Underground mining

Kaplunov D.R., Rylnikova M.V., Eks V.V. Main directions and prospects of development of energy efficient and environmentally safe deep mining .................................................5

Eremenko A.A., Aleksandrov A.N., Skvorcov A.G., Tsarev A.M. Experimental determination of interface between the overburden and roofs of mined-out cavities in mineral deposits in Gornaya Shoria ........................................................................11

Karkashadze G.G., Mazanik E.V., Semykin Ju.A. Calculation procedure for methane inflow from loose coal in longwall mining .........................................................18

Karkashadze G.G., Hautiev A.M-B. Physical equations of residual strains in coal under cyclic sorption shrinkage ...................................................................................23

Lisovskij V.V. Detection and elimination of hostile manufacturing situations as the method of injury risk control in coal mines .................................................................29

Lomonosov G.G., Turtigina N.A. Segregation phenomena in rock mass and its influence on the formation of the quality of products of mining production .........................37

Miletenko I.V., Miletenko N.A., Odintsev V.N. Evaluation of technogenic destruction of the separating pillar .........................................................................................41

Open-cast

Alexandrov B.M., Shamparov A.G. The relationship of general technical and physical properties of peat in natural conditions .................................................................48

Gavrishev S.E., Kornilov S.N., Melnikov I.T., Pytalev I.A. The formation and development of facilities in the public montan development of mineral deposits for the environmentally safe disposal industrial waste .........................................................56

Dement’ev V.A. Sapropel as a source of alternative energy and natural, organic fertilizers ................................................................................................................... 67


Leont’ev A.A., Belogorodcev O.V., Eremin G.M. Features of processes of ore by-passing to accumulation horizons in the cyclical-and-continuous method with ore passes and production shafts in deep open pit mining .........................................................86

Minibaev R.R., Matveev A.V., Pushkarev V.Yu., Maksheev V.P., Suprun V.I., Voroshilin K.S. Experience of bulk transport jumper for opening and mining working levels of cut «Chernigovets» ..................................................................................95

Odayev D.G., Kosolapov A.I., Malofeev D.E. Justification of borders of stage open-mining at group fields .................................................................................................102


Holodnyakov G.A., Vainonen N.S., Obozhin A.A. Determination of open pit mining boundaries by the contour output factor at composite deposits .....................................125

Fedorov A.V., Gorev D.E. Application of cyclic-flow technology for coal mining in order to improve the operating efficiency of the cuts ....................................................................131

Holodnyakov G.A., Abdullaev M.D. Prime mine technical determinants of rational bench height in an open pit mine .............................................................................147

Holodnyakov D.G., Miller S.O., Ivanova M.A. Calculation method of mining activity for investments of quarry construction ...........................................................................150

Yablonev A.I., Dorogov O.V. Calculation of pneumatic drive dual trailer for transporting milled peat ........................................................................................................154

Enrichment of minerals
Kovalenko E.G., Dvojchenkova G.P., Polivanskaya V.V. Rationale for application of heat treatment to improve the process of foam separation of diamonds ..................158
Kozlov V.A., Chernyshova E.N., Pikalov M.F. Influence of pulp composition on float-and-sink cyclone performance .............................................................................165
Samusev A.I., Meneko V.G., Yagudina Yu.R., Karasov Yu.K. Copper–zinc ore leaching in electrochemically modified dump water ..................................................176
Sockolov I.V., Antipin Yu.G., Baranovsky K.V. Experimental and commercial mining the transition zone reserves during combined development of the Kishtim granulated quartz deposit ...............................................................183
Sockolov I.V., Antipin Yu.G., Nikitin I.V. Modeling and optimization of uncovering method and scheme for steep ore bodies under open pit bottom ..................................190
Sockolov I.V., Smirnov A.A., Gobov N.V., Antipin Yu.G. The expediency of subsurface concentration complexes application in iron ore mines ..................................197
Shumilova L.V., Kostikova O.S. Effect of operating parameters on Jameson cell flotation machine performance «Jameson Cell» .................................................................207

Markshadering
Redkin G.M. Hierarchy of geochemical fields values ..................................................................................................................213

Building of underground constructions and mines
Kulikov Yu.N. The durability of the lining of micro-tunnels of polymer pipes ..................219
Kulikova E.Yu. Modern problems of technogenic safety in the conditions of development of underground space of the city .................................................................222

Measuring, control, diagnostics
Buyanova D.S. Features of electrometric control of rock mass jointing around underground excavations ........................................................................................................227
Lodus E.V., Pak A.K., Kuznetcov N.N. Analysis of hard rock strength characteristics under triaxial axisymmetric compression .................................................................233
Tatarinov V.N., Morozov V.N., Kagan A.I. Modeling stress and filtration of groundwater by selecting sites for underground disposal of radioactive waste ..................................243

Mining cars, the equipment and transport
Bulgakov I.S., Sekisova I.A., Teryekhin E.P. Investigation of the dependence of the coefficient of hydraulic fluid friction (λ) on the reynolds number (Re) with respect to hydraulic drive ..........................................................................................250
Vagin V.S., Filatov A.M., Kurochkin A.I. Correction dynamic loads in mobile excavating gearless hoisting unit hydraulic ......................................................................................254
Goryachev V.I., Mikheyev I.I., Vorobiev S.E. Vibrated layer dryers for particulate materials ..........................................................................................................................259
Gutarevych V.O. Side oscillations of rolling-stock of mine suspended monorail ...........264
Kantovich L.I., Sultonov H.N., Kuziev D.A. Effect of the design and technology on cutting performance of pry-out front shovel machine in an open pit mine .................271

