

North America Edition



2nd MINING 4.0

Roadmap for the Future

Toronto, Canada / March 30-31 / 2023

PROGRAM HIGHLIGHTS:

- Robotics & Automation
- Pit-To-Port Optimization
- Digital Twins
- Connected Mine
- Cloud & Big Data
- Challenges of Advanced Analytics
- Next Generation Ore and Waste Control
- New Technologies in Exploration

HOTEL



INDUSTRIES ATTENDING



Metals and Mining Operators



Infrastructure Developers



Information Technology & Software



Mining Technology & Machinery Companies

www.minetech-forum.com

Event partnered by:



About:

Mining 4.0: Roadmap for the Future is a North American edition of the exclusive Mining & Metals event series that will bring senior stakeholders and decision-makers together for a two-day networking event in the spring of 2023.

The mining sector is embracing new technologies as it transitions to digital operations. Companies are now shifting towards sustainable, digitized, and smart equipment. Businesses are actively looking for ways to improve the bottom lines, reduce human involvement, and keep up with industry-wide advancements. Digitization and automation are the trends shaping the industry; together, these tools help companies increase productivity, cut costs, and achieve sustainability targets. The management consulting giant McKinsey predicts that digitalization can help the metals and mining industry conserve \$373 billion over the next three years by cutting waste, improving safety measures, and increasing efficiency. Digitalized, smart mines offer companies the opportunity to maximize benefits from their capital expenditures while improving safety, environmental impact, and social responsibility. The digitalization of a mine involves artificial intelligence, industrial cloud servers, and big data paired with modern robotics technology and drones. All of these advancements benefit from developments in LTE and 5G technology, so it is only a matter of time before unmanned mining becomes a reality. Companies unprepared for the shift to digitized mining will find themselves at a competitive disadvantage.

Mining 4.0: Roadmap for the Future is a conference intended to showcase current mining solutions for productivity, production rates, and cost reduction. Mining executives will share their strategies for extending mine longevity and examine case studies on the transition from manual to automated mining. The event will provide attendees with a roadmap for overcoming the challenges inherent in implementing mining automation and digitalization at scale. Learn from the experience of your peers, and avoid common pitfalls on the road to digital transformation together with Future Bridge.

Who Should Attend?

VPs, CEOs, CTOs, CIOs, MDs,
Directors, Heads, and Managers
who are responsible for:

- Mine Planning
- Green / Sustainable Technologies
- Asset Management
- Asset Development
- Infrastructure Development
- Operations
- Fleet and Mobile Technology
- Technical & Sustainability
- Geology & Exploration
- Underground Mine
- Open-pit Mine
- R&D
- Automation
- Data Management
- Digitalization
- Digital & Innovation
- Technology Development
- Data Science
- Advanced Analytics
- IoT
- Maintenance
- Digital Transformation
- Technical Services
- Business Intelligence
- Information Technology



Speakers & Panelists

Chairperson



Gisela GIPS

General Manager;
 Integrated Planning

ArcelorMittal



Nathan STUBINA

VP Technology

Sherritt
 International
 Corporation



Ludovic DONATI

Chief Digital Officer & Integrated
 Operations Program Director

Eramet Group



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Jennifer SELBY

Global Mining Technology Lead

Hatch



Aida PRADO

Portfolio Director
 Digital Mining

ArcelorMittal



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Thierry BERNARD

GM DNA-Blast Group/TBT

DNA-Blast
 Group/TBT



Rasmus TAMMIA

Program Manager – Artificial
 Intelligence in Mining

Boliden



Nicolás TAGLE

Head of Advanced Analytics at
 Minera Los Pelambres

Antofagasta
 Minerals



LOS PELAMBRES
 ANTOFAGASTA MINERALS



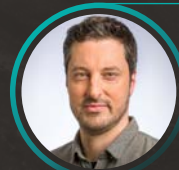
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Juan Manuel PARDAL

Global Metals Processing Director

Schneider
 Electric



Jean-Loup LOYER

Group Chief Data & Analytics Officer
 (CDAO)

Eramet Group



Dr. Khushaal POPLI

Domain Lead Data Science,
 Processing

Teck Resources Ltd.



