

mines and technology

27th – 29th November, London

The **digital transformation of mining will unlock \$190 bn in value**. This is forcing mining companies to focus their operational investments on **digital** to maximise yield recoveries and improve operational efficiencies.

Mining companies will be investing close to \$50 bn to unlock this value. Mines and Technology is, therefore, the perfect platform to source solutions to future-proof mining companies and drive performance across the industry.

Set to take place in London, 27-29 November 2018, **Mines and Technology** will have **dedicated exhibition showcases and features across 9 critical areas of the digital transformation**.

Confirmed Speakers – Digital Transformation

Phil Baker, CEO, **Hecla Mining**

Dr Ali Soofastaei, Research Developer, Advanced Analytics Center, **Vale**

Bruno Poirier, Enterprise Data Manager, **Agnico Eagle**

Ivar Fossum, CEO, **Nordic Mining**

Fredrik Kauma, Project Manager, **Boliden**

Néstor Alemán Esteban, Regional Project Manager - West Africa at Kinross Gold Corporation,
Kinross Gold Corporation

Murat Tiryaki, Engineering and Innovation Manager, **Yilmaden Holdings**

Thomas Wallmach, Geology, Mining and Mineralogy Expert, **Eramet Group**

Robert Mueller, Senior Technologist, Exploration Research and Technology Programs, **NASA**

Thomas Gaisecker, Senior Manager International Sales and Manager Mining & Monitoring Business
Division, **RIEGL**

Philippa Malmgren, Author, Economist, Leading Policy Analyst and Founder, **H Robotics**

Chris Mulligan, Solution Partner and Head of MineLens and MineSpans, **McKinsey & Company**

Karen Høngshøj, CEO, **EIT Raw Materials**

Dr. Joseph Quinn, Senior Engineering Geologist, **Klohn Crippen Berger**

Carlo Cristofari, Managing Director, Digital Transformation Services, **Hatch**

Dr Mohsen Yahyaei, Group Leader, Advanced Process Prediction and Control (APPCo), **Sustainable Minerals Institute**

Confirmed Speakers – Digital Exploration

Alan R Butcher, Research Professor, **Geological Survey of Finland**

Joe Cucuzza, Managing Director, **Amira International**

Stephen Stewart, CEO, **Orefinders**

Chris Calam, Sales Manager, **ThermoFisher Scientific**

Dr Dave Lawie, Chief Geoscientist, **IMDEX**

Robert Hough, Science Director and Deputy Director, Mineral Resources, **CSIRO**

Confirmed Moderators

Robert Bacon, Member of the Board, **IOM3 Mining Technology Division (MTD)**

Professor Patrick Foster, Director of Education, **Camborne School of Mines**

27th November 2018 – Digital Exploration

09:00 Gaining an Edge from the Next Generation of Data Analytics - How to leverage existing data, knowledge of geologic formations and advanced analytics to improve exploration success

Stephen Stewart, CEO, Orefinders

09:30 How to increase safety, productivity and decision-making through artificial intelligence

Dr Ali Soofastaei, Research Developer, Advanced Analytics Center, Vale

10:00 Taking geoscience to the point of drilling - A step change in sensor design and data collection to facilitate exploration decision making through to optimised blasting outcomes

Dr Dave Lawie, Chief Geoscientist, IMDEX

10:30 Networking Break

11:00 How to maximise deep earth imaging technology to improve image-precision of subsurface rock properties

Joe Cucuzza, Managing Director, Amira International

11:30 How to leverage your portable XRF for exploration and grade controls

Chris Calam, Sales Manager, ThermoFisher Scientific

12:00 How to implement rapid mineral characterisation to deliver cost-effective exploration and discovery as well as optimising resource management.

Alan R Butcher, Research Professor, Geological Survey of Finland

12:30 How to improve mineral exploration with new data science driven technologies

Robert Hough, Science Director and Deputy Director, Mineral Resources, CSIRO

13:00 Networking Lunch

14:00 **Mine Enterprise**

Check out the latest products the exhibitors have brought along in this demonstration slot and let the judging panel quiz them on its capabilities!

