

Table of Contents

Foreword	VII
Organizing and Executive Committee	VIII
<i>Mining and Environment</i>	
Mining Life Cycle Modelling for Environmental Control and Waste Minimisation <i>5. Dinuan, A. Kitre, G. Mwwi-Melende: & L. Chanc-Kim</i>	3
Environmental Issues and Eco-Based Mine Planning <i>H.Y. Ersun, K. Dagilelen & T.C. Rivgonyi</i>	11
Environmental Issues in the Extraction of Phosphate Ore from Abu-Tartour Mine, Egypt <i>S.S.Ahmed</i>	17
Addressing Small-Scale Gold Mining Problems in Ghana <i>E.Y.Buafi, SKAgbenn</i>	23
Mining Method Selection in Third Anomaly of Gol-E-Gohar Iron Ore Deposit <i>F.S.Numin, K.Shahnar & S.Karimi Ncwthib</i>	29
Stability Analysis of the Second Site of the Sarcheshmeh Heap Leaching <i>S. Karimi Numb, M. A. Nabizadeh & M. Ranjbar, B. Sluiydaic, M. R. Mollaei Fard</i>	35
Problems of Environment Protection During the Utilization of Spent Vanadium Catalysts <i>A. Zh. Terlikbayeva</i>	41
Technologies for Environment Protection at Mines of Non-ferrous Metallurgy and Their Introduction in Practice <i>Sh.A. Altayev & M.Zh. Zhanguliyeva</i>	43
Sustainable Development in The Salt Industry of Romania <i>A L Drăgănescu & Salina Steinte</i>	45

Evaluating the Loss of 'Geological' Lignite in 'Zebia' Type Deposits <i>N Kolovos & D Sotuopuulos A Geoigukopoalos</i>	49
<i>Rock Engineering and Ground Control</i> South African Mining Industry in the New Millennium and New Technologies For The Future <i>R G Mturna</i>	57
Emeigmg Suppoit Concept Thin Spay-on Linis <i>H ilma: S Savdam 4 / Topet</i>	65
Study of Load Transtei Capacity of Bolts Using Shot Encapsulation Push Test <i>N IA:i: & B J Wehb</i>	75
VD Estimation of Stresses Around a Longwall Face by Using Finite Difference Method <i>\ b)ci!,uth& Bl/mei</i>	83
Fracture Toughness Analysis of Ankaia Andésite <i>S Şener or L Tültüroğlu</i>	89
An Example and Comparison of Old and New Tunnel Suppoit Estimation Methods <i>C Ağan A luiubik A M M Güven</i>	93
Ground Control Problems and Roadheadei Duvage at Ombilin Coal Mine Indonesia <i>K Maltun it H Slitnuiila H Eu/aktina S Kainadibiata H £ Aim m</i>	99
Slope Stability at Gol-E-Gohar Iron Mine <i>A Biir>heiian & K Shahnai</i>	105
Rock Mass Classification Using A Computer Program-Classmass <i>1 H Deltoi inanlı & 7 Oncu çnii</i>	113
Determination of the Optimum Cement Content for Paste Backfill Samples <i>E \linaz A Kesmal B Etçikti & I Alp</i>	119
<i>Mine Mechanization</i>	
Application of Fuel Cells in Underground Mining and Tunnelling <i>R Sage & M Betiminin</i>	129
Possibility of Using Mechanical Means in Underground Chromite Mines' Ore Productions and Two Different Examples <i>H Timçdemir H Çopur C Feridunoğlu A N Bilgin</i>	135
Large Mobile Mining Equipment Operating On Soft Ground <i>TG Joseph</i>	143
Diagline Cycle Time Analysis - Case Study <i>IS Ciitem t G Pa^amehmeloğlu</i>	149
Diaglines-The Same 'Old' Stuff <i>Lee B Patei \im</i>	155