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Jon ALLWOOD

Regional Director, North America –
 Digital

Hatch



Darren NATHAN

Manager - Operational Excellence
 and Asset Management

Glencore



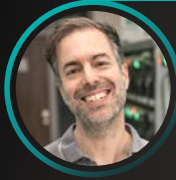
Anna WEEGAR

Sr. Manager, Connected Worker
 Information & Digital Solutions (IDS), Potash

Nutrien



Speakers & Panelists



Millan HERCE

Senior Mining Engineer,
Mining Systems & Project

Glencore

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Thiago AMARAL

Enterprise Sales Executive

Siemens

SIEMENS

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Bernardo MARINHO

Head of Global Sales - Minerals Automation
& Digitalization Solutions

Siemens

SIEMENS



Michelle ASH

Technology Executive Lead

OZ Minerals Australia

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Dr. Sohail NAZARI

Global VP Digital Transformation

ANDRITZ

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Dr. Ali SOOFASTAEI

AI Program Leader

Vale

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Martin PROVENCHER

Global Industry Principal for Mining,
Metals and Materials

AVEVA

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Unnati KINGI

Global Director
- Digital

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Day 1 30 March 2023

Time Zone - EDT
 (Eastern Daylight Time)

- 08:20** Registration and Welcome Coffee
- 08:50** Welcome Speech from the Organizer
- 08:55** Chairperson Address

Gisela GIPS



09:00 Is the Mining Industry as Innovative as We Think?

09:30 Digital Transformation in the Mining Industry - ERAMET Group Journey so far

- ERAMET Group digital transformation roadmap
- First initiatives (through drones, IoT, and data science)
- Which of the initiatives will be gathered in the IROC dynamic?
- Feedback from the People/Process/Technology challenges

Nathan STUBINA
 VP Technology
 Sherritt International Corporation

Ludovic DONATI
 Chief Digital Officer & Integrated Operations Program Director
 Eramet Group

10:00 Hatch Video Analytics Performance Management System

- A system has been developed which provides automated data reporting through the use of visual recognition software and artificial intelligence via standard security cameras
- Goal: understand the actual timing of each mining activity, compare it to the forecasted time and provide feedback on how to improve to match the expected time
- Performance inconsistencies are found the process refined to achieve optimal mining advance rates
- System provides automated, unbiased, and detailed performance data with zero maintenance and zero downtime

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Jennifer SELBY
 Global Mining Technology Lead
 Hatch

10:30 MORNING NETWORKING BREAK



11:10 Setting Up for the Future - Integrated Planning Pit to Port

- Why are we doing this?
- Journey to date
- What have we learnt so far?
- The pain of change
- Importance of people and processes above technology

Gisela GIPS
 General Manager, Integrated Planning
 ArcelorMittal

11:40 Unlocking the Potential of AI for Remote Operations Centers in Mining: The Role of Research and Development

- How AI contributes to improve effectiveness
- Artificial vision, object detection and Internet of Things applied to a use case

Aida PRADO
 Portfolio Director Digital Mining
 ArcelorMittal

12:10 How Blast Digital Twin Can Support Sustainability?

- Future of mining
- Blast Digital Twin
- 2 case studies:
 - Ore and waste control
 - Minimizing carbon footprint

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Thierry BERNARD
 GM DNA-Blast Group/TBT
 DNA-Blast Group/TBT

12:40 LUNCH BREAK



13:40 Optimize Process Control and Operational Performance with a Digital Twin

- Mining and telecommunication
- AI in an established business
- Boliden's AI R&D program
- AI operator support

Rasmus TAMMIA
 Program Manager - Artificial Intelligence in Mining
 Boliden

14:00 Implementing Advanced Analytics in Mining: Challenges & Opportunities from a Chilean IROC

Nicolás TAGLE
 Head of Advanced Analytics at Minera Los Pelambres
 Antofagasta Minerals
 LOS PELAMBRES ANTOFAGASTA MINERALS



14:40 Unified Operations Centers

- Role Based Information
- Evolution
- Different Concepts
- Integrating Data & Applications for meaningful insights
- Design Process
- Examples

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Juan Manuel PARDAL
 Global Metals Processing Director
 Schneider Electric

15:10 AFTERNOON NETWORKING BREAK



15:50 PANEL DISCUSSION:
 Addressing Challenges and Unlocking Potential of Advanced Analytics in Mining



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Jon ALLWOOD
 Regional Director, North America - Digital
 Hatch

Dr. Khushaal POPLI
 Domain Lead Data Science, Processing
 Teck Resources Ltd.

Jean-Loup LOYER
 Group Chief Data & Analytics Officer (CDAO)
 Eramet Group

16:50 Closing Remarks

17:30 COCKTAIL RECEPTION sponsored by:

Darren NATHAN
 Manager - Operational Excellence and Asset Management
 Glencore

Day 2 31 March 2023

Time Zone - EDT
 (Eastern Daylight Time)



Gisela GIPS

- 08:30** Welcome Coffee
- 08:50** Chairperson Address
- 09:00** **Connected Workforce, a Nutrien Potash Journey**
 - Evolution of Digital Solutions for Operations
 - Examples of our Technology foundations to support future innovation
 - Our approach to delivering these technologies to our operations
- 09:30** **Raglan Mine Connected Mine Project: Overview**
 - A glance of Raglan Mine
 - Connected Mine Scope (over 200 x underground vehicles fleet & 450 x cap lamps)
 - Technology deployment and tools/dashboards
 - Control room, where we started
 - 3 years vision
- 10:00** **The Digital Mine Becomes Reality**
 - Future of mining and the digital mine
 - Digital blueprint for integrated mining lifecycle management
 - Best practices on implementing digital mine projects with concrete references
 - Latest innovations on digital twin and big data technologies

