## DAY ONE

### PLENARY SESSION ONE
**GREAT ROOM 3 & 4**

**Session Chair:** Dale Sims FAusIMM(CP), PACRIM Congress Convenor; Dale Sims Consulting

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 - 8:35AM</td>
<td>Welcome from the Conference Chair: Dale Sims FAusIMM(CP), PACRIM Congress Convenor; Dale Sims Consulting</td>
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<tr>
<td>8.35 – 8.45AM</td>
<td>Official Conference Opening: Colin Moorhead FAusIMM (CP), AusIMM Immediate-Past President</td>
</tr>
</tbody>
</table>
| 8.45 – 9.15AM | Keynote Presentation 1: Richard Schodde MAusIMM, MinEx Consulting  
*Exploration and discovery of base and precious metal deposits in the Pacific Rim over the last 50 years* |
| 9.15 – 9.45AM | Keynote Presentation 2: Doug Kirwin, Realgold Resources  
*The business of mineral exploration, challenges and future trends* |
| 9.45 – 10.15AM | Keynote Presentation 3: Sharon Flynn, OceanaGold  
*Social sustainability and mining* |
| 10.15 – 10.30AM | Keynote Presentation 4: Stephen Bell MAusIMM, North Canterbury Transport Infrastructure Recovery  
*Innovating safety and well-being in Kaikoura rebuild* |
| 10.30 – 11.00AM | MORNING TEA AND EXHIBITION  
**GREAT ROOM 1 & 2** |
| 11.00 – 12.30PM | CONCURRENT SESSIONS  
**2A: Advances in Exploration techniques**  
**Great Room 3 & 4**  
**Session Chair:** Gregory Collins MAusIMM  
(IG Copper Group)  
| 11.00 – 11.30AM | Invited speaker: Mary Harris, Newcrest  
*Innovations in drill core data collection* |
| 11.30 – 11.45AM | Terry Hoschke, Alterrex  
*Modern processing of historical geophysical data to help map alteration in the Wafi-Golpu porphyry system* |
| 11.45 – 12.00PM | Stephanie Sykora AAusIMM, First Quantum Minerals  
*Porphyry exploration at First Quantum Minerals – active application of new techniques* |

**2B: Region - North and South America**  
**Crystal Room 2**  
**Session Chair:** Juan Carlos Oróñez-Calderón (Kinross Gold)  
| 11.00 – 11.30AM | Invited speaker: Diego Guido, La Plata University  
*Deseado Massif hot spring deposits (Late Jurassic, Patagonia, Argentina) and their association with epithermal systems* |
| 11.30 – 12.00PM | Ian Taylor MAusIMM, Mining Associates  
*Exploration and resource growth at the Buriticá Gold project, Colombia*  
| 12:00 - 12:15PM | Shawn Hood, TMVC, UTAS  
*A speedy update on machine learning applied to bedrock mapping using geochemistry or geophysics*  
| 12:15 - 12:30 PM | Steven Micklethwaite, Monash University  
*The Century day - accelerating information, not just data, from drone*  
| 12:30 - 1:30 PM | Stephen Sykora AAusIMM, First Quantum Minerals  
*Porphyry exploration at First Quantum Minerals – active application of new techniques*  
| 1:30 - 1:45 PM | Invited speaker: Colin Moorhead FAusIMM(CP), PACRIM Congress Convenor; Dale Sims Consulting  
*PT Merdeka Copper Gold Tujuh Bukit development - The story so far*  
| 1:45 - 2.00 PM | Invited speaker: Fabio Caratori Tontini, GNS Science  
*Geophysical signatures of seafloor hydrothermal systems at Brothers volcano, Kermadec Arc*  
| 2:00 - 2.15 PM | Gregory Collins MAusIMM, IG Copper Group  
*Russia - open for business*  
| 2:15 - 2.30 PM | Paul Harper FAusIMM(CP), Private Consultant  
*Improved reporting of mining "feasibility study" results*  
| 2:30 - 2:45 PM | John Youngson MAusIMM(CP), Youngson Geoscience Consultants  
*NZIMMR’s fine-gold research, Westland, New Zealand*  
| 12:00 - 12:15PM | McLean Trott, First Quantum Minerals  
*The role of multidisciplinary interpretation for porphyry copper targeting in the South American Andes*  
| 12:15 - 12:30 PM | Alan McOnie FAusIMM, Alexco Resource Corp  
*Geology and exploration of the Keno Hill Silver District, Yukon, Canada*  
| 12:30 - 1:30 PM | Great Room 1 & 2  
**LUNCH AND EXHIBITION**  
**GREAT ROOM 1 & 2**  
| 1:30 - 2:45 PM | CONCURRENT SESSIONS  
**3A: Mining Investment and New Project Developments**  
**Great Room 3 & 4**  
**Session Chair:** Dale Sims FAusIMM(CP), PACRIM Congress Convenor; Dale Sims Consulting  
| 1:30 - 1:45 PM | Invited speaker: Colin Moorhead FAusIMM(CP), PACRIM Congress Convenor; Dale Sims Consulting  
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*NZIMMR’s fine-gold research, Westland, New Zealand*  
| 2:45 - 3:15 PM | Great Room 1 & 2  
**AFTERNOON TEA AND EXHIBITION**  
**GREAT ROOM 1 & 2**  

