

CONTENT

Geotechnology (underground, open and construction)

<i>Lygach A.V., Ignatkina V.A., Lygach V.N.</i> Central Russia's phosphorite—top-priority source for production of simple and composite mineral fertilizers	5
<i>Boltushkin A.N., Belyakov V.A.</i> Improvement of cutting technology for subsurface peat of low decomposition rate.....	13
<i>Bui Trung Kien, Kubrin S.S., Kaung Pyae Aung</i> Effect of frequency converters on power network performance in mines	20
<i>Kosolapov A.I., Kaderov M.Yu.</i> Application of hybrid mining technology at marble deposits in Russia.....	27
<i>Petrochenkov D.A.</i> Features of mining Upper Devonian Moroccan ammonites suitable for jewelry and ornamental purposes	34
<i>Stepanenko V.P.</i> Resource-saving energy sources and storage units for self-contained power supply.....	42
<i>Fedorin V.A., Shakhmatov V.Ya., Varfolomeev E.L., Mikhaylov A.Yu.</i> Structural aspects of hybrid open pit/underground method of coal mining.....	50
<i>Filimonov V.V., Khristolyubov E.A., Eremenko A.A., etc.</i> Substantiation of process solutions on modernization of mining with and without backfilling at Tashtagol deposit.....	57
<i>Khramtsov B.A., Bakaras M.V., Kravchenko A.S., Korneychuk M.A.</i> Loose dump stability control at open pit iron ore mines of the Kursk Magnetic Anomaly.....	66
<i>Chmykhalova S.V.</i> Effect of ore quality loss and variability on long-life operating data and ecological index of a mining company (in terms of Apatit)	73

Mining industrial geology

<i>Akinin N.I., Annikov V.E., Mikheev D.I., Trunin V.V.</i> Hypotoxic powder–water gel compositions.....	81
--	----

Mine aerogasdynamics

<i>Kiyantsa L.A.</i> Determining analytical dependences for heat flow in soil from enclosed-type shallow underground subway stations with double-track tunnels	89
<i>Lugin I.V., Krasnyuk A.M., Kulikova O.A.</i> Application of turbojet two-circuit engine for sustained thermal environment in railway tunnels in severe climatic conditions	103

Geoecology of mining industry

<i>Khudyakova L.I., Voiloshnikov O.V.</i> Geocological risks and mitigation in magnesium silicate deposit mining.....	111
---	-----

Mining geophysics

<i>Anashkina N.E., Bunin I.Zh., Ryazantseva M.V.</i> Effect of pulsed energy treatment on physicochemical, structural and process properties of diamonds and rock-forming mineral of kimberlite	118
<i>Bryleva M.S., Barabasheva E.E.</i> Elementary composition of coal at Apsat and Chitkanda deposits in Transbaikal Territory.....	130

<i>Nazarov L.A., Nazarova L.A., Miroshnichenko N.A., etc.</i> Seasonal variation in the water level of the Baikal Lake and weak seismicity in the Baikal Rift Zone	140
<i>Silyutin S.A.</i> Procedure for estimating distribution of microelements in organic and mineral substances of coal	148

Mining machinery and equipment

<i>Bevza V.F., Grusha V.P., Krasnyy V.A.</i> Improvement of structure and properties of Ni-resist cast-iron part blanks for mining and petroleum refining machine industry.....	156
<i>Brigadin I.V., Vozgrin R.A., Krasnov S.A., Toropov A.Yu.</i> Model of unbladed road traffic in open pit mines	168
<i>Karamanits F.I., Gromadskiy A.S., Kuzmenko D.I.</i> Engineering and testing of new drill bits for compensatory drilling in hard rocks	175
<i>Sergeev V.V., Versilov S.O., Efimov A.R.</i> Application alternatives and optimization of reinforced-concrete feeder	185
<i>Sklyarov V.N.</i> Designing mine belt conveyor rollers of higher endurance and maintainability.....	194

Enrichment of minerals

<i>Kuporova A.V., Pukhova O.V.</i> Hydro-mechanical properties of fuel made of peat and integral waterproofer	201
<i>Berdaliyev B.A.</i> Enhancement of uranium mine efficiency based on modeling and optimizing production and processing of pregnant solutions	208
<i>Gorbatyuk S.M., Zarapin A.Yu., Chichenev N.A.</i> Reengineering of spiral classifier of Catoca Mining Company Ltd, Angola	215

Industrial safety and labor protection in mining

<i>Shkundin S.Z., Khivrin M.V.</i> Data transmission channel optimization in multifunction safety systems of coal mines	222
---	-----

Special editions GIAB

<i>Pshenin V.V., Gaysin M.T., Zakirov A.I.</i> Problems of energy saving in the transportation of oil	12
<i>Le Thanh Binh, Bolobov V.I., Nguyen Khac Linh</i> Influence of cryogenic treatment on mechanical properties and wear resistance of materials of hydraulic breakers chisels	19
<i>Kaung Pyae Aung, Kubrin S.S., Pevzner L.D.</i> The system of automatic stabilization of traction factor of the belt conveyor under conditions of uneven loading.....	56
<i>Team of authors.</i> Miner's Week–2018 International Symposium Proceedings.....	72
<i>Valiev N.G., Vandyshev A.M., Potapov V.Ya., etc.</i> Geotechnical considerations in mining industry.....	80
<i>Romanova V.S., Gabov V.V.</i> Research of the process of layer-by-layer selective destructions of materials in cone vibration crusher.....	117
<i>Kubrin S.S., Reshetnyak S.N., Degterev V.V., etc.</i> Modern problems of safety and efficiency of high-performance mining sites of coal mines.....	155