

**Nov.20<sup>th</sup> Topics**

		Principal Hall		
		Room 1	Room 2	Room 3
7:30	9:00	Registration		
9:00	9:30	Welcoming Session		
9:30	10:30	Plenary Session 1 (Widzyk-Capehart/Kumar)		
10:30	11:00	Coffee Break		
11:00	12:30	Plenary Session 2 (Hekmat/ Yellishetty)		
12:30	14:00	Lunch		
14:00	15:40	Blasting and Fragmentation ( Canaan/ Genc)	Mining Equipment Selection and Innovative Materials Handling Systems and Equipment ( Rezakhah/ Rupprecht)	Mine Development; Rock Mechanics and Geotechnical Applications (Gomez/ Mertuszka)
15:40	16:00	Coffee Break		
16:00	17:15	Design, Planning and Optimization of Surface and Underground Mines ( Tholana /Rojas)	Mining Equipment Selection and Innovative Materials Handling Systems and Equipment (Stefaniak / Anani)	Management of Mining and Hazardous Waste and Waste Stabilization ( Bascetin / Garcia)
17:15	17:30	Announcements		
17:30	19:00	Welcome Cocktail		

**Nov.21<sup>st</sup> Topics**

		Room 1	Room 2	Room 3
8:30	9:30	Registration and Announcements		
9:30	10:30	Plenary Session 3 (Hu/ Morales)		
10:30	11:00	Coffee Break		
11:00	12:30	Plenary Session 4 (Zimroz / Demirel)		
12:30	14:00	Lunch		
14:00	15:40	Design, Planning and Optimization of Surface and Underground Mines (Menegaki / Musingwini)	Mining Equipment Selection and Innovative Materials Handling Systems and Equipment ; Maintenance and Production Management for Mines and Mining Systems ( Golbasi / Ghodrati)	Risk and Environmental Impact Assessment (Gogolewska/ Sabanov)
15:40	16:00	Coffee Break		

16:00	17:15	Design, Planning and Optimization of Surface and Underground Mines (Askari-Nasab/ Baafi)	Maintenance and Production Management for Mines and Mining Systems (Birch / Torres)	Emissions and Spontaneous Combustion (Manca / Erkayaoglu)
17:15	17:30	<b>Announcements</b>		
17:30	19:00	<b>Committee Meeting</b>		
19:30	22:00	<b>Conference Dinner</b>		

### Nov.22<sup>nd</sup> Topics

		Room 1	Room 2	Room 3
9:00	9:15	<b>Announcements</b>		
9:15	10:30	Rock Mechanics and Geotechnical Applications (Nguyen / Napa-García)	Maintenance and Production Management for Mines and Mining Systems (Abbaspour/ Kruczek)	Emerging Monitoring and Measurement Technologies (Onifade / Yefremova)
10:30	11:00	<b>Coffee Break</b>		
11:00	12:40	Numerical Modeling/ Slope Stability (Barberán /Nhleka)	Mineral Processing and Tailings Treatment, Recycle, Disposal (Neculita / Biliangadi)	Energy Efficiency; Economic and Financial Risk Assessments (Wylomanska/ Hamanaka)
12:40	14:00	<b>Lunch</b>		
14:00	15:15	Research & Development to Improve Health and Safety in Mines (Khojayev / Nelis)	Innovation and Future Mining (Zvarivadza/ Pinna)	Water and Effluents: Treatment and Management (Derpich/ Monardes)
15:15	15:30	<b>Coffee Break</b>		
15:30	16:00	<b>Closing Ceremony</b>		
16:00	17:30	<b>Goodbye Cocktail</b>		

