

Technical Program

⚠ Version as of July 23, 2026.

Important: This program is subject to change, including updates to schedules, ballrooms, and presentations. Please review the latest available version prior to the Congress.

Wednesday Aug 05

08:10-10:20 Technical Sessions BALLROOM A, B & C				
BALLROOM A		BALLROOM B		BALLROOM C
↘ SESSION 1		↘ SESSION 2		↘ SESSION 3
Session 1: Applied Artificial Intelligence I		Session 2: OT-IT Integration I		Session 3: Advanced Process Control I
08:10	SPA	SPA	SPA	
Daily update		Daily update		Daily update
08:20	ENG	ENG	SPA	
Transforming mining reliability through predictive maintenance at scale <u>Abraham Ortiz</u> , Emerson, Mexico and Joao Pedro Almeida, Emerson, Brazil		Cybersecurity, privacy, and regulatory compliance as enablers of secure digital mining Yaser Alsakaji and <u>Douglas Gomes</u> , Intelltech Intelligent Technologies, Brazil		Simulación simplificada de línea de flotación para identificación y control multivariable predictivo <u>Walter Eskuche</u> , Autonomation, Chile; y Milind Karkare, Autonomation, Estados Unidos
08:40	ENG	SPA	SPA	
AI-assisted knowledge access for maintenance personnel in heterogeneous mining fleets <u>Veronica Gacitua</u> , Ribbeon, USA; and Claudio Gacitua, Innovaengine, Chile		Terrestra Altiplano: optimización exacta del despacho de flotas de camiones de extracción para una orquestación prescriptiva en tiempo real <u>Geff Lang</u> , Terrestra, Chile		NMP Optimizer: alineando la estrategia con la operación de la concentradora <u>Robert von Loebenstein</u> , Andritz, Chile
09:00	SPA	SPA	ENG	
Modelamiento físico e IA aplicado al mantenimiento predictivo y optimización de procesos en minería <u>Victor Chávez</u> y Javier Meza, ABB, Chile		Ciberseguridad industrial en sistemas OT en operación: integración progresiva basada en IEC62443 <u>Ricardo Pozo</u> , Inprint, Chile, y María Taberna, Steryon, Spain		Fuzzy expert system for level control in the iron ore flotation process <u>Lucas Reis</u> and Rafaela Reis, Vale, Brazil; Jeferson Reis and Jonas Assis, IHM Stefanini, Brazil
09:20	SPA	SPA	SPA	

De modelos predictivos a decisiones operacionales: implementación de LM-ORION en la planta concentradora Candelaria

René Quezada, Adolph Möller, Luis Ayala, Diego Rojas y José Aguirre, Distrito Candelaria, Lundin Mining, Chile

Sistema de monitoreo de cumplimiento en señales de pare en minería a cielo abierto

Hugo Gonçalves, Arthur Franca, Ruda Martins y Sergio Junior, Hexagon, Brasil; Anthony Gutarra y Aldo Olarte, Hexagon, Peru

Control avanzado de proceso con límite adaptativo de presión basado en señales de vibración: optimización del molino SAG en Cerro Corona

José Aedo, César Ramirez, Augusto Flores y Eduardo de la Torre, GoldFields Cerro Corona, Perú

09:40

ENG

AI remote monitoring: enhancing safety and efficiency in iron ore mining

Yan Oliveira, Weir Motion Metrics, Brazil; and Gilney de Freitas, Vale, Brazil

SPA

Convergencia OT➡IT en minería habilitada por Ethernet APL y plataformas IIoT

Rodrigo Assman, Endress+Hauser, Chile

ENG

Beyond the froth: digital control non-visual flotation systems

Tuhin Banerjee, Jasper Schaffer and David Hatton, Woodgrove Technologies, Canada

10:00

SPA

Quantifying the impact of AI sensing on payload compliance at Vale Iron Ore Mine

Yan Oliveira, Weir Motion Metrics, Brazil; and Fábio Ferreira, Vale, Brazil

SPA

Agile and capital-efficient upgrade of an autonomous fleet management system in Chile

Miguel González, PwC, Chile

SPA

Estimador de granulometría en alimentadores a molino SAG, basado en modelos de Machine Learning de clusterización

Ignacio Villalobos, Honeywell, Chile; Marcelo Navarro y Sergio Rubilar, Anglo American Digital Automation, Chile

10:20 - 11:00 Coffee-Break and Poster Session

11:00-12:40 Technical Sessions
BALLROOM A, B & C



BALLROOM A

BALLROOM B

BALLROOM C

↘ SESSION 4

Session 4: Machine Learning & Predictive Analytics

↘ SESSION 5

Session 5: Digital Transformation Management

↘ SESSION 6

Session 6: Process Optimization I

11:00

ENG

AI sensing for GET loss prevention and fragmentation analysis at Vale Sossego

Yan Oliveira, Weir Motion Metrics, Brazil; and Matheus Santiago, Vale, Brazil

SPA

Integrated metallurgical data from laboratory to pilot for continuous interpretation