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[Additional content available at pacrim.ausimm.com](pacrim.ausimm.com)
### DAY ONE CONTINUED

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<td>2:15 - 2:30 PM</td>
<td>Valerie Stucker, GNS Science</td>
<td>Geochemistry of vent fluids from seafloor hydrothermal systems, Brothers Volcano, Kermadec Arc</td>
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<td>2:30 - 2:45 PM</td>
<td>John Youngson MAusIMM(CP), Youngson Geoscience Consultants</td>
<td>NZIMMR’s fine-gold research, Westland, New Zealand</td>
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<tr>
<td>2:45 - 3:15 PM</td>
<td>Steve Piercey, Memorial University, St Johns</td>
<td>Comparing and contrasting our knowledge base and gaps in ancient volcanogenic massive sulphide (VMS) deposits via comparisons to modern seafloor massive sulfide (SMS) systems</td>
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</table>
PLENARY SESSION TWO - QUICKFIRE SESSION
Seven 2 Minute presentations by MSc and PhD student poster presenters
GREAT ROOM 3 & 4
Session Chair: Dale Sims FAusIMM(CP), (Dale Sims Consulting)

3:15 - 3:30 PM

Benix Masangcay, The University of Auckland (MSc study) - Structural architecture and evolution of the Wharekirauponga epithermal Au-Ag deposit, Hauraki Goldfield, Coromandel

Stephie Tay, University of Otago (MSc study) - Placer rare earth element-bearing minerals, Westland, New Zealand

Michael Ofman, University of Otago (MSc study) - The architecture and evolution of the Glade Fault, Fiordland, New Zealand

Simon Holbek, University of Otago (MSc study) - Structural controls and geochemistry of hydrothermal fluid flow in an exhumed accretionary prism, Otago Schist, New Zealand

John Mering, University of Waikato (PhD study) - Constraining temperature in hydrothermal ore deposits using clumped isotopes and laser spectroscopy: examples from Waihi and the Taupo Volcanic Zone

Rocky Barker, University of Waikato (PhD study) - Hyperspectral mineral and chemical characterisation from μ-XRF and machine learning: applications to Carlin-type gold deposits

Daniel Coultgard Jr, Massey University (PhD study) - Crystallization of spinel-structured oxides from hydrous boninitic and basaltic melts: Implications for liquidus stability of chromite and magnetite in oxidising melt conditions

3:30 - 5:30 PM
PLENARY SESSION THREE
Association of Applied Geochemists' session
GREAT ROOM 3 & 4
Session Chairs: Dennis Arne Telemark Geosciences and Juan Carlos Ordoñez-Calderón Kingross Gold

