# SEG 2025 CONFERENCE PROGRAM

SEG 2025

## BRISBANE, AUSTRALIA

September 26-29, 2025

seg2025.org

SOCIETY OF ECONOMIC GEOLOGISTS
FOUNDED 1920

**Conference Venue**

**Brisbane Convention & Exhibition Centre**
Merivale St
South Brisbane, QLD 4101
Australia

**Wi-Fi:**
**Sponsored by AngloGold Ashanti Australia**

**Wi-Fi details at registration**

**Parent's room:** See registration desk for locations

**Speaker Ready Room (M10 Mezz level)**

| | |
|---|---|
| Thursday, September 25: | 3:00pm-6:00pm |
| Friday, September 26: | 7:00am-5:00pm |
| Saturday, September 27: | 7:00am-5:00pm |
| Sunday, September 28: | 7:00am-5:00pm |
| Monday, September 29: | 7:00am-5:00pm |

**Registration (Main Foyer)**

| | |
|---|---|
| Friday, September 26: | 7:00am-6:00pm |
| Saturday, September 27: | 7:00am-6:00pm |
| Sunday, September 28: | 7:00am-6:00pm |
| Monday, September 29: | 7:00am-12:00pm |

| EXHIBITS AND POSTERS (EXHIBIT HALL, Q1 & Q2) | | |
|---|---|---|
| Thursday, September 25 | 3:00pm–6:00pm | Exhibit Move In (Poster and Exhibitor Only Access) |
| Friday, September 26 | 8:00am-3:00pm<br>6:00pm-6:30pm<br>7:00pm-9:00pm | Exhibit Move In (Poster and Exhibitor Only Access)<br>Exhibitor Only Access<br>Posters and Exhibits Open-Welcome Reception |
| Saturday, September 27 | 9:00am-10:00am<br>10:00am-7:30pm<br>5:30pm-7:30pm | Exhibitor Only Access<br>Exhibits Open<br>Exhibit and Poster Reception |
| Sunday, September 28 | 9:00am-10:00am<br>10:00am-7:30pm<br>5:30pm-7:30pm | Exhibitor Only Access<br>Posters and Exhibits Open<br>Exhibit and Poster Reception |
| Monday, September 30 | 9:00am-10:00am<br>10:00am-2:00pm<br>2:00pm-4:00pm | Exhibitor Only Access<br>Posters and Exhibits Open<br>Exhibits Dismantle (Exhibitor Only Access) |

**Acknowledgment of Country**

We respectfully acknowledge the Traditional Custodians of the land on which we will gather, the Jagera and Turrbal of Meanjin (Brisbane). We honor their enduring connection to the land, waters, and skies and pay our respects to their Elders past, present, and emerging. As we convene for this conference, we recognize the importance of Indigenous knowledge in fostering sustainable and respectful resource practices. May this conference be an opportunity to foster understanding, collaboration, and shared stewardship of our natural resources.

The information in this program is current as of September 15, 2025.
Please see the SEG 2025 Attendee Hub for updated information.

seg2025.org/hub

# SEG 2025 Schedule at a Glance

## THURSDAY, SEPTEMBER 25

**8:30am-5:30pm**
Pre-Conference Workshops

**6:00pm - 10:00pm**
Student and Early Career Social

## FRIDAY, SEPTEMBER 26

**8:00am-5:30pm**
Pre-Conference Workshops

**8:30am-4:30pm**
Student and Early Career Events

**5:00pm-5:15pm**
Welcome to Country

**5:15pm-6:30pm**
Presentation and Panel Discussion

**6:30pm-7:00pm**
SEG Presidential Address

**7:00pm-9:00pm**
Exhibits and Posters Open

**7:00pm-9:00pm**
Welcome Reception - Sponsored by BHP Xplor

## SATURDAY, SEPTEMBER 27

**8:00am-9:30am**
Opening and Plenary Sessions

**9:30am-10:30am**
- Session 1: Lithosphere and Mineralization
- Session 2: Tectonics and Porphyries
- Session 3: 3D Exploration and Prospectivity

**10:30am-11:00am**
Break, Poster and Speed Talks in Exhibit Hall

**11:00am-12:30pm**
**BHP Xplor**

**12:30pm-2:00pm**
BHP Xplor Showcase and Sponsored Lunch

**2:00pm-3:30pm**
- Session 4: Orogenic Gold
- Session 5: Paterson to Global Cu (Au-Pb-Zn)
- Session 6: Machine Learning and AI

**3:30pm-4:00pm**
Break, Posters and Speed Talks in Exhibit Hall

**3:30 pm-6:00pm**
- Session 7: Orogenic and Other Au and Cu
- Session 8: Orthomagmatic
- Session 9: Exploration Technology

**6:00pm-8:00pm**
Exhibit and Poster Reception, NGEA Panel Discussion

## SUNDAY, SEPTEMBER 28

**8:00am-8:30am**
Plenary Session

**8:30am-10:30am**
- Session 10: IOCG
- Session 11: Porphyry Exploration and Technology
- Session 12: Pegmatites

**10:30am-11:00am**
Break, Posters and Speed Talks in Exhibit Hall

**11:00am-12:30pm**
- Session 13: IOCGs, Cu/Co and Replacement
- Session 14: Collaborative Geoscience 1
- Session 15: Machine Learning Workflows to Prospectivity

**12:30pm-2:00pm**
Lunch, Posters and Speed Talks in Exhibit Hall

**2:00pm-3:30pm**
- Session 16: IOCGs, Cu/Co and Replacement
- 17: Collaborative Geoscience 2
- Session 18: Fluid Flow and Metal Deposition

**3:30pm-4:00pm**
Break and Posters in Exhibit Hall

**4:00pm-4:30pm**
SEG Distinguished Lecturer 2025

**4:30pm-5:30pm**
Awards Ceremony

**5:30pm-7:30pm**
Exhibit and Poster Reception

**8:00pm - 11:00pm**
Conference Celebration

## MONDAY, SEPTEMBER 29

**8:00am-8:45am**
Plenary Session

**8:45am-10:30am**
- Session 19: Applied Orebody Knowledge
- Session 20: Porphyry Tracers 1
- Session 21: From Geomet to Remediation 1

**10:30am-11:00am**
Break, Posters and Speed Talks in Exhibit Hall

**11:00am-12:30pm**
- Session 22: Porphyry Tracers 2
- Session 23: ESG
- Session 24: From Geomet to Remediation 2

**12:30pm-2:00pm**
Lunch

**2:00pm-4:00pm**
- Session 25: Porphyry Americas
- Session 26: REE and Carbonatites
- Session 27: Big Workflows

**4:00pm-4:30pm**
Break

**4:30pm-5:30pm**
Closing Ceremony and Closing Remarks

**5:30pm-6:30pm**
Closing Social

## TUESDAY, SEPTEMBER 30

**8:30am-5:00pm**
Post-Conference Workshops

## WEDNESDAY, OCTOBER 1

**8:30am-4:15pm**
Post-Conference Workshops

## Conference Information

### Conference Organizing Committee

| | |
|---|---|
| **Conference Chairs:** | Rick Valenta and Mark Noppé |
| **SEG Executive Director:** | Jennifer D. Craig |
| **Technical Program:** | Nick Oliver |
| **Poster Program:** | Corey Jago |
| **Early Career Program:** | Nick Dyriw, Rocio Vargas, and Kam Bhowany |
| **Workshops:** | Kaylene Camuti and Andrea Rutley |
| **Field Trips:** | Vladimir Lisitsin and Ioan Sanislav |
| **Social Program:** | Loren Nicholls |
| **Sponsorships and Exhibitors:** | Helen Degeling and Kylie Prendergast |
| **Marketing and Media:** | Evelyn Mervine |
| **Publications:** | Pat Hayman |
| **Advisory Panel:** | Stuart Simmons, Anne Thompson, and Steve Piercey |

### SEG Contact Information

7811 Shaffer Parkway
Littleton, CO 80127-3732
Tel.1.720.981.7882
E-mail: seg@segweb.org

### Conference Organizer

Sea to Sky Meeting and Association Management, Inc.
conferences@segweb.org

**The information in this program is current as of September 15, 2025. Please see the SEG 2025 Attendee Hub for updated information. seg2025.org/hub**

## Table of Contents

## Welcome to the SEG 2025 Conference!

Thank you for joining us for SEG 2025 in Brisbane. The world in 2025 is a complex and challenging place, and the need to secure critical and strategic resources for the future is greater than ever before. This conference is a great opportunity to get together and learn from each other, to swap lessons and approaches, and to meet both old friends and people from our region who have never before been to a conference like this!

We have put together a fantastic technical program that combines new insights on the major deposits from the Asia Pacific region and worldwide, the new technologies and workflows to improve discovery, the latest pre-competitive data sets, and the social, environmental, and market aspects of our fascinating business.

We also have a great lineup of field trips to key areas in Australia and more broadly in our region; workshops addressing some of the key development needs of our members; and an exciting mix of social activities. We will further have an ambitious program to bring early-career professionals from around the world together with each other and with more experienced professionals, as well as activities to ensure a combination of personal development and fun.

The conference will take place at the Brisbane Convention and Exhibition Centre at Brisbane's Southbank. The venue is ideal for a conference of this type and is located in an area full of activities, restaurants, and attractions.

Thank you again for joining us for the conference. We hope you have a great experience and come away energized and informed—with new ideas and approaches that you will find useful in the future. And of course, we hope you have the chance to make new connections and to reconnect with friends and colleagues.

**Rick Valenta,**
SEG 2025 Co-Chair
*Director,* Sustainable Minerals Institute, The University of Queensland

**Mark Noppé,**
SEG 2025 Co-Chair
*Director,* WH Bryan Mining Geology Research Centre, The University of Queensland

**Jennifer Craig**
*SEG Executive Director*
Society of Economic Geologists

## SEG Awardees for 2025

Awards will be presented at 4:30 p.m. on September 28, 2025,
at the Brisbane Convention and Exhibition Centre

R.A.F. PENROSE GOLD MEDAL

**Sarah-Jane Barnes**
(Université du Québec Chicoutimi)

SEG SILVER MEDAL

**Hilke Dalstra**
(University of Utrecht)

SEG WALDEMAR LINDGREN AWARD

**Xuyang Meng**
(China University of Geosciences, Beijing)

BRIAN J. SKINNER AWARD

**Robert R. Loucks**
(University of Western Australia)

SEG DISTINGUISHED LECTURER

**Mei-Fu Zhou**
(Chinese Academy of Sciences)

SEG THAYER LINDSLEY LECTURER

**Stephen Roberts**
(University of Southampton)

REGIONAL VICE PRESIDENT LECTURER

**Juan Carlos Castelli**
(Geovectra)

SEG AWARD OF SPECIAL RECOGNITION

**Lawrence D. Meinert**

## Pre-Conference Field Trips

**Cu-Au Deposits of Java Island, Sunda Arc, Indonesia**
**Dates:** September 14-23, 2025
**Leaders:** Lucas Donny Setijadji, Adam C. Simon, Andreas Rama Alfario, and supported by members of the Gadjah Mada University SEG Student Chapter

**IOCG, ISCG, and Sediment-Hosted Cu (±Zn-Pb-Ag) Deposits of the Mount Isa Province - North West Queensland**
**Dates:** September 19-22, 2025
**Leaders:** Vladimir Lisitsin, Elena Belousova, Alkis Kontonikas-Charos, and Ioan Sanislav

**Porphyry and Epithermal Deposits of the Macquarie Arc, New South Wales**
**Dates:** September 20-25, 2025
**Leaders:** David Cooke, Alan Wilson, Jonathon Hoye, Sebastien Meffre, and Jessica Askew

**World-Class Archean Gold Deposits of the Eastern Yilgarn, Western Australia, and Insights into Au, Ni, Li, and REE Deposits**
**Dates:** September 22-24, 2025
**Leaders:** Gerard Tripp and Alicia Verbeeten

**Sn-W Deposits and Rare-Metal Mineral Systems of Northeast Queensland, Australia**
**Dates:** September 23-25, 2025
**Leaders:** Avish Kumar, Benjamin Hines, and Jaime Poblete

**World-Class Intrusion-Related and Epithermal Gold Deposits of Northeast Queensland**
**Dates:** September 23-25, 2025
**Leaders:** Ioan Sanislav, Hugo Sera, Al-Tamini Tapu, and Vladimir Lisitsin

## Post-Conference Field Trips

**Tasmania's Diverse Array of Base, Precious, Critical, and Strategic Metal Deposits**
**Dates:** September 30-October 6, 2025
**Leaders:** David Cooke, Owen Missen, and Emrecan Yurdakul

**Iron-Oxide Cu-Au Deposits of the Olympic Cu-Au Province, South Australia**
**Dates:** October 1-2, 2025
**Leader:** Adrian Fabris

## Pre-Conference Workshops

**Micro to Macroscale XRF Core Scanning Technologies in Mineral Exploration and Mining**
**Date:** September 25, 2025
**Presenters:** Shaun Barker, Cassady Harraden, Gustav Nortje, Ayesha Ahmed, Nigel Kelly, Carolina Marin Suarez, Jason Bennett, Fernando Fontana, and Brian McNulty

**Structural Analysis, Deformation Processes, and Fluid Flow in Fracture-controlled Hydrothermal Ore Systems**
**Dates:** September 25-26, 2025
**Presenter:** Stephen F. Cox

**Deposit Styles and Ore Textures of the Mount Isa and Cloncurry Districts**
**Date:** September 25, 2025
**Presenter:** Richard Lilly

**How to Extract Value from Ore - An Introduction to Mineral Processing**
**Dates:** September 25-26, 2025
**Presenter:** Mohsen Yahyaei