Nov.20 <sup>th</sup>		Principal Hall		
		Room 1	Room 2	Room 3
7:30	9:00	Registration		
9:00	9:30	Welcoming Session		
9:30	10:00	Ministry of Mining		
10:00	10:30	Ms. Mohini Singhal, MPES – SWEMP International Organizing Committee Recent Advances in Mining Science and Technology		
10:30	11:00	Coffee Break		
11:00	11:30	Mr. Nelson Trejo, Epiroc, Sweden Service electrification		
11:30	12:00	Prof. Radoslaw Zimroz, Wroclaw University of Technology, Poland Mining goes digital		
12:00	12:30	Prof. Uday Kumar, Lulea University of Technology, Sweden Maintenance of Mining System: Trends in Technologies and Management		
12:30	14:00	Lunch		
14:00	14:25	Use of Geospatial Queries for Optimum Drilling and Blasting Practices in Surface Mining <i>M. Erkayaoglu</i>	Environmental comparison of different transportation systems (Truck-Shovel and IPCCs) in open pit mines by system dynamic modelling <i>H. Abbaspour, C. Drebenstedt</i>	Fundamental Study of Stope and Barrier Pillar Stabilities by Using Cut and Fill Method for Redevelopment of Rest Gold Mine, Myanmar <i>N. Naung, H. Shimada, T. Sasaoka, A. Hamanaka, S. Wahyudi, M. Pisith</i>
14:25	14:50	Optimization of the presplit using the hybrid stress blasting model <i>F. Orellana, R. Ortiz</i>	Truck-and-excavator versus conveyor system. An environmental and economic comparison <i>C. M. de Almeida, T. de Castro Neves, C. Arroyo, P. Campos</i>	Three-dimensional Integral Modeling of Large Open-Pit Slopes: An Innovative Stability Analysis <i>G. F. Napa-García, V. F. Navarro Torres, I.R. Trópia, R.B. Capelli, T.R. Câmara</i>
14:50	15:15	Implementation of Emulsion in Horizontal Developments-Chuquicamata Underground Mine <i>J. Alcaíno, D. Morales</i>	Bulk material volume evaluation and tracking in belt conveyor network based on data from SCADA <i>P. Stefaniak, P. Kruczek, P. Śliwiński, N. Gomolla, A. Wyłomańska, R. Zimroz</i>	Collocated ground deformation and pore pressure measurements in open pit mines: laboratory testing and analysis of wireless sensing platform <i>E. Widzyk-Capehart, A.Barberán, M. J. Briceño, C. Navarro, P. M. V. Nguyen, S. Steffen</i>
15:15	15:40	Prediction of Rock Fragmentation Based on a Modified Kuz-Ram Model <i>A. Hekmat, S. Muñoz</i>	Optimal Selection and Assignment of Loading Equipment for the Compliance of an Open Pit Production Plan <i>H. Gonzalez, N. Morales</i>	Determination of the Crown Pillar Thickness between Open Pit and Underground for Coal Mining <i>P.M.V. Nguyen, E. Widzyk-Capehart, Z. Niedbalski</i>
15:40	16:00	Coffee Break		
16:00	16:25	Transportation Problem Based Stochastic Integer Programming Model to Dispatch Surface Mining Trucks under Uncertainty <i>M. Afrapoli, M. Tabesh, H. Askari-Nasab</i>	A Discrete Event Simulation for a Truck-Shovel System <i>E. Y. Baafi, W. Zeng</i>	Application of Fly Ash to Acidic Soil to Improve Plant Growth in Disturbed Land of Open-cut Mining <i>A. Hamanaka, H. Yamasaki, T. Sasaoka, H. Shimada, S. Matsumoto</i>
16:25	16:50	Comparison of different approaches to strategic open-pit mine planning under geological uncertainty <i>G. Nelis, N. Morales, E. Widzyk-Capehart</i>	Increasing the Productivity of the Transport Fleet by Reducing the Carry Back Load <i>W. Felsch Jr, M. das Graças Silva, C. Arroyo, M.s Vinicius Baeta, A. Claudio Souza, R. Fonseca, A. Curi</i>	An Investigation of the Geotechnical Properties of Coal Combustion By-Products from Matimba Power Station In Lephalale, South Africa <i>L. Magunde, F. Sengani, T. Zvarivadza</i>

16:50	17:15	Use of Genetic Algorithms for Optimization of Open-Pit Mining Operations with Geological and Market Uncertainty <i>G. Franco-Sepulveda, G. P. Jaramillo, J. C. Del Rio</i>	Open-pit mine production scheduling: improvements to MineLib library problems <i>E. Jélvez, N. Morales, P. Nancel-Penard</i>	Sensitivity analysis of mechanical and geometrical properties of fly ash stabilized overburden dumps using mathematical simulations <i>T. Gupta, M. Jamal, M. Yellishetty, T. N. Singh</i>
17:15	17:30	<b>Announcements</b>		
17:30	19:00	<b>Welcome Cocktail</b>		