3:30 - 4:00 PM
Keynote Presentation 5: Scott Halley, (AAG keynote speaker), Mineral Mapping
Making the most of your multi-element assays

4:00 - 4:30 PM
Keynote Presentation 6: Steve Piercey, (AAG keynote speaker), Memorial University, St Johns
An overview of exploration lithogeochemistry for volcanogenic massive sulfide (VMS) deposits: historical perspectives, current methodologies and a view to the future

4:30 - 5:00 PM
Keynote Presentation 7: Dennis Arne (AAG keynote speaker), Telemark Geosciences
A catchment analysis approach to the interpretation of regional stream sediment data: Examples from the Canadian Cordillera

5:00 - 5:30 PM
Keynote Presentation 8: Juan Carlos Ordoñez-Calderón (AAG keynote speaker), Kinross Gold
Applications of machine learning to model 3D geological attributes of mineral deposits using multi-element geochemical data

5:30 - 7:00PM WELCOME FUNCTION AND POSTER SESSION IN EXHIBITION AREA
### PLENARY SESSION FOUR

**GREAT ROOM 3 & 4**

**Session Chair:** Mike Stewart MAusIMM, Seequent and AusIMM New Zealand Branch Committee

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<td>8:25 - 10:30 AM</td>
<td><strong>PLENARY SESSION FOUR</strong></td>
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<tr>
<td>8:25 - 8:30 AM</td>
<td>Session Chair introduction: Mike Stewart MAusIMM, Seequent and AusIMM New Zealand Branch Committee</td>
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<tr>
<td>8.30 – 9.00 AM</td>
<td>Keynote Presentation 9: <strong>Julie Rowland</strong>, The University of Auckland</td>
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<tr>
<td></td>
<td><em>Making Zealandia’s Cretaceous-to-recent metal belt: the golden trigger</em></td>
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<td>9.00 – 9.30 AM</td>
<td>Keynote Presentation 10: <strong>Stuart Simmons</strong>, Hot Solutions</td>
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<td><em>Boiling zones and precious metal mineralisation in epithermal environments</em></td>
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<td>9.30 – 10.00 AM</td>
<td>Keynote Presentation 11: <strong>Dave Craw</strong>, University of Otago</td>
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<td><em>Orogenic deposits: new approaches to old goldfields in New Zealand</em></td>
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<td>10.00 – 10.30 AM</td>
<td>Keynote Presentation 12: <strong>Cornel de Ronde</strong>, GNS Science</td>
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<td><em>The distribution and transport of metals within a magmatic seafloor hydrothermal system</em></td>
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**MORNING TEA AND EXHIBITION**

