



Australia 3.0 – Mining Program – 2014

Dates: Thursday & Friday 28th & 29th August 2014
 Room 103, Level 1, Melbourne Convention Centre

Where: [Melbourne Convention and Exhibition Centre](#)
 1 Convention Centre Place, South Wharf

Day One Thursday 28 August

8.30-9.00am **Registration / Coffee** – Melbourne Convention Centre, Level 1

9.00-10.00am **Opening Session - Introduction**

Chair: **Colin Farrelly** – Indago Partners, Australia 3.0 Mining Stream Lead – opens the event, outlines the objectives, the program and introduces the mining organising committee (15 minutes).

Keynote Speakers: **David Andrew** – Technology and Innovation Lead, VCI – Innovation in the mining industry and highlights of the 2014 Global Innovation State of Play survey (20 minutes, including questions).

Lex McArthur – CEO, Jolimont Global – challenges for technology startups in mining, based on over 230 technology company assessments (20 minutes, including questions).

Session Synopsis: What is the state of play for innovation in mining? How can product and service providers best engage with mining companies on new ideas and solutions?

10.00-10.30am **Coffee break (late registrations)** – NICTA TechShowcase area on Level 1

10.30-12.30pm **Mining Stream – Session 1 - Theme: Exploration and Development**

Session Chair: **Joe Cucuzza** – CEO AMIRA International – Introduction covering what the future mine will look like and the way the industry, governments and research organisations can collaborate to realise that potential (10 minutes).

Keynote Speaker: **Gavin Yeates** – Vice President of Mine Optimisation, BHP Billiton – the key opportunities and challenges in the way transformational change is implemented in a global mining company and how ICT technology innovation can assist (30 minutes, including questions).

Innovation Pitches: Up to four speakers (with 7 minutes each including 1 or 2 questions) selected as having either a great new idea for research or have an existing system in place that delivers clear value to the mining industry. Those with the opportunity to speak are:

Jan Barca (Monash) Prospecting with Swarms of Autonomous Quad Copters

Lachlan McCalman (NICTA) Data fusion for optimal resource exploration with quantified uncertainty

Simon Lardner (Challenge) Converged data communications platform based on LTE

Mark Cooksey (CSIRO) New approach to Real Options for optimising decisions under uncertainty



Host Partners

Foundation and Mining Stream Partners

Q&A session: Panel of session speakers with audience participation discussing the theme and asking questions of the speakers (35 minutes).

Session Synopsis: Orebodies are getting more complex, lower grade and buried deeper, presenting significant challenges for both exploration and development. The amount of data collected has continued to rise in volume and variety with the increased use of remote sensing and new generation drilling and sensing technologies. Mining companies are also trying to execute projects faster and without delays in approvals and community acceptance.

12.30-1.30am *Lunch – NICTA TechShowcase area on Level 1*

1.30-3.30pm **Mining Stream – Session 2 - Theme: Mining Productivity**

Session Chair: **Jonathan Law** – Director Minerals Resources Flagship, CSIRO – Introduction covering how the industry can make step changes in the way they operate through long-term research programs that deliver value along the way (10 minutes).

Keynote Speaker: **Andrew Shook** – GM Surface Mining & Automation, Technology & Innovation, Rio Tinto – how Rio Tinto is developing technologies to change the way they mine to improve productivity and deliver more value faster with lower operational risk speaker (30 minutes including questions).

Innovation Pitches: Up to five speakers (with 6 minutes each including 1 or 2 questions) selected as having either a great new idea for research or have an existing system in place that delivers clear value to the mining industry. Those with the opportunity to speak are:

Chris Alford (AMS) Optimising underground mine design through simulation of multiple scenarios

Mal Jones (3D-P) Simple traffic control solution using existing GPS enabled devices

Jeremy Harkins (Ineni Realtime) Real-time 4D Immersive Environments for the smart operations centre

Amit Bhandari (CEMining) Integrated ICT solutions for blasting operations

Jordan Parham (IMER) Optimising Heap Leach Performance with entirely new sensors

Q&A session: Panel of session speakers with audience participation discussing the theme and asking questions of the speakers (35 minutes).

Session Synopsis: Lower ore grades, deeper mines, higher input costs and complex regulation have all contributed to declining productivity, and together with challenges such as an ageing workforce, political uncertainty and water and energy constraints, they have reduced our global competitive advantage. A number of mining companies are conducting major initiatives to achieve a step change in performance. These initiatives are underpinned by the digital transformation and are aimed at shifting operations from a relatively static and disparate set of functions, to a digitally aware, dynamic, automated, integrated and interactive environment, with increased agility, lower operating costs and higher productivity.

3.30-4.00pm – Coffee break – NICTA TechShowcase area on Level 1

4.00-6.00pm **Mining Stream – Session 3 - Theme: Sustainability**

Session Chair: **Rod Touzel** – Managing Consultant Power Systems, WorleyParsons / Executive Consultant Evans & Peck – introducing the session, covering the challenges in providing power to mining operations, particularly at remote sites, and how ICT innovation has the potential to have a significant impact on improving reliability, reduction of risks and lowering carbon footprints (15 minutes, including questions).

