

DIGITALISATION IN MINING LATIN AMERICA

MARCH 21-22, 2023

SANTIAGO DE CHILE,
INTERCONTINENTAL
SANTIAGO

WORKSHOP:

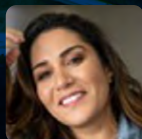
MARCH 23, 2023

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10 FEBRUARY**

FEATURED SPEAKERS:



Cristian Carrasco
Regional Technology
and Operational
Excellence Manager
Glencore Chile



Sandrine Moura
Head of Change
Management and
Digital Transformation
Vale S/A



Jaime Rebollo
Head Natural
Resource Chile
NTT Data



**Alvaro Orellana
Raccoursier**
Reman Engineering &
Innovation Manager
Komatsu Chile



Douglas Pimenta
Artificial Intelligence
Program Leader
Vale S/A



Felipe Merino Grau
Head of Innovation
Codelco

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Ingeniería de Minas
FACULTAD DE CIENCIAS
FÍSICAS Y MATEMÁTICAS
UNIVERSIDAD DE CHILE



MEDIA PARTNERS



Translation services will be available at the conference.
Los servicios de traducción estarán disponibles en la conferencia.

mininginnovationnetwork.swoogo.com/dmla2023 {Spanish translation available}

Organised by:

**MINING
INNOVATION
NETWORK**

ABOUT THE EVENT

English/Spanish translation will be available onsite / La traducción está disponible

From the organisers of the Digitalisation in Mining Australia and Digitalization in Mining North America Conferences, the **2023 Digitalisation in Mining Latin America Conference** will address these challenges over two days with both regional and global experts providing in-depth case studies, thought-provoking panel discussions, and the leading solution providers showcasing how they can solve the industry's unique challenges.

3 FEATURED SESSIONS IN AGENDA:

ARTIFICIAL INTELLIGENCE & DATA IN MINING

The Artificial Intelligence and data session will highlight the importance of artificial intelligence (AI), machine learning, and data for the mining industry - including helping companies with mineral exploration, site selection, sorting, transportation, operations, value chain management, and increased safety.

The session will include strategic insights, case studies, technology spotlights, and panels. In addition, it will take a deep dive into application areas and explain the benefits of machine learning for your business, new technologies and innovation available, and much more.

ROBOTICS & AUTOMATION IN MINING

Robotics and Automation in the mining sector are crucial to reducing costs, saving time, increasing productivity and operational efficiency. It is, without doubt, a key ingredient in the digital transformation of the mining industry.

The robotics and automation session is an opportunity to hear real-life case studies, strategic insights, and technology spotlights directly from the source.

ESG TECH IN MINING

Technology is the key differentiator in a company's ESG strategy and success. The right technology and innovation can help a company improve energy consumption, waste management, and sustainable operations, attract investors, reduce costs, and build customer loyalty, and much more.

This session will bring you all you need to know about the various ESG technologies through case studies, panel discussions, and strategic insights. Topics include Electrification and Alternative Fuel Solutions in Mining, Mine Closure Planning, Decarbonisation, and much more.

TOP 5 PRESENTATIONS:

- ✓ **Glenore shares** "The journey towards digitalization"
- ✓ **The Journey towards Automation and Digital** by Glencore Copper
- ✓ **Exploring Antapaccay's Autonomy Program** by Compañía Minera Antapaccay
- ✓ **Decarbonization & Sustainability Technologies in Mining** panel by Komatsu, Worley and Codelco
- ✓ **Anglo American** leads a panel discussion on "Enabling long-term innovation through culture, diversity, and inclusion"

WHAT THEY SAID ABOUT OUR 2022 DIGITALISATION IN MINING AUSTRALIA AND DIGITALIZATION IN MINING NORTH AMERICA CONFERENCES:



This event was an intimate setting with industry-relevant sessions and had a high proportion of personas we look to engage with.

Matt Lindsay, Client Manager,
RtTech Software



It was an excellent opportunity to learn more about the mining industry, its challenges, how different companies are approaching those challenges, what kind of solutions are being used, and what kind of new technologies we can expect in the near future. Really a high-value opportunity!

