CONTENT

Geotechnology (underground, open and construction)

*Eremenko V.A., Lushnikov V.N.* Procedure for selecting dynamic ground support for rockbursting mining conditions .................................................................5

*Vorsina E.V., Mikheev V.A., Moskalenko T.V.* Change in Kharanor lignite sorption capacity under effect of electromagnetic microwaves .............................................................. 13

*Shulyupin A.N., Chermoshentseva A.A., Konstantinov A.V.* Features of well assaying data interpretation at highly promising heat energy water reservoirs ........................................... 21

Geomechanics

*Zakharov E.V., Kurilko A.S.* Change of specific surface of rocks under cyclic freezing–thawing ........................................................................................................................... 31

*Neustroev A.P., Khokholov Yu.A.* Ice accumulation in rock safety cushion, considering atmospheric precipitation seepage and moist mine air leak in the conditions of permafrost region ........................................................................................................ 39

*Alekseev A.V.* Face deformation in tunneling in the zone of structural and mechanical heterogeneity ................................................................. 48

*Popov V.I., Kurilko A.S.* Approximate method to solve problems of heat and mass transfer under water freezing in permafrost rocks ............................................................... 57

*Semenova I.E., Avetisian I.M., Zemtsovskiy A.V.* Geomechanical modeling of deep-level mining under difficult geological and geodynamic conditions ........................................................................ 65

*Kozyrev A.A., Semenova I.E., Zhuravleva O.G., Pantelev A.V.* Hypothesis of strong seismic event origin in Rasvumchorn Mine on January 9, 2018 ......................................................................... 74

*Alekseev K.N.* Effect of cyclic freeze and thaw on impact resistance of fine-grained concrete depending on basalt fiber content ........................................................................ 84

*Khazhyylay Ch.V., Eremenko V.A., Kosyrev A.M., Yanbekov A.M.* In-situ rock mass failure envelope plotting using the Hoek–Brown criterion and RocData software toolkit ............................................................................................................................ 92

Geoecology of mining industry

*Krupskaya L.T., Melkonyan R.G., Zvereva V.P., etc.* Ecological hazard of accumulated mining waste and recommendations on risk reduction in the Far Eastern Federal District ........................................................................................................ 102

Mining industrial geology

*Vorob’ev A.E., Shamshiev O.Sh., Tolobaeva N.T.* Metallogenic patterns in Mesozoic and Cenozoic ranges of southern Tian Shan ......................................................................... 113

*Kurmazova N.A.* Integrated use of mineral resources (in terms of the Tataurovskoe lignite deposit) ........................................................................................................ 121

Mining geophysics


*Nikolenko P.V., Chepur M.D.* Using acoustic emission phenomena in composites for the stress–strain analysis of rocks surrounding an underground excavation ........................................ 134

Mining machinery and equipment

*Fedorov L.N., Ermakov S.A.* Strength of inserts made of hard and superhard materials under wedge clamping action ................................................................. 142

*Khoshmukhamedov I.M., Kosareva-Volod’ko O.V.* Reliability of electric motors of open pit mine shovels........................................................................................................ 151
Enrichment of minerals

Gorlova O.E., Shadrunova I.V., Sinyanskaya O.M. Development of a combined technology for nonacid flotation–hydrometallurgical processing of noneconomic copper ore stock piles ................................................................. 157

Grabsky A.A., Pokamestov A.V., Bobin V.A. Development of a combined technology for nonacid flotation–hydrometallurgical processing of noneconomic copper ore stock piles .............................................................................................................. 168

Kiselev V.V., Kaimonov M.V., Popov V.I. Promising trends in in-situ leaching in gold placer mines in permafrost region ......................................................................................................................... 177

Merkuryev A.N., Matveev A.I. Problems of processing diamond-bearing sands at placer deposits in North-Western Yakutia in terms of Anabar Diamonds operations ...... 185

Geoinformatics

Tikhonov A.A., Akmatov D.Zh. Review of aerophotography data processing programs........ 192

Production organization and management in mining

Velevsevich V.I. Financial recovery of a mine at different stages of crisis management ...... 199

Fire and industrial safety in mining

Cherechukin V.G., Lyubomishchenko E.I., Kolesnichenko E.I. Volatile yield as indicator of carbon reduction in coke residue of coal sample......................................................... 208

Special editions GIAB

Moskalenko T.V., Mikheev V.A., Vorsina E.V. Development of briquetting in the Republic Sakha (Yakutia) ...................................................................................................................... 30

Vu Van Toan, Yushina T.I., Krylov I.O., etc. Review of technologies for processing iron-containing waste ..................................................................................................................... 126

Kuletskiy V.N., Zhunda S.V., Dovzhenok A.S., etc. Methods of improving the quality of labor processes ...................................................................................................................... 156

Fomenko N.A., Nikitina M.I., Gushchina T.O., etc. Changing the composition of water-soluble substances from ash and slag waste in the presence of brown coal ........ 191

Matsko N.A., Kharitonova M.Yu. Economic development. the search for a new model .... 213

Sazonova T.S., Sokolovskaya E.E., Minaev V.I., etc. Methods of determination of fluorine in coals and waste of their production and processing ................................................. 214

The deposited manuscripts

Kruzhkova G.V. Economic mechanism of providing raw materials of enterprises is not dominant in the market of secondary precious metals......................................................... 112