

PRELIMINARY TECHNICAL PROGRAM

(70 abstracts as of October 26, 2017)

Represented Countries (14): Australia, Brazil, Canada, Chile, Cuba, Czech Republic, France, Germany, India, Iran, Peru, South Africa, Switzerland and USA

Inauguration Ceremony

Words of Welcome

Carlos Barahona, Minexcellence 2018 Executive Director; General Manager, Gecamin, Chile

Rodrigo Pascual, Minexcellence 2018 Co-organizer; Director Department of Mining Engineering, P. Universidad Católica de Chile

Neville Plint, Minexcellence 2018 Co-organizer; Director Sustainable Minerals Institute (SMI), University of Queensland, Australia

Kevin O'Kane, Minexcellence 2018 Chair; President, BHP Pampa Norte, Chile

Opening Address (TBC)

Plenaries Presentations

Codelco's Sustainability Master Plan: A look toward 2040

Jorge Lagos, Sustainability and Institutional Relations Manager, Codelco, Chile

Title to be confirmed

Christian Morales, Senior Manager Quality and Maintenance Safety, Latam Airlines Group, Chile

Title to be confirmed

Neville Plint, Director Sustainable Minerals Institute (SMI), University of Queensland, Australia

Process Improvement and Technology Innovation

(24 abstracts)

(A02) Artificial Intelligence Based Monitoring of Mining Shovel Tooth Wear

Mahdi Ramezani, Saman Nouranian, Hairong Zeng, Caitlin McKinnon, Bahram Sameti, Enoch Chow, Derek Cooper, Shahram Tafazoli, Motion Metrics International Corp., Canada

(A08) Operating for Excellence – O4E, a culture for increase the Business Profitability

Adolfo Hitler Huaman, Asset Management & Business Excellence, Peru

(A09) Determination of Discontinuities and Failure Planes in Open Pit Mine walls by Implementing UAV Photogrammetric Technology

Ahmad Hajarian and MortezaOsanloo, Amirkabir University of Technology, Iran

(A15) Digital Lock out: Simplification in the Lock out Process for Safety using Fingerprint

Marcelo Peters and Pablo Rojas, Minera Escondida, BHP, Chile

(A16) Continuous Improvement Re-Thought for Mining Industry in Digital Era

Nathalie Viens, Sustaining Capital & Consulting Services, SNC-Lavalin, Canada; Harvey Wilson and Benoit Valiquette, Consulting Services, SNC-Lavalin, Canada

(A20) Improving Tyre Life of Tata Steel “Noamundi Iron Mine” – A Case Study

Yogeshwar Gupta, K. Ramkrishna, G.V. Satyanarayan, Tapan Kumar Jena and Ashutosh Bhaskar, Tata Steel, India

(A25) The Copper Cathode Carbon Footprint is about to fall: Technological Breakthroughs

Eduardo Wiechmann, Jorge Henríquez and Pablo Aqueveque, Universidad de Concepción, Chile

(A26) Maximize Return on Investment. Focus on Bottlenecks

Claudio Araya, Hydraulic Engineer, Independent, Chile

(A32) Water Treatment Free of Chemicals for Cooling Towers and/or Evaporative Condensers

Sebastián Rojas, Maxcontrol a Puffer Sweiven Company, Chile

(A37) Utilization of Potential Slurry and Water Energy in Mining

Pavel Marek, DPT Design Centrum S.R.O., Czech Republic

(A40) Design and Performance Characteristics of WEBA Chutes, Minera Carmen de Andacollo Case Study

Pedro Vega, WEBA Chutes South America, Chile; Alwin Nienaber, WEBA Chute Systems and Solutions, South Africa and Claudio Pincheira, Minera Carmen de Andacollo, Teck, Chile

(A41) There’s an App for that: Applied Process Improvement through a Tablet and Internet of Things (IoT) Fleet and Personnel Management Platform

Sean Dessureault, MISOM Technologies, USA

(A42) Improving Mine Plan Accuracy

Miguel Elizalde, José Luis Villagrán and Mario Saez, Spence, Pampa Norte, BHP, Chile

(A43) Coarse Separation at the Mine Face

Michael Scott, CRC ORE, Australia

(A44) Reducing Water, Energy and Emissions through Grade Engineering®

Michael Scott, CRC ORE, Australia

(A48) Lean Full Potential Methodology Implementation Applied to Massive Tunnel Development at PMCHS