Chris Molina, Technical PM,
Yamana Gold



We found the conference very successful. The delegates and organisation were second to none.

Kelly Harris, Regional Sales Manager,
EBSCO



It was great to be part of the current and future trends for tech in the mining industry, and see so many people discussing theoretical and practical examples.

Don Smith, Managing Director,
Tempest Minerals



The conference provided a great opportunity to learn the latest development in mine digitalization, and to network with relevant professionals working in the industry.

Chaoshui Xu, Associate Professor,
University of Adelaide



**DIGITALISATION
IN MINING**
LATIN AMERICA

INDUSTRY EXPERTS



Ricardo Aguilera
Regional Director
Digital, South America
Hatch



Doug Aitken
General Manager
SMI-ICE-Chile,
Sustainable
Minerals Institute



Cristian Carrasco
Regional Technology
and Operational
Excellence Manager
Glencore Chile



Alan Fraser
Business Development
Manager Copper
Bechtel Mining
& Metals



Sofia Sanchez
Kramer
VP People &
Organisation
Anglo American



Sandrine Moura
Head of Change
Management and
Digital Transformation
Vale S/A



Patricio Pastorelli
General Manager
LATAM
Amira Global



Benjamin Perez
President, Mining
Committee Auscham
Auscham



Douglas Pimenta
Artificial Intelligence
Program Leader
Vale S/A



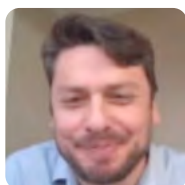
Alvaro Orellana
Raccoursier
Reman Engineering &
Innovation Manager
Komatsu Chile



Giulia Jalmerot-
Timarco
Director - Mining
Mining Innovation
Network



Juan L. Yarmuch
Asst. Professor
Department of
Mining Engineering,
University of Chile



Felipe Merino Grau
Head of Innovation
Codelco



Javiera Bolados
Arroyo
Operational Excellence
Regional Processing Lead
Glencore Chile



Carlos Cotera
Avellaneda
General Manager
Compañía Minera
Antapaccay,
Glencore



Verónica Fincheira
sejo Minero
de Chile



Javier Ruiz del Solar
Executive Director,
Advanced Mining
Technology Center -
AMTC Professor of the
Department of Electrical
Engineering
Universidad de Chile



Osvaldo Bascur
Principal
Osborn Digital, LLC



Claudia Cornejo
Varela
Head Talent and
Transformation Americas
NTT Data



Enrique Jélves
Montenegro
Associate Researcher &
Director Delphos Mine
Planning Lab
Advanced Mining
Technology Center



Zdenko Koscina
Director
Minnovex AG



Gonzalo Montes
Atenas
Associate professor/
Head of the Department
of Mining Engineering
Universidad
de Chile



Jaime Rebolledo
Head Natural
Resources Chile
NTT Data



Nicolás Tagle
Lucero
Advanced Analytics
Superintendent
Minera Los
Pelambres



Carmen Vega
Cancino
Director Operational
Excellence
Minera Los
Pelambres

AGENDA DAY 1: TUESDAY, MARCH 21, 2023

08:00 Registration & Morning Coffee

09:00 Welcome from the Organiser
Giulia Jalmerot-Timarco, Director – Mining,
Mining Innovation Network

09:10 Chairman's Opening Remarks
Patricio Pastorelli, Head of Global Alliances,
Amira Global

09:20 Opening Keynote
The Future of Resources in the Region

- Understanding the current regulatory landscape and where things are heading
- Discussing the importance of partnerships across the industry
- Assessing how the digital transition can increase long-term competitiveness for the Chilean mining industry

09:50 Opening Panel
 **Building the Mine of the Future – Discussing the Future of Technology & Innovation**

- The importance of strategic partnerships and collaborations
- Discussing the challenges and opportunities facing the industry
- Debating the role of digitalization in the regional mining industry
- Understanding the level of technology deployment – Challenges and Opportunities
- Examining what technologies the industry needs and what is currently out there
- How can we improve the level of technology and its deployment

