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Consider the method of preparation of different strengths of rocks for excavation using the technique of cyclic and continuous action by the example of Jeroy-Sardara phosphorite deposits Kyzylkum region of Uzbekistan. One of the features of the structure of this field is the presence of soft layers of solid rock intercalations, requiring prior destruction. Method used at the field of explosive destruction of array of rocks due to the use of explosive energy deep-hole charges on hard seam. But this method does not fully ensure the destruction of the rock mass. The proposed method consists in the fact that over the strong seams cut slits in the thick overburden, have they shaped charges of explosives and blow, which provides qualitative different strengths crushing rocks.
 Key words: hard seam, slotted charges, shaped charge, crushing, metal protection, tamping, energy of explosion. **340**
- Leshchinsky A.V., Shevkun E.B.** CRUSHED STONE WEDGING ABILITY IN COMBINED BLAST HOLE STEMMING
The laboratory experiment on wedging ability of different-size crushed stone in stemming a blast hole with a concrete cone has shown that regardless the con- **344**

crete cone height, the height of filling the space between the cone and blast hole wall with crushed stone depends on average size of crushed stone. Coarse crushed stone possesses the best wedging ability.

Key words: stemming, blast hole, fine crushed stone, drill cuttings.

Leshchinsky A.V., Shevkun E.B., Lukashevich N.K. ESTIMATING WEIGHT OF ELASTIC COMPONENTS OF GAS-PERMEABLE EXPLOSION SHELTERS

Having analyzed operation of gas-permeable explosion shelter made of connected elastic components, the authors present calculation procedure for weight of the shelter based on explosion shock pulse.

Key words: production blast, gas-permeable shelter, fine soil, shock pulse.

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Economy, management and planning

Arzykulova A.E. ESTIMATION OF COST AND PROFITABILITY OF JOINT EXTRACTION OF METHANE AND COAL ON THE DUBOVSKY SITE OF THE KARAGANDA POOL

Complex development of methane and coal on coalbed methane fields of the Karaganda region is an innovation of production of methane commercially. Relevance and prospects of development of new fuel and energy complex in Kazakhstan are proved by estimation of cost of the investment project and a release of the project to payback.

Key words: complex production of methane and coal, profitability of the project, economic feasibility, new gas branch, project payback period.

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Electrification and power supply

Bashkurov A.Yu. GANG BONDING OF DRILLING MACHINES TO DISTRIBUTION TRANSFORMING STATIONS IN CENTRALIZED POWER SUPPLY SYSTEMS.....

The author has studied ways to optimization of power supply sub-system and, in the first place, coordination of distribution stations and voltage of distributors of process loads.

Key words: geological exploration power supply, centralized power supply systems.

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Ecology

Kinsht A.V., Androhanov V.A. THE SYSTEM APPROACH AND THE OPTIMIZATION OF THE MINING LANDSCAPES

The necessity and the opportunity to consider the optimization of the mining landscapes as a single process from the mining degraded to the mining reclaimed are shown. This process must keep within the period of real long-term economic planning (10–15 years).

Key words: socio-economic features of the landscape, the structure of the landscape, mining landscape, degraded mining landscape, reclaimed mining landscape, the optimization of the landscape, the optimization of the mining landscape, the optimization of anthropogenic landscape, the economic planning.

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Valiev N.G., Slavikovskiy O.V., Slavikovskay Yu.O. GEOECOLOGICAL ASPECTS OF APPLIED GEOTECHNOLOGIES IN THE URAL URBANIZED TERRITORIES

Intensive mineral deposits operation cause essential damage to the surrounding natural and geological environment. It is brought forward to use the index of applied geotechnologies subsurface capacity as the indicator of the extent of mining plants influence on geological environment. For the purpose of

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minimization the consequences of mining complex enterprises technogenic influence the necessity to carry out works on ecological rehabilitation of technogenic free space springs up. For the purpose of selecting the direction of its conducting both in the course of fields development and during the period the deposit has been developed the article brings forward the classification of subsurface technogenic free space, forming as a result of deposit mining.

Key words: mineral deposits, mining complex, technogenic influence, technogenic free space classification, geotechnologies' subsurface capacity, economic damage, ecological rehabilitation of technogenic subsurface free space.

Oveshnikov Yu. M. Maximova I.S. IMPROVING ECO-ORIENTED TECHNOLOGIES ACOUSTIC LIGHTENING TECHNOLOGICALLY - CHANGE WATER PITS.....

Features of improvement of acoustic treatment of waste water from the solid particles. The technology of acoustic treatment and the results of experimental research.

Key words: acoustic treatment, water recycling, chemical-free cleaning, waste water. The article describes the features of the acoustic improvement of sewage treatment of solids. Described the technology of acoustic treatment and the results of experimental studies.

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Nikiforov V.V. ENGINEERING-GEOLOGICAL RESEARCHES NEGATIVE CONSEQUENCES OF ANTHROPOGENIC PROCESSES.....