Cristian Herrera and María Cristina Vallejos, Vicepresidencia de Proyectos, Codelco, Chile; Felipe Gattass, Bain & Company, Chile

(A49) Data Analytics for Efficient and Sustainable Mining Operations

Thierry de Saint Pierre, Universidad de Chile

(A52) Business Transformation Model through the Incorporation of Technologies to Mining Operations Komatsu Chile

Jenny Góngora and Cristian Bustamante, Komatsu, Chile

(A53) Analysis and Improvement through Rapid Results methodology in Spence Mining

Alexis Araya, Spence, Pampa Norte, BHP, Chile

(A54) Improvement of 6 percentage points in the Use of Mine Truck Fleet

Víctor Ormazábal, Spence, Pampa Norte, BHP, Chile

(A58) Operational and Economic Implications of Centralized Blasting Systems in Underground Mining (UG)

Rodrigo Gutierrez, Davey Bickford, South America; Christian Mardones, Davey Bickford, Latam

(A64) Methodology for Assessing the Benefits of Grind Control Using PST Technology for True On-Line Particle Size Measurement

Jaime Sepúlveda, J-Consultants, Chile; Christian O’Keefe and Robert Maron, CiDRA Minerals Processing, USA

(A67) Teck HVC’s Froth Velocity Improvements with Advance Process Control

Danny Calisaya and Eduardo Nunez, Teck Highland Valley Cooper Partnership, Canada

(A69) Improving Life on Rotatory Crusher’s Wear Components

Álvaro Rojas and Pablo Chávez, Minera Spence, BHP, Chile

Lean Production

(09 abstracts)

(A01) Boosting the Sustainability of Lean Management in Codelco through Interdivisional Internships

Gonzalo Compan and Carmen Vega, El Teniente Division, Codelco, Chile

(A29) Lean Transformation in Mining and Metals: The Case of Sherritt

Laura Mottola, Sherritt International and Flow Partners, Canada

(A30) Operational Excellence in Cuba – Lean Transformation at Moa Nickel (Year 2)

Adrian White and Laura Mottola, Sherritt International and Flow Partners, Canada; María E. Pena, Moa Nickel, Cuba

(A31) Lean Transformation at Sherritt, Fort Saskatchewan Site (Year 2)

Jeremy Teeuwesen, Sherritt International, Canada; Paul Batten and Laura Mottola, Sherritt International and Flow Partners, Canada

(A33) Load Factor and Cycle Time Levers – Operational Excellence in Minera Los Pelambres

Marco Lagos and Diego Palma, Minera Los Pelambres, Chile

(A34) Improving Copper Recovery through Excellence Approach – Operational Excellence in Minera Los Pelambres

Cristián Barrientos and Francisco Dubournais, Minera Los Pelambres, Chile

(A39) Implementation of Lean Management in Andina

Oliver Verdugo, Claudia Rodríguez, Gabriela Ruiz-Esquide and Jaime Espinoza, Andina Division, Codelco, Chile

(A62) Improvement of Metallurgical Recovery of Caletones Smelter using Lean Management

Ronaldo Poblete and Viviana Pavez, El Teniente Division, Codelco, Chile

(A66) Improvements in Filter Press Plant using the C+ Methodology as a Continuous Improvement Model

Cristian Ramos, Hugo Olmos, Erik Navarro, Aldo Valenzuela, Hugo Acevedo and Claudia Aravena, El Teniente Division, Codelco, Chile

Strategic planning and process integration

(08 abstracts)

(A03) Equipment Sizing for Vazante Mine: Reliability versus Sinergy

Rafael Campos, Votorantim Metais Zinco, Brazil

(A04) Key Performance Indicators as a tool for Underground Mine Planning Improvement

Rafael Campos, Votorantim Metais Zinco, Brazil

(A22) Change of Strategy due to Uncertainties - Catastrophic Event or Opportunity to Change History?

