<b>O. Butenko, K. Vasiutynska, S. Smyk, A. Karamushko.</b> Basics of calculation of a two-circuit air purification system for polydisperse dust. ....	113
<b>Z. Graba, F. Ait Merzeg, I. Akkari, Y. Tiliouine, M. M. Kaci, K. Bachari.</b> Eco-friendly biosorbent based on local raw material: application to dye removal .....	120
<b>V. Lytvyn, A. Tazhmuratova, R. Yerezhpekyzy, R. Myrzageldiyev.</b> Express bus mode as an alternative way of improving the environmental safety of cities. ....	126
<b>Information Technologies, Systems Analysis and Administration</b> .....	133
<b>O. Yankovyi, N. Basiurkina, H. Karpinska, L. Malysenko, V. Chernova.</b> The research of industrial production dynamics based on the tools of chaos theory. ....	133

<b>O. O. Aziukovskyi, V. Z. Gristchak, D. D. Hryshchak, K. A. Ziborov, S. O. Fedoriachenko, D. V. Harkavenko.</b> Determining the parameters of the functioning for a nonlinear ballistic system in a real external environment . . . . .	140
<b>Economy and Management</b> . . . . .	145
<b>O. Cherep, L. Oleinikova, L. Bekhter, S. Dubynina, O. Lyshchenko.</b> Economic security of the industrial enterprise in the frameworks of business process reengineering . . . . .	145
<b>V. Yu. Yedynak, N. S. Kovtun, T. O. Pasichnyk, Yu. O. Kakhovych, O. O. Kakhovych.</b> Personnel development under digital economy conditions . . . . .	153
<b>L. Ostapenko, N. Blok, N. Zilnyk, S. Vasyliv, I. Prots.</b> Legal regulation of labor of internally displaced persons in Ukraine . . . . .	162
<b>T. Shterma, V. Fatkhutdinov, M. Prodanchuk, O. Bernaziuk, Yu. Synytsia.</b> Organizational-legal and accounting-analytical aspects of payroll . . . . .	170
<b>M. Blikhar, H. Lukianova, O. Skochylias-Pavliv, M. Vinichuk.</b> Institutional stability of public administration: the economic and legal dimension . . . . .	178
<b>D. Shvets, M. Pyvovar, I. Oleksiv, T. Zhyravetskyi, N. Marych.</b> State policy in the field of employment: legal problems and prospects in the conditions of martial law . . . . .	185
<b>O. Iastremska, A. Rudych, I. Bumane, A. Hazukin, V. Zdolnyk, P. Kukhta.</b> Management of innovative development of enterprises in the conditions of digitalization: strategy modeling . . . . .	194
<b>A. Fesun, A. Tretiakova, Ye. Lytovchenko, A. Maksyiuta, A. Velychko.</b> Global investment and financing of civil construction in Ukraine under martial law . . . . .	201