Panellists:

Sandrine Moura, Sr Global Manager of Change Management and Digital Transformation, Vale

Moderator:

Patricio Pastorelli, Head of Global Alliances, Amira Global

SESSION I: ARTIFICIAL INTELLIGENCE & DATA IN MINING

10:30 Strategic Insight
Adopting Artificial Intelligence to Drive Innovation

- Adopting artificial intelligence as an innovation strategy
- Understanding how to increase the predictability, reliability, and health of assets in the different phases of the mining operational chain
- Discussing challenges and opportunities


Douglas Pimenta, Artificial Intelligence Program Leader, Vale S/A

10:50 Morning Coffee and Networking Break

11:20 Case Study
The Journey towards Automation and Digital

- Assessing Glencore Cu Americas journey towards digitalization
- Understanding the challenges and how to tackle them
- Looking at the success stories
- Debating where things are heading

Dr. Cristián Carrasco, Regional Manager Operational Excellence and Technology Transformation, Americas, Glencore Copper

11:50 Panel Discussion
 **Harnessing the power of data analytics across the whole mining value chain**

- Assessing how advanced analytics can improve the efficiency of the value chain
- Understanding why we should be sharing more data and not less
- Exploring cost-effective and sustainable solutions
- Debating on challenges and opportunities
- Looking at real-life case studies

Panellists:

Dr. Cristián Carrasco, Regional Manager Operational Excellence and Technology Transformation, Americas, Glencore Copper
Douglas Pimenta, Artificial Intelligence Program Leader, Vale S/A

12:10 Strategic Insight
Cultural Transformation Roadmap – Preparing an organization for the digital transformation

- Exploring different approaches and pathways
- Preparing internally for change
- Understanding the challenges and how to tackle them
- Looking at best practices and winning strategies

Ana Maria Casanova, Manager Technology Portfolio Services, BHP

12:40 Networking Lunch

SESSION II: ROBOTICS & AUTOMATION IN MINING

14:00 Fireside Discussion
Increasing Cybersecurity awareness and harnessing its power

- Assessing the importance of cybersecurity in an industry with increasingly growing reliance on technology across the value chain
- Understanding the specific threats to mining
- Discussing general and industry-specific cybersecurity challenges
- Looking at “Digital Trust” and how to increase trust in the digital innovation
- Debating how to create more substantial barriers in addition to being compliant
- Best practices and real-life case studies

Panellists:
Benjamin Perez, President - Mining Committee Auscham, Auscham

AGENDA DAY 1: TUESDAY, MARCH 21, 2023 - CONTINUED

14:40 Case Study

Exploring Antapaccay's Autonomy Program and the first autonomous drill

- Understanding what the program is about
- Looking at the pathway to realization
- Deployment challenges and how to overcome them
- Discussing further planned and potential developments

Carlos Coterá, General Manager – Antapaccay Mine, **Glencore Peru**

15:10 Afternoon Networking Break

15:40 Presentation

The future of Collision Avoidance Systems

- Exploring the technologies behind – sensors, radars, cameras, lasers, GPS, and much more
- Exploring underground VS open pit challenges and how to solve them
- Looking at best practices and case studies

16:10 The development of new technology for defining optimal and mineable open-pit extraction sequences

Open-pit mine planning is a key process in defining mineral reserves and their efficient extraction.

Open-pit mines are extracted by the mining of sequential pits called pushbacks. Pushbacks need to satisfy complex geometrical constraints to ensure the efficient usage of equipment.

To date, no algorithms that account for those constraints are commercially available. Therefore, pushback design is done by engineers relying on their expertise. In this presentation, we show the process of developing a new algorithm that produces close to optimal practical pushbacks, and we illustrate its performance in real mines.

