

## CONTENT

### Geomechanics, Rock failure

- Suprun V.I., Levchenko Ya.V., Stromonogov A.V.** Experience of studying basic physical and mechanical properties of limestone ..... 5
- Volokhov E.M., Kireeva V.I., Britvin I.A., Voloshina E.A.** Analysis of emergency modes in deep subway station tunnel driving during estimation of displacements in undermined rock mass ..... 28
- Zhuravkov M.A., Nikolaitchik M.A., Petrachkov D.A., Feoktistov P.G., Morochkovski I.V.** Stress-strain analysis of rock mass during open stoping of bedded mineral deposits with regard to various rates of change of backfill stiffness characteristics ..... 50
- Marat R.T., Maslyakov N.S., Solovyh D.Y.** Reverse engineering for spare parts of load-haul-dumpers at a mine service station ..... 65
- Tkhorikov A.I., Popov M.G., Gladyshev S.A.** Analysis of tunnel lining behavior under seismic load depending on size of contact area between lining segments ..... 84

### Mine aerogas dynamics, Mining thermophysics

- Levin L.Y., Maltsev S.V., Semin M.A., Kolesov E.V.** Aerodynamic drag design for project mine shafts using methods of computational fluid dynamics ..... 100

### Geocology

- Fomenko V.A., Makovozova Z.E., Sokolov A.A., Aksenova M.A., Kovalev G.S.** Analysis of water conditions and evolution of rock mass at a mining industry object after reclamation ..... 118

### Enrichment of minerals

- Morozov V.V., Kovalenko E.G., Pestryak I.V., Lezova S.P., Polivanskaya V.V.** Enhancement of attachment efficiency of apolar collectors at diamonds ..... 130

### Geoinformatics

- Kalashnik N.A.** Influence of tailings pond water content on hydrogeomechanical condition of embankment at concentrating plant: 3D modeling ..... 144

### Technosphere safety in mining industry

- Zinovieva O.M., Merkulova A.M., Smirnova N.A., Chadin D.A.** Accidental risk assessment in mineral processing automation ..... 156
- Korshunov G.I., Mironenkova N.A., Poleshchuk A.A.** The topical methods of detecting spontaneous combustion sources in coal mines ..... 169