**GREAT ROOM 1 & 2**

**CONCURRENT SESSIONS**

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<td>4A: New Zealand session 1: Prospectivity and potential</td>
<td>Great Room 3 &amp; 4</td>
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<tr>
<td>Session Chair: Suzannah Toulmin (NZ Petroleum &amp; Minerals)</td>
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<tr>
<td>11.00 – 11.15 AM</td>
<td>Robert Smillie MAusIMM, GNS Science</td>
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<td><em>The mineral systems of the Zealandia continent: 500 million years and counting</em></td>
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<td>11.15 – 11.30 AM</td>
<td>Invited speaker: Mike Ressel, University of Nevada, Reno</td>
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<td><em>Toward a global Carlin-type gold exploration model</em></td>
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<td>4B: Sediment hosted/Carlin deposits</td>
<td>Crystal Room 2</td>
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<tr>
<td>Session Chairs: David Rhys (Panterra) and Shaun Barker MAusIMM (CODES, University of Tasmania)</td>
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<tr>
<td>11.30 – 11.45 AM</td>
<td>Patricia Durance MAusIMM, GNS Science</td>
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<td><em>Understanding the mineral potential for critical elements in New Zealand: the case for nickel and cobalt</em></td>
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<td>11.45 – 12.00 AM</td>
<td>John Greenfield, Geological Survey of New South Wales</td>
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<td><em>Mineral potential mapping in western NSW: new insights into the distribution of IOCG, VMS, orogenic gold and Broken Hill-type mineral systems</em></td>
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<td>4C: Region - Australia and China</td>
<td>Crystal Room 1</td>
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<td>Session Chair: Philippa Sivwright (Newmont Mining)</td>
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<tr>
<td>11.15 – 11.30 AM</td>
<td>Travis Murphy, CSA Global</td>
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<td><em>Development in understanding of the Tritton-Girilambone Cu district, Lachlan Fold Belt, Australia: resolving hydrothermal mineralisation in multiply-deformed rocks</em></td>
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<td>11.30 – 12.00 AM</td>
<td>Angela Lorrigan MAusIMM, Diversified Minerals</td>
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<td><em>Distribution of gold within the Dargues Reef alteration system</em></td>
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<td><strong>Mark Rattenbury</strong>, GNS Science</td>
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<td>Regional-scale multi-element in soil baseline surveys over prospective mineral camps in New Zealand</td>
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<td><strong>Shaun Barker</strong>, CODES, University of Tasmania</td>
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<td>Controls on gold precipitation in Carlin-type gold deposits</td>
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<td><strong>James Lally</strong>, Mining Associates</td>
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<td>Exploration for sedimentary hosted carbonate base metal mineralisation at Manuka, Winduck Shelf, Daring/Cobar Basin, NSW Australia</td>
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<tr>
<td>12:00 - 12:15 PM</td>
<td><strong>Simon Harder Holm Nielsen</strong>, Kenex</td>
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<td>Lithium prospectivity of hydrothermally altered rhyolitic lacustrine sediments of the Taupo Volcanic Zone, New Zealand</td>
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<td><strong>Kenneth Hickey</strong>, University of British Columbia</td>
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<td>Hydrological setting and geological controls on hydrothermal fluid flow in Carlin-type Au-deposits</td>
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<td><strong>Christopher Leslie</strong>, CODES, University of Tasmania</td>
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<td>Porphyry-Cu deposits in the Cowal district, NSW, Australia</td>
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<td>12:15 - 12:30 PM</td>
<td><strong>Mark Rattenbury</strong>, GNS Science</td>
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<td>Increasing accessibility and interoperability of New Zealand geoscience information for mineral exploration</td>
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<td><strong>Doug Kirwin</strong>, Realgold Resources</td>
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<td>Carlin-type gold deposits in the southwest Kyrgyz Republic</td>
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<td><strong>Hongying Qu</strong>, Chinese Academy Of Geological Sciences</td>
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<td>Metallogenesis of stratiform Cu mineralisation in the Dabaoshan deposit, Northern Guangdong Province, South China</td>
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<td>1:30- 3:00 PM</td>
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<td><strong>5A</strong>: Epithermal, intrusion-related and orogenic gold Great Room 3&amp;4</td>
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<td>Invited speaker: <strong>Rick Streiff</strong>, OceanaGold</td>
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<td>Road to discovery at WKP, New Zealand</td>
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<td><strong>5B</strong>: Intrusion-related Au, IOCG, Skarn, Stratiform and rare metal deposits Crystal Room 2</td>
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<td>Characterisation and paleotectonic setting of Mesoproterozoic iron oxide deposits of the St. Francois Mountains, Missouri, USA</td>
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<td><strong>5C</strong>: Mineral systems and exploration targeting Crystal Room 1</td>
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<td>Invited speaker: <strong>Sandra Occhipinti</strong>, CSIRO Mineral Resources, Discovery program spatial and temporal controls on mineral system</td>
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<td>1:30 - 2:00 PM</td>
<td><strong>Leroy Crawford-Flett</strong>, OceanaGold</td>
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<td>Exploration of epithermal quartz vein systems at Waihi, Hauraki Goldfield</td>
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<td><strong>Nick Oliver</strong>, HCOVGlobal consultants</td>
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<td>Source and transport paths in large hydrothermal systems: mapping and geochemical modelling of albitisation and veins around IOCGs</td>
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<td><strong>Paul Angus MAusIMM</strong>, Consultant</td>
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<td>Sams Creek porphyry gold deposit, Northwest Nelson, New Zealand</td>
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<td><strong>David Adams</strong>, Spectrum Resources</td>
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<td>Gold mineralisation and alkaline intrusive rocks at the Hogatza Mine Camp, Northwestern Alaska – connection or coincidence?</td>
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<td><strong>Genevieve Luketina</strong>, Kenex</td>
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<td>Mineral potential mapping and 3D modelling of porphyry targets at the Bundarra Cu-Au project, Queensland</td>
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DAY TWO CONTINUED