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Anna WEEGAR
 Sr. Manager, Connected Worker Information & Digital Solutions (IDS), Potash
 Nutrien

Millan HERCE
 Senior Mining Engineer, Mining Systems & Project
 Glencore

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Thiago AMARAL
 Enterprise Sales Executive

Bernardo MARINHO
 Head of Global Sales - Minerals Automation & Digitalization Solutions
 Siemens

10:30 MORNING NETWORKING BREAK

- 11:10** **Soft Sensors and Virtual Instrumentation – To Measure the Unmeasurable**
 - Why is it important to observe and monitor dynamic conditions at a processing plant?
 - Difficulty and challenges with physical sensors
 - Soft sensors/Virtual Instrumentation
 - First Principles, Machine learning and Modern Control Theory empowered Soft sensor development
 - Applications: Advanced Process Control, Real time Optimization, Fault Detection, Sensor Reliability, and beyond
 - Case Studies and Future

Dr. Khushaal POPLI
 Domain Lead Data Science, Processing
 Teck Resources Ltd.

- 11:40** **Feasibility Study Made Easier with AI**
 - Digitalisation of feasibility
 - Orebody control and prediction
 - Project case study

Michelle ASH
 Technology Executive Lead
 OZ Minerals Australia

- 12:10** **Roadmap to Autonomous Operation**
 - Gradual improvement or abrupt change?
 - How can we benefit along the way?
 - Case study: Autonomous operation of filter press
 - Case study: Autonomous operation in comminution

PRESENTING PARTNER

PRESENTING PARTNER

Dr. Sohail NAZARI
 Global VP Digital Transformation
 ANDRITZ

12:40 LUNCH BREAK

- 13:40** **Future of Mining; How Digital Solutions can support Sustainable and Responsible Mining**
 - Mining 4.0: Challenges and Opportunities
 - Digital Mining aimed at Zero Entry, Zero Harm, and Zero Carbon Emissions
 - The role of Digital Solutions in Responsible Mining
 - Digital Transformation and Sustainability in Mining
 - Digital Maturity Scale; A Practical and Innovative Approach for Mining 4.0

Dr. Ali SOOFASTAEI
 AI Program Leader
 Vale

- 14:10** **Shaping Sustainable Mining**
 - Sustainability
 - Engineering handover
 - Asset Management Strategy
 - Operations Visibility

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Martin PROVENCHER
 Global Industry Principal for Mining, Metals and Materials
 AVEVA

14:40 AFTERNOON NETWORKING BREAK

- 15:20** **PANEL DISCUSSION: Roadmap to the Future Technology Adoption**



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Bernardo MARINHO
 Head of Global Sales - Minerals Automation & Digitalization Solutions
 Siemens

Unnati KINGI
 Global Director - Digital
 Carmeuse

Nathan STUBINA
 VP Technology
 Sherritt International Corporation

- 16:20** Closing Remarks
- 16:30** End of the Summit

Gisela GIPS
 General Manager: Integrated Planning
 ArcelorMittal

Speaker bios

Chairperson



Gisela GIPS

General Manager:
Integrated Planning
ArcelorMittal

Gisela joined ArcelorMittal Mines Canada in 2020, after working for Anglo American in a number of roles and locations for over a decade prior. Working remotely from South Africa for the first year of the pandemic, she moved to Canada in December 2021. She leads the implementation of Integrated Planning in AMMC as well as the IROC in Montreal. A Chemical Engineer by background, she has lived and worked in 3 continents during her career in the mining industry, gaining experience in Operations, Projects and Business Improvement in base metals, coal, and iron ore. She has a keen interest in smart technology and how it supports the mines of the future, the massive potential in integrating value chains and unlocking the knowledge inside the seas of data that is generated to change the way we make decisions and create better businesses. More than technology, she is passionate about helping people find their passion and shine in that. She is also a proud mom of two beautiful children, who teach her more about life and self-development than any career exposure ever could!