Sandy Prieto and Ryan Monteith, SGS Canada

ENG

Autonomous crushing: automation and control in crushing and screening processes

Mário Sérgio Santos, Alexandre Gomes, Cássio Pascoal, Daniel Luiz de Souza, Gabriel Duarte, Kaïke Silva, Pedro Henrique de Moura and Camila Carneiro, Vale, Brazil

11:20

SPA

Implementación de modelos de deep learning para la predicción de arcillas en la planificación minera

Pablo Vega, Ricardo Kreft y Julian Ravanal, Radomiro Tomic, Codelco; Valentina Elgueta, Cesar Briceño, Carlos Barrio y Javier Inostroza, Chuquicamata, Codelco; Tomás Rodríguez, Jacqueline Harris, Pablo

SPA

Plataforma digital para revisión y auditoría de modelos BIM aplicada al diseño de plantas del mercado minero

Miguel Angel Barraza y Juan José Ramos, WSP, Chile

SPA

Ajuste dinámico de velocidades de reboso en flotación, según calidad del concentrado de hierro

Felipe Moreno, Honeywell, Chile; Matheus Moreira, Anglo American, Brasil y Sergio Rubilar, Anglo American, Chile

11:40

SPA Predicting blast-induced vibration risks using machine learning for proactive mine planning <u>Nicolás Rebolledo</u>, Cristián Olmos, Hugo Lozano and Pablo Durán, Universidad Adolfo Ibáñez, Chile	SPA Marco de decisión y business case para adoptar robótica en minería subterránea <u>José Manuel Ortiz</u> y Francisco Zapata, Kinamics Robotics SpA, Chile	SPA Integración de control MPC con lógica carro tripper para optimización en líneas acidificación Patricio Varas, Carlos Yanten, Pablo Karelovic y Felipe Arriagada, Honeywell; Jonathan Aqueveque, Casa Matriz, Codelco; Víctor Gómez y Francisco Poblete, Gabriela Mistral, Codelco, Chile
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12:00

SPA Geo-target 3D: modelo predictivo para blancos de perforación <u>Estefany Cordova</u>, Yhon Vila y Andrea Quevedo, Alpayana, Perú	SPA Implementación de camiones autónomos en minería: aprendizajes y factores críticos <u>Rubén Valdebenito</u>, Loreto Stange y Agustín Lomello, Accenture, Chile	SPA Control granulométrico en el reclamo de la pila de acopio para incrementar el tratamiento de la molienda SAG <u>Eduardo Teuber</u>, Elecmetal, Chile; y Álvaro Rendón, ECN Scientific/ECN Automation, Chile
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12:20

ENG Optimizing through data: fragmentation monitoring <u>Matías Castro</u>, Sebastian Fuentes, Rodrigo Veliz, Fernando García and Felipe Moroni, Orica, Chile; and Juan Aravena, Teck, Chile	ENG Scaling autonomous crushing: from pilot implementation to a structured transformation program <u>Juliene Oliveira</u>, Gabriel Lott, and Luiz Rogério de Freitas Junior, Vale, Brazil; and Wendelling Andrade and Paulo Cruz, Accenture, Brazil	SPA Optimización del chancado mediante APIs: maximización de tonelaje a plantas concentradoras (TBC) <u>Joaquín González</u> y Manuel Vasquez, BHP CAS, Chile
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12:40 - 14:10 Lunch

14:10-15:50 Technical Sessions
BALLROOM A, B & C

BALLROOM A	BALLROOM B	BALLROOM C
SESSION 7 Session 7: AI for Mining Operations I	SESSION 8 Session 8: Industrial Connectivity & Digital Architecture	SESSION 9 Session 9: Industrial Networks & Communications