Juan L. Yarmuch, Assistant Professor, Department of Mining Engineering - **University of Chile**

16:50 Chairman's Closing Remarks

17:00 End of Conference Day 1 and Networking Drinks



AGENDA DAY 2: WEDNESDAY, MARCH 22, 2023

08:00 Registration & Morning Coffee

08:50 Welcome from the Organiser
Giulia Jalmerot-Timarco, Director – Mining,
Mining Innovation Network

SESSION I: ESG TECH IN MINING

09:00 Chairman's Opening Remarks
Douglas Aitken, General Manager, Sustainable
Minerals Institute International Centre of
Excellence Chile - The University of Queensland

09:10 Opening Panel
**Decarbonization & Sustainability
Technologies in Mining**
This session will discuss the road toward Net
Zero and the importance of technology for the
mining industry in the energy transition

- Assessing the challenges that the industry is facing and how to tackle them
- Debating what technologies are out there to reduce carbon emissions
- Looking at how operators and OEMs are tackling net-zero challenges
- What are mining operators looking for and expecting
- Understanding how technology can boost transparency in the supply and value chain

Moderator:

Douglas Aitken, General Manager, Sustainable
Minerals Institute International Centre of
Excellence Chile - The University of Queensland

Panellists:

Alan Fraser, Business Development Director,
Worley

Alvaro Orellana, Engineering & Innovation
Manager, **Komatsu**

Felipe Merino, Head of Innovation, **Codelco**
Oswaldo Bascur, Principal, **Osborn Digital, LLC**

09:50 Fireside Chat
**Enabling long-term innovation through
culture, diversity, and inclusion**

- Exploring new ways to bring diversity into the mining industry
- Understanding the connection between diversity and innovative thinking
- Debating how this is a sustainable and innovative long-term strategy

Panellists:

Sandrine Moura, Global Head of Digital
Transformation & Change Management, **Vale S/A**
Sofia Sanchez Kramer, VP People &
Organisation, **Anglo American**

10:20 Morning Coffee and Networking Break

SESSION II: ARTIFICIAL INTELLIGENCE & DATA IN MINING

10:50 Strategic Insight
Merging Automation and Electrification

- Understanding the challenges and opportunities
- Exploring battery electric vehicle guidelines
- Debating the next steps and where things are heading
- Looking at the technology behind

11:20 Strategic Insight
**Digitalization in constant evolution –
Exploring and understanding the major
changes affecting the mining industry**

- Talent
 - How is this changing and what pushes the change?
- Autonomy
 - How is autonomy changing and how it's pushing digital architecture
- Sustainability – Tackling the risk of greenwashing and creating a real positive impact
- Safety – Understanding the change and preventing accidents through data

Jaime Rebolledo, Head of Natural Resources,
NTT Data
Claudia Cornejo, Director & Head of Americas
Talent and Transformation, **NTT Data**

11:50 Case Study
**Levering data and analytics to accelerate
operational excellence**

- Discuss the connection between analytics and operational excellence
- Looking at a real-life case study
- Understanding the challenges and how to overcome them
- Exploring the opportunities and critical success factors

Javiera Bolados Arroyo, Operational Excellence
Regional Lead, **Glencore Copper Chile**

12:20 Presentation
Digitalization of Strategic Mine Planning

- Exploring what solutions are available
- Discussing challenges and opportunities
- Debating where things are heading

12:50 Networking Lunch

AGENDA DAY 2: WEDNESDAY, MARCH 22, 2023 - CONTINUED

SESSION III: ROBOTICS & AUTOMATION IN MINING

14:30 Trends in Mining Automation

- Exploring current trend in mining automation
- Debating where things are heading and possible future developments
- Latin American market in comparison to other mining regions

Javier Ruiz del Solar, Universidad de Chile

15:00 Networking Break

15:30 Presentation

Levering data and analytics to accelerate operational excellence

- Understanding challenges and opportunities
- Exploring how it works
- Looking at future trends

Javiera Bolados Arroyo, Operational Excellence Regional Processing Lead, Glencore Chile

16:00 Panel Discussion



From Concept to Reality – Discussing the future of autonomous machine design, technology, and innovation