Nathan STUBINA

VP Technology
Sherritt International Corporation

Nathan Stubina joined Sherritt International as VP Technologies. Prior to that, he was Managing Director of Innovation for McEwen Mining. With 30 years of international industrial experience, Nathan also worked at various major mining companies including Barrick Gold Corp., Noranda Inc. and Falconbridge Ltd. Nathan holds a Ph.D. in Metallurgy and Materials from the University of Toronto and a B. Eng. in Mining and Metallurgical Engineering from McGill University. Nathan was named a Fellow of the CIM in 2012, a CIM Distinguished Lecturer in 2019 and a Fellow of the Institute of Minerals, Material & Mining (I²M3) in 2021. Nathan was recently (2022) elected as a Fellow of the Canadian Academy of Engineering (CAE). He is currently a member of the Association of Professional Engineers of Ontario (PEO), and was VP International of the CIM. He is a Past-President of MetSoc (Metallurgy & Materials Society of the CIM), a certified Six Sigma Master Black Belt and a member of the Lassonde Institute of Mining's Advisory Committee at the University of Toronto.



Ludovic DONATI

Chief Digital Officer &
Integrated Operations
Program Director
Eramet Group

Ludovic Donati is the Chief Digital Officer of the Eramet Group since its beginning in 2017 and his mission was to provide Eramet with a strong, coherent and sustainable vision for digital transformation and to launch concrete achievements from Proof of Concept to industrialization in the fields of Mine 4.0, Plant 4.0 and Railway 4.0. The perimeter is also including the performance of the transformation since 2021 and the Integrated Operations Program Director since 2022. Since 2018, Ludovic is the Digital Correspondent of the French Mining and Metallurgy Sector and board member of the Afmet association, digital think-tank around the transformation and growth of industrial sectors. Ludovic is also involved in the French Tech Corporate Community network, working on the environmental impact of the digital and data transformation. Normalien and PhD in chemistry, Ludovic joined the Eramet group in 2011 where he held various positions in R&D, Investor Relations and Strategy (CEO's office).

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Jennifer SELBY

Global Mining
Technology Lead
Hatch

Jennifer has worked within in the mining industry for over twenty years having worked as both a client and consultant on projects ranging from prefeasibility to execution and process improvement. She has worked in both operations and technical roles at several operating facilities and project sites, from mines through to refineries. Her current role as Global Mining Technology lead prioritizes the use of technology to increase the likelihood that execution projects and constructed mines operate in adherence to the project and life-of-mine plan. Areas of focus include real-time underground work progress tracking and reporting for comparison against schedule and integration of project and mine schedules along with capital and operating estimates for scenario evaluation.



Aida PRADO

Portfolio Director
Digital Mining
ArcelorMittal

Aida holds a degree in Mining Engineer (Metallurgy) and a M.Sc. in Mining Engineer, as well as a Master in Project Management. She started her career in ArcelorMittal as responsible for planning and scheduling of the continuous casting of billets and wire rod mill in Gijón (Spain). After 3 years, she took the opportunity to move to Global R&D, where she developed several projects related to planning and scheduling, and supply chain modelling. She has since acquired more responsibilities, and in 2020 she became portfolio director of Digital Mining in Global R&D, a worldwide coordination role that ensures the consistency of Global R&D efforts to digitalize ArcelorMittal's Mining operations.

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Thierry BERNARD

GM
DNA-Blast Group/TBT
DNA-Blast Group/TBT

Thierry BERNARD has a master in mechanics and physics and a PhD in explosive and rock behavior. He has more than 30 years of experience in blasting engineering. He started out as a drill and blast manager with a quarry and construction group in France in early 1990. He became an international blasting consultant in 1992. Thierry was the founder of Delta Caps International, a pioneer in electronic detonator, and was a director of the electronic division of bme (South Africa) from 2003-07. Since 2007, he has been general manager of Thierry Bernard Technologie and the DNA-Blast group, a group of companies specialized in advanced blasting simulations that develop the I-Blast Software and the first Blast Digital Twin. Thierry BERNARD is the author of more than 30 technical international papers on drill & blast technics.



Rasmus TAMMIA

Development Engineer -
Process Control and
Simulation
Boliden

After receiving a M.Sc. in Applied Physics and Electrical Engineering from Linköping University, Rasmus developed advanced control algorithms for Scania's biogas engines. In 2019, he joined Boliden and a team that developed state-of-the-art solutions for process control. Since 2023, he is program manager in Boliden's R&D program in Artificial Intelligence for Mining, a program with the purpose of improving Boliden Mines' operations through Artificial Intelligence and advanced data analytics.

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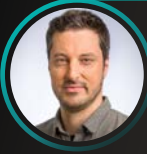


Juan Manuel PARDAL

Global Metals
Processing Director
Schneider Electric

Engineer with 40 years of experience in the Automation business in different industries. 15+ years in Mining, Minerals and Metals plants Automation and Analytics projects, mainly in Chile and Peru. Currently leading a Global Metals Initiative aiming to help companies accelerate digital transformation and adopt new technologies to improve asset efficiency and remain competitive, as well as to comply with new sustainability mandates to reduce carbon footprint. Always considering People and Corporate Culture as key points of interest for successful project implementation.