**From Orebody Knowledge to Geometallurgy: Discovery to Closure**
**Date:** September 26, 2025
**Presenters:** Cassady Harraden, Pia Lois-Morales, Nathan Fox, and Lucas Pereira

## Post-Conference Workshops

**Introduction to Python for Geoscientists**
**Dates:** September 30 - October 1, 2025
**Presenters:** Taryn Scharf, Luc Doucet, and Ben Knight

**Diversity in High-K Calc-Alkaline to Alkaline Porphyry Copper-Gold Deposits: Practical Observations for Effective Exploration**
**Date:** September 30, 2025
**Presenter:** Alan J. Wilson

**Interpreting Ore Textures, Breccias, and Alteration: From Fundamental Observations to Advanced Technology**
**Dates:** September 30 - October 1, 2025
**Presenters:** Gavin Clarke, Vladimir Lisitsin, Ioan Sanislav, Al-Tamini Tapu, Alkis Kontonikas-Charos, Benjamin Hines, and Kaylene Camuti

**All workshops are held off-site.**

## Student and Early Career Events

**Thursday, September 25, 2025**
**Student and Early Career Social**
(Ticketed event)
6:00pm - 10:00pm at The Plough Inn
Sponsored by iCRAG, University of Queensland, Resource Technology and Critical Minerals Trailblazer

**Friday, September 26, 2025**
**Student and Early Career Day**

**8:30am-9:00am**
Icebreaker/coffee

**9:00am-9:30am**
**Inside Xplor: How Majors Spot the Next Generation of Leaders**
Presenter: *John Miller, Technical Lead for BHP Xplor*

**9:30am-10:45am**
**Panel Discussion**
From Aspiration to Reality: Navigating Our Early Career Days as Geoscientists
Moderator: *Chirantan Parui (CSIRO)*
Panelists: *Sheree Armistead (CODES), Jessica Askew (University of Tasmania), Richard Lilly (NExUS), and Dipanshu Sharma (Consultant)*

**10:45am-11:00am**
Morning Break

**10:00am-12:00pm**
**How to Stand Out in a Competitive Pool Workshop**
Presenter: *Jacob Sipos (Boston Resourcing)*

**12:00pm-1:00pm**
Lunch

**1:00pm-2:00pm**
**SEG Opportunities for Students and Early Careers**

**2:00pm-2:30pm**
**Speed dating - Networking**
With an introduction by Iain Dalrymple (AngloAmerican)

## Social Events

**Student and Early Career Social**
Thursday, September 25, 2025
6:00pm - 10:00pm
The Plough Inn
Sponsored by iCRAG, University of Queensland, Resource Technology and Critical Minerals Trailblazer
[Ticketed Event]

**Conference Celebration**
Sunday, September 28, 2025
8:00pm - 11:00pm
Lina Rooftop
[Ticketed Event]

**Closing Social**
Monday, September 29, 2025
6:00pm - 8:00pm
Brisbane Convention & Exhibition Centre
[Ticketed Event]


RioTinto
RioTinto
RioTinto

## Technical Program - September 26, Friday | 5:00 PM - 9:00 PM

= Great Hall Q1 & Q2 = Mezzanine M3 = Mezzanine M4

| 5:00 to 9:00 PM | Opening Event |
|---|---|
| 5:00 PM to 5:15 PM | Welcome to Country<br>*Steven Coghill (Invited Speaker)* |
| 5:15 PM to 5:45 PM | Mineral Security in a Changing World<br>*Daniel Franks (Invited Speaker)* |
| 6:00 PM to 6:30 PM | Value of Economic Geology to Society (Panel Discussion)<br>*Rick Valenta (Chair) Brad Welsh, Caoilin Chestnutt, Peta MacRae, Marina Costelloe, Daniel Franks* |
| 6:30 PM to 7:00 PM | SEG Presidential Address<br>*Anne Thompson, SEG President 2025* |
| 7:00 PM to 9:00 PM | Welcome Reception in Exhibit Hall Sponsored by BHP Xplor |

## Technical Program - September 27, Saturday | 8:00 AM - 10:30 AM

| 8:00 AM to 9:30 AM | Welcome and Plenary Sessions |
|---|---|
| 08:00 AM to 08:10 AM | Opening Comments<br>*Jennifer Craig, SEG Executive Director and Rick Valenta, SEG 2025 Co-chair* |
| 08:10 AM to 08:15 AM | Geology and Mining: Introduction to the New SEG Publication<br>*Dan Wood, Co-editor* |
| 08:15 AM to 08:30 AM | Opening Address<br>*Tim O'Connor, Group Exploration Officer, BHP* |
| 08:30 AM to 09:00 AM | Mineral Systems Models for Clastic-Dominated Zn Deposits: From the Geodynamic to the Microscales<br>*Sarah Gleeson (Plenary Speaker)* |
| 09:00 AM to 09:30 AM | Mineral Systems in a Plate Tectonic Context<br>*Dietmar Müller (Plenary Speaker)* |
| **9:30 AM to 10:30 AM** | **Oral Session 1: Lithosphere and Mineralization** |
| 9:30 AM to 9:45 AM | Probabilistic Assessment of Australia's Lithospheric Architecture and Its Relationship to Mineral Systems<br>*Mark Hoggard* |
| 9:45 AM to 10:00 AM | Targeting the Biggest Discoveries along the Biggest Faults: How Hard Can it Be?<br>*Nick Hayward* |
| 10:00 AM to 10:15 AM | Linking Orogenic Gold and Orthomagmatic PGE-Ni-Cu Deposits in the Archean Yilgarn Craton<br>*Matthew Demmer* |
| 10:15 AM to 10:30 AM | Magmatic Activities Directly Contributed to the Formation of Giant Jiaodong Gold Province: Evidence from the Xiejia Diorite<br>*Zhan-Ke Li* |
| **9:30 AM to 10:30 AM** | **Oral Session 2: Tectonics and Porphyries** |
| 9:30 AM to 9:45 AM | Linking Porphyry Cu Formation to Tectonic Change in Postsubduction Settings: A Case Study from the Giant Yulong Belt, Eastern Tibet<br>*Ming-Liang Huang* |
| 9:45 AM to 10:00 AM | Slab Tearing as a Driver of Porphyry Ore Deposit Formation in Indonesia and the Philippines<br>*Jack Ward* |
| 10:00 AM to 10:15 AM | Magmatism and Post-Emplacement Uplift at the Red Chris Cu-Au Deposit, BC Canada: Implications for Porphyry Copper Formation and Preservation<br>*Brian McNulty* |
| 10:15 AM to 10:30 AM | Magmatic Fertility and Timing of the Dalli Gold-Rich Porphyry Deposit, Central Iran: Geological Insights and Exploration Implications<br>*Hooshang Asadi Haroni* |

## Technical Program - September 27, Saturday | 9:30 AM - 2:00 PM

| 9:30 AM to 10:30 AM | Oral Session 3: 3D Exploration and Prospectivity |
|---|---|
| 9:30 AM to 9:45 AM | Loop: An Open-Source Framework for Probabilistic Geological and Resource Modelling<br>*Lachlan Grose (Invited Speaker)* |
| 9:45 AM to 10:00 AM | Using the Loop platform to Build Structurally Complex 3D Geological Models: Towards Better Resource Models?<br>*Laurent Ailleres* |
| 10:00 AM to 10:15 AM | Unlocking Deep-Time Prospectivity: Integration of Multiple Paleogeographic Models with Geochemical, Geochronological, and Thermochronological Big Data<br>*Fabian Kohlmann* |
| 10:15 AM to 10:30 AM | Unlocking the Potential of Core Photography Leveraging SOTA Open-Source Computer Vision Models<br>*Ankita Singh* |
| 10:30 AM to 11:00 AM | Break, Poster and Speed Talks in Exhibit Hall \| Coffee Sponsored by Geologic AI |
| 11:00 AM to 12:30 PM | **BHP Xplor** |
| | Idaho's Untapped Mineral Potential (Cu Au) \| *Curtis Johnson* |
| | Royalty Creation Through Prospect Generation and Acquisition \| *Marc Tran* |
| | Project Generation and Exploration of Critical Mineral Resources, Argentina \| *Jason Ward* |
| | Discovering Labrador's Critical Metal Deposits, Primarily Copper \| *Tyrell Sutherland* |
| | Multi-Commodity Exploration Prospectivity of Saudi Arabia \| *Oliver Jones* |
| | Cu Au Exploration in the Western Tethyan Belt \| *Elena Clarici* |
| | Cu Exploration in Canada, Peru and Australia \| *Glenn Poole* |
| 12:30 PM to 02:00 PM | BHP Xplor Showcase and Sponsored Lunch in Exhibit Hall |

# Technical Program - September 27, Saturday | 2:00 PM - 8:00 PM

= Great Hall Q1 & Q2 = Mezzanine M3 = Mezzanine M4

| 2:00 PM to 3:30 PM | Oral Session 4: Orogenic Gold |
|---|---|
| 2:00 PM to 2:15 PM | Structural Controls on a High-Grade BIF-Hosted Gold System: Umwelt Deposit Case Study, Back River Gold District, Nunavut, Canada<br>*Cam Bartsch (Invited Speaker)* |
| 2:15 PM to 2:30 PM | Linking Geoscience Research to Orebody Knowledge at the Epizonal Fosterville Gold Deposits<br>*Wessley Edgar* |
| 2:30 PM to 2:45 PM | "Fuchsite" and Chlorite in Carbonated Komatiites at the Kerr-Addison Deposit, Ontario, Canada: Genesis of Listvenites in Orogenic Gold Settings<br>*Derek Leung* |
| 2:45 PM to 3:00 PM | Mafic Magmatic Origin of Orogenic Gold Systems<br>*Daniel Wiemer* |
| 3:00 PM to 3:15 PM | Red Hill: Unveiling the Geochemical and Hydrothermal Evolution of a Granitoid-Hosted Orogenic Gold System in the Yilgarn Craton, Western Australia<br>*Renan De Souza* |
| 3:15 PM to 3:30 PM | Sunday Creek: High-Grade Gold-Antimony Discovery in Clonbinane, Victoria<br>*Kenneth Bush* |
| 3:30 PM to 4:00 PM | Break and Posters in Exhibit Hall \| Coffee Sponsored by Ma'aden |
| **4:00 PM to 5:45 PM** | **Oral Session 7: Orogenic and Other Au and Cu** |
| 4:00 PM to 4:15 PM | Unearth Tomorrow: Exploration and Technology Delivering the New Vision for the Kingdom of Saudi Arabia<br>*Giuseppe LoGrasso (Sponsor Talk)* |
| 4:15 PM to 4:30 PM | Unearth Tomorrow: Exploration and Technology Delivering the New Vision for the Kingdom of Saudi Arabia (continued) |
| 4:30 PM to 4:45 PM | Retrograde Overprint of the MEM2 Gold Deposit: Evidence for Polyphase Mineralization Along the Antimony Line, Murchison Greenstone Belt, South Africa<br>*Luke Carlton* |
| 4:45 PM to 5:00 PM | IOCG, ISCG and Genetically Affiliated Deposits in the Cloncurry District, Queensland, Australia: Diverse Products of One Mineral System<br>*Vladimir Lisitsin* |
| 5:00 PM to 5:15 PM | From the Outside Looking In: An Exploration Perspective of the Mount Isa Cu and Zn-Pb-Ag System<br>*Alex Brown* |
| 5:15 PM to 5:30 PM | Sulfur Isotope Fingerprints of Sediment-Hosted Copper Deposits in Mt Isa Western Succession, Australia<br>*Jemi Ahnaf* |
| 5:30 PM to 5:45 PM | Orogenic Copper Systems: A Global Perspective and Exploration Framework<br>*Matthew Hales* |
| 5:45 PM to7:30 PM | Exhibit and Poster Reception, NGEA Panel Discussion in Exhibit Hall<br>*Marc Gasparotto, Tony Knight, Britney Russell, Alison Morley* |