Gabriel Pino, Eugenia Carrillo and Oliver Miranda, Vicepresidency of Projects, Codelco, Chile

(A23) Risks in Underground Works Contracts in Mining Projects

Fredy Varas and Eugenia Carrillo, Vicepresidency of Projects, Codelco, Chile

(A51) The Use of Carbon Footprint as an Eco-Efficiency Indicator in Mining Operations

Joachim Vogdt, Grupo IASA, Chile; Roxana Powell, Engineering Business Connections, Australia; Kimberly Caron, Metso, Australia

(A57) Mine Plans Uncertainty Reduction through Risks and Opportunities Management

Kelly Montes, Rodrigo Ramírez and Pablo Vergara, Spence, Pampa Norte, BHP, Chile

(A63) Modern Software Tools Can Be Used in Strategic Openpit Planning Software for Bench Design, Scheduling, and Budgeting

Russ Downer, Opencontour LLC, USA

(A65) Unlocking the Value of Digital Mine Technologies through Translating Digital Data to Knowledge

Mohsen Yahyaei, Marcin Ziemski, Neville Plint, Alice Clark, Deanna Kemp and David Mulligan, Sustainable Minerals Institute, The University of Queensland, Australia

Innovations human capital management	(04 abstracts)
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(A14) Accreditation of Labor Capabilities: 3D Model to Identify Safety, Psychologic and Technical Skills

Marcelo Peters, Minera Escondida, BHP, Chile

(A21) Catalysts of Productivity in the Mining Culture

Sergio Slipczuk, Iván Van Meert and Carolina Román, Study of Social Engineering, Chile

(A38) Human Factors and Governance in Tailings Dam Safety

Luis Valenzuela, Independent Geotechnical and Dam Consultant, Chile

(A47) Mine Floating Shift: Productivity, Inclusion and Diversity Women and Communities, Cerro Colorado Mining Company, Pampa Norte

Alejandro Álvarez, Cía. Minera Cerro Colorado, Pampa Norte, BHP, Chile

Information technologies and optimization systems	(08 abstracts)
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(A05) Improving Overall Equipment Effectiveness: Mobile Equipment Telemetry in Underground Mining

Jean-Phillip Bouchard, Newtrax Technologies, Canada

(A06) Growing Underground Technology, Requires Better Data Management

Job Del Rosario, Micromine, USA

(A07) Priorization of Bottle Necks in Hauling and Transportation using Production Control Information

Sergio Valenzuela, Mining TAG, Chile; Rafael Guzmán, El Teniente Division, Codelco, Chile

(A10) Real-Time Water Management to Reduce Water Related Costs and Operational Risks

Michael Gabora, DHI Water & Environment, USA; Alexander Renz, DHI Water & Environment, Germany

(A18) Identification of Suitable Parameters for Mine Slope Monitoring by Movement and Surveying RADAR

Alok Baranwal, Ashutosh Bhaskar, Sabyasachy Mishra, G.V. Satyanarayana and Tapan Kumar Jena, Tata Steel, India

(A24) Achieving Operational Stability in Mining through Collaboration and Business Planning Excellence

Jose Santos, Dassault Systemes, Canada; Nicolas Jeannée, Dassault Systemes, France; Diego De La Barra, Dassault Systemes, Andean Region

(A36) How Phenomenological Models can Aid Flotation Operation

Luis Bergh, Juan Yianatos and Claudio Acuña, Universidad Técnica Federico Santa Maria, Chile

(A70) The Mining Information System

Chris Novak, Centric Mining Systems, Canada; Diego Zamorano, Pacific Innovative Solutions Group, Chile

Asset management, maintenance and supply chain

(08 abstracts)

(A11) MSO – Maintenance Strategy Optimization

Andrés Cabrera, Rodrigo Pérez, Mariana López, Sergio Fica and Maite Mary, Minera Escondida, BHP, Chile

(A12) Keys for Improvement and Stability in Shovels Availability

Juan Pablo Marmolejo and Jorge Diaz, Minera Escondida, BHP, Chile

(A13) Perfect Work Order Evolution

Vladimir Fierro, David Valencia and Rodrigo Pérez, Minera Escondida, BHP, Chile

(A27) Early Risk Assessment in Investment Projects

Claudio Araya, Hydraulic Engineer, Independent, Chile

(A46) Digital Innovations in Asset Management for Mining

Fabio Mielli, Schneider Electric, USA; Javier Orellanna, Schneider Electric, Australia

(A59) Maintenance Strategy Optimization to improve truck fleet CAT 793 availability

Daniel Lara, Spence, Pampa Norte, BHP, Chile

(A61) Applying an Asset Management Approach to Mining Projects using Reliability Decision Making Tools to Sustain Operational Success

Néstor Deza, James Davidson, Adi Dhora and Mehtab Gill, Hatch, Canada

(A68) HPGR Roller Life Extension with Wear Management System

Marcelo Perrucci, Martin Pischtschan, Christian Horstmann and Daniel Sager, ABB, Switzerland