Speaker bios



Jean-Loup LOYER

Group Chief Data & Analytics Officer (CDAO)

Eramet Group

Jean-Loup entered the exciting field of data analytics in 2009, first as a strategy consultant, then as a researcher working on predictive maintenance for jet engines in the UK and finally as a lead data scientist at L'Oréal R&D in Paris. In 2018, he joined the Digital Team at Eramet, a French mining company, in order to develop data analytics & data governance activities. As Chief Data & Analytics Officer, he manages the data governance initiatives for the whole company, with projects spanning all functions and geographies. He also manages the Data Foundry, a team of circa 20 experts - data science, data engineering, UX design, data management - delivering projects at the core of the business: optimization of metallurgical processes, environmental monitoring of the mines, reduction of energy consumption and CO2 emissions... Jean-Loup has graduated in aerospace engineering (Supaero Toulouse, Imperial College) and in data science (MIT, Toulouse School of Economics).



Dr. Khushaal POPLI

Domain Lead Data Science, Processing

Teck Resources Ltd.

Khushaal Popli is an analytics manager at Teck Resources who oversees the Data Science-based solutions for Mineral Processing and refining circuit for Teck's operations across North and South America. He completed his Ph.D. from the University of Alberta (2017), focusing on enhancing Machine Learning and Advance Process Control based algorithms for mining (processing) operations. His research focus lies in the area of Virtual instrumentation, Real-time Optimization, Data-driven, and first principle-based modeling and simulation. During his Ph.D., he has collaborated actively with Operations of diverse Oil & Gas and Mining companies to develop Proof-of-concept applications utilizing Machine Learning and advancing the Digitization journey. At Teck, he has led multiple projects with talented team members to optimize the critical circuits such as Crushing, Grinding, and Flotation leading to a tangible increase in overall metal production with first of its kind Machine Learning Model and Optimization framework. Additionally, he is playing a pivotal role in developing and implementing the Digital Transformation journey for Teck Resources through its RACE program.

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Jon ALLWOOD

Regional Director, North America – Digital

Hatch

Jon is a seasoned digital leader with over 26 years of experience in implementing and delivering high-yield transformative programs across technology, consulting, and business management engagements. His focus in recent years has been on partnering with various clients on establishing their Operational Excellence framework that encompasses automation through scaled digital enablement delivering safe and sustainable value return. While many of his projects are underpinned using digital technologies, Jon emphasizes a 'people, process, technology' approach in design and implementation. At Hatch, Jon works with leading mining and metals, infrastructure, and energy organization leaders to accelerate their digital agenda. Prior to that, Jon was the Global Director – Digital & Asset Transformation at leading technology and automation company.



Darren NATHAN

Manager - Operational Excellence and Asset Management

Glencore

Darren Nathan is Manager of Operational Excellence and Asset Management for the region of North America and Philippine copper assets (NACAP) - Glencore. He started his career at Glencore in 2011 as a graduate of McGill University's chemical engineering program. Since then, he has held various positions at Brunswick Mine, Raglan Mine and NACAP.



Anna WEEGAR

Sr. Manager, Connected Worker Information & Digital Solutions (IDS), Potash

Nutrien

Since 2005, Anna has been supporting Potash Operations through technology. Having developed and supported legacy software from the mining face to product loading early in her career, Anna now concentrates on driving our strategic focus of connecting workers with technology for the purpose of safe, reliable production. Using a people-centric approach, Anna's goals are to enable Nutrien's workforce by providing the Right Information, to the Right Person, at the Right Time.



Millan HERCE

Senior Mining Engineer, Mining Systems & Project

Glencore

I hold the position of Senior Mining System & Project Engineer. I graduated in mining engineering from Laval University in 2000. At Raglan since July 2013, I have been working on our digital projects since 2019 as the project manager for telemetry, proximity detection and mining technology. Additionally, I have worked on many projects involving underground mobile equipment, cement plants, crushing, ground controls, mine consumables, and logistics. I also worked on the suppliers' side with Epiroc for over 8 years and for an engineering consulting firm in my previous career.

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Thiago AMARAL

Enterprise Sales Executive

Siemens

Thiago Amaral is an Enterprise Sales Executive at Siemens Digital Industries Software, based in Toronto. Thiago is responsible for the Siemens process automation software portfolio in Canada, especially COMOS Integrated Engineering, XHQ Operations Intelligence and Plantsight Digital Twin. Before joining Siemens Digital Industry Software, Thiago worked in several technical and sales positions at Siemens for the charging station, motors, drives and mining division. Thiago also worked in the air pollution control and heavy-duty ventilation industries, supplying equipment and solutions to heavy industries such as mining and minerals. Thiago is a member of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and Global Mining Guidelines (GMG). He holds a B. Tech. (Hons) in Manufacturing Engineering from McMaster University in Hamilton, Canada, and is completing an MBA in Executive Management from Royal Roads University in Victoria, Canada.