- Reflex
- Riegl
- MineLens
- VRify

15:00 **Innovation Groups – The Challenge**

28th November 2018

Hosted by IOT Partner

09:00 **IOT Keynote:** How to enable maximum performance of fleets, equipment and people with IOT

Phil Baker, CEO, Hecla Mining

09:20 **Digital Transformation Keynote:** How to build a global data platform in a decentralised operating model

Bruno Poirier, Enterprise Data Manager, Agnico Eagle

09:40 **Artificial Intelligence Keynote:** AI, geopolitics and mining – what does the digital future look like?

Philippa Malmgren, Author, Economist, Leading Policy Analyst and Founder, H Robotics

10:00 **Next-Generation Networks:** Examining the tests of 5G networks in mines and the potential benefits for Boliden's operation

Fredrik Kauma, Project Manager, Boliden

10:20 **IOT Partner Keynote**

10:40 Demo Zone and Exhibition Break

Spotlight 15's

11:30 **Virtual Simulation:** How to leverage virtual simulation technology to improve long-term operational decision-making

Chris Mulligan, Solution Partner and Head of MineLens and MineSpans, McKinsey & Company

11:45 **Mineral Processing:** The secret life of ilmenite in heavy mineral sands – A personal review of analytical techniques revealing the comprehensive value of a resource

Thomas Wallmach, Geology, Mining and Mineralogy Expert, Eramet Group

12:00 **Big Data:** RIEGL 3D Long Range LiDAR Technology - highly accurate, on demand terrain data for autonomous mine planning and operations

Thomas Gaisecker, Senior Manager International Sales and Manager Mining & Monitoring Business Division, RIEGL

12:15 **IOT:** The mine of the future

Jan Kwak, Managing Director – Australia and Asia, Hatch

12:30 **IOT:** Profound innovation: Fuelled by collaboration

Stephen de Jong, CEO, VRify Technology

12:45 **IOT:** Total optimizer – helping you reduce your energy costs by consolidating all of your existing site data into a single digital dashboard

Dirk de Bruyn, Vice President – Global Industry & Mining, Total

13:00 Demo Zone and Exhibition Break

14:30 Innovation Groups – The Feedback

Mines and Technology London

29th November 2018

Hosted by Automation Partner

09:00 **IOT:** How to ensure your mine sites have reliable, durable and capable communications infrastructure for remote operations

Néstor Alemán Esteban, Regional Project Manager - West Africa at Kinross Gold Corporation, **Kinross Gold Corporation**

09:20 **Out of Industry:** Space Exploration – The role of technology which makes this more commercially viable and achievable

Robert Mueller, Senior Technologist, Exploration Research and Technology Programs, **NASA**

09:40 **Smart Sustainability:** How Scandinavian topography offers an innovative approach to mining and tailings disposal

Ivar Fossum, CEO, **Nordic Mining**

10:00 **Market Outlook:** Autonomous vehicles in mining - technologies, challenges, benefits, markets, forecasts, key players and opportunities

Aman Atak, Technology Analyst, **IDTechEx**

10:20 **Automation Partner's Keynote**

10:40 Demo Zone and Exhibition Break

Spotlight 15's

11:30 **IOT:** Innovation and collaboration for a strong European raw materials sector

Karen Høngshøj, CEO, **EIT Raw Materials**

11:45 **Smart Sustainability:** Sustainable practices in tailings dam design: management of liquefaction risk throughout operations and closure

Dr. Joseph Quinn, Senior Engineering Geologist, **Klohn Crippen Berger**

12:00 **Big Data:** How to leverage real-time monitoring and industrial water processing at your mine site

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Jaakko Seppälä, Chairman of the Board, **EHP Environment**

Felix Fondem, Director and Member of the Board, **Global Ecoprocess Services**

12:20 **Artificial Intelligence:** Leveraging virtual and augmented reality to improve workforce training at your mine operation

12:35 **Advanced Process Controls:** Identifying future mineral processing challenges and how to overcome them through innovation and technology

Dr Mohsen Yahyaei, Group Leader, Advanced Process Prediction and Control (APPCo), **Sustainable Minerals Institute**

13:00 Demo Zone and Exhibition Break

14:30 Pub Quiz