## September 27, Saturday | 2:00 PM to 8:00 PM

| Oral Session 5: Paterson to Global Cu (Au-Pb-Zn) | Oral Session 6: Machine Learning and AI |
|---|---|
| Expanding the Chronological Evolution of Winu Cu-Au Deposit (Western Australia): Insights from Modern In Situ Titanite-Apatite-Calcite Petrochronology<br>*Bruno Vieira Ribeiro* | Integrating Machine Learning and Conditional Simulation for Geometallurgical Block Modelling: A Case Study from the Resolution Copper Project<br>*Cecilia Artica* |
| The Geology and Breccia Evolution of the Havieron Breccia-Hosted Au-Cu Deposit<br>*Isaac Brown* | A Machine-Learning Workflow for the Automated Stratigraphic Interpretation of Pilbara Iron Ore Stratigraphy<br>*Elisabeth Scibiorski* |
| What Sulfur Isotopes Reveal About Ore Formation in the Southwest Yilgarn Craton<br>*Paul Duuring* | Challenges in Validating High-Resolution In-Hole Geoscience Data in Metalliferous Open Pit Mining<br>*John Jackson* |
| Quantifying Rifting History of the Proterozoic Mt Isa Superbasin and Its Relationship to Base Metal Mineralisation<br>*Edgar Leong* | AI-Driven Core Logging and Drill Optimization Using High-Resolution Core Scanning: Enhancing Geological Models and Reducing Exploration Risk<br>*Grant Sanden (Sponsor Talk)* |
| Magma and Salt: The Discovery of the Oktyabrsky Supergiant and the Role of Salt-Magma Location on Genesis and Value<br>*Steve Beresford* | How Confident Are We in Our Models? Unidentified Dataset Dependencies May Inflate Machine Learning Performance Metrics<br>*Taryn Scharf* |
| A Remote-Predictive Approach to the Geodynamic Evolution of the Coriolis Troughs<br>*Elizabeth Xu* | A New Paradigm for Geoscientific Insights in the Digital Era: Large Scale Modelling of Orogenic Systems<br>*Jean-Phillipe Paiement (Sponsor Talk)* |

| Oral Session 8: Orthomagmatic | Oral Session 9: Exploration Technology |
|---|---|
| Geodynamics Control the Variability of Magmatic Ni-Cu-PGE Sulfide Mineral Systems Through Time<br>*David Holwell* | Go Small or Go Home… The Evolution of Using the Ultrafine Soil Fraction for Mineral Exploration<br>*Ryan Noble (Invited Speaker)* |
| Mafic-Ultramafic Ore Systems: From Genetic Insights to Exploration Tools<br>*Margaux Le Vaillant* | Using Automated pXRF Data Collection to Model Gold Deportment and Litho-Geochemistry through Regolith in the Yilgarn Craton, Western Australia<br>*Aidan Kitchener* |
| Controls on PGE Mineralization in the Lac des Iles Intrusive Suite: Insights from Trace Element Geochemistry and δ34S in Sulfides<br>*James Tolley* | Field-Based Mineral Chemistry Using Portable Laser-Induced Breakdown Spectroscopy (pLIBS) for Exploration and Mineral Processing<br>*Cassady Harraden* |
| Dual Horizon Ni-Cu-PGE Mineralisation in the Deep Platreef, Mogalakwena Mine Complex, South Africa: Insights into Formation of High PGE Tenors<br>*Kate Canham* | Utilising Indicator Minerals to Narrow the Search Space for Greenfields Exploration<br>*Walid Salama* |
| The Ni-PGE Mineralisation in the Paleoarchean Bacuri Mafic-Ultramafic Layered Intrusion, Guyana Shield-Amazonian Craton, Brazil: Insights from Bulk-Rock Geochemistry and Mineralogy<br>*Carlos Spier* | The Application of Radiogenic (Sr and Pb) and Stable Metal (Cu) Isotopes in Undercover Exploration, Northwest Queensland<br>*Joseph Tang* |
| The Thomson River Cu-Ni-PGE Deposit of the Southeast Lachlan Fold Belt: Implications for Cu-Ni-PGE Prospectivity in Silicic Dominated Magmatic Systems<br>*Steven Boger* | LandScape+® - A new Software Providing Machine-Learned Landscape Context and Target Definition from your Exploration Surveys<br>*Anicia Henne* |
| Cumulates and the Orthomagmatic to Porphyry Transition: New Insights from the Lorraine Cu-Au-Ag Deposit, Quesnel Terrane, Central British Columbia<br>*Matthew Manor* | Data Before Algorithms: An Open-Source Approach to Legacy Geochemical Method Categorization<br>*Sam Scher* |

# Technical Program - September 28, Sunday | 8:00 AM to 12:00 PM

= Mezzanine M4

= Mezzanine M3

= Great Hall Q1 & Q2

| 8:00 AM to 8:30 AM | Plenary Session |
|---|---|
| 8:00 AM to 8:30 AM | Olympic Dam IOCG-U deposit: Significant New Additions to the Mineral Endowment<br>*Kathy Ehrig (Sponsor Talk)* |
| **8:30 AM to 10:30 AM** | **Oral Session 10: IOCG** |
| 8:30 AM to 8:45 AM | The Intersection of the Geoscientist with Business<br>*Jim McCluskey (Invited Speaker)* |
| 8:45 AM to 9:00 AM | Structural Insights of the Olympic Dam Cu-U-Au-Ag Deposit, South Australia Provided by Hardrock 3D Seismic Data<br>*David Haddow* |
| 9:00 AM to 9:15 AM | A Temporal Framework for the Genesis of the Carrapateena Iron Oxide Copper-Gold (IOCG) Deposit, Northern Gawler Craton, South Australia<br>*Richard Lilly* |
| 9:15 AM to 9:30 AM | New Tectono-Stratigraphic Model with Revitalised Discovery Potential for Olympic Dam-type Haematitic Iron Oxide Copper Gold (HIOCG) Deposits<br>*John Anderson* |
| 9:30 AM to 9:45 AM | Critical Ingredients of IOCG Mineral Systems: Insights from a New National Mineral Potential Model of Australia Using a Hybrid Approach<br>*Jonathan Cloutier* |
| 9:45 AM to 10:00 AM | Giant IOCG Deposits Formed in Late Paleoproterozoic to Early Mesoproterozoic Rift Basins After the Assembly of the Columbia Supercontinent<br>*Xin-Fu Zhao* |
| 10:00 AM to 10:15 AM | Deciphering the formation of Andean Iron Oxide-Copper-Gold Deposits: New Advances in their Geology and Exploration<br>*Irene Del Real (Keynote Speaker)* |
| 10:15 AM to 10:30 AM | Deciphering the formation of Andean Iron Oxide-Copper-Gold Deposits: New Advances in their Geology and Exploration (continued) |
| 10:30 AM to 11:00 AM | Break, Posters, and Speed Talks in Exhibit Hall \| Coffee Sponsored by Equinox Gold |
| **11:00 AM to 12:30 PM** | **Oral Session 13: IOCGs, Cu/Co and Replacement** |
| 11:00 AM to 11:15 AM | The Role of Iron-Rich Hydrosaline Liquids in the Formation of Kiruna-Type Iron Oxide–Apatite Deposits: Evidence from Fluid Inclusions<br>*Li-Ping Zeng* |
| 11:15 AM to 11:30 AM | Experiments Supporting IOA Deposit Formation by Interaction of Evaporites and Silicate Magmas<br>*Michael Anenburg* |
| 11:30 AM to 11:45 AM | Alteration-Derived Volume Changes Control the Location of Iron Oxide-Cu-Au Mineralization<br>*Tobias Schlegel* |
| 11:45 AM to 12:00 PM | What Controls the Geometry of Ernest Henry Ore Shoot?<br>*Adrian Corvino* |

| Oral Session 11: Porphyry Exploration and Technology | Oral Session 12: Pegmatites |
|---|---|
| The Tujuh Bukit District: An Emerging Cluster of Cu-Au Porphyry Systems in East Java, Indonesia<br>*Alexsei Robert Taube* | Application of Satellite and Proximal Hyperspectral Sensing to Target Li Mineralization in Volcano-Sedimentary Deposits: The McDermitt Caldera (USA) Case Study<br>*Francesca Corrado* |
| Geology and Geochemistry of an Emerging Copper – Gold Discovery in the Autonomous Region of Bougainville, Papua New Guinea<br>*Patrick Highsmith* | Geology and Geochronology of the Mount Marion Lithium Pegmatite Deposit, Yilgarn Craton, Australia<br>*James Porter* |
| The Significance of the Mineralising Magma Composition on the Diagnostic Exploration Criteria for Porphyry Copper Deposits<br>*Ross Large* | The Crust-Mantle Structure of West Kunlun-Songpan-Ganzi Giant Pegmatitic Li Belt and Its Implications for Metallogenic Processes<br>*Yongbao Gao* |
| Synchronous Carbonate-Base Metal Gold and Skarn Copper-Gold Mineralization New York-Wellington Area, Ok Tedi District, PNG: Implications for Genetic Models<br>*Peter Pollard* | Isotopic Constraints on Tungsten-Beryllium Mineralisation at Mahuaping, SW China<br>*Bin Fu* |
| An Updated Appraisal of the Mineral Prospectivity of the Arabian Shield<br>*Jamie Price* | |
| Sulphur Flushing as a Driver of Copper Accumulation in Magmatic Arcs<br>*Teresa Ubide* | Melt-Melt Immiscibility as a Key Mechanism for Spodumene-Quartz Mineralisation in Pegmatites, Insights on a Novel Concept from Andover, Western Australia<br>*Richard Cubitt* |
| Advanced Mineralogical, Spectral, and Geochemical Tools for Locating Upflow Zones and Mineralization in the Lithocap Environment<br>*Lejun Zhang* | Innovating Discovery: Field Sensors and Breakthrough Technology at the Sinclair Cesium Mine, Western Australia<br>*Nigel Brand* |
| Close-Range Hyperspectral Sensing of Mineralized Outcrops in Open-Pit Mines: Analysis of the Lithocaps of the Allumiere-Tolfa Epithermal System (Central Italy)<br>*Anna Sorrentino* | Multiple Mineralisation Events Demonstrated in Complex Li-Cs-Ta Pegmatites at Buchanan Creek, Queensland<br>*Ben Hines* |

| Oral Session 14: Collaborative Geoscience 1 | Oral Session 15: Machine Learning Workflows to Prospectivity |
|---|---|
| Building Bridges in Geoscience: EuroGeoSurveys in Fostering International Resource Collaboration<br>*Julie Hollis (Invited Speaker)* | Identification and Measurement of Minerals on Thin Sections of Intrusive Igneous Rocks Using Deep Learning<br>*Stalyn Paucar* |
| The Critical Minerals Geoscience and Data (CMGD) Initiative of the Geological Survey of Canada<br>*Geneviève Marquis* | Exploring the Digital Terrain: The Power of Geospatial Technology and GeoAI in Modern Mining<br>*Aune Kamosho* |
| Environmentally Sustainable Production of Critical Metals in Tasmania: A Collaborative Multidisciplinary Initiative<br>*Owen Missen* | The Rock Whisperer: Integrating Automated EDA Workflows with LLM<br>*Putra Sadikin* |
| The Global Critical Minerals in Ores (CMiO) Database – A Review and Update<br>*Evgeniy Bastrakov* | Characterisation of Ore Deposits: Overcoming Cross- and Multi-Scale Challenges<br>*Elena Belousova* |

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|---|---|
| 12:00 PM to 12:15 PM | Exploration Success and Refinement of Mineralisation Models in the Western Forelands of the Democratic Republic of Congo<br>*Amanda Stoltze (Keynote Speaker)* |
| 12:15 PM to 12:30 PM | Exploration Success and Refinement of Mineralisation Models in the Western Forelands of the Democratic Republic of Congo (Continued) |
| 12:30 PM to 02:00 PM | Lunch in Exhibit Hall |
| **02:00 PM to 03:30 PM** | **Oral Session 16: IOCGs, Cu/Co and Replacement** |
| 02:00 PM to 02:15 PM | Structural Architecture of the Lufilian Arc: Arc-Scale Structural Controls on Mineralization Based on a New GIS Compilation<br>*Ian Basson* |
| 02:15 PM to 02:30 PM | Skarn-Porphyry Transition<br>*Zhaoshan Chang* |
| 02:30 PM to 02:45 PM | Carbon and Oxygen Isotope Analyses with Paired Geochemical Data in Exploration for Cu-Zn Skarn Mineralization at Antamayo, Central Peru<br>*Lucas Marshall* |
| 02:45 PM to 03:00 PM | The Timing and Geochemistry of Dolphin W Skarn, King Island, Tasmania: A Micro-Scale Study of Garnet and Scheelite<br>*Angela Isaura Santos Costa* |
| 03:00 PM to 03:15 PM | Subtle Potassic Alteration as a Vector for Mineralization in the Silvertip CRD, Northern British Columbia<br>*Max Hohl* |
| 03:15 PM to 03:30 PM | Unlocking the Timing of Au-Sb-Hg Mineralization in the Kyrgyz South Tien Shan: Constraints from In-Situ U–Pb Dating of Hydrothermal Calcite<br>*Aizat Zhaanbaeva* |
| 3:30 PM to 4:00 PM | Break and Posters in Exhibit Hall \| Coffee Sponsored by VRIFY |
| 4:00 PM to 5:30 PM | SEG Distinguished Lecture Presentation and Awards Ceremony<br>*Mei Fu Zhou (Distinguished Lecturer)*<br>**See p. 8 for 2025 SEG Awardees** |
| 05:30 PM to 07:30 PM | Exhibit and Poster Reception, Exhibitor Spotlight Talks in Exhibit Hall |
| 8:00 PM to 11:00 PM | Conference Celebration (ticketed) |

## September 28, Monday | 8:00 AM - 9:30 AM

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|---|---|
| **8:00 AM to 8:45 AM** | **Plenary Session** |
| 8:00 AM to 8:45 AM | How Do We Fix Metals Exploration? (Panel Discussion)<br>*David Lawie (Chair), Richard Schodde, Ned Howard, Sarah MacKenzie* |
| **8:45 AM to 10:30 AM** | **Oral Session 19: Applied Orebody Knowledge** |
| 8:45 AM to 9:00 AM | What Is the Value of Ore Body Knowledge for the Mining Industry?<br>*Shaun Barker (Invited Speaker)* |
| 9:00 AM to 9:15 AM | Teaching AI the Language of Rocks: Transforming Orebody Knowledge<br>*Dave Lawie* |
| 9:15 AM to 9:30 AM | The Flow of Geological Information in the Mining Value Chain and Its Use for Operational Optimization<br>*Carolina Marin Suarez* |

