Section 1. Mine Construction and Modernization

1. Selection of A Rational Form for The Steel Winding Tower as A Preventive Measure to Increase Its Industrial Safety
   Elena.G. Kassikhina, Vladimir V. Pershin, Nikiya O. Butrim, Weiguo Qiao

2. Engineering and process design solutions for the vertical shaft completion
   Weiguo Qiao, V.V. Pershin, E.G. Kassikhina, N.O. Butrim

3. Study on Construction of Embedded Bolt Sleeve’s Precision in Massive Concrete
   Chongge Wang, Jiachuan Liu

4. Economic and technological criteria of choosing the support for construction of mine workings
   Weijie Song, V.V. Pershin, Yu.A. Masaev, V .Yu. Masaev, Weiguo Qiao

5. Constructions Parameters Updating of Protecting Apron Under Deepening of Vertical Shafts
   Vladimir V. Pershin, Aleksandr I. Kopyitov, Mikhail D. Voiyov, Akhmed A. Wetti, Ivan V. Zhuk

6. Structural calculation of the foundation curb of the slope shaft
   Mihail D. Voytov, Pavel A. Budnikov.
7. Designing of parameters for blasting work at drivage with application of CCC and CSCC
   Alexey N. Sabantsev

Секция 2. Геотехнология

Section 2. Mining Theory, Method and Technology

8. Highwall Mining Stability
   Baotang Shen

9. Study on the Movement Law of Overburden Strata During Mining Strip Pillow with Paste
   Weijia Guo, Yangyang Li, Baoliang Zhang, Hailong Wang, Xizhen Sun

10. Numerical simulation study on influencing factors to part-filling pillars' stability
    Wanpeng Huang, Yanghui Ren, Lin Gao

11. Research on Strip Filling Surface Subsidence Rule
    Yongkui Shi, Minhua Qi, Jingyu Zhang, Jian Hao

12. Characteristic Analysis of Surface Subsidence in Deep Mining
    Xikun Chang, Rongfa Wang, Jinchen Zhang

13. Mechanical models and support technologies for retaining gob-side entry
    Yunliang Tan, Yanchun Yin, Jianguo Ning, Tongbin Zhao

    Chunqiu Wang, Wenshuai Li, Shitan Gu, Chuanle Ma, Zhimin Xiao

15. Influence of heat and mass transfer on formation of lumpy tense–deformed states of rocks around tunnel of sewage collector in cryolytozone
    Vladimir V. Popov

16. The Application of Fuzzy Analytic Hierarchy Process for Thick Coal Seam Mining Methods in China
    Lei Wang, Yang Yang, Huimin Cheng
   Fan Liu, Wenjie Liu, Tongxu Wang

18. Rapid Heading technology of Coal Seam Containing iron sulfide Nodules  
   Xinglin Wen, Mengmeng Dong, Ran Fan, Kai Sun, Zhongjian Zhang

19. Simulation and Analysis on Characteristics of Lower-group Roadway  
   Surrounding Rock under Deep Near Interval Coal Seam  
   Peisen Zhang, Hao Wang, Dongcai Lin, Zhonghui Kan

20. Study on Grouting Anchor Cable Supporting Technology of Roadway  
    through Extra Large Fault Fracture Zone  
    Jinxiao Liu, Jidong Jing, Yiyu Feng, Lei Wu, Peisen Zhang

21. Study on Optimal Design of Concrete-Filled Steel Tube Support in Coal Mine  
    Limin Liu, Shijun Zhao, Junzhi Cao, Zhongcheng Qin

22. Measurement and Analysis on Failure Height of Overburden Strata of  
    mechanized sublevel caving in Shallow Region of Baodian Coal Mine  
    Fuchen Li, Wenquan Zhang, Wei Guo, Zongsheng Wang, Yunjiang Li,  
    Yanxin Liu

23. Study on the Rapid Excavation Technology of Deep Large Cross-section  
    Rock Tunnel  
    Xinjie Liu, Dezhong Kong, Gaofeng Song

24. Large Deformation Control Principle and Reinforcement Technique for  
    Solid Coal Rib of Large-Section Gob-side Tailentry in Thick Coal Seam  
    buried Deeply  
    Chuanwei Zang, Miao Chen, Yunliang Tan, Chuanle Ma, Xiangjun Meng

25. Durability Test of Gangue Paste Filling Material  
    Yin Liu, Qifeng Wang, Haoqiang Zhang

26. Technology update of the one-stage electrochemical unstable soil  
    densification at building of the mine working  
    Dmitry A. Rudkovsky, Sergey V. Prostov .