2.30 – 2.45 PM
Dave Craw, University of Otago
Regional crustal structure, fluid and metal transport pathways of Otago illuminated by geophysics

Peter Pollard MAusIMM(CP), Pollard Geological Services Pty Ltd
Controls on gold precipitation in Carlin-type gold deposits

Beatriz Caetano, Universidade Federal do Rio de Janeiro
New evidence of magmatic-hydrothermal activity of porphyry-epithermal system in the rear arc of Izu-Bonin-Mariana

2.45 – 3.00 PM
Hamish Blakemore, OceanaGold
Advances in the understanding of the structural setting of mineralisation within the Hyde-Macraes Shear Zone and the discovery of new resources, Macraes Mine, NZ

Bénédicte Cenki-Tok, Université de Montpellier, France (visiting University of Sydney)
Rare metal concentration triggered by sulfide dynamic recrystallisation

Mark Pearce, CSIRO
Analysing Mineral Systems from nanometres to kilometres

3.00 – 3.30 PM
AFTERNOON TEA AND EXHIBITION

3.30 – 3.45 PM

CONCURRENT SESSIONS

6A: Gold, tungsten and industrial minerals
Great Room 3&4
Session Chairs: Rene Sterk FAusIMM(CP) and Sean Aldrich MAusIMM (RSCMME)

Doug MacKenzie MAusIMM(CP), University of Otago
Textures and grain size of scheelite as a potential byproduct, Macraes Au mine, New Zealand

Invited speaker: Greg Corbett, Corbett Geological Services
Time in porphyry Cu Au development - exploration implications

Robert Findlay, Montagu Minerals Mapping
Liamu Igneous Complex, PNG: significance for late Miocene-Pliocene mineralisation along Papuan Peninsula and PNG tectonics

Lawrence Queen MAusIMM, Queen And Associates
Review of Nickel-Cobalt Laterites in Papua New Guinea

6B: Porphyry Cu systems 1
Crystal Room 2
Session Chairs: David Cooke and Aysha Ahmed (CODES, University of Tasmania)

Colin Dunn, Colin Dunn Consulting
Biogeochemical exploration: orientation surveys in NZ

Debora Araujo, Rio Tinto
Exploring for porphyry deposits in different tectonic settings using mineral chemistry? An empirical approach

Andrew Vigar MAusIMM, Mining Associates
Exploration, discovery and resources, Kainantu gold project, PNG

6C: Region - PNG, Indonesia, the Philippines and Pacific islands
Crystal Room 1
Session Chair: Rob Smillie MAusIMM (GNS Science)

Robert Brathwaite MAusIMM, GNS Science
Epithermal zeolite mineralisation, central Taupo Volcanic Zone, New Zealand

Julian Bartlett, PT Merdeka Copper Gold
Exploring the Wapolu detachment related mesothermal and epithermal gold deposit, Fergusson Island, PNG

Colin Randall FAusIMM(CP), SAS Avenir Makatea
Makatea Island exploration leads to new phosphate discovery

3.30 – 3.45 PM

Doug MacKenzie MAusIMM(CP), University of Otago
Textures and grain size of scheelite as a potential byproduct, Macraes Au mine, New Zealand

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Colin Dunn, Colin Dunn Consulting
Biogeochemical exploration: orientation surveys in NZ