- Understanding the challenges facing the industry and discussing potential solutions
- Assessing pros and cons of in-house R&D vs buying from third parties
- Addressing interoperability challenges and how to solve them
- Looking at the newest technologies and other practical solutions
- Uniting technology and people - Assessing the human factor in Robotics & Automation.
- Discussing how we can collaborate and bring in the community to find the right solutions

Veronica Fincheira, Council-Manager – Mining, Consejo Minero de Chile

16:40 Chairman's Closing Remarks

16:45 End of Conference



DIGITAL TWINS FOR THE FUTURE OF THE MINING INDUSTRY Price: \$395

ABOUT THE WORKSHOP:

This workshop will unravel what digital twins are and their added value to the mining industry today and in the future. It will explain how it works, application areas, and give practical examples.

The workshop will be held in Spanish.



ABOUT THE WORKSHOP LEADER:

Enrique Jélvez Montenegro, Researcher at the **Advanced Mining Technology Center** will lead this workshop.

ABOUT THE AMTC:

This workshop is held by the AMTC (Advanced Mining Technology Center).

The AMTC was created in March 2009 after being selected by Conicyt's Associative Research Program within the framework of the Basal Financing Program for scientific and technological centers of excellence. It is part of the Faculty of Physical Sciences and Mathematics of the University of Chile, as a Faculty Center.

Its scientific work is divided into five research groups: Reservoir Exploration and Modelling; Mine Design and Planning; Mineral Processing and Extractive Metallurgy; Automation in Mining, and Water and Environmental Sustainability. These groups bring together more than 170 researchers, including academics and graduate students.

During its history, the AMTC has carried out successful scientific research projects that have resulted in prototypes, software, and collaborative relationships with various mining companies. It has also established important cooperation agreements and joint research initiatives with government entities and world-class scientific and technological centers.

WORKSHOP AGENDA:

08:30 Registration and Morning coffee

11:00 Workshop part II

09:00 Workshop part I

12:30 End of Workshop

10:30 Coffee Break



WHY SPONSOR THIS CONFERENCE?

Now is the ideal time to position your solutions in front of senior decision-makers from the mining sector. If you want to achieve your yearly sales goals and position your brand as a leading innovator for the mining industry, please contact:



Jessica Angsomwine

Director of Sales, Mining Innovation Network

T: +1 832-241-6504

E: jessica.angsomwine@energyconferencenetwork.com



- ✓ **Drive sales:** get in front of executive decision-makers and influential business advisors to drive new business development revenue and achieve yearly goals in just two days of work
- ✓ **Differentiate yourself from your competitors:** position yourself as a thought leader on stage, sharing industry insights and interacting with your peers to address highly relevant challenges facing the industry right now
- ✓ **Heighten your visibility:** showcase your leading products and/or services to qualified prospects
- ✓ **Increase brand loyalty before, during, and after:** Website, marketing emails, social announcements, event signage, exhibition space, and banners
- ✓ **Shape end-user's attitudes towards your solutions:** Build strong relationships with your existing clients and new prospects through various networking opportunities & tools



SPEAKING OPPORTUNITIES

Share your industry intelligence and show the attendees that you are an industry leader. Our team will help you develop a topic that is right for the audience and focuses on the strength of your organization.



EXHIBITION SPACE

There's no better way to showcase your products and/or services than face-to-face, in-person. Exhibiting gives you maximum signage exposure and a quicker way of converting sales from the attendees who are already looking for the solutions you provide.



NETWORKING OPPORTUNITIES

Have all your prospective customers in one room, networking over coffee, cocktails, lunch or dinner. With multiple representatives from your organization present, you'll be sure to get more contacts and prospective new business in a short amount of time. Work with the Mining Innovation Network team to come up with a creative and fun way to engage with the audience!



Q&A SPONSOR

Add your branding to Sli.do, our virtual Q&A software. All Q&A at the end of sessions will be done using Sli.do and will appear on the screen to be answered. See your logo each time!



LANYARD/ NAME BADGE SPONSOR

Every delegate must wear a name badge throughout the event, so this is the ideal way to make sure your branding is prominent.