14:10

ENG Integration of geometallurgy and AI for predictive and real-time optimization in mineral processing <u>Henrique Gonçalves</u>, Glauber Lopes and Giovanni Felice, Samarco Mineração, Brazil; and Matheus La Guardia, Progen, Brazil	ENG IoT-based GNSS Infrastructure for scalable positioning in surface mining assets operations <u>Felipe Silva</u>, Eduardo Borges, Paulo Braga, Wesley Camilo, Bruno Vicentini, Bruno Ogando, Danilo de Lima, Federal University of Lavras; Leandro Camargo, Federal Institute of Education, Science and Technology of Rio Grande do Sul; Claudio Dal Col and Bruna Ferreira, Vale, Brazil	SPA Conectividad móvil pública gestionada como habilitador de soluciones IoT en faenas mineras <u>Erane Franulic</u>, Entel Digital, Chile
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Analysis of critical features importances in tailings and waste rock piles using ensemble learning models Sueli Silva, Samarco Mineração, Brazil; Claudio Resende, Kelson Figueiredo, Thayane Simoes, Celso Romanel, and Roberto Quevedo, Pontifícia Universidade Católica do Rio de Janeiro, Brazil	Alto rendimiento de GPS en P&T con soporte en gemelo digital Gabriel Ibarra y Alexis Troncoso, Geocom, Chile	Digital transformation of territorial analysis in mining projects using artificial intelligence Gisele Ramos and Talita Bracher, Vale, Brazil; and Isabella Alves, The Bakery, Innovation Consultant, Brazil
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17:10

SPA MiningDecisionSupport: plataforma digital trazable para selección de métodos de explotación en minería subterránea Gonzalo Bouldres, Felipe Cancino, Francisco Saavedra, Eduardo Latorre y Andrés Pardo, Universidad de Atacama, Chile	SPA Control predictivo con analítica avanzada en celdas cleaner en planta de sulfato de litio Karina Milanca, Sebastián Oñate y David Rojas, Nova Andino, Chile	SPA Inspección digital, modelos predictivos y agentes conversacionales: caso de éxito en CH&T José Gómez y Felipe Iturrieta, Innomotics, Chile
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17:30

SPA Integración geometalúrgica y analítica avanzada en molienda SAG Francisco Soto, Gabriel Berkowitz y Vicente Rojas; Empírica Consultores, Chile	SPA Convergencia tecnológica en seguridad minera: bitácora digital y SOC como nuevos paradigmas Carlos Walther, Christian Johannesen and Diego Pandolfa, Guard Service, Chile	PRT Machine learning-enabled social impact assessment in large-scale Amazon mining Fabio Abdala, University of São Paulo, Brazil
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17:50

SPA Agentes de inteligencia artificial trazables para decisiones operacionales mineras Arturo Martínez, Eclipse Data Innovations, Chile	SPA APC e Industrial DataOps en minería: dos problemas, una convergencia necesaria Sergio Campana, Rockwell Automation, Chile	ENG AI copilot for the generation of mineral reserve technical reports Carolina Takano, Vitor Ohnesorge and Gustavo Zanetti, Vale, Brazil
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18:10 - 18:40 Coffee-Break and Poster Session

18:40-20:00 Opening Ceremony
BALLROOMS A y B



BALLROOMS A y B

Opening Ceremony

18:40

SPA Welcome Words Mimy Mackenzie, Conference Manager, Gecamin, Chile Victor Babarovich, Minería Digital 2026 Program Director; Technological Innovation Consultant, Chile Javier Ruiz-del-Solar, Minería Digital 2026 Co-Organizer; Executive Director, Advanced Mining Technology Center (AMTC), Universidad de Chile Alexis Fuentealba, Minería Digital 2026 Co-Organizer; Head of Mechatronics Engineering Program, Universidad de Tarapacá, Chile

- **Gustavo Pessin**, Minería Digital 2026 Co-Organizer; Mining Automation Area Researcher, Vale Institute of Technology, Brazil
- **Nathalie Risso**, Minería Digital 2026 Co-Organizer; Assistant Professor, Dept. of Mining and Geological Engineering, The University of Arizona, USA

19:30

SPA

From Digital to Sustainable: Creating the Mining Operations of Tomorrow

Priscila Guedes, Engineering Manager, Technology Projects, Vale, Brazil

20:00 - 21:30 Welcoming Cocktail

Thursday Aug 06

08:10-10:00 Technical Sessions
BALLROOM A, B & C



BALLROOM A

BALLROOM B

BALLROOM C

SESSION 13

Session 13: Artificial Intelligence & Asset Management

SESSION 14

Session 14: Digital Transformation in Practice

SESSION 15

Session 15: Process Modelling, Control & Optimization

08:10

SPA

Daily update

SPA

Daily update

SPA

Daily update

08:20

PRT

Artificial intelligence for asset health and performance management

Daniela Andrade and Bruno Balbi, EY, Brazil and Gabriela Castro, Alexandre Pigatti, Nikolas Oliveira, Rodrigo Martins and Maria Sousa, Vale, Brazil

SPA

RockVision DTwin: inteligencia geoespacial para control operacional minero

Fabrizio García y Antonio Cedeño; RockBlast Design Spa, Chile

ENG

Feature representation for ML soft sensors in conveyor belt mass flow estimation

Niliken Silva, Vale, Brazil; Luísa Ferreira, Gustavo Pessin and Tomás Vargas Pinto, Instituto Tecnológico Vale, Brazil; Francisco Diniz and Jó Ueyama, Universidade de São Paulo, Brazil

