



Target 2017: Innovating Now for Our Future

Wednesday 19th to Friday 21st April 2017

University Club, University of Western Australia, Crawley

Preliminary Program

Themes

- T1 Future Gazing
- T2 New Frontiers Space Time
- T3 Scales of Targeting
- T4 Mineral Systems Analysis
- T5 Thinking Targeting Lithospheric Scale
- T6 District Scale Targeting
- T7 Prospect Scale Near Mine Exploration
- T8 The New Toolbox for Exploration Targeting
- T9 Business Case for Greenfields Discoveries

Sponsors





































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Day One



	Theme	Title	Speaker
8.00 am	Registration		
8.30 am	Traditional welcome ceremony: Richard Walley Introduction		
9.00 am	T3 Chair: Nico Thebaud	Keynote: Multi-commodity, multi- scale exploration targeting using the large igneous province record	Richard Ernst (Carleton University)
9.40 am	T1	Keynote: Exploration targeting: towards best practice	Nick Hayward (Teck)
10.20 am	Morning tea		
10.50 am	T1 Chair: Sandi Occhipinti	Keynote: Successful targeting and exploration success to the mining industry – a corporate perspective	Glen Masterman (Evolution Mining)
11.20 am	T1	Future Licence to Prosper 'Key to Unlock Mining Sustainability'	Matthew Horgan Timothy Andrews Jessica Harman Jessica Volich (UWA MBA Graduate Team)
11.40 am	T1	Invited: Access to precompetitive data: What, where and how?	Esther Harris (Murdoch University)
12.00 pm	T1	Terrane-scale porphyry Cu fertility in the Lhasa Terrane, southern Tibet	Yong-Jun Lu (GSWA)
12.20 pm	Lunch and poster session		
1.20 pm	T1 Chair: Chris Wijns	Realising a decade of Australian Government Investments in eResearch infrastructure to fuel the next generation of data intensive minerals exploration undercover	Tim Rawling (Auscope)

	Theme	Title	Speaker
1.40 pm	T1	Keynote: Creating a new frontier in detection and data integration for exploration through cover	Rob Hough (CSIRO)
2.10 pm	T1	Prospectivity mapping and the evaluation of permissive tracts in the search for economic uranium deposits	Andy Wilde (CET and Wilde Geoscience)
2.30 pm	T1	Role of Geometallurgy in developing albitite-type uranium deposits	Alexander Otto (Triton Geoscience Group)
2.50 pm	Afternoon tea		
3.20 pm	T2 Chair: Jon Hronsky	Fingerprinting ore forming processes with sulfur isotopes: craton to camp scale	Crystal LaFlamme (CET UWA)
3.40 pm	T2	Time scales and length scales in magmatic mineral systems	Steve Barnes (CSIRO)
4.00 pm	T2	How semantic technology makes geodata more discoverable, more useful and more valuable	Antony Benham (Edward Lewis) (International Geoscience Services)
4.20 pm	Т9	Invited: The business of greenfields minerals exploration	John Sykes (CET UWA)
4.40 pm	Т9	Evaluation of mineral exploration projects; working towards a better model	Ahmad Saleem (CET UWA)
5.00 pm	SEG student drinks evening		

Day Two



	Theme	Title	Speaker
9.00 am	T3 Chair: Nick Hayward	Keynote: Methods of targeting across all scales – what important elements to consider?	Cam McCuaig (BHP)
9.40 am	T5	Keynote: Thinking and targeting on the lithospheric scale as part of an exploration strategy – using pre- competitive datasets	Ross Cayley (GSV)
10.20 am	Т5	Deep crustal to upper mantle structures in the Superior Province, Canada — implications for exploration targeting and Archaean tectonic models	Lyal Harris (Institut National de la Recherche Scientifique)
10.40 am	Morning tea and poster session		
11.10 am	T6 Chair: Lyal Harris	Invited: Petrophysics and exploration targeting: best practice and applications	Mike Dentith (CET)
11.30 am	Т6	Regional to deposit scale 3D mineral characterisation of alteration footprints through cover	Tom Cudahy (Carsten Laukamp) (C3DM, CSIRO)
11.50 am	Т6	Tracing sulfur-sources in the Agnew gold camp: an illustration of Archean orogenic gold deposits diversity	Nicolas Thébaud (CET UWA)
12.10 pm	T6	Rutile as an indicator mineral in gold exploration	Andrea Agangi (Curtin University)
12.30 pm	Lunch and poster session		
1.40 pm	T7 Chair: Crystal LaFlamme	Geophysics at the small end of the scale: understanding the resource	Chris Wijns (First Quantum Minerals)
2.00 pm	T7	Mappable alteration patterns linked to CO ₂ metasomatism in both oxidized and reduced high grade Archean gold systems	Adam Bath (John Walshe) (CSIRO)