27. Coal Deposits’ Mining with High Content of Natural Radionuclide
28. Advanced Technology Based on New Technological and Organizational Principles of Spatial Development of Front of Mining Operations at Open Pits
   Alexei V. Selukov

29. Fractal characteristics of mudstone microscopic morphology in MATLAB environment
   Dongmei Huang, Zhenquan Zhang, Xiaofei Lin, Huaxue Li

Секция 3. Горные машины и оборудование
Section 3. Mining Equipment and Machinery

30. Modeling of Hydraulic Power Cylinder Seal Assembly Operation
    Gennady D Buyalich, Konstantin G Buyalich

31. Formation Auger Equipment Reliability
    Yuriy V. Dorzdenko

32. Stress-Deformed State Knots Fastening of a Disk Tool on the Crowns of Roadheaders
    Aleksey Khereshok, Leonid Mametyev, Andrey Bosirov, Aleksey Vorobiev

33. Preventive Maintenance of Mining Equipment Based on Identification of Its Actual Technical State
    Kovalev Vladimir, Gerike Boris, Khoreshok Aleksey, Gerike Pavel

34. Increasing productivity of mobile equipment through multi-directional drilling in horizontal underground mining
    Aleksandr V. Grigorev

    Vladimir Efremenko, Roman Belyaevsky

36. Reasons of conveyer belts’ wear
    Vadim V. Yurchenko
37. Study of the effectiveness of centering of the belt conveyor on the magnetic levitation by the electromagnetic field
   *Aleksandr Y. Zaharov*

38. Research of possibility of creation of magnetic loviteley of boring instrument on the basis of the magnetic systems with successive by connection of permanent magnets
   *Michail T. Kobyljansky*

39. Influence of hydraulic cylinder wall thickness on its natural frequency of oscillation
   *Gennady D. Buyalich, Vladimir N. Voevodin, Konstantin G. Buyalich, Anna A. Mikhailova*

Секция 4. Безопасность горных работ

Section 4. Construction Safety in Mines and Underground Engineering

40. Study of Asymmetric Failure Law and Support for Large Embedded Depth Roadway Driving along the Roof in Inclined Coal Seam
   *Guoqiang Cheng, Mingju Yan, Hongli Zhu, Haifeng Yu*

41. Analysis on Human Safety Behavior Mode during the Production Process
   *Gang Zhou, Jiao Xue, Hao Wang, Qi Zhang*

42. Control design of roof rock for advance blasting in roof on gob-side entry without roadside support
   *Kaizhi Zhang, Baocheng Liu*

43. Drilling Strata Movement Detection Experiment on Failure Law of Overlying Strata Movement
   *Shijian Yu, Zhaobin Liu*

44. Research of Mining Depth Influence on Floor Coupled
   *Liming Yin, Nan Shi, Juntao Chen*

45. Rock Burst Danger Warning and Large Diameter Drilling Pressure–relief Technology in Fully Mechanized Caving Island Coal Face
   *Shitan Gu, Zhimin Xiao, Ruifeng Huang, Yunliang Tan, Bangyou Jiang, Wenshuai Li*
46. Numerical simulation of stress relieving and analysis of influencing factors on geostress measurement  
   *Tongbin Zhao, Minglu Zhang, Zhanhai Li, Ze Zhang*

47. Numerical simulation of roadway gas migration based on the lattice Boltzmann method  
   *Zhigang Zhao, Yongbo Zhang, Yunliang Tan*

48. Research Status of Wet Duster in Fully Mechanized Workface  
   *Yang Zhong, Mengmeng Wu, Xinxiang Yang, Wei Xiao*

49. Development and application of integrative jumbo for deep hole sampling  
   *Gang Wang, Xinxiang Yang, Wei Xiao, Mengmeng Wu*

50. Analysis on the Old Gob Water Inrush Accident of Kunlun Mine in Zibo  
   *Hua Jiang, Wenren Gai, Fu Zhao, Xin Zhang, Hailin Liu*

51. Risk Assessment of Floor Water Inrush in Deep Mine Based on Grey System Theory  
   *Weitao Liu, Xiaofeng Pan, Huan Liu, Jianjun Shen*

52. The Water-disaster Characteristic of Coal Mine in Shandong Province and the Research on Prevention and Control Countermeasures  
   *Wenquan Zhang, Zhongping Ren, Hua Jiang, Gaoliang Sun, Qianqian Hang, Yi Dong*

53. Determination of rational coal and rock pillars height of coal mining under the loose aquifer  
   *Jianhu Wang, Mingxi Shao, Yanfeng Shang, Siwen Cao, Xin Zhang, Chuanmeng Hu*

