

CONTENT

Geotechnology (underground, open and construction)

| | |
|--|----|
| <i>Yanchenko G.A.</i> . Procedure of engineering calculation of conditional specific air enthalpy by Ramzin during drying of rocks and rock processing products | 5 |
| <i>Bashkov V.I., Khristolyubov E.A., Eremenko A.A., etc.</i> Substantiation of mining system parameters for rock-burst hazardous blind iron ore bodies in Gornaya Shoria | 18 |
| <i>Valuev A.M.</i> Technologies of generating and selecting logistics scenario in operational open pit mine management | 32 |
| <i>Kubrin S.S., Zhuravlev E.I.</i> Intelligent dynamic hazard prediction system for production areas in coal mines..... | 40 |
| <i>Lyashenko V.I., Andreev B.N., Kucha P.M.</i> Technological development of in-situ block leaching of metals from hard ore..... | 46 |
| <i>Malyukov V.P., Starovoytova Yu.I.</i> Improving technologies that limit production of solids in hydrocarbon recovery..... | 61 |
| <i>Novoselov S.V., Panikhidnikov S.A.</i> Method of differential calculation of process idle time in production cycle of high-output faces in gas-hazardous mines with regard to threshold concentrations of methane | 69 |
| <i>Patutin A.V., Rybalkin L.A., Shilova T.V., Serdyukov S.V.</i> Device for making transverse fractures in mines | 75 |
| <i>Shevyrev Yu.V., Fedorov O.V., Sarvarov A.S.</i> Technology state-of-the-art and supply of resources..... | 82 |

Mine aerogasdynamics

| | |
|---|----|
| <i>Pavlenko M.V.</i> Substantiation of gas-bearing coal preparation technology based on integrated treatment..... | 91 |
|---|----|

Geoecology of mining industry

| | |
|---|-----|
| <i>Alborov I.D., Tedeeva F.G., Madaeva M.Z., etc.</i> Transformation of natural environment under mining and processing impact in the middle mountains of the North Caucasus..... | 98 |
| <i>Lisina K.O.</i> Eco-risk mitigation outline at Zhezkazgan processing plant..... | 106 |
| <i>Chmykhalova S.V., Sibagatullina S.S.</i> Assessment of technogenic environmental capacity of Bashkortostan..... | 112 |

Mining geophysics

| | |
|---|-----|
| <i>Pashchenkov P.N.</i> Method to determine parameters of Langmuir isotherm and gas permeability of dispersed coal particles..... | 120 |
|---|-----|

Mining machinery and equipment

| | |
|--|-----|
| <i>Sklyanov V.I., Ufatoval Z.G.</i> Sinusoidal-ball rotary-multiplying drill – a fundamentally new design to increase deep exploration drilling speed with diamond rock-breaking tool..... | 129 |
| <i>Tarasov P.I., Zyryanov I.V., Khazin M.L.</i> New special-purpose transport for the Arctic..... | 136 |

Enrichment of minerals

| | |
|---|-----|
| <i>Melnikov Z.G., Konoplev V.N.</i> Preserving stability of produced oil properties during transport by removal of bottom sediments using flat flexible electrical heaters as the method of oil processing..... | 148 |
|---|-----|

Production organization and management in mining

| | |
|---|-----|
| <i>Lozovskaya Ya.N., Mikhaylov M.V.</i> Modern production management philosophies: strengths and weaknesses..... | 159 |
| <i>Palianova N.A.</i> Improvement of regulatory and legal framework to ensure ecologically and economically sustainable development in the coal mining industry in Russia | 168 |
| <i>Fedorin V.A., Tatarinova O.A.</i> Principles of the method of getting access to georesources in transportation optimization problems in underground coal mining | 176 |
| <i>Frankevich Zh.A., Gagarina A.Yu.</i> Investment project risks: analysis and evaluation | 183 |

Industrial safety and labor protection in mining

| | |
|---|-----|
| <i>Eliseeva M.A.</i> Developing methodical framework for enhanced-quality risk management at hazardous industrial objects..... | 193 |
| <i>Kupriyanov V.V., Matskevich O.A., Bondarenko I.S.</i> Parametric and nonparametric models for predicting off-normal situations in underground mines..... | 200 |

Computer science, Automated control systems

| | |
|---|-----|
| <i>Bukeykhanov S.D., Bukeykhanova S.S., Kanagatova A.A., Sapakov E.A.</i> Application of the object-oriented analysis method to creating an automated open pit mine planning and design system..... | 208 |
| <i>Markaryan L.V.</i> Monitoring and modeling compression of geophysical data | 218 |

Special editions GIAB

| | |
|--|-----|
| <i>Team of authors</i> Collection of scientific works of teachers and graduate students of North Caucasus Mining-and-Metallurgy Institute | 45 |
| <i>Team of authors</i> Kamchatka-5..... | 111 |
| <i>Fedorova M.A., Agafonov V.V., Yakunchikov E.N.</i> Development of scientific approaches to the justification of design decisions development georesource potential gas-and-coal deposits..... | 147 |
| <i>Gorinov S.A., Maslov I.Yu.</i> Features of application of ammonium nitrate explosives in sulfidogenic rocks..... | 192 |

The deposited manuscripts

| | |
|---|-----|
| <i>Pushkin N.V.</i> Development of technical solutions to reduce arc overvoltage in the 6 Kv network of the branch «Krasnobrodsky coal mine» | 97 |
| <i>Yarotsky G.P.</i> Geo-ecological grounds for Kamchatsky krai natural resources development in seismic conditions (southwest of the Koryak highland)..... | 119 |
| <i>Zlobin D.A.</i> Energy and energy efficiency mining industry..... | 158 |