SPONSOR LUNCH

Welcome the attendees to lunch from the stage on day 1 or day 2 and invite them to your booth during the break. Your logos will be featured throughout the buffet and will be shown on the screen in the conference room.



AI-powered matchmaking - empowering you to form meaningful connections and demonstrate measurable ROI.

Our event matchmaking is powered by **Brella (www.brella.io)** - which matches sponsors with attendees and enables hassle-free meeting scheduling in seconds. Your attendees can chat beforehand and take their meeting anywhere - in-person or virtually.

HOW DOES IT WORK?

Attendees choose interests relevant to your industry and event, plus why they want to network about their choice. Brella AI then determines the top matches for that attendee - and once a suitable match is found, sponsors and attendees can suggest a meeting at a mutually convenient time.

We provide meeting space for you to reserve - for 1 meeting or 30.

The app will also allow you to scan the QR codes of attendees - so that you can follow up with attendees post event.

REGISTRATION

Group discounts are available. For more information, contact mike.hegerty@energyconferencenetwork.com

Group size	Discount off listed pricing
3-5	15%
6-9	25%
10 or more	30%

Ticket Type	Early Bird Price Expires 10 February	Last Call Price Expires 3 March	Full Price
In-Person Registration + Access to Recordings and Presentations <i>This registration is for in-person attendance and includes access to the conference sessions, exhibition area, food, beverages and all networking opportunities, as well as approved PDF presentations and recordings after the event.</i>	\$1,195	\$1,495	\$1,695
In-Person Registration <i>This registration is for in-person attendance and includes access to the exhibition area, food, beverage, and all networking opportunities. It does not include access to the approved PDF presentations and recordings after the event.</i>	\$995	\$1,295	\$1,495
Industry Sponsor <i>This ticket is valid for Mining Operators ONLY and covers unlimited passes to two full days of the conference, along with full access to the exhibition, food, beverage and all networking functions. Additionally, you will receive access to available presentations after the event.</i>	-	-	\$5,000
Attending Sponsor <i>Registration includes a ticket (everything in the In-Person + Presentations package).to attend the conference in person, as well as branding at the event.</i>	-	-	\$1,995
VIP Table <i>This includes 8 tickets and secures you a table, in a prim position, for both days at the conference. It includes everything in the In-Person + Presentations package.</i>	-	-	\$5,000

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TERMS & CONDITIONS

Payment by invoice will incur a \$50 administration fee

Payment Terms

Payment is due in full by credit card upon completion of this registration form. By completing this registration form you agree to Mining Innovation Network charging your credit card for the amount stated above and you agree to pay Mining Innovation Network the price to secure your conference ticket. Your registration will not be confirmed until payment has been made by credit card and cleared funds are received in full. Admission to the conference will be refused if payment has not been received.

Cancellation and Substitution Policy

Cancellations must be received in writing and we do not offer refunds once payment has been made. If the cancellation is received more than 14 days before the conference, attendees will receive a full credit to a future conference. Cancellations received 14 days or less (including the fourteenth day) prior to the conference will be liable for the full fee. A substitution from the same organization can be made at any time in writing at no extra charge. If Energy Conference Network cancels a conference, payments received at the cancellation date will be credited towards attendance at a future conference or in the event of postponement by Mining Innovation Network, towards the rescheduled date. Credit notes remain valid for twelve months.

Changes to Conference and Agenda

Mining Innovation Network reserves the right to postpone or cancel an event, to change the location or alter the advertised speakers for an event. Energy Conference Network is not responsible for any loss or damage as a result of substitution, alteration, postponement or cancellation of an event due to causes beyond its control including without limitation, acts of God, natural disasters, sabotage, accident, trade or industrial disputes, terrorism or hostilities. In the event that a conference is cancelled, Mining Innovation Network is not liable for any costs incurred by delegates in connection with their attendance.

Occasionally it is necessary for reasons beyond our control to alter the content and timing of the program, venue or the identity of the speakers without any liability to the delegates. Changes to the agenda will be updated on our website as soon as possible.

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