

CONTENTS

Geology	5
I. S. Nikitenko, O. V. Starik, M. L. Kutsevol, S. V. Shevchenko. Petrographic research on stone tools from the megalithic cult site of Tokivske-1	5
Mining	13
A. O. Bondarenko. Modeling of interaction of inclined surfaces of a hydraulic classifier with a flow of solid particles	13
M. I. Stupnik, V. O. Kalinichenko, S. V. Pysmennyi, O. V. Kalinichenko. Determining the qualitative composition of the equivalent material for simulation of Kryvyi Rih iron ore basin rocks.....	21
M. V. Petlovanyi, V. Yu. Medianyk. Assessment of coal mine waste dumps development priority.....	28
V. M. Orlovskyy, V. M. Savyk, P. O. Molchanov, A. M. Pokhylko. Simplified plugging material	36
Solid State Physics, Mineral Processing.....	43
D. Nettour, M. Chettibi, A. Bouhedja, G. Bulut. Determination of physicochemical parameters of Djebel Onk phosphate flotation (Algeria)	43
V. V. Sobolev, N. V. Bilan, O. S. Baskevych, L. I. Stefanovich. Electrical charges as catalysts of chemical reactions on a solid surface	50
I. K. Mladetsky, Ya. G. Kuvaiev, N. S. Pryadko. The control regularity detection of the useful mineral extraction from the ore feed stream with autogenous grinding. Part 1. Correlation analysis	59
Geotechnical and Mining Mechanical Engineering, Machine Building	66
D. V. Brovko, V. V. Khvorost, V. Yu. Tyshchenko. Qualimetric assessment in calculation of the survivability level of the mine surface objects	66
V. M. Zelenyak, L. I. Kolyasa, V. B. Loik, O.D. Synelnikov. Thermoelastic state of a half-space with an edge crack under local heating conditions.....	72
O. V. Denyshchenko, A. L. Shyrin, V. O. Rastsvetaiev, O. V. Cherniaiev. Forming the structure of automated system to control ground heavy-type ropeways.....	79
Yu. M. Khalymendyk, V. Yu. Khalymendyk, L. M. Zakharova, V. V. Nazimko. Bench testing of a steel yielding frame support	86
O. K. Ishchenko, V. M. Konoval, K. S. Ishchenko. Efficiency of preparation of mountain mass at careers of building materials.....	92
I. O. Vakulenko, S. O. Plitchenko, N. H. Murashova, V. N. Bohomaz. Concept of determining the friction stir welding mode	99
Electrical Complexes and Systems	106
S. K. Podnebennaya, V. V. Burlaka, S. V. Gulakov. Three-to-one phase converter's control method for power factor corrected power supply of resistance welding machine	106

CONTENTS

Environmental Safety, Labour Protection	115
V. Mikhailov, Yu. Kovrovskyi, P. Volynskiy. Development of civil protection in the process of reforming local self-government and territorial organization of power in Ukraine	115
I. M. Loza, O. Y. Pakhomov, V. I. Chorna, N. V. Voroshilova. Evaluation of remediation efficiency of manganese quarry lands after open-cut mining: ecosystem approach.....	122
 Information Technologies, Systems Analysis and Administration	129
G. G. Shvachych, O. V. Ivaschenko, V. V. Busygin, Ye. Ye. Fedorov. Parallel computational algorithms in thermal processes in metallurgy and mining.....	129
O. M. Pihnastyi, V. D. Khodusov. Calculation of the parameters of the composite conveyor line with a constant speed of movement of subjects of labour.....	138
 Economy and Management	147
O. A. Lagovska, T. P. Nazarenko, I. V. Suprunova, V. Yu. Ilin. State support as a tool for development of enterprises of coal industry: current situation and problems	147
O. Aleksandrova, L. Batchenko, M. Dielini, U. Lavryk. Specifics of managing competitiveness of present-day university on principles of social responsibility.....	157
Ye. V. Terekhov, Yu. I. Litvinov. Eco-oriented management of manufacturing and supply activity of manganese ore raw materials supplier.....	166

“Scientific Bulletin of National Mining University” was included in the “List of Scientific occupational editions of Ukraine” on geological and technical sciences (Order of Ministry of Education and Science of Ukraine No.1328 dated December 21, 2015).