= Mezzanine M4

= Mezzanine M3

= Great Hall Q1 & Q2

## September 27-28, Sunday 12:00 PM - Monday 9:30 AM

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|---|---|
| Disruptive Thinking and Transformational Research to Shape the Future Resource Workforce<br>*Marco Fiorentini* | Multi-Scale Characterisation of Intrusion-Related Gold Systems in NE Queensland: Insights from the Ravenswood Deposit<br>*Al-tamini Tapu* |
| Collaboration in Action: Advancing Geoscience Through Government, Research and Industry Partnerships<br>*Janelle Kerr (Invited Speaker)* | Mapping Alteration Footprints of IOCG Systems: A Case Study of the Ernest Henry Camp, Cloncurry District, Queensland<br>*Alkis Kontonikas-Charos* |

| Oral Session 17: Collaborative Geoscience 2 | Oral Session 18: Fluid Flow and Metal Deposition |
|---|---|
| Government Geoscience Accelerating Resource Discovery and Development<br>*Marina Costelloe (Invited Speaker)* | Mineral Systems Modeling: New Technologies for Exploration Vectoring<br>*Daniel Palmowski* |
| Academia-Industry-Government Collaborative Projects to Explore the Proterozoic Basins in Australia and their Sediment-Hosted Resources<br>*Juraj Farkas* | The Architecture and Dynamics of Coupled Failure and Fluid Flow in Magmatic-Hydrothermal Systems: Insights from Swarm Seismicity, Hakone Caldera, Japan<br>*Stephen Cox* |
| Assessing Proximity to Cu and Au Deposits Using Resistate Mineral Chemistry<br>*Caroline Tiddy* | Identifying Mineralisation Within the Sunrise Dam Gold Mine Using Geomechanical Targeting Technology<br>*John Mclellan* |
| A Continental-Scale Heavy Mineral Reference Framework for Mineral System Detection<br>*Brent McInnes* | Suspension-Driven Transport of Noble Metals in Hydrothermal Fluids<br>*Nestor Alfredo Cano Hernandez* |
| MinEx CRC's Model for Collaboration in Exploration Geoscience<br>*David Giles (Invited Speaker)* | Electrical Processes in Charge of Ore Formation<br>*Chris Voisey* |
| Collaborative Geoscience Discussion | Colloidal Flocculation and the Mechanical Transport of Gold: Causes of the 'Nugget Effect' in Hydrothermal Ore Deposits<br>*Duncan McLeish* |

## September 28, Monday | 8:00 AM - 9:30 AM

| Oral Session 20: Porphyry Tracers 1 | Oral Session 21: From Geomet to Remediation 1 |
|---|---|
| Delamerian Porphyry Mineral Systems in South Australia: What Can Magmatic Mineral Chemistry Deliver on Fertility and Exploration?<br>*Wei Hong* | Geometallurgy of the Olympic Cu-Au Province Deposits, South Australia<br>*Vanessa Liebezeit* |
| Alteration Mineralogy Controls on Using Geochemical Data for Rock Classification: Insights from the Camp Creek Cu-Mo-(Au-Ag) Porphyry Deposit, Canada<br>*Maxwell Porter* | Improving Remediation Strategies for Legacy Mines: Case Study of Mt. Morgan Gold and Copper Mine, Queensland, Australia<br>*Adithyanti Febriana* |
| Zircon and Whole-Rock Trace Element Indicators of Magmatic Hydration State and Oxidation State Discriminate Copper Ore-Forming from Barren Arc Magmas<br>*Gonzalo J. Henriquez* | Bacteriologically Driven REE Recovery from Mary Kathleen Uranium Mine Tailings: Potential Formation of Biogenic REE-Minerals<br>*Samadhi Gunathunga* |

= Great Hall Q1 & Q2
= Mezzanine M3
= Mezzanine M4

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|---|---|
| 9:30 AM to 9:45 AM | Magnetite Ores and the Green Steel Revolution: A Global Outlook on Resources and Future Prospects<br>*Yoram Teitler* |
| 9:45 AM to 10:00 AM | The Application of Data Fusion Algorithms and Machine Learning to Increase Orebody Knowledge<br>*Penny Stewart* |
| 10:00 AM to 10:15 AM | The Critical Role of Ore Body Knowledge in Mining Success: A Systems Leadership Perspective<br>*Andrea Rutley* |
| 10:15 AM to 10:30 AM | Modelling the Future of Copper Production in Queensland's NW Minerals Province: A New Foundation for Policy Development and Infrastructure Planning<br>*Tom Evans* |
| 10:30 AM to 11:00 AM | Break, Poster and Speed Talks in Exhibit Hall \| Coffee Sponsored by Equinox Gold |
| **11:00 AM to 12:30 PM** | **Oral Session 22: Porphyry Tracers 2** |
| 11:00 AM to 11:15 AM | Sericite and Chlorite Type and Composition within and Around Porphyry Deposits: Tools to Vector Towards K-Silicate Alteration at Depth<br>*Farhad Bouzari* |
| 11:15 AM to 11:30 AM | Trace Element Compositions of Micro Inclusions Extracted from Mixed LA-ICP-MS Analyses and Their Use in Exploration<br>*Ivan Belousov* |
| 11:30 AM to 11:45 AM | Assessing the Precision and Accuracy of In Situ Re-Os Dating of Molybdenite and Considerations for Ore Systems Research<br>*Duane Petts* |
| 11:45 AM to 12:00 PM | New Developments in Geochronology to Place Mineralisation Processes into Better Constrained Tectonic and Geodynamic Context.<br>*Dr. Sarah Gilbert* |
| 12:00 PM to 12:15 PM | The Geological Footprint of Alteration and Mineralization at the High-Grade Resolution Porphyry Cu-Mo Deposit, Arizona<br>*Takeshy Coaquira* |
| 12:15 PM to 12:30 PM | Adakitic Signatures from Permian Granitoids Around the Georgetown Region – Potential for Porphyry Cu Mineralisation and Implication for Tectonic Setting<br>*Jonghyun Lee* |
| 12:30 PM to 02:00 PM | Lunch, Posters and Speed Talks in Exhibit Hall |
| **02:00 PM to 04:00 PM** | **Oral Session 25: Porphyry Americas** |
| 02:00 PM to 02:15 PM | New Insights for the Porphyry Model from Complex Overprinted Porphyry Systems<br>*Angela Escolme (Invited Speaker)* |
| 02:15 PM to 02:30 PM | Magmatic Plagioclase as a Porphyry Copper Fertility Indicator in Arc Systems<br>*Daniela Parra-Encalada* |
| 02:30 PM to 02:45 PM | Insights Into the Petrogenesis of the Taca Taca Bajo Cu-Mo Porphyry Deposit (Argentina) and Its Significance Within the Andean Retro-Arc<br>*Madeleine Ince* |
| 02:45 PM to 03:00 PM | Anatomy of a Moderately-Telescoped Porphyry–High Sulfidation System: Insights of a 2-km Vertical Profile of Alteration at Valeriano Cu-Au Deposit, Chile<br>*Jaime Osorio* |

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|---|---|
| Redox-Sensitive Trace Elements in Apatite: Insights into Porphyry Copper Mineralization Environments<br>*Maria Alejandra Rodriguez Mustafa* | From Penalty to Opportunity: Geometallurgical Characterisation of Gold Concentrates and Tailings for Critical Metal Recovery Using Novel Solvents<br>*Lara Tritton* |
| Zircon Trace-Element Indicators of Magmatic Gold Fertility<br>*Robert Loucks* | Responsible Mining – the Pyrite Challenge<br>*John Thompson* |
| Zircon and Melt Inclusion Geochemistry from the 1.1 Ga Jogran Porphyry, Canada: Implications for Porphyry Formation in a Non-Arc Setting<br>*Pete Hollings* | Selective Bioleaching of Critical and Precious Metals from Northern Queensland Mine Waste Using Indigenous Bacteria<br>*Eric O. Ansah* |
| Exploration and Genesis Information Revealed from Comparative Copper Isotope Analysis of Sulfides from PCDs, IOCGs, and Mantos<br>*Ryan Mathur* | Interrogating LA-ICP-TOF-MS Mineral Maps: Methods and Applications to Critical Metal Research<br>*Jeffrey Oalmann* |

| Oral Session 23: ESG | Oral Session 24: From Geomet to Remediation 2 |
|---|---|
| Global Perspectives on Exploration and ESG<br>*Sarah Mackenzie (Invited Speaker)* | Cobalt Potential from IOCG Tailings and Copper-Cobalt Deposits of the Atacama Region, Chile: Bioleach Alternatives for Sustainable Recovery<br>*Brian Townley (Keynote Speaker)* |
| Practitioner Perspectives on Current Approaches to Community Relations at Exploration: Highlights from Northern Europe, Latin America, North America, and Central Africa<br>*Kathryn Kochan (Invited Speaker)* | Cobalt Potential from IOCG Tailings and Copper-Cobalt Deposits of the Atacama Region, Chile: Bioleach Alternatives for Sustainable Recovery (continued) |
| Geospatial Modelling of Environmental, Social and Governance (ESG) Risks for Mineral Exploration and Mining Feasibility Assessments in Finland<br>*Bijal Chudasama* | Environmental Impact of Abandoned Mining Activities in the Monte Amiata District (Italy) and Implications for a Sustainable Environmental Management<br>*Guia Morelli* |
| Biomass Carbon Emissions from Nickel Mining Have Significant Implications for Climate Action<br>*Evelyn Mervine* | Software Tool Development for Evaluating the Beneficiation Potential of Mining Waste<br>*Dandara Ataide Salvador* |
| Mineral Landscapes: Connecting Geoscience to Stakeholders<br>*Karin Olson Hoal* | Rare Earth Elements' Secondary Prospectivity of Mine Waste in South Australia<br>*Francesco Colombi* |
| Evidence-Based Solutions for Improving Equity, Diversity and Accessibility: Informing Policy and Governance in Economic Geology<br>*Fernanda Alvarado-Neves* | Carbon Dioxide Removal Using Serpentine-Rich Mine Residues<br>*Greg Dipple (Invited Speaker)* |

| Oral Session 26: REE and Carbonatites | Oral Session 27: Big Workflows |
|---|---|
| Occurrence of Invisible Au in Carlin-Type Au Deposits<br>*Zhuojun Xie* | Automating Lithology Prediction Using Python and ioGAS: A Streamlined Workflow for Geochemical Analysis<br>*Ingrid Flemons* |
| Inwards-Younging of the Annular Twihinate Carbonatite-Aillikite Complex (Southern Morocco) and Its Implication for REE Distribution<br>*Lucas Tatnell* | From Data to Discovery: Targeting Sedimentary Copper in South Australia Using a Mineral Systems Approach<br>*Genevieve Luketina* |
| Data Integration of Hyperspectral and Whole-Rock Geochemistry: New Insights into Mt Weld Carbonatite-Hosted REE Deposit<br>*Siyu Hu* | Technological Innovations in Exploration and Mining – Success Stories from a Copper Miner<br>*Michaela Young-Mitchell* |
| Geology and Genesis of the REE-Bearing Ironstones of the Yin Complex, Gascoyne Province, Western Australia<br>*Ross Chandler* | Prospectivity Mapping of Gold Deposits in the Qinling Orogen Belt: A Data-Driven Framework<br>*Haicheng Wang* |

## Technical Program - September 29, Monday | 3:00 PM - 6:30 PM

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|---|---|
| 03:00 PM to 03:15 PM | Geology, Mineral Alteration and Mineralization of the Santa Cecilia Porphyry Au-Cu Deposit, Maricunga Belt, Northern Chile<br>*Jose Franco Moraga* |
| 03:15 PM to 03:30 PM | Discovery of the Ferrobamba Deeps Deposit, Las Bambas, Southern Peru<br>*James Cannell* |
| 03:30 PM to 03:45 PM | New Discoveries in a Mature Terrain Through Holistic Exploration Practices: A Story of Safford, Arizona<br>*Matthew Wetzel* |
| 03:45 PM to 04:00 PM | Reevaluating the Schultze Granite: A New Temporal Model for the Globe-Miami Magmatic-Hydrothermal System and Its Implications for Porphyry Exploration<br>*Lawrence Carter* |
| 4:00 PM to 4:30 PM | Break in Great Hall Foyer |
| **4:30 PM to 7:30 PM** | **Closing Events** |
| 4:30 PM to 5:30 PM | Closing Ceremony and Concluding Remarks<br>*Rick Valenta, SEG 2025 Conference Chair*<br>*Alan Wilson, SEG President 2026*<br>*Stephanie Mills, SEG 2026 Conference Chair* |
| 5:30 PM to 6:30 PM | Closing Social, Mezzanine Level of Great Hall (Ticket Required) |

## September 29, Monday | 3:00 PM to 6:30 PM

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|---|---|
| Preservation of Na-REE Mineralisation at Kangankunde Carbonatite Complex, Malawi, with Implications for Magma Evolution<br>*Nicholas Mappin* | Using Open-Access Remotely Sensed Data to Support Greenfield Mineral Exploration: Methods and Lessons from Case Studies<br>*Mana Rahimi* |
| Rare Earth Element Ion Adsorption Clay Deposits: A Mineral Systems Approach for Exploration<br>*Samantha Russo* | SMX - Sustainable Mining Explorer Platform: A Geoscience-Based Approach for ESG Risk Management in Mining<br>*Vinicius Louro* |
| The Cradle and Future of Rare Earth Elements<br>*Ignacio Gonzalez-Alvarez (Keynote Speaker)* | From Ore to PV: A Sustainable Tellurium Value Chain for Net-Zero Goals<br>*Homay Fath* |
| The Cradle and Future of Rare Earth Elements (continued) | Critical Minerals Potential in the Delamerian Orogen Margin: Exploring the Sustainable Prosperity<br>*Yanbo Cheng* |

= Great Hall Q1 & Q2 = Mezzanine M3 = Mezzanine M4

## Invited Speakers

**Shaun Barker** is the director of the Mineral Deposit Research Unit, within the Department of Earth, Ocean and Atmospheric Sciences at the University of British Columbia in Vancouver, Canada. Shaun has a background of geochemistry, mineralogy, and structural geology. Shaun is involved in a diverse range of research projects and has worked on a variety of gold and copper deposits in collaboration with the minerals industry, and in particular works on orebody knowledge and innovative methods for mineral exploration.

**Cameron "Cam" Bartsch** is a structural geologist with B2Gold in their corporate office in Vancouver. He has over 20 years of combined experience in mineral exploration and production, with a strong emphasis on orogenic gold systems throughout North America and Africa. Prior to joining B2 Gold in 2023, Cam worked as a consulting geologist specializing in 3D deposit modeling focused on mine-site ore controls and geotechnical analysis. Cam obtained his bachelor of science degree from the University of Saskatchewan in 2001, and a master's degree studying the tectonic history of the Appalachian orogen in eastern Canada from Acadia University in 2005. He is a registered professional geologist with Engineers and Geoscientists British Columbia.

