## CONTENT

Mining industrial geology, Mining geophysics

*Shkuratnik V.L., Nikolenko P.V., Anufrenkova P.S.* Kaiser effect performance in anthracite as an indicator of the rock resistance to cryo-thermal treatment.............................................. 5


*Voznesenskii A.S., Krasilov M.N., Ya.O. Kutkin, Tyutcheva A.O.* The effects of dolomite-gypsum bonded interfaces on acoustic properties and damage of rock under cyclic bending loads.............................................................................................................. 27

*Sanfirov I.A., Babkin A.I., Yaroslavtsev A.G.* Prospects for studies into transversal waves in salt rock mines................................................................................................................................. 45

Geotechnology

*Golubev D.D.* Using pillar-free mining technologies in gently dipping and self-ignitable coal seams.................................................................................................................................................. 64

Mining machinery

*Bochkov V.S., Dyagilev S.D.* Analysis of one-stage and two-stage crushing of shale in jaw crusher ShchD 10M for manufacture of terrazzo tiles ........................................................................................................... 78

*Perekutnev V.E., Zotov V.V.* Comparative assessment of rubber steel cables for vertical mine hoists..................................................................................................................................................... 85

Geomechanics, Rock failure


*Pleshko M.S., Nasonov A.A., Dymnikova O.V., Ryabova N.V.* Overall safety of recovery and reconstruction of mine shafts........................................................................................................................................... 104

*Toktarov V.N., Morozov I.A., Beltyukov N.L., Udartsev A.A.* Deformation of underground excavations under conditions of the Gremyachinsk potassium salt deposit................................................................. 113

*Shibaev I.A., Vinnikov V.A., Stepanov G.D.* Determining elastic properties of sedimentary strata in terms of limestone samples by laser ultrasonics.................................................................................. 125

Geocology


Safety in emergency

*Kulikova E.Yu., Vinogradova O.V.* Risks as a cause of industrial safety inhibition in underground construction........................................................................................................................................... 146

Production organization and management in mining

*Prokopenko S.A., Griskevich T.I., Ravochkin N.N., Dyagileva A.V.* The essence of the intelligent and innovation potential of a mining engineer.................................................. 155
Special editions MIAB

**Turbor I.A., Turuk Yu.V., Shurygin D.N.** Justification and development of a scheme for moving sections of mechanized support in the conditions of mining layers with unstable roofs ................................................................. 44

**Fedorov A.S., Kazakov Yu.A., Fadeev D.V.** Parameters of the screw press mouthpiece taking into account the requirements for peat molded products ................................................. 93

**The deposited manuscripts**

**Karpenko S.M., Bezginov G.Yu.** Tools for software and analytical management of power consumption at mining enterprises ................................................................. 103

**Babokin G.I., Dubonosov S.V.** Improving energy efficiency of a ball mill in technological scheme of ore preparation ................................................................. 145