Speaker bios

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Bernardo MARINHO

Head of Global Sales - Minerals Automation & Digitalization Solutions

Siemens

Bernardo Marinho is a senior sales executive in digitalization, with large experience in mining projects worldwide. He currently heads the Minerals Automation and Digitalization Sales department of Siemens Headquarters, where he is responsible for global sales and portfolio management. Bernardo has over 10 years of experience as a provider of industrial solutions within Siemens, where he held different positions such as process engineer, project manager, business developer and sales manager, with proven project experience in different branches like cement, mining, oil and gas, chemical and agriculture. Bernardo received a B.Sc. degree in Chemical Engineering from Federal University of Minas Gerais and a post-graduate specialization certificate in Industrial Engineering at the Catholic University of Minas Gerais, both located in Brazil.



Michelle ASH

Technology Executive Lead

OZ Minerals Australia

Michelle joined OZ Minerals in March 2022. As Technology Executive, she is accountable for ICT, including digital, robotics and automation, Mining Technology and Transformation. Michelle has more than 30 years' experience in the mining and manufacturing sectors with a focus on business improvement and change management. Most recently, she was CEO of Dassault Systems GEOVIA software division where she led a growth strategy across the company's Natural Resources sector, delivering next-generation solutions through geologic modelling and mining engineering software applications. Prior to this, Michelle was Chief Innovation Officer at Barrick Gold. She is also a Board Member GMG as well as several technology start-ups Railveyor and Off World.

PRESENTING PARTNER



Dr. Sohail NAZARI

Global VP Digital Transformation

ANDRITZ

Dr. Sohail Nazari is responsible for ANDRITZ Automation & Digitalization's Digital Transformation in the Mining Industry and was instrumental in winning first prize at Newmont Goldcorp's 2019 #DisruptMining innovation competition. Mr. Nazari has been helping industry lift automation to a higher level through "Digital Transformation", including digital twins, advanced data analytics, artificial intelligent (AI) controls with integrated machine-learning and optimizing technologies.



Dr. Ali SOOFASTAEI

AI Program Leader

Vale

Dr. Ali Soofastaei is a global artificial intelligence (AI) industrial projects leader and professional academic editor. He established the Soofastaei Institute aimed to develop the innovative application of advanced analytics and AI to tackle business challenges in different industries. This institute covers a variety of businesses, education, and publications activities in the field of applied AI for prediction, optimization, and making decisions for multidimensional systems. Dr. Soofastaei has been involved in industrial research and development projects in several industries, including oil and gas (Royal Dutch Shell), steel (Danieli), and mining (BHP, Rio Tinto, and Vale). His extensive practical experience in the industry has equipped him to work with complex industrial problems in highly technical and multi-disciplinary teams. Currently, Ali is leading the Soofastaei-Businesses, an organization focused on digital transformation, practical innovations, and value chain improvement by applying integrated AI solutions. Ali completed his Ph.D. and was a Postdoctoral Research Fellow at the University of Queensland, Australia, in the field of AI applications in mining engineering, where he led a revolution in the use of Deep Learning and AI methods to increase energy efficiency, reduce operation and maintenance costs, and reduce greenhouse gas emissions in surface mines. In the past fifteen years, he has provided practical guidance to postgraduate students in different prestigious universities worldwide as a principal industrial advisor. Recently, he founded an educational organization named Soofastaei-Educations. This establishment facilitates and presents educational short-term, medium-term, and long-term courses for different industrial companies and universities as Bootcamp or semester programs. Dr. Soofastaei has been known as an internationally famous keynote speaker in the field of advanced applied analytics and AI solutions to improve safety, productivity, and energy efficiency and decrease total product costs. He also directs a publication institute called Soofastaei-Publications to publish scientific journal papers and academic reference books with impressive publishers such as Springer, McGraw Hill, CRC Press, Lambert, and IntechOpen. Leading actively industrial analytical-based projects in giant industrial companies, designing and presenting innovative educational programs, keynote speaking at important conferences around the world, having more than one hundred published papers, books, and technical documents, and working with prestigious publishers to provide the scientific resources has made him a pioneer leader in creating a digital revolution in industry 4.0

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Martin PROVENCHER

Global Industry Principal for Mining, Metals and Materials

AVEVA

Martin Provencher is Global Industry Principal for Mining, Metals, and Materials at AVEVA. He has more than 25 years of experience in operations, maintenance management, information technology and is Vice-President of the Maintenance Engineering and Reliability Society of the Canadian Institute of Mining. Mr. Provencher acquired his industry knowledge through different positions in his career, such as Production Director for Casthouse and Production Services at Aluminerie Alouette, the largest aluminum smelter in the Americas, located in Quebec, Canada, managing operations and maintenance for seven different production areas. Before that, he was the Information Technology & Automation Manager for Aluminerie Alouette. Mr. Provencher has also been an active Industry 4.0 speaker and influencer for IBM as Canada's Quebec Mining and Metals Leader. He also worked with Norda Stelo, a Canadian engineering company, as Director for manufacturing and processing plants. Mr. Provencher holds a bachelor's degree in computer science with Artificial Intelligence focus from the University of Quebec in Montreal.