**Caoilin Chestnutt** is head of technical services at Thiess, leading global teams in engineering, geotechnical, geologic, and geospatial disciplines. With nearly 30 years of postgraduate experience, she has worked across gold, copper, nickel, coal, and coal seam gas projects worldwide. Caoilin is nonexecutive chair of Australian Securities Exchange-listed Pacgold, a member of RFC Ambrian's critical minerals investment committee, and deputy chair of the Queensland Exploration Council. Her previous roles span senior positions at BHP, Xstrata, Anglo American, and Arrow Energy, as well as resources investment commissioner for Queensland. She is a recognized industry leader and advocate for women in exploration and mining.

**Marina Costelloe** is head of the mineral systems branch at Geoscience Australia, leading work to support a responsible transition of Australia's resource sector toward a low-emissions future. With a career spanning mineral exploration, groundwater, critical infrastructure, earthquakes, nuclear test monitoring, and space weather, Marina brings deep technical expertise and strategic insight. She holds a BSc and a graduate diploma in science in geology and geophysics from the University of Sydney and an MSc from James Cook University. A former president of the Australian Society of Exploration Geophysicists, Marina is a committed STEM advocate, mentor, and champion for gender equity and inclusion.

**Irene del Real** has a geology undergraduate degree from the University of Chile, Chile, an MSc degree from the University of British Columbia, and a PhD from Cornell University, Ithaca, New York, USA. She worked as a postdoctoral researcher at the University of Chile, and currently she is an assistant professor at the mining engineering department of the Catholic University of Chile. She has worked in Chile and in North America, and her research focuses on understanding the genesis of Andean iron oxide copper-gold deposits, specifically in the Candelaria-Punta del Cobre district porphyry Cu and iron oxide-apatite deposits. Her research is characterized by understanding the processes involved in the formation of mineral deposits—integrating structural geology, field geology, and geochemistry—and using this knowledge to develop new approaches for their exploration.

**Greg Dipple** is the head of science and co-founder of Arca Climate Technologies. He is also emeritus professor of geological sciences at the University of British Columbia (UBC), where he studied mineral-fluid reactions, including those that modulate Earth's long-term climate through chemical weathering. The UBC CarbMin Lab pioneered research on carbon mineralization in mine tailings, establishing it as a key pathway for mitigating greenhouse gas emissions. Today, Arca partners with mining companies to remove tonnes of carbon dioxide from the atmosphere and store it permanently in minerals.

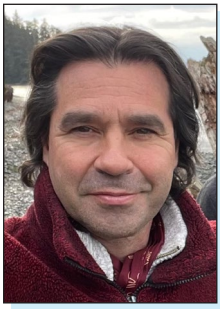
**Kathy Ehrig** completed her PhD in geology at the University of California-Berkeley in 1991. She left San Francisco in 1992 to join the former Western Mining Corporation as a research geologist to work on the genesis of the Olympic Dam deposit in Australia and to provide mineralogical support for the Olympic Dam processing plant. In 2006, she moved to Adelaide to lead the development of the Olympic Dam geometallurgy program. She has remained focused on using mineralogy to solve processing issues, predicting metallurgical performance, unravelling the complex geological history of the Olympic Dam deposit, and using deposit-scale geological/mineralogical insights as inputs into discovering new IOCG deposits. She has co-supervised 16 PhD students and 10 postgraduate researchers working on Olympic Dam-based projects. She has shared the geological/geometallurgical knowledge gained from Olympic Dam and surrounding prospects by authoring or co-authoring >125 published papers and delivering >80 national and international presentations.

**Angela Escolme** is currently a senior lecturer in geology and geometallurgy at the Centre for Ore Deposits and Earth Sciences (CODES), University of Tasmania, and an independent geometallurgy consultant. She has recently returned from a three-year career break with her young family. Prior to this, her research activities at CODES were centered around developing new approaches to ore deposit characterization for improved geometallurgical domaining and predictions of processing performance, as well as advancing our understanding of ore deposits. She enjoys working closely with the minerals industry to find innovative solutions to real-world problems. Prior to completing her PhD at the University of Tasmania in 2016, Angela spent four years working in regional, near-mine, and underground gold exploration in Western Australia. She also holds a master of earth sciences from the University of Manchester, UK.

**Daniel Franks** is a professor and the director of the Global Centre for Mineral Security at The University of Queensland's Sustainable Minerals Institute and a leading authority on the role of minerals in sustainable development. His work has shaped global understanding of how minerals contribute to poverty reduction, inclusive growth, and environmental responsibility. He introduced influential concepts such as mineral security and development minerals and has advised the United Nations, UNESCO, and the World Bank on mineral governance. Daniel has led global initiatives to reduce mine waste, improve social outcomes, and support artisanal miners, positioning him as a key voice in responsible resource development worldwide.

**David Giles** is the John Ralston Chair of Minerals and Resources Engineering at the Future Industries Institute, University of South Australia, and chief scientific officer of MinEx Cooperative Research Centre (CRC). He has worked at the interface between academia and the minerals industry for his entire career; as an exploration and project geologist (1993–1996); as a PhD candidate and industry-linked postdoctoral researcher (1996–2005), and as the inaugural State of South Australia Chair of Mineral Exploration (2006–2016). Between 2010 and 2018 David was Program 3 (Targeting) Leader in the Deep Exploration Technologies CRC. As chief scientific officer of MinEx CRC (2019-2028) David's role is to manage, support, and champion the research efforts of a multidisciplinary team distributed across industry, government, and academia.

**Sarah A. Gleeson** is director of iCRAG, Research Ireland Professor at University College Dublin (UCD), and full professor in sustainability geoscience at the UCD School of Earth Sciences. She received a BA (mod.) in geology from Trinity College, Dublin, and a PhD in geochemistry from the Royal School of Mines, Imperial College, London. Subsequently, she held postdoctoral positions at the Natural History Museum, London, and the University of Leeds before taking up a professorship at the University of Alberta, Canada, and more recently at the Freie Universität Berlin. She led the inorganic and isotope geochemistry section at the GFZ, German Research Centre for Geosciences from 2015 to 2024. She serves on several advisory boards to scientific institutions and on international grant funding panels. Sarah has broad research interests in mineral deposit genesis, hydrothermal fluid flow, and water-rock interaction. Throughout her career, her research has focused on the genesis and detection of base metal mineral deposits in sedimentary basins with an emphasis on mineral system models, sedimentary geochemistry, diagenesis, and ore-forming processes.



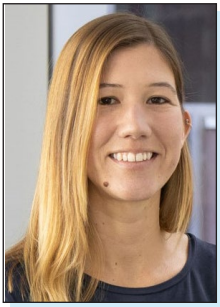
**Ignacio (Nacho) González-Álvarez** is a Spanish-born geoscientist and the principal geochemist at CSIRO in Australia. He has extensive experience in rare earth elements (REEs) and high field strength elements (HFSEs). Ignacio has led mineral exploration and geoscience research across six continents and currently oversees multidisciplinary, nationally coordinated projects focused on critical minerals. His research focuses on the mobility of REEs and HFSEs in the Earth's crust, analysis of mineral systems, and the geochemistry of surface and sedimentary processes. Additionally, Ignacio contributes to the scientific community as an associate editor for international journals, and he serves as an adjunct research fellow at the University of Western Australia.

**Lachlan Grose** is a research fellow at Monash University and CTO of the Loop3D Foundation. He has a PhD in 3D structural geologic modeling and is the principal developer of LoopStructural—an open-source library for 3D structural geological modeling—and has led the development and research for the Loop project. The Loop project is an open-source, interoperable, integrative, probabilistic 3D geologic modeling platform. Lachlan's work focuses on integrating structural geology concepts into the implicit modeling algorithms that form the basis of most 3D modeling workflows. His work prioritizes building workflows where geologic uncertainties can be propagated through the model-building process and by ensuring interoperability with modern data-science tools.

**Julie Hollis** is secretary general of EuroGeoSurveys, a not-for-profit association representing 37 European geologic survey organizations. She has a background in regional geologic mapping and more than 20 years of experience in leadership roles in government geoscience for geologic survey organizations in Australia, Denmark, Greenland, and Belgium. Julie has a PhD in geology and a master of science in communication and public engagement from the University of Edinburgh. Her passion for geoscience communication has a human-centric and storytelling approach. Julie's primary focus is delivering EuroGeoSurvey's vision of a geological service for Europe—a permanent, central, and sustainable service that provides foundational geoscientific data, information, and knowledge at a continental scale.

**Ned Howard** is a geologist with 20 years' experience in gold and copper exploration and mining across Australia and internationally. He is currently manager geoscience at Evolution Mining Ltd., a leading mid-tier gold-copper producer. Ned is presenting on behalf of the Australian Institute of Geoscientists (AIG) education committee, whose members include chair Kaylene Camuti, Doug Young, Martin Robinson, and Jenna McGovern. The committee recently completed a new strategic plan designed to strengthen AIG's role in supporting and advancing geoscience education across Australia.

**Janelle Kerr** is the director of minerals geoscience with the Geological Survey of Queensland (GSQ) in the Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development. A geophysicist by training, Janelle has worked with the GSQ for 14 years, managing acquisition and modeling of geophysics, particularly magnetotelluric surveys, across Queensland. In her current role, she oversees the delivery of large-scale geoscience programs for the benefit of Queensland, particularly the mineral exploration sector. Janelle is also the past-president of the Australian Society of Exploration Geophysics, which supports geophysicists across Australia and the world, and promotes the role of geophysics in society.



**Kathryn Kochan** has a background in economics and international development. She has been with the Centre for Social Responsibility in Mining for more than five years. Kathryn recently completed her doctoral research in the field of community relations in the mining sector, focusing on the processes mining companies use to address and manage community level grievances, conflicts, and incidents. Kathryn's research focused on a global set of public inquiries and case studies to understand the triggers, precursors, and moderating factors that influence the visibility and escalation of mining-related community issues. She is determined to apply her doctoral findings to understand how company and community approaches to the grievance landscape are shifting in response to geopolitical, social, and regulatory challenges.

**Sarah Mackenzie** is an international development professional with deep field experience in Africa and Latin America. She has worked extensively with civil society and nongovernment organizations, particularly in the field of water, sanitation, and hygiene. While based in Burkina Faso, Sarah began collaborating with a mineral exploration company in 2011 as the country's gold mining sector boomed. She has since worked with other mining and exploration companies in Botswana, Ivory Coast, Liberia, and Niger. Her current areas of disciplinary expertise include community engagement, community development, social investment, and gender as a cross-cutting theme. Sarah holds a bachelor of arts in Spanish and history from Auckland University and a master of science in development management from the Open University in the UK. She is fluent in French and Spanish.

**Peta MacRae** is the mayor of Mount Isa and a dedicated community leader with a strong background in education, business, and local government. She holds a bachelor of education degree from James Cook University, a diploma of education from the University of Southern Queensland, and is a graduate of the Australian Institute of Company Directors. She has also completed MBA units through the Australian Institute of Management. With over 13 years in business and eight years as a councilor, Peta is passionate about youth mentoring, sport and recreation, tourism, and economic development. She is committed to building a vibrant, resilient future for Mount Isa.

**Jim McCluskey** has worked for more than 27 years in many different parts of the mining industry, from underground and open-pit mining, brown and greenfields exploration, prefeasibility and feasibility phase capital projects, business development activity in mergers, acquisitions, and divestments, as well as long-term strategic planning and short-term delivery planning. He has also done due diligence across diverse commodities and managed to get to every continent through work (barring Antarctica!). He is motivated by being part of something larger than himself and the energy that being part of, or leading, a strong team brings. His focus is on maximizing value through focus on key value drivers and on working at the right level for the opportunity at hand. He also believes that how we do things is just as important as what we do and accomplish, and that our values and performance are intimately linked.

**Dietmar Müller** received his undergraduate degree from the University of Kiel, Germany, and his PhD in earth science from the University of California, San Diego, in 1993. After joining the University of Sydney, he built the EarthByte Research Group, which pursues geodata synthesis through space and time. He is leading the construction of a virtual Earth laboratory, assimilating the wealth of disparate geological and geophysical data into an experimental planet. His group's virtual Earth models have numerous applications, ranging from resource exploration to linking deep Earth to surface processes. He has held an Australian Laureate Fellowship and led an ARC Industry Transformation Research Hub. Currently, his EarthByte team and industry partners are creating prospectivity maps for a range of critical minerals including copper, nickel, cobalt, and chromium, as well as rare earth elements, using spatial and spatio-temporal machine learning methods. He is a Fellow of the American Geophysical Union and the Australian Academy of Science.

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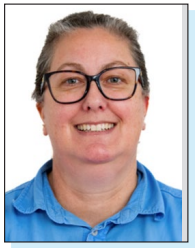
**Ryan Noble** is a senior principal research scientist and the group leader of predictive mineral systems science at the Commonwealth Scientific and Industrial Research Organisation (CSIRO). For the past 20 years, Ryan has worked on numerous regolith and groundwater geochemistry projects related to gold, base metal, Ni, U, and rare earth element (REE) mineral exploration. His current project interests are focused on getting the maximum amount of information from soil samples with the least amount of effort, machine learning-driven landscape classification, and developing the UltraFine+ technique. Ryan is a past president and a Fellow of the Association of Applied Geochemists, and Fellow of the Australian Institute of Geoscientists. He is a board member of the Australian Geoscience Council and the past chair of Australian Earth Science Education.