08:40

PRT

Context lifecycle framework: bridging project-to-operation handover in Latam mining

Vitor Bueckmann, Octave, Brazil

ENG

Interoperable architecture for greenfield and brownfield digital mine projects

Marcelo Ribeiro and Giovanino Di Niro, Siemens, Brazil

SPA

Modelación de pilas mezcla para la gestión de humedad y reducción de atollos en Planta PTMP-DCH

Alonso Figueroa, Gonzalo Farías, Valentina Elgueta, Diego Tarazona y Luis Barboza, División Chuquicamata, Codelco, Chile

09:00

SPA

Modelo de agentes IA aplicado en asset management y excelencia operacional

Nicolás Pollmann y Matías Sánchez, Accenture, Chile

ENG

A cognitive governance layer for reliable AI assisted decision making in mining

Sandro Freitas, Vale, Brazil

SPA

Estrategia de detección y gestión de pérdida de carga en correas para evitar atollos

Gabriel Droguett y Nicolás Fuenzalida, Honeywell, Chile

09:20

SPA

Plataforma inteligente para monitoreo y predicción de procesos industriales en minería

[Felipe Castillo](#), I&T Solutions, Chile

ENG

What have we learnt from the first 25 years of our digital journey in mining and oil and gas

[Tony Edwards](#), StepChange Global, United Kingdom; and [Jonathan Mayhew](#), Chile

SPA

Sistema de control MPC para alimentación mixta de mineral fresco y ripios en planta de aglomerado

[David Arancibia](#) y Marco Encina, Honeywell, Chile; Camilo Labrín y Cristian Orellana, Minera Spence, Chile

09:40

SPA

Modelos de Mineral Tracking: cinco años de experiencia en Codelco

[Magdalena Ribbeck](#), Casa Matriz, Codelco, Chile; y Felipe Santibañez, Accenture, Chile

SPA

La importancia de la integración de información minera en una única plataforma tecnológica

[Claudia Merino](#) y Felipe Robles, Codelco, Chile

SPA

Sistema integrado de recomendaciones en molienda SAG para optimizar rendimiento mediante IT/OT

Felipe Figueroa, Oscar Hernández, Pablo Bustos, Luis Figueroa, Cristian Leyton y [Mario Vergara](#), Minera Los Pelambres, Chile

10:00 - 10:40 Coffee-Break and Poster Session

10:40-11:20 Technical Sessions
BALLROOM A, B & C



BALLROOM A

BALLROOM B

BALLROOM C

▶ SESSION 16

Session 16: Industrial Cybersecurity

▶ SESSION 17

Session 17: Mining Electrification & Energy Efficiency

▶ SESSION 18

Session 18: Advanced Analytics & Optimization

10:40

SPA

Secure digital mining: Integrating IT, OT and compliance in critical environments

[Martín Fonzo](#), Certenza, Argentina

SPA

Integrated optimization of haulage operations and energy management in underground mining

[Fernando Soto-Naranjo](#), Ángela Flores, Luis Orellana, Marcos Orchard, Pierre Nancel-Penard and Javier Ruiz-del-Solar, U. de Chile; Víctor Bucarey, U. de O'Higgins, Chile; Gonzalo Monsalve and Gonzalo Ramírez, Codelco, Chile

ENG

Productivity increase through the optimization of exclusion zones using new digital technologies

[Igor Oliveira](#) and Jair Alarcon, Orica, Brazil; Carlos Campos and João Soares, Vale, Brazil

11:00

SPA

Deepfake e IA en minería: estrategia integral frente a la suplantación de identidad

Danilo Pomalaza y [Melissa Nole](#), Compañía Minera Antamina, Perú

SPA

Technical and economic evaluation of electric trucks fleet for the Andean countries

[Gerson Bastos](#) and Pablo Monsalve, Ausenco, Chile

SPA

Integración de analítica avanzada y conocimiento experto para la detección anticipada de eventos críticos en minería

[Martín Erazo](#) y Pablo Zúñiga, Metso, Chile

11:20

SPA

Auditabilidad desde el origen: integración de datos para contabilidad metalúrgica

SPA

Modelo electromecánico adaptable para estimar potencia instantánea en equipos mineros eléctricos

SPA

An integrated framework for strategic mine planning and multitime optimization

Brayan Churata, Joe Vilchez y Jhon Muñoz,
Datamine, Perú

Lukas Gleisner, Diego Troncoso-Kurtovic, Jorge
García-Bustos, Bruno Masserano, Ricardo
Salas-Espiñeira, Vicente Pinochet, Francisco
Jaramillo-Montoya, Ángela Flores, Luis
Orellana, Marcos Orchard y Javier Ruiz-del-
Solar, Universidad de Chile; Gonzalo Monsalve y
Gonzalo Ramírez, Codelco, Chile