Health, safety and environment

(07 abstracts)

(A17) Safety Solution: Achieving Predictive Analysis in Health & Safety via 3D Digital Technology

Nathalie Viens, Sustaining Capital & Consulting Services, SNC-Lavalin, Canada; Benoit Valiquette and Harvey Wilson, Consulting Services, SNC-Lavalin, Canada

(A28) One Culture: The Integration of Operational Excellence and Health & Safety in Moa Nickel, Cuba
 Ivo Gonzalez, Sherritt International, Canada; Laura Mottola, Sherritt International and Flow Partners, Canada

(A35) Change of Dump Truck Trays using Gantry Cranes in Tandem BHP Mineral Americas – Pampa Norte Spence
 Marcelo Muñoz, Pedro Torres and Andrés Cabrera, Minera Spence, BHP, Chile

(A50) Air Quality in Mining: A Disruptive Paradigm
 Sabdiel Mella, SAME, Chile

(A55) Work Safe through Improved Systems of Detection of Proximity of Equipment and Vehicles in the Mine
 Harry Zúñiga and Carlos Ruz, Spence, Pampa Norte, BHP, Chile

(A56) Irrigation of Road Miners in Autonomous Form
 Juan González, Spence, Pampa Norte, BHP, Chile

(A60) Eliminate Risks Exposure of Geotechnical Team during Field Inspections through Aero-Analysis Flight Technology
 José Rojas, Spence, Pampa Norte, BHP, Chile

Knowledge management	(02 abstracts)
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(A19) Reflecting on 10+ Years Training the Mining Industry: Opportunities and Challenges
 Isabel Alarcón, Pontificia Universidad Católica de Chile

(A45) The Next Generation Workforce – Technologies that will narrow the Skills Gap in the Mining Industry
 Fabio Mielli, Schneider Electric, USA; Javier Orellanna, Schneider Electric, Australia

ABSTRACT DISTRIBUTION

Mining companies	(34 abstracts)
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- BHP Minera Escondida, Chile (5)
- BHP Pampa Norte, Cerro Colorado, Chile (1)
- BHP Pampa Norte, Spence, Chile (10)
- Codelco, Andina Division, Chile (1)
- Codelco, El Teniente Division, Chile (4)
- Codelco, VP of Projects, Chile (3)
- Minera Los Pelambres, Chile (2)
- Sherritt International, Canada (4)
- Teck, Minera Carmen de Andacollo, Chile (1)
- Teck Highland Valley Cooper Partnership, Canada (1)
- Votorantim Metais Zinco, Brazil (2)

Engineering and consulting companies

(17 abstracts)

- Asset Management & Business Excellence, Peru (1)
- Bain & Company, Chile
- Dassault Systemes, Canada/France/Andean Region (1)
- Davey Bickford, Latam/South America (1)
- DHI Water & Environment, USA (1)
- DPT Design Centrum S.R.O., Czech Republic (1)
- Engineering Business Connections, Australia
- Flow Partners, Canada
- Grupo IASA, Chile (1)
- Hatch, Canada (1)
- Independent Geotechnical and Dam Consultant, Chile (1)
- Independent, Chile (2)
- J-Consultants, Chile
- MISOM Technologies, USA (1)
- Opencontour LLC, USA (1)
- SAME, Chile (1)
- SNC-Lavalin, Canada (2)
- Study of Social Engineering, Chile (1)
- WEBA Chutes, Chile/South Africa
- Centric Mining Systems, Canada (1)
- Pacific Innovative Solutions Group, Chile

Supplier companies

(11 abstracts)

- ABB, Switzerland (1)
- CiDRA Minerals Processing, USA (1)
- Komatsu, Chile (1)
- Maxcontrol a Puffer Sweiven Company, Chile (1)
- Metso, Australia
- Micromine, USA (1)
- Mining TAG, Chile
- Motion Metrics International Corp., Canada (1)
- Newtrax Technologies, Canada (1)
- Schneider Electric, Australia/USA (2)
- Tata Steel, India (2)

Universities and research centres

(08 abstracts)

- Amirkabir University of Technology, Iran (1)
- CRC ORE, Australia (2)
- Pontificia Universidad Católica de Chile (1)
- Universidad de Chile (1)
- Universidad de Concepción, Chile (1)
- Universidad Técnica Federico Santa María, Chile (1)
- SMI, The University of Queensland, Australia (1)