**Tim O'Connor** is the group exploration officer at BHP. In his current role, Tim has accountability for BHP's global Exploration efforts – including the innovative Xplor incubator. Prior to stepping into the exploration, Tim led the Resource Centre of Excellence and Legacy Assets—with functional accountability for Geoscience, Resource Engineering, Tailings and Processing across the group, as well as operational accountability for 24 mine sites in various states of closure. A strong believer in the solving complex challenges across the value chain, Tim led the integration of the OZ Minerals business into BHP following its acquisition in 2023. Tim has been at BHP since 2006 and has worked in both the petroleum and minerals businesses, holding senior roles in strategy, exploration and production. Tim has degrees in both geology and geophysics from Boston College.

**Jean-Philippe "JP" Paiement** is a geostatistician with more than 20 years of experience in mineral exploration and mining, and he has applied his expertise across diverse geological environments, gaining insight—through hands-on experience—into how technology can, and will, shape the mineral exploration industry. JP is recognized as a pioneer in applying machine learning and deep learning to geoscience, and his groundbreaking innovations have transformed mineral exploration by leveraging AI to reduce bias and risk while enhancing targeting accuracy. In 2016, JP made history by applying machine learning to mineral exploration, winning the prestigious Integra GoldRush Challenge. Since then, he has led the development of cutting-edge AI applications, including supervised learning for targeting, automated geologic mapping, and deep learning for geophysical data enhancement. As CTO at VRIFY, he is further redefining mineral exploration with DORA, helping exploration teams unlock critical mineral discoveries faster and more efficiently than ever before.

**Grant Sanden** is the CEO of GeologicAI. Prior to founding GeologicAI, Grant had over 15 years of experience in various engineering and geoscientific roles working on resource development projects across the globe. He founded GeologicAI in 2013, with the mission of exploiting emerging technologies to improve the science and practice of resource geology. GeologicAI has grown into a global leader in mining innovation, applying robotics, machine vision, artificial intelligence, cloud computing, and big data to revolutionize the discovery and recovery of subsurface resources. In 2023 GeologicAI announced an investment from Bill Gates–founded Breakthrough Energy Ventures, and Export Development Canada. In 2025 GeologicAI recently announced the successful closing of a $44 million US Dollar Series B funding round. The round was led by Blue Earth Capital, with participation from BHP Ventures and Rio Tinto, representing two of the world's largest mining companies, and existing investors such as Breakthrough Energy Ventures.



**Amanda Stoltze** is exploration manager for Ivanhoe Mines in the Democratic Republic of the Congo (DRC). She completed an undergraduate degree in applied geology from Curtin University in 1997 and a PhD from The Australian National University in 2006. Since that time, she has worked extensively in Africa exploring for gold, nickel, and copper. She also worked as senior geochemist with ALS from 2019 to 2022. The current exploration program in the DRC is focused on the Western Forelands region with more than 2,000 km$^2$ of licences and a 10-diamond-rig drilling program.

**Brian K. Townley** is an associate professor in the Department of Geology at the University of Chile, an associate researcher at AMTC, and academic coordinator for mining engineering diploma programs. With more than 30 years of applied research experience, his work spans ore deposits, Andean metallogenesis, applied geochemistry, geo-mineral metallurgy, and the geology of vine cultivation. He leads major research and development projects on mineral recovery from tailings, sustainable mining, and geo-metallurgical modeling. Over the past decade, he has authored more than 35 papers on mineral exploration and vineyard geology, and he has been a consultant for major mining companies such as BHP-Billiton, Codelco, and Anglo American. Brian has also collaborated with the wine consortium of Chile, including the VitisGeoClima platform. His research has been funded by state, private, and international sources like AMIRA. He actively promotes knowledge transfer through diploma programs, workshops, and short courses across Chile and the Americas, including Argentina, Brazil, Mexico, and Canada.

**Brad Welsh** is chief executive and managing director of Energy Resources of Australia. Since being appointed in 2022, Brad has focused on leading the organization through highly complex transactions, stakeholder engagement, and operational activities while delivering sustainable outcomes. He was the first Indigenous Australian to become a chief executive and managing director of an Australian Securities Exchange-listed company in the mining sector. He also serves as a non-executive director for nib Holdings Limited, and he is the director of Mawal Pty. Ltd., a private company specializing in uniting investors and host communities to deliver mutual value and accelerate projects. Brad holds a master's in mining engineering (mine management) and a bachelor of law from the University of New South Wales, as well as a bachelor of welfare (Aboriginal community studies) from the University of Western Sydney. He is also a graduate of the Australian Institute of Company Directors. Brad is a proud Muruwari man from northwestern New South Wales who grew up in the Aboriginal community of Redfern, Sydney. He believes in integrating indigeneity into the balance sheet, recognizing it as a vital contributor to organizational success. In 2020, Brad was recognized as the Exceptional Indigenous Person in Queensland Resources.


**Dan Wood AO** spent 24 years with BHP and 18 years with Newcrest Mining Limited, during which time he was associated with a number of significant discoveries. After joining Newcrest at its formation in 1990, he was executive general manager of exploration from the mid-1990s, leading the company's exploration team, which was judged by the Metals Economics Group of Canada to have been the world's most successful gold explorer from 1992 to 2005. For a period in 2010 to 2011, he was director of the WH Bryan Mining and Geology Research Centre at the University of Queensland, where he is presently an adjunct professor. In 2015, Dan was appointed an Officer of the Order of Australia by the Australian government for his services to the mining industry and academia.

**Mei-Fu Zhou** is a research professor at the Institute of Geochemistry, Chinese Academy of Sciences, China. Professor Zhou obtained a BSc degree from Nanjing University (China) and a PhD degree from Dalhousie University (Canada). He was a postdoctoral researcher at Laurentian University (Canada) before joining the University of Hong Kong, where he taught for more than 25 years. His research includes ophiolites, large igneous provinces, mineral deposits, and regional geology. He has published more than 450 papers in scientific journals with more than 45,000 citations and an H-index of 118 (data from Google Scholar).

# Posters

Posters will be on display during conference hours. Titles and presenting authors are listed below. **Posters listed in blue are Speed Talks.**

## Collaborations

**P1.001** Evaluating the Tectonic and Climatic Controls on Sediment-Hosted Ore Deposits in Deep Time
*Sheree Armistead*

P1.002 Insights into the Delamerian Orogen Mineral Systems Through Pyrite Chemistry
*Adrienne Brotodewo*

**P1.003** Solubility of Alkali Elements and Chlorine in Sulfide Melts Under Magmatic Conditions: Implications for Ore Genesis
*Maria Cherdantseva*

P1.004 The Queensland Mineral Deposit Atlas Series
*Tom Evans*

P1.005 Alkaline Magmatism in the Adang Volcanic Complex, Mamuju District (Western Sulawesi, Indonesia): A Preliminary Study on Rare Earth Elements Enrichment
*Fadlin Fadlin*

**P1.006** National-Scale Critical Mineral and Strategic Material Potential Assessments to Support Decision-Making in the Net Zero Transition
*Arianne Ford*

P1.007 Phreatomagmatic Ash as a Natural Drill Core: Unraveling Subvolcanic Hydrothermal Systems in Active Arc Volcanoes
*Muhammad Andriansyah Gurusinga*

**P1.008** Empowering Exploration with National Scale Maps
*Nichole Knepprath*

**P1.009** Chromite and Sulphide Mineralization of the Uitloop Ultramafic Bodies in the Northern Limb of the Bushveld Complex, South Africa
*Mabatho Mapiloko (Student)*

**P1.010** Archaean BIFs from Karnataka, India: Genetic Insights from the Dharwar craton, India, and Implications for Post-Depositional Hematitic Iron Deposits
*Perumala Venkata Sunder Raju*

## Deposits

**P2.011** Deciphering the Role of Remobilisation in the Formation of High-Grade Gold Deposits
*Sumail*

P2.012 Geochemical Signature of Au-Cu Mineralization in Soil Profiles of the Wadi Al Jaww Prospect and Applications for Exploration, Saudi Arabia
*Hassan Abbas*

**P2.013** Applications of Mineral Chemistry to Petrogenesis and Exploration in the Borralan Carbonatite Complex and Associated Alkaline Silicate Rocks
*Abdulkadir Mohamed Abdulkadir (Student)*

P2.014 Exploring for Cu-Au Alkalic Porphyry Deposits from the Fringes
*Fabrizzio Abello (Student)*

P2.015 Mineralization and Ore Genesis of the Neoproterozoic Pan-African Belt, Eastern Ghana: Constraints on Lithology and Mineralogy
*Rauda Addae (Student)*

P2.016 Sulfide Dendrites in Silica Scales at the Salton Sea Geothermal Field, California
*Aaron Adsit (Student)*

P2.017 What Do the Pyrites Tell Us About the Young-Davidson Orogenic Gold Deposit, Matachewan, Ontario, Canada?
*Oya Ak (Student)*

P2.018 Geological Features and Diagnostic Characteristics of Gunung Akmil HSE Prospect in Central Java, Indonesia: Vectoring to Concealed Porphyry System
*Andreas Rama Alfario (Student)*

P2.019 Initial Investigation of Geology and Litho-Geochemistry in North Halmahera, Indonesia: Implications for Porphyry Copper and Epithermal Deposit Potential
*Achmad Zulfan Almahdy (Student)*

P2.020 Nature of the Parental Source Material(s) for the Placer Gold-Bearing Banket Conglomerate, Ghana: Constraints from δ18O Water in the Quartz Pebbles
*Edwin Animah Obeng (Student)*

P2.021 Geology and Geochemistry of Nikolauz Mafic-Ultramafic Intrusions, Peru: A Gondwanide Ni-Cu Sulfide Mineralized Conduit System in an Andean Orogenic Environment
*Abraham Arana (Student)*

P2.022 REE and HFSE Fractionation and Mobility in the Tapira and Salitre Carbonatite Complexes Southeast, Brazil
*Jo Hannah Asetre (Student)*

P2.023 Unlocking the Hidden Potential of the Cargo Deposit: New Geochronological and Geochemical Insights from the Macquarie Arc
*Jessica Askew (Student)*

P2.024 The Geology and Paragenesis of the Akyem Orogenic Gold Deposit, Ghana
*Fuseini Atanga (Student)*

P2.025 μ-XRF Atlas of Epithermal and Porphyry Deposit Textures
*Aaron Atkins (Student)*

P2.026 Mineralogical and Geochemical Characteristics of the Epithermal Au-Ag Mineralization at the Felicia Orebody, Lepanto, Mankayan District, Philippines
*Yasuhiro Awano (Student)*

P2.027 Textures and Geochemistry of Pyrite and Arsenopyrite from the Leon Sediment-Hosted Gold Deposit, Ratatotok District, Indonesia: Implications for Ore-Forming Conditions
*Muhammad Arba Azzaman (Student)*

P2.028 Iron-Oxide-Copper-Gold (IOCG) Type Hydrothermal-Alteration Recorded in the Lawa Gold Deposit: North Singhbhum Mobile Belt, Eastern India
*Paromita Banerjee (Student)*

P2.029 Late Au-Bearing Quartz - Carbonate Veins System Overprinted the Base Metal Skarn Mineralization in the E44 Deposit, Northparkes District, NSW
*Billy Beas Caceres (Student)*

P2.030 Geochemical and Mineralogical Signatures of the Rocklands Cu-Au-(Co) Deposit, Northwest Queensland, Australia
*Elena Belousova*

P2.031 Tectonic Controls on Long-Lived Sn Mineralization in the Martinamor Extensional Dome (Salamanca, Spain)
*Daniel Bermejo López (Student)*

P2.032 Clay-Hosted REE Deposits Associated to Eucla Basin Paleovalleys in Southern Australia
*Gabriel Valentim Berni*

P2.033 A Prolonged Magmatic History to the Dismembered Mid Miocene Arc, Manus Island, Papua New Guinea
*Joel Blake*

P2.034 Exploring a Sleeping Giant: Chlorite Chemistry as a Vectoring Tool in the World-Class Tennant Creek Au-Bi-Cu Province
*Damian Braize (Student)*

P2.035 Orebody Knowledge from the Sinclair Deposit: A New Template for Cesium Exploration
*Nigel Brand*

P2.036 The Prominent Hill Deposit: A Modified, High-Grade IOCG System Hosted in Hematite-Altered Sedimentary Breccias
*Riccardo Brigante*

P2.037 Statistical Analysis of Geochemical Data from In-Bearing Mineralization in the Marta Centro Vein, Pingüino Deposit, Patagonia, Argentina
*Juan Matías Buratti (Student)*

P2.038 Regolith-Hosted REE Systems in South America: Mineralogical and Geochemical Insights Across Contrasting Geological and Climatic Settings
*Nicolás Bustos (Student)*

P2.039 From Regional Insight to Discovery: Integrated Targeting for Sapphire Mineralization in Southeastern Madagascar
*Evelyn Caiza (Student)*

P2.040 Exploration Vectoring Tools in Complex Magmatic-Hydrothermal Systems: Application to the Potrerillos District in Northern Chile
*Yamila Cajal*

P2.041 Assessing the Timing of the Magmatic to Hydrothermal Transition and Onset of Porphyry Mineralization Across the Yerington Porphyry System, USA
*Lawrence Carter*

P2.042 High-Grade Gold Controls and Spatial Chemical Zonation at The Snip North Prospect of The Iskut Project, Canada
*Daniel Castano Madrigal (Student)*

P2.043 Cobalt Enrichment in Sulfides from Iron Oxide Copper-Gold Mount Colin Deposit, NW Queensland
*Gabriel Cellier (Student)*

P2.044 Structural Controls on Epithermal Ag-Pb-Zn Vein Systems in the Eastern Erzgebirge, Germany
*Jan Cerny*

P2.045 Contrasting Styles of REE Mineralisation Within the Southern and Central Gifford Creek Carbonatite Complex
*Ross Chandler*