Nov.21 <sup>st</sup>		Principal Hall		
		Room 1	Room 2	Room 3
8:30	9:30	<b>Registrations and Announcements</b>		
9:30	10:00	<b>Prof Froilan Vergara, University of Concepcion, Chile</b> Minería y Medio Ambiente en Chile		
10:00	10:30	<b>Erkan Topal, WASM Curtin University of Technology, Australia</b> Waste Rock Management as Part of Pit Optimization		
10:30	11:00	<b>Coffee Break</b>		
11:00	11:30	<b>Prof. Cuthbert Musingwini, University of Witwatersrand, South Africa</b> Lessons from Some Recent and Current Mine Planning Related Postgraduate Research Work at the University of the Witwatersrand		
11:30	12:00	<b>Prof. Zhenqi Hu, China</b> Progress and prospect of ecological restoration of coal waste piles with spontaneous combustion in China		
12:00	12:30	<b>Prof. Jose Miguel Galera, Subterra, Chile</b> Tunnels excavated under high stress conditions: squeezing and rock burst behaviour. Remedial constructive actions		
13:30	14:00	<b>Lunch</b>		
14:00	14:25	Application of Particle Swarm Optimization Algorithm to Optimize Stope Layout for Underground Mines <i>T. M. Mmola, A. S. Nhleko, J. M. Atherfold</i>	Application of the automatically controlled systems in drilling for horizontal mine development operations <i>A. Zablocki</i>	Environmental Management and Metal Recovery: Re-processing of Mining Waste at Montevecchio Site (SW Sardinia) <i>P.P. Manca, G. Massacci, C. Mercante</i>
14:25	14:50	Optimisation of mining block size for narrow, tabular gold deposits <i>C. Birch</i>	Condition monitoring for LHD machines operating in underground mine – analysis of long-term diagnostic data <i>A. Michalak, P. Śliwiński, T. Kaniewski, J. Wodecki, P. Stefaniak, A. Wyłomańska, R. Zimroz</i>	Possible Environmental Risks Associated with Steel slag: A Batch study <i>S.Biliangadi, V. N.L. Wong, M. Yellishetty, A. Kumar. Dikshit, S. Majumdar</i>
14:50	15:15	Analysis of the impact of the dilution in the planning of open-pit mines for highly structural veti-shaped bodies <i>R. Amira, N. Morales, A. Cáceres</i>	Predictive maintenance of mining machines - problem of non-Gaussian noise <i>G. Žak, A. Wyłomańska, R. Zimroz</i>	Mud Inflow Risk Assessment in Block Caving Operation Based on AHP Comprehensive Method <i>A Hekmat, A. Anani, F. Tapia, I. Navia</i>
15:15	15:40	Open Pit Mine Planning with Degradation due to Stockpiling <i>M. Rezakhah</i>	Predictive Maintenance of Mining Machines using Advanced Data Analysis System based on the Cloud Technology <i>P. Kruczek, N. Gomolla, J. Hebdasobkowicz, A. Michalak, P. Sliwinski, J. Wodecki, P. Stefaniak, A. Wyłomska, .R. Zimroz</i>	Ash, Volatile Matter and Carbon Content Influence on Spontaneous Combustion Liability of Coal-Shales <i>M. Onifade, B. Genc</i>
15:40	16:00	<b>Coffee Break</b>		

16:00	16:25	Optimization of Coal Production Rate as a Function of Cut-out Distance <i>A. Anani, W. Nyaaba, A. Hekmat</i>	Effect of Spare Parts Policy on Equipment Production Loss in Mining <i>O. Golbasi</i>	Effect of the Heat Input by Dolerite Intrusions and the Propensity for Spontaneous Combustion in the Highveld Coalfields, South Africa <i>E.R. Mokone, T. Zvarivadza, F.Sengani</i>
16:25	16:50	Generation of a Monthly Mining Development Plan for Underground Mines Using Mathematical Programming <i>V. Rojas, T. González, N. Morales</i>	Underground Track Design, Construction and Maintenance <i>S. Rupprecht</i>	Industrial wind erosion: PM Emission from the Erodible Flat Surfaces of Tailing Basins' <i>V. Dentoni, B. Grosso, G. Massacci, M. Cigagna, C. Levanti, C. Corda, F. Pinna</i>
16:50	17:15	Methodology to Optimize and Sequence the Semi-automated Ramp Design in Underground Mining <i>S. Montané, P. Nancel-Penard, N. Morales</i>	Why should inspection robots be used in deep underground mines? <i>R. Zimroz, M. Hutter, M. Mistry, P. Stefaniak, K. Walas, J. Wodecki</i>	Comparative Evaluation of CO2 Emissions in Europe and Turkey Using GIS' <i>N. Demirel</i>
17:15	17:30	<b>Announcements</b>		
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Nov.22 <sup>nd</sup>		Principal Hall		
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9:00	9:15	<b>Announcements</b>		
9:15	9:40	Neural Network Apply to Blast Vibration Control near Communities in Large-Scale Iron Ore Mines <i>V. Torres, J.A. Reis, P.L. Luiz, J.H.R. Costa, L.S. Chaves</i>	Enhanced K-Nearest Neighbors Method Application in Case of Draglines Reliability Analysis <i>A. Taghizadeh Vahed, B. Ghodrati, H. Hossienie</i>	Development of a Dust Violation Control Tool from Plant Data <i>Mustafa Erkayaoglu</i>
9:40	10:05	Numerical Simulations of Geomechanical State of Rock Mass Prior to Seismic Events Occurrence – Case Study from a Polish Copper Mine Aided by FEM 3D Approach <i>W. M. Pytel, P. P. Mertuszka, T. Jones, H. Paprocki</i>	Development of a Computer-Aided Dragline Selection Program <i>S. Akhundov, N. Demirel A</i>	Finding the Right Time to Mine: A Real Options Analysis of Landfill Mining Projects <i>M. Menegaki, D. Damigos, A. Benardos, D. Kaliampakos</i>
10:05	10:30	Seismic Hazard Prediction Using Passive Seismic Tomography in Polkowice-Sieroszowice Copper Ore Mine, SW Poland <i>A. B. Gogolewska, D. Smolak</i>	Haul Productivity Optimization: An Assessment of the Optimal Road Grade <i>V. Torres, J. Ayres, P. L. A. Carmo, C.G.L. Silveira</i>	Data Acquisition System for Position Tracking and Human Selected Physiological and Environmental Parameters in Underground Mine <i>P. Stefaniak, J. Wodecki, A. Michalak, A. Wytomańska, and R. Zimroz</i>
10:30	11:00	<b>Coffee Break</b>		
11:00	11:25	Towards a mechanically based definition of the disturbance factor using the "Slope Model" Lattice Code <i>R. Silva, P. Gomez (presenter: V. Rivero)</i>	Universal Flotation Reagent Produced from Plant Waste <i>S. Yefremova, L. Bunchuk, Yu Sukharnikov, E. Li, A. Niyazov, S. Shalqimbayev, Yu Hain, A. Zharmenov</i>	Switching perspective - aligning mine energy demand to supply <i>M. Ziemski</i>