Isabella Buitrago, Dassault Systèmes,
Colombia; Magdiel Alfaro, Solaer, Chile; Olga
Reshetnikova, Dassault Systèmes, Brazil; and
José González, Dassault Systèmes, Chile

11:40

SPA

Ciberseguridad: encriptación cuántica (APQ)
José Uzcategui y Fernando Torres, NTT DATA,
Chile

SPA

Enabling continuous operation of battery-
electric LHDs with trolley-assisted charging
Lukas Gleisner, Diego Troncoso-Kurtovic, Jorge
García-Bustos, Bruno Masserano, Ricardo
Salas-Espiñeira, Vicente Pinochet, Francisco
Jaramillo-Montoya, Ángela Flores, Luis
Orellana, Marcos Orchard y Javier Ruiz-del-
Solar, Universidad de Chile; Gonzalo Monsalve y
Gonzalo Ramírez, Codelco, Chile

SPA

De modelos predictivos a decisiones
operacionales: implementación de LM-ORION
en la planta concentradora Candelaria
René Quezada, Adolph Möller, Luis Ayala, Diego
Rojas y José Aguirre, Distrito Candelaria, Lundin
Mining, Chile

12:00 - 12:30 Coffee-Break and Poster Session

12:30-14:00 Plenary Session 1
BALLROOMS A y B



BALLROOMS A y B

Plenary Session 1

12:30

SPA

Technology, automation, and artificial intelligence ➡ enhancing value in safety and
productivity
José Ramón Abatte, Corporate Manager Technology and Digitalization, Codelco, Chile

13:00

SPA

AI pays off
Jaime Rebolledo, Director - Mining Services, NTT Data Chile

13:30

SPA

Innovation under pressure: accelerating digital transformation for safer and more
sustainable mining
Luis Sánchez Pastor, Head of Innovation, GoldFields, Perú

14:00 - 15:30 Lunch

15:30-17:10 Technical Sessions
BALLROOM A, B & C



BALLROOM A	BALLROOM B	BALLROOM C
📄 SESSION 19 Session 19: Computer Vision & Intelligent Monitoring	📄 SESSION 20 Session 20: Smart Mining Equipment	📄 SESSION 21 Session 21: Digital Twins & Optimization
15:30 SPA Implementación de modelo de video analítica para monitoreo de pilas de lixiviación en División Chuquicamata <u>Francisca Miranda</u>, Camila Albornoz, Diego Vergara, Mauricio Pozo, División Chuquicamata, Codelco, Chile; Juan Pablo Hasche, Martín Campos y Camilo Menares, Casa Matriz, Codelco, Chile	SPA Cálculo de metas operacionales basado en percentiles a partir de datos de sistemas anticolisión <u>Jecar Arroyo</u>, Hexagon, Chile; Hugo Gonçalves, Arthur Franca y Ruda Martins, Hexagon, Brasil	ENG Model-agnostic predictive analytics and multi-indenture availability optimization for mining <u>Veronica Gacitua</u>, Ribeeon, USA; and Claudio Gacitua, InnovaEngine, USA
15:50 ENG To be confirmed Speaker to be confirmed	SPA Integrated system for automated dam failure detection and siren activation <u>Pâmela Leite</u> and Anderson Fernandes, Geomin Tecnologia, Brazil	PRT Digital twin and virtual commissioning for mining stacker/reclaimer projects <u>José da Silva</u> and <u>Leopoldo Naves</u>, Automaton, Brazil; and Sergio Campana, Rockwell Automation, Chile
16:10 ENG Q-Learning for adjusting silo fill rates in tripper car scheduling at ore processing plant <u>Lucas Reis</u> and Luciano Cota, Vale, Brazil; and Marcione Souza, Universidade Federal de Ouro Preto, Brazil	SPA Optimización del proceso de medición de pozos mediante tecnología radar en operaciones de voladura <u>Jorge Álvarez</u>, Juan Arenas y Martín Peña, Enaex, Chile	SPA Optimización conjunta de mezcla diaria y flota CAEX mediante MILP e IA para maximizar el cobre fino recuperable <u>Cristóbal Marín</u> y Eduardo Conesa-Pietscheck, Trytopo.ai, Chile
16:30 ENG Artificial intelligence in railway systems: computational optimization for efficient monitoring Luísa Ferreira, <u>Thomás Pinto</u> and Gustavo Pessin, Instituto Tecnológico Vale, Brazil; and Francisco Diniz, Universidade de São Paulo, Brazil	SPA De captura manual a robótica para datos geológicos en Túnel Correa <u>José Manuel Ortiz</u>, Francisco Zapata y Pablo Araya. Kinamics Robotics SpA, Chile	SPA Gryphon: plataforma con IA para minería <u>Roberto Fustos</u>, <u>Trinidad Toro</u> y Jean Navarrete, Universidad de Concepción, Chile
16:50 PRT GET loss detection system pilot: AI-driven crusher protection at Salobo Copper Mine Yan Oliveira, Weir Motion Metrics, Brazil; and <u>Adriano Xisto</u>, Vale, Brazil	SPA Managing grade variability in heterogeneous deposits using XRF sensors <u>Álvaro Araya</u> y <u>Valeria Osorio</u>, MineSense Technologies, Chile	SPA Application of digital twin technology for enhanced operational efficiency in mine projects <u>Brady Hostettler</u>, Honeywell, USA