Malinovsky A.K., Sidach Y.A. Study emergency stop mine hoist with variable parameters of the safety brake ......................................................................................276

Toshov J.B. Improve ways of drilling in blast holes by on ways optimization three dynamic parameters of the drill bits ...........................................................................281

Khetagurov V.N., Kamenetsky E.S., Sobolev S.E., Pliev V.A., Gudieva N.A. Effect of combined particulate material release from the centrifugal vertical mill working area on the granulometric composition of the final product ..................................................287

Yakhontov Y.A. Condition of self-excited vibration of suspended carrying rollers belt conveyors ...............................................................................................................292

Aerology, methane, safety

Slastunov S.V., Kolikov K.S., Karkashadze G.G. High-tech utilization of mine methane – a way of the global climate management ...................................................298

Slastunov S.V., Polchin A.I., Steflyuk Yu.Yu. Underground studies into efficiency of multi-stage in-seam degassing in special mining-and-geological conditions of the extremely outburst-hazardous seam D6 in Kazakhstanskaya mine .................................302

Yanchenko G.A. Indicators moisture content combustion and gasification underground coal conditions and their interrelationships ......................................................308

Economics and management

Savon D.Yu. Improvement of system of paid environmental management ........................314

Frankevich Zh.A. Principles of capital investment planning in the construction of underground workings and structures .........................................................................321

Yastrebinskiy M.A. Economic assessment of the market criterion of reduced costs and its results ...........................................................................................................327

Bakhvalov L.A., Tsatsorin E.A. Data flow management control in cluster information systems ............................................................................................................331

Explosive works

Kutuzov B.N., Belin V.A., Ganopol’skij M.I. The criteria defining a choice of a way of production of special explosive works ..............................................................336

Mathematical and computer modeling

Volovik A.V., Efimenko A.V., Klavdiev I.A., Klavdiev A.A., Trushnikov V.E. Assessment of stochastic similarity of objects with casual parameters complex technical systems ..........................................................342

Volovik A.V., Efimenko A.V., Klavdiev I.A., Klavdiev A.A., Trushnikov V.E. Definition of indicators of reliability at extreme slu-chayah of selective supervision complex technical systems ...........................................................................350

Geology

Verkhoturov A.G. Impact dynamics cryolithozone on mining and geological environment in Transbaikalia .........................................................................................357


Technology

Kantemirov V.D. Technological features of development of new raw-material bases........369
Geodynamics

Kamnev E.N., Morozov V.N., Tatarinov V.N., Kagan A.I., Kachur L.I. Geodynamic zoning when designing the mining of uranium deposits .................................................................374

Oil and gas

Shadrina A.V., Kabanova T.V. Experimental investigation of rock failure with impact energy .............................................................................................................381

Works of young scientists

Zhikhareva V.S. Problem of use of the marketing analysis at the enterprises for production of construction materials ..................................................................................387

Lyzina N.V. Is the chinese yuan ready to become the world’s reserve currency? ...............391

Nezhel’skaya A.V. History of development and regulation of international commerce at the turn of centuries .......................................................................................396

Rapiev A.A. Role of international economic integration in the jewelry industry of Kazakhstan ...............................................................................................................404

Russia’s foreign trade after WTO accession: capabilities and limitations ..........................409

Smirnova M.A. Influence of political parties on business life and social environment in the Federal Republic of Germany .................................................................417

Preprints

Lakeyev D.V. Practical application of genetic algorithms to improve the performance of multinomenclature production .............................................................................94

Kononatov A.B., Alexandrova T.N., Korchevenkov S.A. Development of methodology for determining characteristics of water stream in trough of spiral separator consistent with it’s geometrical characteristics .........................................................175

Bondarenko V.A., Savenok O.V. Research of methods and technologies management of complications, due to sand control .................................................................182


Akopov E.Yu. Analysis of methods for surface hardening of the working wheels ...............258

Tarasov Yu.D., Trufanova I.S. Improved intermediate linear drives of belt conveyors with increased tractive effort .........................................................................................291

Konovalov A.B., Alexandrova T.N., Korchevenkov S.A. Theoretical substantiation of the division of fine materials in the gravitational devices ............................................416

The deposited manuscripts

Yakonovskaya T.B., Zhigulskaia A.I., Romanova L.V., Oganeyan A.S. Prospects of the cluster model of development of peat industry: regional aspect .........................55

Yakonovskaya T.B., Zhigulskaia A.I., Zhigulskiy M.A. Features of estimation of economic efficiency of technologies of development of peat deposit ..........................106

Romanova L.V., Yakonovskaya T.B. Planning of system of management personnel of mountain company, as planning of business .................................................242

Romanova L.V. Management by human capitals of mountain enterprise within the framework of stage-by-stage development .........................................................286

Zhigulskaia A.I., Egereva L.A., Zhigulskiy M.A. Information management system multistage process waste processing resources of peat deposits ......................................297

Morozov V.N., Kolesnicov I.Yu., Kagan A.I., Pyatigin V.A., Tatarinov V.N., Tatarinova T.A. Calculation of deformation parameters of the geological environment around radwaste storages according to the results of observations of the earth surface displacements satellite systems .......................................................................368

Yakonovskaya T.B., Romanova L.V., Zhigulskaia A.I. Features and problems of normatively-legal management by peat industry of russian federation ........................386