P2.046 Link Between Deformation and Pegmatite Emplacement in the Mataki Greenstone Belt, North East Zimbabwe Craton
*Pharisie Chibaya (Student)*

P2.047 Multi-Stage Fluid Alteration of the Agua Santa Pegmatite (Brazil): Implications for Mineral Zonation and Exploration
*Sofia Chinaglia (Student)*

P2.048 A New Process-Based Mineral System Classification Linked to Commodities
*Jonathan Cloutier*

P2.049 Oxidized Mantle Sources in Cretaceous Komatiites from Gorgona Island: Insights into Mantle Redox Structure and Impacts on Ore-Forming Systems
*Camilo Andrés Conde Carvajal (Student)*

P2.050 Chemical and Isotopic (Sr, Nd) Analysis of the Nurra Basin Bentonites (NW Sardinia, Italy)
*Sebastiano Coticelli (Student)*

P2.051 Structural Characterisation of the Ribeirão Grande Shear Zone, Southern Brazil
*Graciany da Silva*

P2.052 Geochemical and Structural Controls of the Gold-Bearing Carbonaceous Veins Hosted Malenggang Project, West Kalimantan, Indonesia
*Arif Zardi Dahlius*

P2.053 Resolving the Syn-Genetic Age of the King Metamorphosed VHMS Deposit, Yilgarn Craton, Western Australia
*Cendi Dana*

P2.054 Garnet Geochemistry as a Tracer of Timing and Fluid Pathways in Pb-Zn Systems
*Joëlle D'Andres (Student)*

P2.055 Genesis of IOA-IOCG deposits, Coastal Cordillera, Peru: Insights from Iron ($\delta^{56}Fe$) and Triple Oxygen ($\delta^{18}O$, $\Delta^{17}O$) Isotopes in Magnetite
*Jose Carlos Davila*

P2.056 Relative Timing of Au Mineralization at the Epithermal Calm Before the Storm Zone, Treaty Creek Area, Golden Triangle, British Columbia
*Nikola Denisova*

P2.057 Contribution of Auger and Reverse Circulation to the Definition of Waraba Mineralization (Loulo Permit)
*Zoumana Diallo (Student)*

P2.058 Polyphase Cobalt Mineralisation in the Rajapalot Au-Co Deposit, Finland
*Lily Dickson (Student)*

P2.059 Morphochemical Analysis of Gold in the Pinalejo Placer: The First Quantitative Analysis of Gold Wear Rate During Fluvial Transport
*Kelvin Dos Santos Alves (Student)*

P2.060 Is the Zabrnjica Prospect on Ober License in Southwestern Serbia a Previously Unrecognized Reduced Intrusion Related Gold Systems (RIRGS)?
*Dragan Dragic*

P2.061 Geological Controls on Critical Metal Endowment in Sedimentary-Hosted Zn-Pb Deposits: Insights from the Canadian Cordillera
*Foteini Drakou*

P2.062 Oak Dam West IOCG deposit, South Australia – Evolving Geological Knowledge as Resource Definition, Advanced Exploration and Mining Studies Continue
*Kathy Ehrig*

P2.063 Quantitative Analysis of Mineral Orientation in Sulphide Ore Deposits
*Tom England (Student)*

P2.064 Geochemical and Mineral Inclusion Analysis of Alluvial Gold as Exploration Tools: Experiences from the Central Iberian Zone, Spain
*Vanessa Leonor Escobar Duche (Student)*

P2.065 Constraining Magma Evolution Associated with Alkalic Porphyry Mineralization in British Columbia, Canada: A Melt Inclusion Study
*Maria Paula Estrella (Student)*

P2.066 Global Controls on the Formation of Porphyry Systems: Insights from Machine Learning and Plate Tectonic Reconstructions
*Ehsan Farahbakhsh*

P2.067 Decoding Structural Influences on Vein Formation in the Japudali Prospect, Indonesia
*Dian Yesy Fatimah*

P2.068 Pyrite Chemistry as a Tracer for Metallogenic Evolution in the Au-Ag-Te Kochbulak Deposit (Chatkal-Kurama Region, Uzbekistan)
*Danis Ionut Filimon (Student)*

P2.069 Integrated Exploration Approach Unlocks a Deep-Seated High-Grade Copper Mineralization in the Jervois Range, Northern Territory, Australia
*Jalu Bias Firdausi*

P2.070 Geometallurgical Behavior at Increasing Depths in the Cuiabá Underground Gold Mine, Brazil
*Beatriz Fontes Andrade (Student)*

P2.071 Integration of Petrographic, Structural, and Geochemical Data in Weathered and Challenging Prospective Areas: Case Study of the Descoberto Prospect, Brazil
*Beatriz Fontes Andrade (Student)*

P2.072 Structural Controls, 3D Geometry and the Evolution of Vein-Hosted Copper Mineralization at Frontier Mine, Democratic Republic of Congo
*Heike Fourie*

P2.073 The Epithermal to Skarn-Porphyry Transition at La Colorada Deposit (Zacatecas, Mexico)
*Pedro Francisco (Student)*

P2.074 Geochemistry Modeling and Mineralogy of the Banded Iron Formation, West Moeda Syncline, Quadrilátero Ferrifero Region
*Carolina Frésca Alves (Student)*

**P2.075** Chile's First Defined Intrusion-Related Gold System: Ternera's Hydrothermal Footprint in the El Zorro Gold District
*Eduardo Fritis (Student)*

P2.076 Unveiling Diamond Potential in the Meya Kimberlite Dyke: Petrographic and Thermobarometric Insights
*Tenoch Galeana Cornejo (Student)*

P2.077 Long-Lived High-Temperature Metamorphism in the Late-Archean Granulite-Hosted Katanning Gold Deposit, Southwest Yilgarn Craton
*Jonathan Garcia (Student)*

P2.078 Geochemical and Structural Comparison of the Golden Pike and Dunlops Crossing Stockwork Orebodies, Golden Mile, Kalgoorlie, WA
*Ana Sofia Garcia Saltzmann*

P2.079 Carboniferous Epithermal Gold Deposits in the Khundii Metallogenic Province, Southwest Mongolia
*Bat-erdene Gendenjamts*

P2.080 Critical Metal Distribution in the Renison Bell Tin Deposit, Western Tasmania
*Javier Gil-Rodriguez (Student)*

**P2.081** Geology and Age of the Granite Related Metasomatic Overprinting of the Rosebery VHMS Deposit
*Vinicius Godoi Pereira Da Cruz (Student)*

P2.082 Trace Elements of Pyrite, Chalcopyrite and Sphalerite Across Distinct Ore Types and Lenses at the Rosebery VHMS Deposit, Western Tasmania
*Vinicius Godoi Pereira Da Cruz (Student)*

P2.083 Advanced Argillic Alteration and Geochemistry of Alunite in the Iriki Gold Exploration Area, Hokusatsu, Japan
*Yuji Gonoi*

P2.084 Rodinia Breakup and a New Undercover Neoproterozoic Magmatic Cu-Ni-PGE Province at Cape York, Australia
*Peter Gregory (Student)*

P2.085 Quantifying the Financial Implications of Orebody Knowledge Deficiencies in Mining Projects
*Haruna M. Grema (Student)*

P2.086 The Archean Troilus Au-Cu-Ag Deposit: An Atypical Syn-Volcanic World-Class Deposit Reworked During Amphibolite-Grade Metamorphism and Deformation (Quebec, Canada)
*Pierre-Arthur Groulier*

P2.087 Alteration Zoning and Exploration Implications in the Freiberg Pb-Zn-Ag Epithermal Vein System, Germany
*Marie Guilcher (Student)*

P2.088 New Calibration of the Al-in-Hornblende Geobarometer: Evidence for Lower-Crustal Fluid Saturation in Porphyry Copper Magmas
*Gonzalo Henríquez*

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P5.276 Data-Driven Geometallurgy at Tujuh Bukit: Integrating Hyperspectral Core Imaging, SEM/MLA, Dynamic Rebound Hardness, and Machine Learning for Processing Design Optimisation
*Mochammad Hafid Rahadi*

P5.277 Using PHAST Reaction-Transport Modeling to Study the Formation of Zebra Limestone
*Andrea Salas Rivera (Student)*

P5.278 From Basement Rocks to Mineral Systems: Demonstrating the Value of In-Situ Zircon (U-Th)/He Thermochronology
*Paola Salas Rivera (Student)*

P5.279 UAV-borne Hyperspectral Data Across Tailings and Waste at Memi Mine in the Republic of Cyprus
*Katerina Savinova*

**P5.280** The Application of Unsupervised Machine Learning to Identify Geochemical Associations with Geological Domains of Nickel Laterite Deposit in Sorowako, Indonesia
*Alya Sevy Setiawan (Student)*

P5.281 Determination of Iron Oxidation State in Biotite Using Electron Probe Microanalysis
*Shahed Shahrestani (Student)*

P5.282 Automated Coal Picking in MWD Logs
*Katie Silversides*

**P5.283** Breakthrough Hydrogeochemical Techniques for Exploration and Heap Leaching
*Adam Simon*

P5.284 High Velocity = High Prospectivity? A Seismic Window into Southeast Tasmania's Natural Hydrogen Potential
*George Taylor*

P5.285 Multispectral Survey Based on Remote Sensing for Chromite Prospecting in Oman Ophiolite
*Cezar Augusto Teixeira Falcão Filho*

P5.286 Mapping Hydrothermal Alteration for Gold Prospecting in British Columbia, Canada: Integrating Multispectral Remote Sensing and Geophysical Data
*Cezar Augusto Teixeira Falcão Filho*

P5.287 Machine Learning-Driven Geometallurgical Evaluation of the Lowermost Manganese Bed in the Kalahari Manganese Field, South Africa
*Louis van Eeden (Student)*

P5.288 A Multi-Scale Integrated Geological Modeling Approach of the Northern Norrbotten Ore Province, with a Focus on Iron Oxide-Apatite Mineral Systems
*Ervin Veress (Student)*

P5.289 Application and Optimization of Blasting Parameters in Selected Rock Quarries of Southwest and Northcentral Nigeria
*Paul Visaa (Student)*

P5.290 Pyrite Trace Element Behavior in IOCG Deposits: An Unsupervised Learning Approach for Vectoring and Ore Paragenesis
*Shouchun Yu (Student)*

P5.291 An Apatite to Unravel Magma Chamber Dynamics, Mantle Sources and Metallogenesis in the Bushveld Complex
*Peace Zowa (Student)*

## Speed Talks (1-Minute Breaks Between Talks)

### Saturday, September 27

| Morning Talks 10:35 AM - 11:00 AM | |
|---|---|
| 10:35 AM - 10:40 AM | Andradite U-Pb Dating at the Ernest Henry IOCG deposit, NW Queensland: Constraints on the Timing of Cu-Au Mineralization<br>*Jeffrey Steadman* |
| 10:41 AM - 10:46 AM | Geology and Age of the Granite Related Metasomatic Overprinting of the Rosebery VHMS Deposit<br>*Vinicius Godoi Pereira Da Cruz* |
| 10:47 AM - 10:52 AM | Tracing Cu-Au Ore-Forming Processes in the Proterozoic Elaine Dorothy Skarn Deposit, Mount Isa (Queensland, Australia), Using In-Situ Sulphide Mineral Compositions<br>*Catherine Nyakecho* |
| 10:52 AM - 10:53 AM | Morning Wrap-up |
| **Late Afternoon Talks 3:35 PM - 4:00 PM** | |
| 3:35 PM - 3:40 PM | The Application of Unsupervised Machine Learning to Identify Geochemical Associations with Geological Domains of Nickel Laterite Deposit in Sorowako, Indonesia<br>*Alya Sevy Setiawan* |
| 3:41 PM - 3:46 PM | Ore Vectoring Using Machine Learning: Case Study of Copper Occurrences in Northern Ireland<br>*Felix Sihombing* |
| 3:47 PM - 3:52 PM | Breakthrough Hydrogeochemical Techniques for Exploration and Heap Leaching<br>*Adam Simon* |
| 3:53 PM - 3:58 PM | Thermodynamic Modelling and Trace Element Partitioning as Predictive Tools for REE-Enrichment in Alkaline-Silicate Igneous Systems<br>*Corinne Frigo* |
| 3:58 PM - 3:59 PM | Late Afternoon Wrap-up |

### Sunday, September 28

| Morning Talks 10:35 AM - 11:00 AM | |
|---|---|
| 10:35 AM - 10:40 AM | Deciphering the Role of Remobilisation in the Formation of High-Grade Gold Deposits<br>*Sumail* |
| 10:41 AM - 10:46 AM | Applications of Mineral Chemistry to Petrogenesis and Exploration in the Borralan Carbonatite Complex and Associated Alkaline Silicate Rocks<br>*Abdulkadir Mohamed Abdulkadir* |
| 10:47 AM - 10:52 AM | Chile's First Defined Intrusion-Related Gold System: Ternera's Hydrothermal Footprint in the El Zorro Gold District<br>*Eduardo Fritis* |
| 10:52 AM - 10:53 AM | Morning Wrap-up |
| **Afternoon Talks 12:45 PM - 1:45 PM** | |
| 12:45 PM - 12:50 PM | National-Scale Critical Mineral and Strategic Material Potential Assessments to Support Decision-Making in the Net Zero Transition<br>*Arianne Ford* |
| 12:51 PM - 12:56 PM | Empowering Exploration with National Scale Maps<br>*Nichole Knepprath* |
| 12:57 PM - 1:02 PM | Archaean BIFs from Karnataka, India: genetic insights from the Dharwar craton, India, and implications for post-depositional hematitic iron deposits<br>*Perumala Venkata Sunder Raju* |
| 1:03 PM - 1:08 PM | Chromite and Sulphide Mineralization of the Uitloop Ultramafic Bodies in the Northern Limb of the Bushveld Complex, South Africa<br>*Mabatho Mapiloko* |

| | |
|---|---|
| 1:09 PM - 1:14 PM | Evaluating the Tectonic and Climatic Controls on Sediment-Hosted Ore Deposits in Deep Time<br>*Sheree Armistead* |
| 1:15 PM - 1:20 PM | Building Recognition, Trust and Confidence through Good Practice: An Example from the Research Ireland Centre for Applied Geosciences (iCRAG)<br>*Shonny Lehane* |
| 1:21 PM - 1:26 PM | Zr-Nb-REE Enriched Alkaline Silicate Magmatism in Victoria<br>*Tom Andrews* |
| 1:27 PM - 1:32 PM | Resourcing Western Australia - Mineral, Geochemical and Isotopic Datasets to Accelerate the Discovery of Critical Mineral Resources in Western Australia<br>*Rose Turnbull* |
| 1:33 PM - 1:38 PM | Systems-Thinking to Tackle the Impending Economic Geologist Crisis<br>*Elizabeth Sharman* |
| 1:39 PM - 1:44 PM | The Immortality of Hydrocarbons in an Era of Green Industrialisation: The Case of 'Drill Baby Drill'<br>*Shepherd Nyambe* |
| 1:44 PM - 1:45 PM | Afternoon Wrap-up |

