ARC CRITICAL RESOURCES FOR THE FUTURE

CCRF ACTIVITIES 2025 Q3

THE UNIVERSITY OF WESTERN AUSTRALIA

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THE UNIVERSITY OF QUEENSLAND AUSTRALIA

Introduction

Welcome to the third edition of our quarterly newsletter 2025

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Our Team

Team updates

Directors Update — Quarter 3, 2025

It has been another big quarter for the Centre, with our Research Fellows and PhD students truly hitting their stride—getting out into the field, presenting at major conferences, and engaging with both the research community and industry.

I continue to be incredibly impressed by the enthusiasm and quality of work across our team. Our students are pushing boundaries in their projects, and our Research Fellows are becoming active leaders within the Centre's key research themes. I also feel deeply supported by our Chief Investigators and Partner Organisations, who continue to drive collaboration and impact across all nodes, and also most importantly by our Business Manager and the administrative team.

This quarter has been particularly significant for our Deputy Director, A/Prof Anita Parbhakar-Fox, who has been in high demand as a keynote and plenary speaker. Her thought-provoking presentation at the 18th SGA Biennial Meeting in Colorado—*"Net Zero Mine Waste: A Realistic Global Target?"*—challenged traditional thinking on mine waste and sustainability. Anita also delivered keynote presentations at the Australasian Exploration Geoscience Conference in Perth, highlighting technological innovation and the future of mine waste management, and continues to represent CCRF at major events such as at the Engineers Australia's Climate Smart Engineering Conference.

Our Deputy Director, Prof. Carl Spandler, has also been busy, representing the Centre and Adelaide University at Austmine's Copper to the World Conference, and stepping into new roles ahead of the upcoming merger that will see the formation of Adelaide University in 2026.

For my part, I've been fortunate to support our students internationally in the field and to represent CCRF at the 2025 MRIWA Research Showcase, where I spoke about the Centre's leadership in training the next generation of geoscientists and developing innovative techniques for exploration and sustainable mineral development.

We wrapped up the quarter with our Annual Workshop and strong representation at the SEG 2025 Conference in Brisbane, where CCRF researchers shared outstanding work and connected with our global peers.

As we move into the final quarter of 2025, I'm proud of what we've achieved together and excited to build on this momentum as we plan for 2026. The future of critical resources research is bright, and CCRF is right at the centre of it.

Management Team

The Centre in Critical Resources for the Future (CCRF) is delighted to share some exciting leadership updates that strengthen both our academic and industry connections.

Our Deputy Director and UQ Node Leader, A/Professor Anita Parbhakar-Fox, has transitioned from The University of Queensland to join BHP as Principal Global Characterisation — working with our BHP Partner Investigator Kerry Turnock. While Anita's focus shifts from academia to industry, we're pleased to say we won't be losing her! Instead, her new role will deepen the interchange of knowledge and research between the Centre and BHP. This is an opportunity to strengthen our collaborative network and connect research innovation with real-world application.

We congratulate Anita on her new chapter and thank her for her ongoing commitment to CCRF — her move to BHP is a win for both academia and industry, and we look forward to many exciting collaborations ahead with Kerry, Anita and the BHP Resource Centre of Excellence team.

We encourage everyone to take a look at this LinkedIn post by Kerry Turnock highlighting Anita's involvement at the SEG Conference and her continuing impact in the field.

We are also pleased to welcome Dr Denys Villa Gomez to our leadership team, representing The University of Queensland. Additionally, Professor Carl Spandler will chair the Student Experience Subcommittee, bringing his expertise and enthusiasm to the ongoing development of our early-career researchers.