	Theme	Title	Speaker
2.20 pm	Т7	The spatial and temporal significance of alteration associated with goldbearing structures in the Greater Revenge Area, St. Ives, Western Australia	Barbara Duggan (Outcrop Exploration Services)
2.40 pm	T7	Fusing geochemistry and structure for near-mine exploration	Nick Oliver (HCOVGlobal)
3.00 pm	Afternoon tea		
3.30 pm	T7 Chair: Mark Jessel	Subtle near surface geochemical signatures – frontiers in partial extraction and passive soil gas analyses	Ryan Noble (CSIRO)
3.50 pm	T7	Linking seismic images to geology in mineralised terrains	Greg Turner (HiSeis)
4.10 pm	Т7	Applications of volcanic stratigraphy to mineral exploration: examples from the Kalgoorlie Terrane	Patrick Hayman (QUT)
4.30 pm	Т7	Recent advances and potential leads in lithogeochemical exploration for magmatic nickel sulphide deposits	Margaux Le Vaillant (CSIRO)
4.50 pm	Sum up		
5.15 pm	Drinks		
6.30 pm	Haddon King Conference Dinner		

Day Three



	Theme	Title	Speaker
9.00 am	T8 Chair: Klaus Gessner	Keynote: The role of machine learning in brownfields exploration	June Hill (CSIRO)
9.30 am	Т8	Keynote: The OSNACA Project: Navigating in Magmato- Hydrothermal Space	Carl Brauhart (CSA Global)
10.00 am	Т8	Application of recurrence plots to orebody exploration data	Sebastian Oberst (Bruce Hobbs) (University of NSW)
10.20 am	Т8	Invited: Innovative and interpretable data analytics for mineral exploration	Eun-Jung Holden (CET UWA)
10.40 am	Morning tea and poster session		
11.20 am	T8 Chair: EJ Holden	Keynote: Uncertainty mapping in GIS-based prospectivity modelling	Alok Porwal (Indian Institute of Technology)
11.50 am	Т8	Invited: Down hole data integration	Daniel Wedge (CET UWA)
12.10 pm	Т8	AusLAMP Victoria – Illuminating lithospheric architecture for mineral systems exploration	Karol Czarnota (Geocience Australia)
12.30 pm	Т8	i3DGS – Implicit 3d Time-Aware GeoStructural Simulator	Laurent Ailleres (Monash University)
12.50 pm	Lunch and poster session		
1.45 pm	T7 Chair: Lisa Vella	Keynote: Methods of targeting across all scales – what important elements to consider – learnings from the Capricorn Distal Footprints study	Sandra Occhipinti (CET UWA)
2.15 pm	Т7	Systems Thinking for Discovery: Why we need a systems thinking approach to studying mineral systems and ore systems	Tim Craske (Thinkercafe and Geowisdom)

	Theme	Title	Speaker
2.35 pm	Т7	Mineral potential mapping of lithospheric-scale mineral systems: intrusion-hosted Ni-Cu-PGE and iron oxide Cu-Au prospectivity of Australia	Roger Skirrow (Geoscience Australia)
2.55 pm	Т7	Structural controls on the localization of Au and Ni deposits in the Halls Creek Orogen, insight from geodynamic numerical modelling and geophysical interpretation	Fariba Kohanpour (CET UWA)
3.15 pm	Afternoon tea		
3.45 pm	T7 Chair: Graham Begg	Interpretation of 3D magnetotelluric with potential field data identifying mineralisation in the northeast Kimberley region	Mark Lindsay (CET UWA)
4.05 pm	Т7	Getting more from your maps: The Topology of Geology	Mark Jessell (CET UWA)
4.25 pm	Summary talk – what have we learnt from this meeting		
4.35 pm	Thank you from Nicolas Thébaud		
4.40 pm	Drinks		