The complex of research methods earned additionally territories is considered. The results of drilling, these laboratory studies are analysed. The estimation of the negative anthropogenic processes is given. Obtain comprehensive integrated assessment of anthropogenic processes consequences.

Key words: Upper Kama potash deposit, engineering geology, seismic, drilling, physico-mechanical properties.

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Mathematical modeling

Adigamov A.E., Romankov A.V. STOCHASTIC HILBERT PROBLEM FOR N-ANALYTIC FUNCTIONS IN A STATIC THEORY OF A HOMOGENEOUS ISOTROPIC ELASTIC BODY

The stochastic Hilbert problem for polyanalytic functions of order n is considered. The problem is reduced to a system of stochastic Hilbert problems. Necessary and sufficient conditions for solvability are given.

Key words: polyanalytic function, characteristic operator, conformal mapping.

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Kaplunov D.R., Yukov V.A. EVALUATION OF STABLE PERFORMANCE OF MINE TECHNICAL SYSTEMS UNDER UNCERTAINTY OF ORIGINAL MINING AND GEOLOGICAL DATA

The conditions and limitations of mining systems sustainability were considered in five aspects: geographical, geological, technological, ecological, economic.

Key words: sustainability, mining system, indeterminacy, conditions and limitations.

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Egor Nikolaevich Chemezov 75 anniversary

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Preprints

Golik V.I., Poluhin O.N. PROBLEMS OF UNDERGROUND DEVELOPMENT OF ORE FIELDS OF CMA

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Shows the role of the Belgorod region in the extraction of iron ores. Assessment of prospects of underground mining with the bookmark voids mixtures. Formulated the concept of recycling of tailings: unmarketable mineral raw materials with the use of effective technologies provides ecological-and-economic effect. Provides information on the technology of the preparation of stowing mixtures with the use of technological components. Recommended by the technology of extraction of metals from the tailings enrichment by mechanochemical activation of the apparatus. The formulated tasks of the development of mechanochemical technologies and indicated protected by the patents of the ways to solve the problem.

Key words: diversification, mining, underground, mining, ore, technology, solid stowing a mixture of man-made components, the extraction of metals, tailings, by Mechanochemistry, activation, mining engineers.

Bodnaruk M.N., Vayno A.E., Goncharenko S.N., Efimov V.I., Ismailov B.T., Kobayakov A.A., Kozlov O.V., Kulikova A.S., Le Binh Zyiong, Nilulin I.B., Petrova A.I., Petrov I.V., Popov S.M., Stoyanova I.A., Te A.A., Fedash A.V., Khelaia I.T., Popov M.S. ECOLOGICAL-ECONOMIC PROBLEMS OF THE MINING PRODUCTION AND DEVELOPMENT OF FUEL AND ENERGY COMPLEX

In the collection of papers includes articles of scientific employees, teachers and ASPI-migrants of the Moscow state mining University, devoted to organizational, mining-and-technical, economic and environmental problems of the development of the coal industry, coal mining regions and fuel-energy complex of Russia as a whole.

Key words: municipal waste, the trends of waste generation, disposal methods, the problem of treatment of urban waste.

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Aybinder I.I., Zharikov I.F., Shenderov A.I. INNOVATIVE FEATURES COMBINED SYSTEM OF OPEN-PIT MINING.....

The prospects of further development of the combined system of the development, as one of the priority directions for development of progressive and open-pit mining. The new design and layout scheme of dlinostrelovyh, enabling the stower 1.5 times increase the height of the shoulder –1.7 nadugol'noj otrabatyvaemoj zone without the use of graphics-intensive technological schemes with by road or rail.

Key words: system development, ledge, overburden, dragline, spreader, conveyors, crushers, road transport performance.

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Savenok O.V. METHODS OF THE FORECASTING FACTOR DIFFICULTIES OF OIL PRODUCING WITH COMPLICATED CONDITION AND ANALYSIS PRINCIPLE INFORMATION CONTROLLING SYSTEMS.....

At present at decision of the problem of increasing to efficiency of oil production with complicated condition to exploitation is worked out large number of the methods, technology and technical decisions with localized application then theoretical generalizing positions, complex approaches and optimization decisions are presented fragmentary. In article are considered methods of evolution modeling in system with sign uncertainty and incompletenesses to information

Key words: Increasing to efficiency of oil production, complicated conditions to exploitation, methods evolution modeling, forecast methods, complex decisions, limiting radius to correlations.

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Yaroslavtsev A.G., Gikin A.A., Sanfirov I.A., Tumanov V.V., Sukhinin E.V. IMPROVED DIGITAL PROCESSING SEISMIC DATA FOR AREAS WITH HIGH NATURAL DEVELOPMENT PRESSURE.....

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The variants of the simplified and detailed analysis of seismic data obtained within the territory of the underworked, complicated faults. Analyzes the main problems associated with this type of processing seismic data, based on which offered the optimum parameters of observation systems and graph processing.

Key words: digital processing, shallow seismic, coherent noise, FK-filtering, velocity analysis, faults, thrust.

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