11:25	11:50	Modeling permeability filtration in outburst zones <i>R. Khojayev, R. Gabaidllin, S. Asainov, I. Filatov</i>	Laboratory Studies to Examine the Effects of Adding Cement to Various Layers of a Surface Paste Tailings Storage <i>S. Tuylu, A. Bascetin, D. Adiguzel</i>	Economic Value Add Analysis for Mining Companies <i>T. Tholana, P.N. Neingo</i>
11:50	12:15	Enhanced Networked Smart Markers – A New Integrated Slope Monitoring Approach <i>A Thomas, J Jakubec, M Royle, E Widzyk-Capehart, S. Steven</i>	Optimizing the rougher flotation process of copper ore <i>I. Derpich, V. Monardes</i>	Mine energy efficiency evaluation—sometimes the insignificant factors are significant <i>G. R. Ballantyne, M. Ziemski</i>
12:15	12:40	Recent experience in numerical modeling applied to Chuquicamata Mine <i>V. Rivero, P. Gomez, R. Ledezma</i>	Study to transform arsenic residues from smelters in stable compounds <i>A. Lozano, N. Zerené, L. Vera, A. Reghezza, F. Parada</i>	Financial Risk Analysis of Optimized Ventilation System in the Gold Mine <i>S. Sabanov</i>
12:40	14:30	<b>Lunch</b>		
14:00	14:25	A Move to a 12-hour Working Shift – The Benefits and Concerns <i>S. Rupprecht</i>	Modification of high water content sediment for rare earth mining in deep sea by surfactants agents <i>T. Funatsu, T. Sakiyama, A. Hamanaka, T. Sasaoka, H. Shimada, K. Takahashi</i>	Coke-Based Carbon Adsorbent <i>S. Yefremova, A. Kablanbekov, K. Anarbekov, L. Bunchuk, A. Terlikbayeva,</i>
14:25	14:50	Safety towards Zero Harm in the South African Platinum Sector <i>B. Genc, T. Mlangena, M. Onifade</i>	Numerical Modelling of Pb-Znc Mine Tailing Dam based on Soil Stability <i>A. Bascetin, S. Tuylu, D. Adiguzel, H. Eker, E. Odabas</i>	Ammonia Nitrogen Removal in Mine Effluents by Advanced Oxidation Processes <i>S. Ryskie, C. M. Neculita, T. Genty</i>
14:50	15:15			Treatment of As-rich effluents from gold leaching in refractory ores and potential environmental impacts of produced sludge <i>L. Coudert, R. Bondu, C. M. Neculita, E. Rosa</i>
15:15	15:30	<b>Coffee Break</b>		
15:30	16:00	<b>Closing Ceremony</b>		
16:00	17:30	<b>Goodbye Cocktail</b>		