## Monday, September 29

| **Morning Talks 10:35 AM - 11:00 AM** | |
|---|---|
| 10:35 AM - 10:40 AM | Secondary Prospectivity of Mine Wastes from the Thalanga, Highway-Reward and Balcooma Volcanic-Hosted Massive Sulphide Deposits<br>*Rosie Blannin* |
| 10:41 AM - 10:46 AM | Cobalt Trace Element Mineralogy and Geometallurgy in the Mount Lyell Copper Mine Tailings, Tasmania, Australia<br>*Owen Missen* |
| 10:47 AM - 10:52 AM | Geoenvironmental indicators using line scan hyperspectral and XRF core analyses for early AMD prediction in Northern Queensland ore deposits, Australia<br>*Enrique Saez Salgado* |
| 10:53 AM - 10:58 AM | Geoenvironmental Characterisation of the Abandoned Elverdton Mine Tailings, Western Australia<br>*Pamela Curi Rivera* |
| 10:58 AM - 10:59 AM | Morning Wrap-up |
| **Afternoon Talks 12:45 PM - 1:45 PM** | |
| 12:45 PM - 12:50 PM | From Source to Sink, Geochemical and Mineralogical Dynamics of Sediment-Associated Metal(loid)s in an Acid Mine Drainage-Affected River<br>*Elin Jennings* |
| 12:51 PM - 12:56 PM | Process Mineralogical Constraints on the Recovery of Platinum Group Metals via Direct Leaching of UG2 Ore in the Bushveld Complex<br>*Nonhlanhla Ndlovu* |
| 12:57 PM - 1:02 PM | Machine Learning Approach to Automated Mineral Identification from RGB Reflected Light Microscopy<br>*Kevin Brown* |
| 1:03 PM - 1:08 PM | Getting the most out of drill hole data: meaningful and robust boundary detection tools<br>*Ryan Manton* |
| 1:09 PM - 1:14 PM | Smarter Use of Geochemistry and Machine Learning to Support Geological Domaining and Geometallurgical Modelling of Porphyry Cu Deposits<br>*Melissa Gregory* |
| 1:14 PM - 1:15 PM | Afternoon Wrap Up |

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**SEG's Conference Accessibility Program (CAP) offered funding to 104 local students, postdoctoral researchers, and those early in their careers in order to participate in the SEG 2025 Conference. Generous support from our CAP sponsors (+CAP) assisted in their travel, conference registration, and SEG membership costs.**

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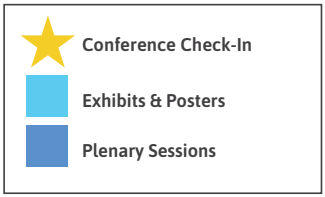
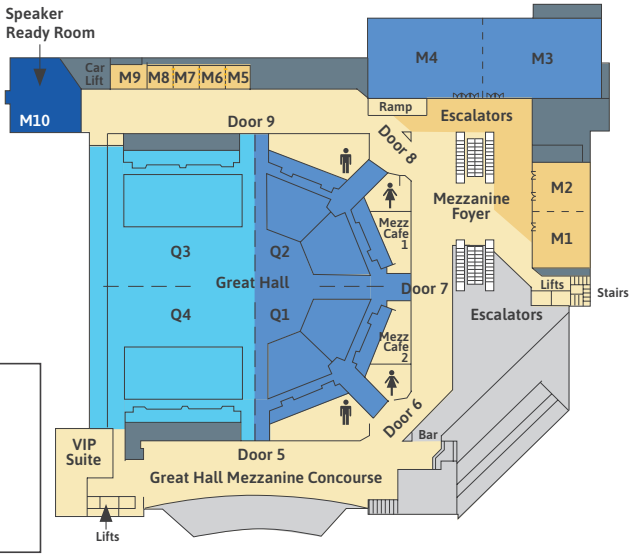
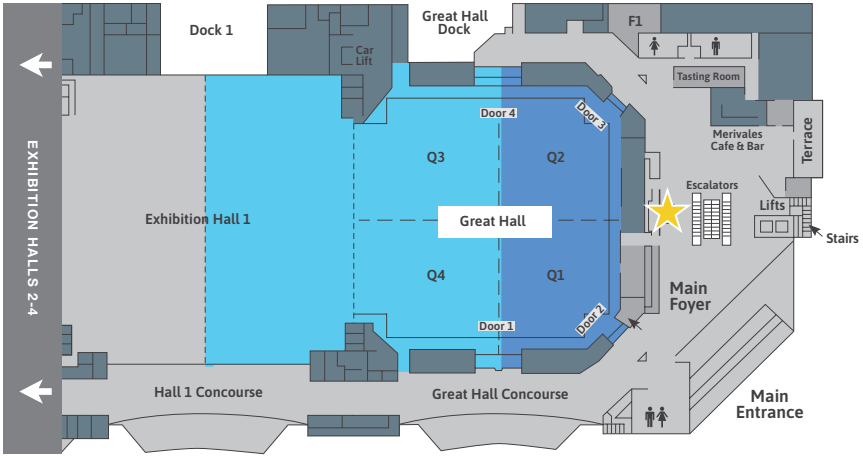
# Brisbane Convention & Exhibition Centre (BCEC)

## Upper Level (Mezzanine)




## Main Level




MERIVALE STREET

## Exhibitor Booths

| Booth | Exhibitor |
|---|---|
| 1, 2 | Ma'aden |
| 3, 4 | Society of Economic Geologists |
| 5, 6 | Rio Tinto |
| 7 | Geo Spectra Pty Ltd |
| 8 | VRIFY |
| 9 | ALS Geochemistry |
| 10 | Gnomic Exploration Services |
| 11, 12 | Geological Survey of Queensland |
| 13 | Resource Technology and Critical Minerals Trailblazer |
| 14 | Gap Geophysics Exploration Services |
| 15 | CSIRO |
| 16 | iCRAG |
| 17 | Portable PPB |
| 18, 19 | GeologicAI |
| 20 | The University of Queensland |
| 25, 26 | TECT Geological Consulting |
| 27, 28 | BHP Xplor |
| 29 | MDF Global Limited |
| 30 | SpecTIR |
| 31 | DDH1 Drilling |
| 32 | SRK |
| 35 | Brunton |
| 36 | Association of Applied Geochemists |
| 37 | Australian Institute of Geosciences (AIG) |
| 38 | Geological Survey of Western Australia |
| 39 | Activation Laboratories Ltd |
| 40 | CODES, University of Tasmania |
| 41 | Datarock |
| 42 | PGN Geoscience |
| 43 | Intertek |
| 44 | Automated Mineralogy Incubator |
| 45 | Lithodat |
| 46 | Bruker |
| 47 | Veracio |
| 48 | SciAps |

## Exhibitor Spotlights (1-Minute Breaks Between Talks)

### Sunday, September 28

5:45pm - 5:50pm The Brunton Axis Transit: Measuring Any Angle in Any Direction
*Brunton*

5:51pm - 5:56pm From Data to Discovery: Unlocking Orebody Insights with Machine Learning
*Datarock*

5:57pm - 6:02pm Application of AI for Porphyry Copper-Gold Targeting in the Woodjam District, British Columbia, Canada
*VRIFY*

6:03pm - 6:08pm Geoscientists and the Critical Mineral Exploration Crisis
*GeologicAI*

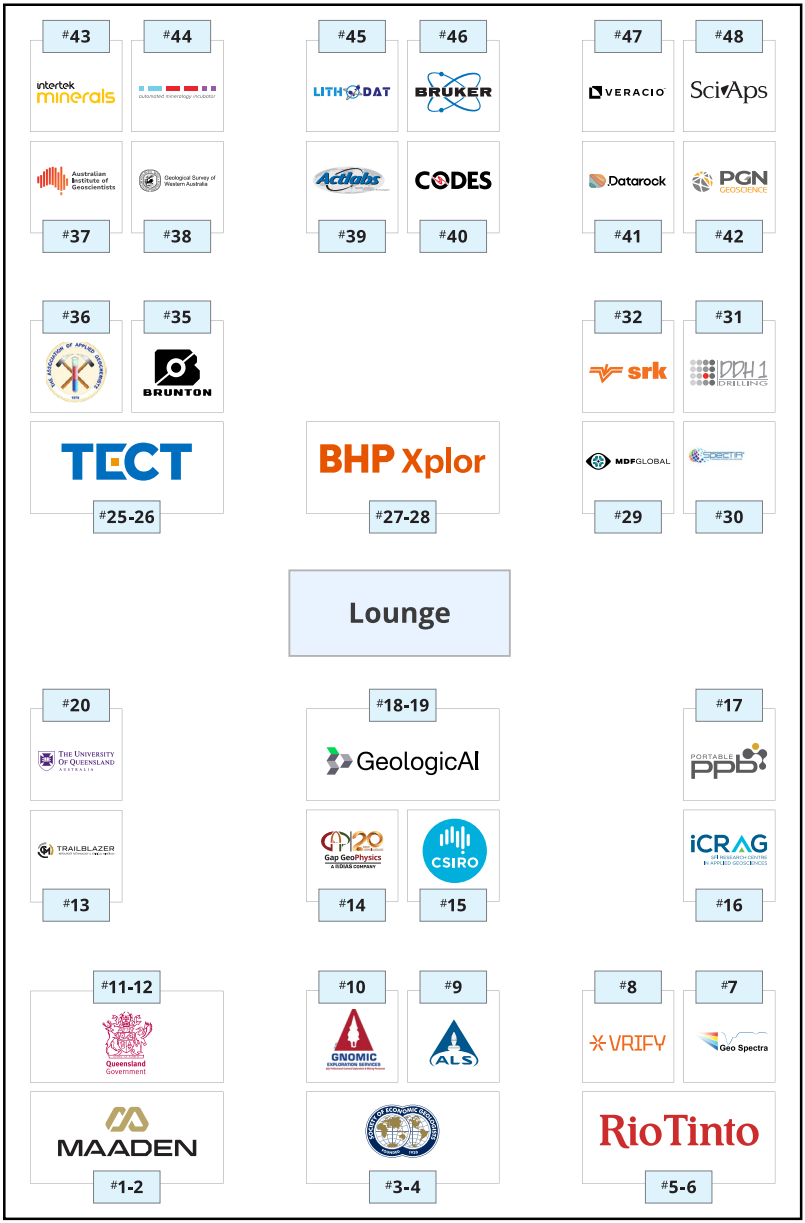
6:09pm - 6:14pm The Pyramid Porphyry Cu Mo system, Alaska: Fresh Insights on the Deposit That Shouldn't Exist
*MDF Global*

6:15pm - 6:20pm Advancing Gold and Copper Target Generation Through Multispectral and Hyperspectral Satellite Data: Insights from Easter Iran and Western Australia
*Geo Spectra Pty Ltd*

6:21pm - 6:26pm The Value of Imagery in Core Analysis
*TerraCore*

6:27pm - 6:32pm Automated Mineralogy Incubator

# Exhibit Hall Map



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# SEG 2026 CONFERENCE

## SALT LAKE CITY, UNITED STATES
## September 30-October 3, 2026

The Society of Economic Geologists (SEG) invites you to the 2026 conference in Salt Lake City, Utah, USA, from September 30 to October 3, 2026. This event will deliver the high-quality technical content that is a hallmark of SEG conferences, including innovations, advancements, and discoveries throughout the mining chain. The program will feature a balance of applied case studies, global advances in framework geology, technical innovation, and archetypal ore deposits and geologic processes globally, while highlighting the North American Cordillera. These themes will be present throughout a vibrant slate of field trips, workshops, technical presentations, and unique conference events.

The SEG 2026 conference is focused on facilitating knowledge transfer within the economic geology community, showcasing geologic and career insight from experienced members, providing technical growth and development for mid-career geologists, and introducing a new generation to the fascinating world of economic geology. With a mix of participants from industry, government, and academia worldwide, SEG 2026 offers a unique opportunity to connect, learn, and help shape the future of economic geology.

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SEG 2026 Chair

**Rachelle Boulanger**
*Talon Metals*
SEG 2026 Chair

**Jennifer Craig**
*Society of Economic Geologists*
SEG Executive Director

## SESSION THEMES

- **The future of the mining workforce**
- **Orebody knowledge and deposit characterization**
- **Framework geology for ore deposits**
- **Keeping up with the commodities: Expanding terranes and targets**
- **New technology and old deposits**

**Watch www.seg2026.org for more information**