Haulage Optimisation in an Australian Underground Metal Mine <i>N. Aziz & W. Keilieh</i>	161
<i>Drilling and Blasting</i>	
Application of Van Ruth Wire Line Core Orientator at The Sarcheshmeh Open Pit Mine <i>S. Karimi Na.sab, M. Assadipour & M. Maghami,</i>	171
Drillability Prediction in Rotary Blast Hole Drilling <i>N. Bilgin, S. Kahraman</i>	177
Application of Stemming Plugs and A Case Study in A Limestone Quarry <i>D Karakuş, A. H. Onur, G. Konak & H Köse, M. Kızılcaağacı</i>	18.1
Technologies for Optimizing Drilling and Blasting in Open-Pit Mines <i>M. Karaca & D. Hopkins, J. Keinem, I. Segui</i>	191
Impact Machines for Without-Blast Destruction of Rocks <i>E.K. Yedigenov</i>	199
<i>Health and Safety</i>	
Coal Mine Explosion Suppression Using Active On-Board Suppression Systems - The South African Experience <i>B Gene</i>	205
Appraisal of Self-Contained Self Rescuers for Use in Australian Coalmines <i>N.I. Aziz & E.Y. Baafi</i>	215
A Method for Continual Monitoring the Natural Ventilating Pressure <i>F Kopucek, R Ceniga, M. Tabasek</i>	223
Estimation of Fugitive Dust Impacts of Open-Pit Mines on Local Air Quality - A Case Study: Bellavista Gold Mine, Costa Rica <i>C. Arpacioğlu & C. Er</i>	229
Rockburst and Fall of Ground Investigations in Deep Level Gold Mines: South African Example <i>K.S. Koldas</i>	237
Acoustic Anemometry Control Means Elaboration for Coal Mines <i>S.Z. Shkundin, O.A. Kremleva & V.A. Rumyantseva</i>	245
Reduction of Toxic Components Released by Motor Vehicles in Quarries <i>P. Tehomakov, V. Bojilov, H. Mitko</i>	249
Designing The Ventilation System For Galandroud Coal Mine <i>R.R.Osgoui, H.Maduni</i>	253
Health, Safety, Environmental & Community Management: A Case Study For Rio-Tinlo IMEx Turkey <i>H. Y. Ersau, A. Bayram</i>	259

Using of Expert Systems in Ventilation Systems Controlling <i>A.I. Koketuyev</i>	263
Prediction of Methane Emission Out of Seams on The Basis of Geodynamic Deposit Zonation <i>E V.Concharov. T.A.Lazarevich. B.V.Vla.senko</i>	265
Health and Safety at Work in The Romanian Mining Industry Present and Future <i>G. Bakan, S. Simiu.</i>	273
<i>Modelling, Management and Planning</i>	
Life Cycle Management - A Growing Trend <i>L.B. Paterwn</i>	281
Application of Web-based Knowledge Management Systems in The Mineral Industry <i>A.S.Atkms. N.I Aziz & E. Y.Baafl</i>	285
SLO - A Program for Stop Limit Optimisation Using A Heuristic Algorithm <i>M.Atæe-pour</i>	295
Artificial Neural Networks Provide a Toolbox for Analyzing The Pressure Transient Data Collected in Coalbed Methane Drainage Wells <i>X.Dong & T.Ertekin</i>	303
Planning of Development of Mining Operations and Freight Traffics at an Open Cast by Analytic-Imitation Systems <i>D.Bukeikhanov. U.Dzharlkaganov & B.Bekmurzayev</i>	313
The Ground Control Management Plan of a Mine: Ovacık Gold Mine Example <i>K.S. Koldaç</i>	319
Dry Gas Injection or Underground Gas Storage <i>I. Jiillner. B Kavedzi/an A I Krnl/ac</i>	327
Optimized Open Pit Mine Planning and Scheduling <i>/ K. Kapageridis</i>	331
Designing of Information Model of Mines <i>S.A.Kaliçev & D.A. Akhmelov</i>	339
System Dynamics Applications in The Mining Industry <i>M.A. Alpagut. N. Çelebi</i>	341
A Guideline for DSS System for Underground Mining Method Selection <i>M. Yavuz & S Alpay</i>	347
<i>Mineral Processing and Coal Preparation</i>	
Reduction of Sulfur Oxide Emissions by Means of Mechanical Preparation of Hard Coal <i>R.G.hmg. W.Riege i mann & U.Hochheimer</i>	353

Flotation of A Sulphide Ore Using High Velocity Water Jets <i>P. Cnrbini, R. Ciaii, M. Ghiuni & C. Tilocia, F. Sana</i>	365
A Novel Collector for Flotation of Phosphate Minerals <i>R. Atmatulii</i>	371
Rio Tinto Borax's Initiative On Sustainable Development In Mining Operations <i>T S Griffin</i>	375
Effect of Alkalinity on Flotation Behavior of Quartz <i>A Sayitan & A I Ami</i>	381
Briquetting of Afsin/Elbistan and Sorgun/Yozgat Lignites without Adding a Binder <i>M Yildirim</i>	385
Selective Separation of Na-K Feldspai in Nepheline Syenite <i>C Kuraguzel, C Demir, I Gitgomtl, I Bentti, MS Celik</i>	391
Microwave Heating Characteristics and Microwave Assisted Magnetic Enhancement of Pyrite <i>T.Uslu, Ü.AtaUy</i>	397
Comparison of the Combustion Characteristics of Three Different Fossil Fuels from Turkey <i>C Hıçyılnaz & N E Allim</i>	401
The Krebs Gmax Cyclone Development In The Coal Industry <i>Roman van Ommen, MSC. MBA, Robert G. Mtmrehead, MSC</i>	407
Effect of Surface Area, Growth Media and Inert Solids on Bioleaching of Complex Zinc/Lead Sulphides <i>H.Devetçil.Alp&T.Uslu</i>	415
Characterization of Surface Roughness of Calcite by BET and Surtronic 3 ⁺ Techniques <i>U Ulusoy & M Yekeler, C Hıçyılnaz:</i>	425
The Effect of Chemical Treatment on The Production of Active Silica from Rice Husk <i>H. Kuralim, S. K. Kurama</i>	431
Masonry Units Heat-Insulating from No-Fines Lightweight Concrete (Pumice) <i>A.Sarwijk</i>	437
The Effect of Fraction of Mill Critical Speed on Kinetic Breakage Parameters of Clinker Limestone in a Laboratory Ball Mill <i>V. Dem; A. Gelir & A. Demir</i>	443
Relationships Between Bond's Grindability ($G_{i,g}$) and Breakage Parameters of Grinding Kinetic on Limestone <i>V Deniz</i>	451
Feldspar Beneficiation from Manisa Alaşehir Pegmatites <i>S. Saklar, C. Oktav, M. Karadeniz & S. Gur.su</i>	457