Robert Brathwaite MAusIMM, GNS Science
Epithermal zeolite mineralisation, central Taupo Volcanic Zone, New Zealand

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Robert Brathwaite MAusIMM, GNS Science
Epithermal zeolite mineralisation, central Taupo Volcanic Zone, New Zealand

Andrew Vigar MAusIMM, Mining Associates
Exploration, discovery and resources, Kainantu gold project, PNG

4.15 – 4.30 PM

Tom Ritchie AAusIMM,Hardie Pacific
Placer garnet deposits of the South Island’s West Coast, New Zealand

Stuart Munroe MAusIMM, SRK Consulting
Exploring the Wapolu detachment related mesothermal and epithermal gold deposit, Fergusson Island, PNG

4.30- 4.45 PM

Sean Aldrich MAusIMM, RSCMME
Sea floor nodules of the South West Pacific

Colin Randall FAusIMM(CP), SAS Avenir Makatea
Makatea Island exploration leads to new phosphate discovery

4.45 – 4.50 PM

PLENARY SESSION 5
Great Room 3 & 4
Session Chair: Tony Christie MAusIMM (GNS Science)

Keynote Presentation 13: Bruce Gemmell, University of Tasmania
Minerals geoscience: Discovery to metal
PLENARY SESSION SIX
GREAT ROOM 3 & 4
Session Chair: Annette Pocock MAusIMM, NZ Petroleum & Minerals

8:55 - 9:00 AM
Session Chair introduction: Annette Pocock MAusIMM, NZ Petroleum & Minerals

9:00 – 9:30 AM
Keynote Presentation 14: Rich Goldfarb (SEG keynote speaker), China University of Geosciences Beijing
Geological evolution of China and the resulting spatial-temporal distribution of gold resources

9.30 – 10:00 AM
Keynote Presentation 15: Sasha Pontual, AusSpec International
Easy alteration mineralogy – Are we there yet and why do we need it?

10:00 – 10:30 AM
Keynote speaker 16: Stephen Walters, CRC ORE
Generating ore body knowledge fit for manufacturing purpose - future trends and challenges in geometallurgy

10:30 – 11.00 AM MORNING TEA AND EXHIBITION
GREAT ROOM 1 & 2

11.00 – 12.30 PM CONCURRENT SESSIONS

7A: Geometallurgy
Great Room 3 & 4
Session Chair: Anita Parbhakar-Fox (ARC TMVC Research Hub, University of Tasmania)

11.00 – 11.15 PM
Nathan Fox, University of Tasmania
X-ray based technologies for geometallurgical characterisation

11.15– 11.30 PM
Matthew Cracknell, University of Tasmania
Automated identification of sulphides from drill imagery

11.30 – 11.45 PM
Ned Howard, Evolution Mining Ltd
Geometallurgy of the Mount Carlton Au-Ag-Cu Deposit: Using geochemical and spectral data to model alteration and sulphide-sulphosalt mineral distribution

11.45 – 12.00 PM
Paul Weber MAusIMM(CP), O’Kane Consultants
Geometallurgical tools to understand acid and metalliferous drainage risks for PACRIM mining projects

12.00 – 12.15 PM
Laura Jackson AAusIMM, RGS Environmental Pty Ltd
Approach to building a geoenvironmental block model for the Walford Creek Project, AEON Metals

12.15 – 12.30 PM
Anita Parbhakar-Fox, ARC TMVC Research Hub, University of Tasmania and WH Bryan Research Centre, SMI, University of Queensland
Geomet of tailings dams

7B: Epithermal systems
Crystal Room 2
Session Chairs: Stuart Simmons (Hot Solutions) and Bruce Gemmel (Consultant)

11.00 – 11.15 PM
Invited speaker: Ayrton Hamilton AAusIMM, The University of Auckland
Identifying surface manifestations of epithermal systems: processes and products

11.30 – 11.45 PM
Mark Simpson, GNS Science
Alteration in epithermal Au-Ag and geothermal systems in New Zealand: insights for mineral exploration