17:10 - 17:50 **Coffee Break and Poster Session**

	BALLROOM A	BALLROOM B	BALLROOM C
	↘ SESSION 22	↘ SESSION 23	↘ SESSION 24
	Session 22: Autonomous Mining Systems	Session 23: Operational Innovation & Industrial Communications	Session 24: Industrial Data, AI & Process Optimization
17:50	SPA Wiraq: scoop semiautónomo Adolfo Merca, Alessandra Mandriotti y Andrea Quevedo, Alpayana, Perú	SPA A Data-driven approach to the electroleaching treatment of waste streams in the WATERPROOF project Guillermo Pozo, Carmen del Rio, Eider Martin, Maider Azpeitia, Ainhoa Unzurrunzaga, Javier Nieto and María Fernandez, Tecnalia, Spain	ENG Integrated IoT and cloud analytics architecture for geotechnical monitoring Yaser Alsakaji, Willian Barbao, and Charleston Bezerra, Intelltech Intelligent Technologies, Brazil
18:10	PRT Aplicando gestión integrada y digital en activos de minería David Elio y Luca Diederichsen, Accenture, Brasil	SPA Energy-efficient pump dispatch and continuous monitoring in a mine water pipeline Pablo Vergara, Pablo Monsalve and Gerson Bastos, Ausenco, Chile	ENG Mapping data fragmentation costs to digital twin investment viability in mining Guilherme Klein and Tadeu Martins, Siemens, Brazil
18:30	SPA StabCrown: plataforma digital para estabilidad de pilares corona Gonzalo Bouldres, Felipe Cancino, Leticia Campos y Daniel Alvarado, Universidad de Atacama, Chile	ENG AI-driven physics-based framework for hydrodynamic journal bearing analysis Adesh Kumar Tomar, Department of Mechanical and Metallurgical Engineering, Pontificia Universidad Católica de Chile, Chile	ENG A machine learning approach for fault detection in hydraulic cylinders Niliken Silva, Vale, Brazil; Luísa Ferreira, Thomás Pinto and Gustavo Pessin, Instituto Tecnológico Vale, Brazil; and Francisco Diniz, Universidade de São Paulo, Brazil
18:50	SPA Transformadores digitales en minería: de la monitorización a la gestión de flota basada en riesgo Marcelo Ulloa, Rhona, Chile y Estevan Bravo, Maschinenfabrik Reinhausen, Brasil	SPA Gestión inteligente de flota con sistema Dispatch C4M (TBC) Adolfo Merca, Gerardo Ávalos y Aldair Buleje, Alpayana, Perú	SPA Digitalización del control de caliza liberada en operación multi-rajo Jordán Castro e Ignacio Soto, Datamine, Chile

Fri Aug 07

	BALLROOM A	BALLROOM B	BALLROOM C
	↘ SESSION 25	↘ SESSION 26	↘ SESSION 27

08:10

SPA

Daily update

SPA

Daily update

SPA

Daily update

08:20

SPA

REx: Chatbot experto en reología para análisis avanzado y soporte operativo en tiempo real

Sebastián Haristoy, Jonathan Venegas y Rodrigo Balboa; Konatec, Chile

ENG

Digital product thinking as a strategy for PPM platform adoption in mining capital projects

Priscila Lobo Ferreira, Vale, Brazil

SPA

Optimizing maintenance strategies for geotechnical monitoring systems using NSGA-II

Giovanna Rocha and Marília Melo, Vale, Brazil, and Homero Castro, Thais Menegaldi and Michel Bessani, Universidade Federal de Minas Gerais, Brazil

