

Научная программа  
VIII Российско-Китайского симпозиума  
«Уголь в XXI веке: добыча, переработка, безопасность»

The scientific program  
VIII Russian - Chinese symposium  
«Coal in the XXI century: mining, processing, safety»

**Секция 1. Реконструкция и строительство шахт**

**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*

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8. Highwall Mining Stability  
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9. Study on the Movement Law of Overburden Strata During Mining Strip Pillar with Paste  
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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*
14. Influence of Mining and Retaining Parameters on Evolution of Hazard Rockburst in Strip-pillar Mining  
*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*

17. Simulation Study of Dynamic Response of Bolt Support in Impact Roadway  
*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

*Pavel B Avdeev, Galina P. Sidorova*

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*

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*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*

35. Evaluation of Explosion Protection Means of Mine Electrical Equipment for Operation in Excavations of Coal Mines

*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 levitation 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*

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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, Mikhhail 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*

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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

*Xinghua Li, Bin Xiao, Limei Zhang*

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*