11.45 – 12.00 PM
Richard Kellett, GNS Science
Geophysical properties of rocks from the Hauraki Goldfield (New Zealand), supporting continued mineral exploration

12.00 – 12.15 PM
Tony Christie MAusIMM, GNS Science
“The devil is in the detail” vein mineralogy and texture as an aid to exploration in the Hauraki Goldfield

12.15 – 12.30 PM
Jillian Aira Gabo-Ratio, University of the Philippines
Geology and mineralisation in the Suyoc epithermal deposit, Mankayan District, Philippines: insights from ore mineralogy, fluid inclusion microthermometry and stableisotope studies

12.30 – 1.30 PM LUNCH AND EXHIBITION
GREAT ROOM 1 & 2
### CONCURRENT SESSIONS

**8A: Multi-scale characterisation**
Great Room 3&4  
Session Chairs: **Mark Pearce** (CSIRO) and **Michael Gazley MAusIMM** (RSCMME)

- **1.30 – 1.45 PM**  
  **Michael Gazley MAusIMM,**  
  RSC Mining & Mineral Exploration  
  *Multivariate data analysis and machine learning - towards robust geometallurgical domains: Examples from the Pacific Rim*

- **1.45 – 2.00 PM**  
  **Mark Pearce,**  
  CSIRO  
  *Path-finder element and gold microstructures from the Alturas high-sulphidation epithermal Au-Ag Deposit, El Indio Belt, Chile*

- **2.00 – 2.15 PM**  
  **Stephen Windle MAusIMM,**  
  Monazita Sac  
  *Rapid structural modelling from core photography at the Zafranal project, Peru*

- **2.15 – 2.30 PM**  
  **Mikael Bergqvist,**  
  Orexplore  
  *3D Tomography and geochemistry of drill cores reveals geological structures, minerals, textures - combine data for maximised results*

- **2.30 – 2.45 PM**  
  **Mike Stewart MAusIMM,**  
  Seequent  
  *Multi-scale modelling of the Martha Deposit*

- **2.45 – 3.15 PM**  
  **AFTERNOON TEA AND EXHIBITION**  
  GREAT ROOM 1 & 2

**8B: Porphyry Cu 2 and PGE deposits**  
Crystal Room 2  
Session Chairs: **David Cooke** and **Aysha Ahmed**  
(CODES, University of Tasmania)

- **1.30 – 1.45 PM**  
  **Invited speaker: Steve Garwin FAusIMM,**  
  Solgold Plc  
  *The geology and mineralisation of the world-class Alpala porphyry copper-gold deposit in northern Ecuador*

### PLENARY SESSION SEVEN

**GREAT ROOM 3 & 4**  
Session Chair: **Dale Sims FAusIMM(CP),** PACRIM Congress Convenor; Dale Sims Consulting

- **3.15 – 3.45 PM**  
  **Keynote Presentation 17:**  
  **Rick Sibson,** University of Otago  
  *Subduction seismic style, fluid release, and orogenic gold mineralisation in forearc settings*

- **3.45 – 4.15 PM**  
  **Keynote Presentation 18:**  
  **Nick Oliver,** HCOVGlobal consultants  
  *The (dis)organisation of structural controls on epithermal mineralisation*

- **4.15 – 4.45 PM**  
  **Keynote Presentation 19:**  
  **David Cooke,** University of Tasmania  
  *The porphyry model - regional variations on a theme around the Pacific Rim*

- **4.45 – 5.15PM**  
  **Keynote Presentation 20:**  
  **Larry Meinert,** Colorado School of Mines  
  *Space resources – separating the hype from reality (but it is closer than you think)*

- **5.15 – 5.30 PM**  
  **Conference close:**  
  **Dale Sims FAusIMM(CP),** PACRIM Congress Convenor; Dale Sims Consulting

- **5.30 – 6.30 PM**  
  **Farewell Networking Drinks**

- **7.00 – 10.00 PM**  
  **Hydrothermal Fluid Society Meeting**