08:40

SPA

Plataforma de inteligencia operacional para soporte de decisión en minería

Eduardo Riquelme, Andritz, Chile

SPA

Caso de éxito de gemelo digital en planta de tostación

Diego Jaques y Sandy Ramirez, Kairos Mining, Rodrigo Diaz, Ministro Hales, Codelco; Jonathan Aqueveque, Codelco

SPA

Application of advanced control performance monitoring in an acid plant: a case study in Caletones smelter

Jonhatan Barriga, Accenture, Chile; Marcelo Green and Felipe Retamales, División El Teniente, Codelco, Chile; Aldo Bonomelli, Casa Matriz, Codelco, Chile; and Rodrigo Vega, Schneider Systems Chile

09:00

ENG

SIRIEMA: a scalable industrial computer vision framework for mining operations

Rodrigo Paiva, Brenda Moura, Álvaro Martins, Ralf Filho, Tiago Wirtti, Claudio Ramalho and Vitor Ohnesorge, Vale; Rodrigo Mendes, Deloitte, Brazil; Rodrigo Fardin, Mogai; and Caio Carletti, Tata Consultancy Services, Brazil

SPA

AI for rock fragmentation, prediction and drill-blast optimization in open pit mining

Ana Salazar, Universidad Central del Ecuador

ENG

Leveraging equipment performance data to enhance uncertainty-aware mine planning

Sylvester Avane, Angelina Ananji and Nathalie Risso, University of Arizona, USA

09:20

SPA

Improving loading-cycle performance and safety with computer vision-based operational analytics

Sergio Lagos, Jorge Skeet, Manuel Zamorano and Sebastián Vergara; PSINet, Chile

SPA

IA + Blockchain para capturar el premium ESG en mercados internacionales y aumentar ROI del cobre

Serrana Verges, AmbioTeck, Chile

SPA

Cyclone operating patterns as a driver of particle size uniformity and metal production

Rodrigo Bruna, Alejandro Ramos, Robert Maron and Alejandro Jaque, CiDRA Minerals Processing, Chile

09:40

SPA

Centro integrado de operaciones División Radomiro Tomic

Roxana Pinto, Manuel Acuña y Marcos Cifuentes, Codelco, Chile

SPA

Closed-loop energy-aware digital twin for trolley-assisted CAEX haulage

Priscila Alves and Víctor Baeza, NTT DATA, Chile

ENG

Metallurgical accounting in a large production chain

Italo Figueiredo and Jedson Alessandro Damasceno, Samarco Mineração, Brazil; William Barbosa and Paulo Sérgio de Oliveira, TAGNA Tecnologia, Brazil

10:00 - 10:40 **Coffee-Break and Poster Session**

10:40-12:00

Technical Sessions

BALLROOM A, B & C



	BALLROOM A	BALLROOM B	BALLROOM C
	↘ SESSION 28 Session 28: Computer Vision, AI & Robotics	↘ SESSION 29 Session 29: Industrial Data & Connected Systems	↘ SESSION 30 Session 30: Smart Equipment & Automation
10:40	SPA Smart F80: detección de granulometría con IA José Criado, Jesús Acuña y <u>Piero Zela</u>, Alpayana, Perú	SPA Diagnóstico del greide en vías de acarreo mediante datos GPS de sistemas de seguridad vehicular <u>Hugo Gonçalves</u>, Arthur Franca, Ruda Martins y Sergio Junior, Hexagon, Brasil; Anthony Gutarra y Aldo Olarte, Hexagon, Peru	SPA CAS Nivel 9 en minería subterránea: caso minera Meridian ➡ El Peñón, Chile Camilo Morales y Michael López, EPIROC, Chile
11:00	SPA Multimodal AI and quadruped robotics for conveyor belt inspection in mining <u>Mauricio Ramírez</u>, SK Godelius, Chile	SPA Convergencia OT ➡ IT en minería LATAM: integración de datos geotécnicos para operaciones seguras y eficientes <u>Charleston De Oliveira</u>, Filipe Ferreira y Ricardo Marcel, Intelltech Intelligent Technologies, Brasil; y Glendy Suarez, Intelltech Intelligent Technologies, Chile	SPA To be confirmed Speaker to be confirmed
11:20	SPA Power prediction in grinding using hybrid models and time-series architectures <u>María José Astudillo</u>, Fernanda Barrera, Cristian Vernet, Matias Mansoulet and Brian Vivero, Molycop, Chile; and Paul Shelley, Molycop, Australia	SPA Sistema multi-experto para priorización de alertas CAS y análisis espacial de riesgo de colisión <u>Anthony Gutarra</u> y Aldo Olarte, Hexagon, Peru; Arthur Franca, Hugo Garcia y Ruda Martins, Hexagon, Brasil	ENG Optimization of swing-angle control in ERS 7495 to improve loading efficiency <u>Gilney de Freitas</u>, Talitta Marinho, and Aline Campos, Vale, Brazil
11:40	SPA Framework de continuidad operacional para medición leyes basado en capa física y virtual César Bravo, Cristian Leyton, Luis Figueroa, Oscar Hernandez y <u>Mario Vergara</u>, Minera Los Pelambres, Chile	SPA Monitoreo remoto para la confiabilidad de activos en pozos de agua en zonas remotas: cumplimiento normativo y optimización operativa (TBC) <u>Jorge Espinoza</u>, Emerson, Costa Rica	ENG Evaluation of feed rate control adjustments for reducing average truck dumping time <u>Camila Ribeiro</u>, Mateus Filipe, Cristiano Citi and Jackson Sousa Silva, Vale, Brazil; and Vinicius Ferreira, IHM Stefanini, Brazil