Unnati KINGI

Global Director - Digital

Carmeuse

Unnati Kingi is the Global Director - Digital, at Carmeuse. Previously, she was the Head of Product and Customer Success at Industrial AI & ML Solutions for Petuum. Unnati also has over a decade of experience with business and industry development from a variety of roles she held at Caterpillar Inc. She received her Bachelors in Mechanical Engineering from Osmania University and finished her postgraduate studies in Industrial and Manufacturing Engineering from Bradley University. Unnati holds multiple executive certifications and also spends time volunteering as a Job Bank Coordinator for the Society of Women Engineers.

Sponsors

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Siemens:

Decades of experience of electrification and automation in Mining and Cement industries and deep understanding of state-of-art digital technologies equip Siemens to be a reliable partner to accompany mining and cement customers throughout the digital transformation, starting from consultancy of approaches and architecture to implementation of customized projects.

Pit-to-port optimization

Globalization of mining led to complex operations distributed across countries and continents, resulting in disconnected management that dramatically impacts the overall efficiency. To help mining companies to address this challenge, Siemens is applying digital technologies that enable integrated operations management and performance improvement at value chain level.

HATCH

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Our organization is passionately committed to the pursuit of a better world through positive change. We embrace your visions as our own and partner with you to develop better ideas that are smarter, more efficient, and innovative. Our global network of 9,000 professionals work on the world's toughest challenges. Our experience spans over 150 countries around the world in the metals, energy, infrastructure, digital, and investments market sectors. We are employee-owned and independent—free to bring our best thinking to your business. Our exceptional, diverse teams combine vast engineering and business knowledge, working in partnership with our clients to develop market strategies, manage and optimize production, develop new game-changing technologies, and design and deliver complex capital projects. We work closely with the communities in which we serve to ensure that our solutions optimize environmental protection, economic prosperity, social justice, and cultural vibrancy. We want their businesses, ecosystems, and communities to thrive, both now and into the future. Our people are passionate about our corporate purpose and values. We believe in long-term relationships with our partners, and are committed to our clients' lasting success. We are "entrepreneurs with a technical soul." www.hatch.com

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Schneider's purpose is to **empower all to make the most of our energy and resources, bridging progress and sustainability** for all. We call this **Life Is On**.

Our mission is to be your **digital partner for Sustainability and Efficiency**.

We drive digital transformation by integrating world-leading process and energy technologies, end-point to cloud connecting products, controls, software and services, across the entire lifecycle, enabling integrated company management, for homes, buildings, data centers, infrastructure and industries.

We are the **most local of global companies**. We are advocates of open standards and partnership ecosystems that are passionate about our shared **Meaningful Purpose, Inclusive and Empowered** values.



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DNA-Blast Group, a dedicated group of expert companies, that designs and supplies digital twins' solutions for sustainable blasting and operating processes for professionals in mines, quarries and the construction industry. We provide software packages (blast digital twins for emulation and optimization) together with specific training or customized, integrated expertise and engineering services (vibrations, cast movement, damage, dimensional, fragmentation or granulometric measurements) from a preliminary configuration study to the restitution of deliverables and recommendations with the help of data collection. Our international experts (France, USA, Peru, Brazil, Mexico, Russia) first analyze the needs, site and geological data, then supply equipment such as software, drones, seismographs, GPS, geophysical sensors etc and training or services to reach the objectives. Customer results are:

- A fast, customized reply, on a par with important challenges with varied parameters
- Modernization and rationalization of processes and industrial choices
- A ROI of a few months

AVEVA

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AVEVA is a global leader in industrial software, sparking ingenuity to drive responsible use of the world's resources. The company's digital applications and secure industrial cloud platform enable businesses to harness the power of their information and improve collaboration with customers, suppliers and partners. Enterprises worldwide rely on AVEVA to help them deliver safe and reliable operations and processing of minerals. AVEVA provides solutions to connect people with trusted information enabling efficient engineering (brownfield and greenfield projects), optimized operations, ESG management and responsible growth. Named as one of the world's most innovative companies, AVEVA supports customers with open solutions and the expertise of more than 6,400 employees, 5,000 partners and 5,700 certified developers. With operations around the globe, we are headquartered in Cambridge, UK and listed on the London Stock Exchange's FTSE 100. Learn more at www.aveva.com.