Bacterial Leaching of Pyrite <i>F. Göktepe, F.D. Pooley</i>	461
The Effect of Reagent Addition Points and Aeration on the Flotation Performance of Sulphide Minerals <i>A. Aslan, Z. Ekmekeci & I. Bayraklar, B. Ikscini</i>	465
Broleaching of a Complex Sulphide Ore by Mesophilic and Extremely Thermophilic Bacteria- Statistical Analysis of Data Using Ergun's Test <i>H. Deveux, M.A. Jordan & N. Powell</i>	471
The Flotation of Murgul - Çakmakkaya Copper Mine and The Determination of the Results of Locked Cycle Flotation Tests <i>I. Çakmak Önen & H. Ozsen</i>	479
Solution Of Ore Blending Problem By Stochastic Approach <i>M. Kumral</i>	485
Statistical Design And Optimization Of Leaching Tests For Iron Removal From Pyrophyllite Ore <i>T. Şahin, M. Kumral & M. Erdemoğlu</i>	491
Determination of Leaching Conditions of Sphalerite Concentrate in Acidic Ferric Chloride Solution <i>(A. Aras, S. Aydogan & A. Özkan, M. Cembazoğlu</i>	495
Sorption of Nonionic Organic Contaminants by Organo-Zeolite <i>B. Enox & E. Sabah, V. Marl & M.S. Çelik</i>	501
Briquetting of Washed Coal Fines of Merzifon-Yeni Çeltek Coal Enterprise <i>G. Ozbayoglu, U. Atalay & C. Hıçyılmaz</i>	507
Utilisation of Granite Sawing Mud and Borax Tailings as A Ceramic Material <i>M.S. Başpinar, A. Kartal, A. Evcin & S. Anasız</i>	513
The Effect of Circulating Load and Test Sieve Size on The Bond Work Index Based on Natural Amorphous Silica <i>V. Dent, N. Silçı & Y. Limiten</i>	517
Modern Condition of Hard-to-Processing Ores in The Republic of Kazakhstan <i>Ytt.P. Yeryomin & O.R. Kim, A.A. Niyinov, M.Zh. Zlunutsov</i>	523
Controlled Stabilization of Nanoparticulate Suspensions <i>G.B. Başım, I.U. Vakerahki, P.K. Sinçh & B.M. Moudil</i>	527
A Simpler and More Cost Effective Solid-Liquid Separation for the Mining Industry <i>P. Cosello, W. Noiutme</i>	533
Technique of Definition of Costs on Separate Kinds Mining Chemical Products by Their Complex Processing <i>M.Zh. Biimbaev, Zlt.A. Aldongarov, N. Zhalgussnly, B.A. Moldagulova</i>	541

Miscellaneous

The Ancient "Actors" of the Mining - Metallurgical Beginning <i>H. Saiiku</i>	545
Economic Criteria of Ore Deposits Mined with Consolidated Stowing <i>V.S. Muzguui</i>	551
Peculiarities of Regulation of Nature-Using in Mining Regions of Kazakhstan <i>M.B. KenzhegiKtn & B.K. Yessckma. DA Aitzhanova</i>	55^
Determination of Thermal Conductivity of Building Stones from P-Wave Velocity <i>H. T. Özkahraim & EC Işık</i>	557
A Critical Approach to Usage of Diamond Segmented Frame Saws <i>F. Bayram S. KulaLii: & Y. Özçelik</i>	565
Thorium as A Nuclear Fuel <i>M. Kaya. V. Bozkurt</i>	571
Improving The Strength Characteristics of The Pumice Aggregate Lightweight Concretes <i>/ Uğur</i>	579