Keynote Speaker: **Pascal Van Hentenryck** – Optimisation Research Group Leader, NICTA – new research on holistic energy systems modeling in partnership with the Los Alamos National Laboratory, the United State's premier national security research facility, determining the most efficient way to maximise the use of natural gas, reduce reliance on coal, and exploit renewable sources of energy (25 minutes, including questions).

Innovation Pitches: Up to four speakers (with 7 minutes each including 1 or 2 questions) selected as having either a great new idea for research or have an existing system in place that delivers clear value to the



mining industry. Those with the opportunity to speak are:

Stefan Hrabar (CSIRO) Laser mapping of underground stopes using unmanned aerial vehicles (UAVs)
Will Visser (Brokk) Remote controlled technology from other industries for underground mining
Dennis Franklin (Soldata) Geotechnical research facility in collaboration with European nuclear industry
Nigel Dalton-Brown (B2BCOIN) Managed service for tracking internal and external compliance certification

Q&A session: Panel of session speakers with audience participation discussing the theme and asking questions of the speakers (35 minutes).

Session Synopsis: To ensure a sustainable business, the mining industry needs to maintain the confidence of the governments and communities in which they operate in regards to health, safety and environmental management. The drive for a lower carbon intensive economy also acts as a further catalyst to accelerate innovation and the implementation technology to achieve a step change in efficient and safe operations.

6.00pm – Thursday 28 August – Day closed

Day Two Program Friday 29 August

8.30-9.00am Registration / Coffee – Melbourne Convention Centre, Ground Floor

9.00-10.00am Opening Plenary – Theme: Technology transforming competitiveness

Session Chair: **Sandy Plunkett** – Innovation & Technology Consultant

Keynote Speaker: **Hon Bruce Billson** – MHR and Federal Minister for Small Business.

Other Speakers: **Jim Minifie** – Program Director, Productivity Growth, Grattan Institute
Jane Treadwell – Moderator, World Bank Leaders for Transformation Network

Session Synopsis: Technology can play a critical role in transforming industries to adapt to the future needs of both customers and suppliers. How can business best adopt technology to realise the potential gains in the transformations of competitive position in markets? What roles does R&D play in differentiating capabilities and delivering comparative advantage into the future? How can industry, government and research best collaborate to leveraging the opportunity?

10.00-10.30am Coffee break

10.30-12.30am Mining Stream – Session 4 – Research Proposals

Session Chair: **Colin Farrelly** – Indago Partners – welcomes new attendees (day 2 only), outlines the program for developing research proposals (5 minutes).

Andrew Shook – Rio Tinto – provides Feedback on the previous day (10 minutes)

Joe Cucuzza – AMIRA International – introduces the Keynote speaker (5 minutes)

Keynote Speaker: **Paul Goiak** – Director, Industry Participation, Department of State Development, South Australia – the way a State Government can respond to support the mining industry innovation agenda (30 minutes including questions).

Session Moderator: **Danny Davis** – Vantis Advisory– presents options for up to four research proposals and calls for breakout groups (10 minutes).

Research Proposals: Audience breakout discussions to discuss draft scopes of research proposals and jointly make suggestions of how they can be improved and completed (30 minutes).

Three speakers (with 5 minutes each) selected from the previous Innovation speakers to present back the case for being the best option for a new research project (15 minutes).



Wrap up session: Discussion on: What next? / Future sessions ? Moderator and Chair to summarise the output and close the session (15 minutes).

Session Synopsis: Closing the gap between innovative ideas and industry uptake. Socialisation and endorsement of the draft research proposal scopes coming out of sessions 2 to 4 from Thursday 28th. Sourcing of the collective wisdom and experience of the participants to scope the best value research proposals and to secure the endorsement of the group.

12.30-2.00am *Lunch – Pearcey Oration – Senator Kate Lundy – Melbourne Room on Level 2*

2.00-3.30pm **Wrap Up Plenary – Theme: Adopting digital solutions**

Session Chair: **Wayne Fitzsimmons** – Chair of The Pearcey Foundation & Australia 3.0 Convener

Keynote Speaker: **Hon Paul Fletcher** – MP Parliamentary Secretary to Minister for Communications

Stream Leads:
Denis Tebbutt – Health
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Colin Farrelly – Mining
Dean Economou – Infrastructure
Ian Oppermann – Government Services

Moderator: **Peter Cebon** – Melbourne Business School

Session Synopsis: After 2 days of discussion, debate and deliberation “Adopting digital solutions” will be explored as a uniting theme to wrap up Australia 3.0 in 2014. The common theme for all streams will help create a compelling proposition across the program with the goal to end on a high on what we’ve achieved this year. Perhaps the intersection of where these streams meet is the biggest opportunity to collectively deliver change. How can we best partner to deliver greater success for digital solutions?

3:30 – 4.30pm **NICTA Tech Showcase Official Opening**

The Hon Paul Fletcher, Parliamentary Secretary to the Minister for Communications

6.30-7.30pm **iAwards Pre-dinner Drinks** – Melbourne Room on Level 2

7.30-11.30pm **iAwards Gala Dinner** – Melbourne Room on Level 2

The culmination of the iAwards is the prestigious Gala Dinner. Attend the iAwards Gala Dinner for \$275 (not included in complimentary Australia 3.0 registration) www.iawards.com.au

For more information contact:

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