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ANDRITZ is a globally leading supplier of plants, equipment, and services for hydropower stations, the pulp and paper industry, the metalworking and steel industries, and for solid/liquid separation in the municipal and industrial sectors as well as for animal feed and biomass pelleting. Other important business segments include automation and service business. The publicly listed technology Group is headquartered in Graz, Austria, and has a staff of approximately 27,900 employees. ANDRITZ operates more than 280 sites in over 40 countries. The Automation & Digitalization division is leading the charge towards digitalization by using cutting edge technologies to shift plants in industrial facilities towards autonomous operation.



EXHIBITING PARTNER

We take best-in-class automation, power, measurement, and energy systems and we implement them with expertise and care — so what you get is a solution that puts productivity in your control.

SFC Energy is a service-oriented, value-added sales company specializing in custom-integrated and manufactured solutions. Our company has been headquartered in Calgary, Canada since 1971, and has earned a reputation of providing a wide range of industries with quality solutions.



Basetwo

EXHIBITING PARTNER

Basetwo is a venture-backed AI company that offers a low-code platform for the metals and mining industry. The platform enables engineers to design, build, and deploy digital twins of their refining processes, optimizing productivity and reducing energy consumption, waste, and emissions. With the help of Basetwo's platform, engineers without coding experience can deploy digital twins by accessing a library of pre-built data workflows and models that cover a wide range of use cases. At the same time, expert process modellers can customize machine learning, mechanistic, or hybrid models to fit deployments that range from predictive maintenance to real-time process optimization. The end-to-end cloud platform provided by Basetwo streamlines the digital transformation of metals and mining industries, making it easier to reach the goals of increased efficiency, improved safety, and sustainable growth.



COCKTAIL NETWORKING
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MineSense is a pioneer in digital mining solutions, supplying real-time, sensor-based ore sorting for mines. Our signature solution is ShovelSense®, a robust sensor installed on mining equipment to scan and measure the grade of the material in every shovel and bucket. Real-time ore characterization provides superior actionable data to enable automated smart truck diversions: mill, stockpiles, or waste dump to greatly reduce both ore losses and dilution. The increased real-time visibility of your orebody provided by ShovelSense® drives improvements in your mine's efficiency, profitability, and sustainability.



HOTEL

Radisson Blu Toronto Downtown




About the hotel

We are delighted to confirm venue for the event 2nd ETER – the Radisson Blue Hotel. Located on a lake with great airport proximity and shopping. A prime downtown Toronto location just minutes from CN Tower, Rogers Centre/Skydome, Air Canada Centre, Metro Toronto Convention Centre, Direct Energy Centre/National Trade Centre and many more.

Booking:

For room reservation with special group rate of 185 CAD/night, please write an email to frontdesk@radissonblutoronto.com or dial number [1-437-886-9667](tel:1-437-886-9667). To ensure receiving the special Group rate, attendees must identify the group name "2nd Edition ETER" when making the reservations.

 **Address:** 249 Queen's Quay West, Toronto, ON M5J 2N5, Canada

 **Link:** <https://www.radissonhotelsamericas.com/en-us/hotels/radisson-blu-toronto>



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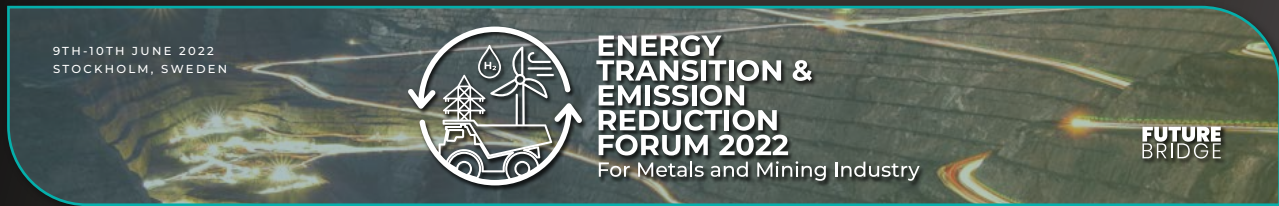
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About Organizer

What We Do

At Future Bridge our mission is to guide today's companies in embracing tomorrow with certainty. All of our activities are aimed to build value for today's industries and facilitate their sustainable and long-term growth, providing a seamless transition into the digital era, as well as assisting with better adapting to ever-changing environmental policies without compromising efficiency.

How We do It

Future Bridge organizes B2B corporate events, conferences and summits. Please visit our Upcoming Events for more information on upcoming projects. Utilizing our global behind-the-scenes access to exclusive information and a vast network of industry experts, Future Bridge is the partner of choice for organizing tailored conferences or specific business activities tailored to meet your organization's goals.

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