12:20 - 12:40 Coffee-Break and Poster Session

12:50-14:10

Plenary Session 2

BALLROOMS A y B



Plenary Session 2

12:50

SPA

Digital ecosystems in mining: connecting data, people, and operations across the value chain

Sofía Castillo, Digital Systems Manager Latam, Teck Resources, Chile

13:20

SPA

Designing digital operations from day one: OT architecture for next-generation mining projects

Jorge García, Operational Technology Manager, Vicuña, Argentina

13:50

SPA

Tecnología en minería de baja ley: cómo la innovación con sentido redefine la creación de valor

Rodrigo Bilbao La Vieja, Manager IT and Digital Transformation, Sierra Gorda SCM, Chile

14:20 - 15:50 Lunch

15:50-16:50 Technical Sessions
BALLROOM A, B & C



BALLROOM A

BALLROOM B

BALLROOM C

▾ SESSION 31

Session 31: Industrial Data & Connected Systems II

▾ SESSION 32

Session 32: Remote Operations

▾ SESSION 33

Session 33: Mining Electrification Infrastructure

15:50

SPA

Integration of ore traceability and advanced analytics for sulfuric acid optimization at DGM

Manuel Vargas, Rodrigo Ibaceta, Eric Véliz; Gabriela Mistral, Codelco; Javiera Corrales, Felipe Santibañez, Eduardo Aguilera and Antony Delacruz, Codelco, Casa Matriz, Chile

SPA

Application of digital tools in engineering of records: experiences in tailings storage facility management

Consuelo Rodríguez, Abraham Figueroa, German Toledo y Wolfgang Wachtendorff, Arcadis, Chile

ENG

Electrical generator selection for islanded power stations

Rene Rossi, R. Rossi & Associates, Australia

16:10

SPA

MINEWATCH: tracking en la última milla

Juan Pedro Gajardo, DMC, Chile; Nicolás Canales y José Reyes, Vigalab Spa, Chile

SPA

De la captura a la decisión: robótica, analítica e inteligencia de negocios para una operación minera más eficiente

José Manuel Ortiz, Ignacia España y Carlo Lobiano, Kinamics Robotics SpA, Chile

SPA

Dimensionamiento de infraestructura de carga para equipos a batería en minería subterránea

Agustín Vilches, Kevin Espinoza, Fernando Urzúa, Iván Pérez, Francisco Jaramillo, Ángela Flores, Luis Orellana, Marcos Orchard y Javier Ruiz-del-Solar, Universidad de Chile; Gonzalo Monsalve y Gonzalo Ramírez, Casa Matriz, Codelco, Chile

16:30	ENG Implementation of a virtual weighing system for coal traceability at Parauapebas terminal <u>Vitor Nunes</u>, Taiany Coura, Rinaldo Secundino and Jessica Lorana, Vale, Brazil; and Paulo Sá, SATEC Soluções Industriais, Brazil	SPA Plataforma de modelamiento y visualización en tiempo real para mejora operacional desde centro de operaciones remoto <u>Katherine Muñoz</u>, Anglo American, Chile y Joaquín Laínez, TIMining, Chile	ENG Technological architecture for electrical substation automation system <u>Débora Martins</u>, Paulo Vieira and Mateus Cruz, Vale, Brazil; Audrey Machado and Maurício Santos, Engineering Brazil
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16:50-18:20	Closing Ceremony, Participants Satisfaction Survey Raffle and Farewell Cheese and Wine Foyer	
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Foyer
Closing Ceremony, Participants Satisfaction Survey Raffle and Farewell Cheese and Wine

16:50	SPA Acknowledgments and Closing Remarks • Mimy Mackenzie, Conference Manager, Gecamin, Chile • Victor Babarovich, Minería Digital 2026 Program Director; Technological Innovation Consultant, Chile • Priscila Guedes, Minería Digital 2026 Chair; Engineering Manager, Technology Projects, Vale, Brazil
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