54. Research on Water Resistance of The Hanging Wall of the Fault Tilting Water-resisting Key Strata Model  
   *Yuhe Wang, Xinglei Zhang, Houchen Wang, Jiulong Cheng, Wei Guo*

55. Study on Test Method of Rock Acoustic Emission and Damage Evolution Characteristics Under Triaxial Compression  
   *Yongjie Yang, Depeng Ma, Yanxin He, Luyi Xing*
56. Research advances of heterogeneity representation methods for rocks
   *Yanchun Yin, Yunliang Tan, Weijia Guo, Minglu Zhang*

57. The Numerical Simulation of The Influence from Fault Dip Angle on Coalface Pressure
   *Li Zhang, Junfeng Xia, Chuanwei Zang*

58. The Research and Application of The Hard Roofs Forced Caving Technology in Short Wall Stopes
   *Min Gao, Jiuchuan Wei, Xiaoqi Ma*

59. To the Question of the Destructed Rock Mass Movements Regime Assessment
   *Victor S. Kharkoaskyi, Valery M. Plotnikov, Eugenia V. Komleva, Olessya A. Kogay, Anna S. Korobkina, Anna V. Harlamova, Anna V. Goncharov, Yuri N. Goncharov*

60. Simulation of Stress-Strain State of The Reinforced Soil Foundation for Structures
   *Sergei M. Prostov, Mikhail V. Sokolov*

61. Inert Compositions For Underground Fire Fighting in Mines
   *Vyacheslav Portola, Nima Galsanov*

62. Modeling Peculiarities of Reinforced Crack of Hydraulic Fracture of Coal Seams for Estimation of Their Permeability
   *Mihail A. Baev*

**Секция 5. Методы управления в горной отрасли**

**Section 5. Mines, Underground Engineering Operation and Management**

63. Application of Safety Check List On Confidential Inspection
   *Haiyan Chen, Jianguang Gao, Yunfei Xu*

64. Coal Mine Safety Influence Factors Causality Analysis and Function Relationship Construction Based on System Dynamics
   *Jing Chen, Yongjie Yang, Qinggui Cao*

65. Research and application of heat exchange system in Sun village coal mine
66. Research of Safety Pre-control Management System of Power Plants
   Xinghua Li, Suli Wang

67. Study on Early Warning Method of Coal Mine Accident about Ventilation, Gas, Dust and Fire
   Xiaofei Lin, Shouxin Song, Dongmei Huang

68. The Influence of Coal Mining on Groundwater Resources and the Analysis of Water Resources Protection Countermeasure
   Hongri Zhang, Yuanyuan Sheng, Guibin Zhang, Zhizhuo Dong, Yu Liu

69. The transport systems of simulation and optimization of Dingfeng’s slime and gangue power plant
   Xinghua Li, Danying Wang

70. Rare Earth Elements in Kuznetsk Coals: Ability to Excavate and New Functional Materials
   Tatyana G Cherkasova, Elizaveta V Cherkasova, Elza S Tatarinova, Alena A Bobrovnikova, Irina P. Goryunova, Yuliya A. Mihaylenko, Anastasia V Tihomirova, Irina V. Isakova

71. The Main Characteristics of Freight on Hot Streams
   Natalya V. Erofeeva, Irina N. Chebotova

72. Study of the Process of the Polymer Flocculants Degradation Used for Coal Processing
   Sergey D. Evmenov, Galina L. Evmenova

73. Safety of Mining Engineering Buildings and Facilities Under Fem Analysis and Catastrophe Theory
   Vladimir V. Pershin, Dmitriy I. Nazarov

74. Physical Basis of the Controlled Electrochemical Treatment of Soils from Oil Products
   Sergey M. Prostov, Maxim B. Gucal, Evgeniy F. Shabanov

75. Justification Complex Purification Technology Open-pit Mines Wastewater
   M.A. Tyulenev, Y.V. Lesin
76. Solid Fuel Obtaining by Processing of Coal Enterprises Technogenic Materials  
   Andrey D. Ushakov, Elena S. Ushakova, Gennaday V. Ushakov

77. Experience for Coal Mine Methane Utilization to Generate Thermal and Electric Power  
   Oleg V. Tailakov, Denis. N. Zastrelov, Evgeniy A. Utkaev, Alexey I. Smyslov, Alexey N. Kormin

78. Study on the dissipation mechanism of shock and vibration energy in a stress release area of deep roadway  
   Jianguo Ning, Jun Wang, Xuesheng Liu, Yunliang Tan

79. Study on reinforcement technique by injection grout in deep soft rock supporting  
   Andrey V. Uglyanitsa

80. Simulator for monitoring and fault detection of the multidrive belt conveyors  
   Veniamin A. Kashirsky, Alexander N. Nesterovsky