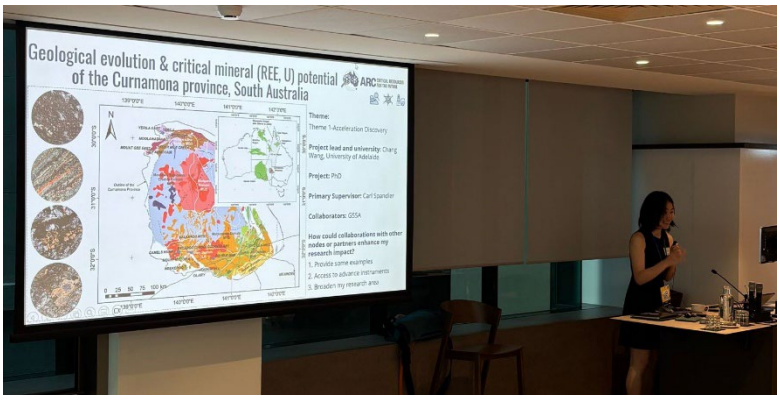
Research Fellows

In Q3, we were pleased to welcome and work alongside five Research Fellows who have been actively contributing to Centre activities. Highlights this quarter included their strong participation in the CCRF Annual Workshop, with Olivia Mejías playing a key role in organising the day. Lillian, Chris, and Yihao represented the Centre at the Critical Minerals Conference in Perth, and Lillian also supported our outreach program by running engaging sessions with Year 7 students.

Please see the Centre Activities section for more on these events and visit our website to learn more about our Research Fellows and their research.

New HDR Candidates Join and Present at the CCRF Annual Workshop

In Q3, we were pleased to welcome two outstanding new HDR candidates to the Centre — Chang Wang and Frank Ndudzo — who, despite having only just begun their research journeys, confidently presented their research plans at our First Annual All-Member Workshop.



Chang Wang, supervised by Prof. Carl Spandler at the University of Adelaide, is investigating the geological evolution of critical Mineral potential of the Curnamona province in South Australia.

For more on Chang's proposed research, please see the Researchers Update.

Frank Ndudzo, who had only arrived in Perth the week before the Workshop, is supervised by Prof. Tony Kemp and Dr. Lillian Kendall-Langley. His research focuses on the expression of Li-Cs-Ta Pegmatites in the Critical Zone

Further details on Frank's work are also available in the Researchers Update.

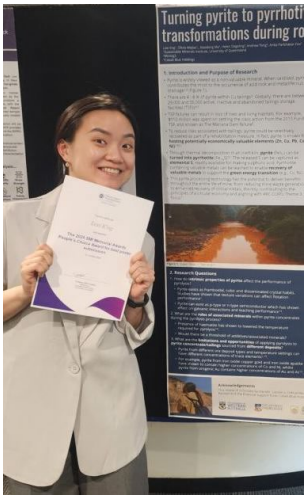
Chang and Frank join an excellent and growing cohort of researchers across the Centre — you can learn more about them and their work on our CCRF website

Celebrating Early-Stage Research Success

The quarter ended well with two of our CCRF researchers at, The University of Queensland, being recognised through the 2025 SMI Memorial Awards.

Olivia Mejías González, whose innovative research applying Laser-Induced Breakdown Spectroscopy (LIBS) technology for critical minerals was recognised with seed funding through the Dan Alexander Memorial Award. This support from the Dan Alexander family provides vital early-stage funding to help translate Olivia's research into real-world applications, fostering collaboration and opening pathways toward commercialisation across the mining value chain.

Olivia expressed her gratitude to the Dan Alexander family, the selection committee, and colleagues including Dr Anita Parbhakar-Fox, Professor Rick Valenta, and Dr Nathan Fox, for their guidance and support, saying the award represents "just the beginning of bringing new knowledge and fostering collaborations through the ARC Centre in Critical Resources for the Future and the Sustainable Minerals Institute."



Lexi K'ng was recognised with the SMI People's Choice Award for Best Poster Presentation, reflecting both the quality of her research and her ability to communicate complex geoscience topics with clarity and impact. Lexi shared that the event was *"emotional, heart-warming, and inspiring,"* highlighting how personal stories from donors and award recipients reinforced the importance of purpose-driven research.

Lexi also reflected on the importance of developing soft skills—such as communication, leadership, and empathy—alongside technical expertise, noting that these are essential to advancing collaboration and achieving shared goals such as net-zero waste in the mining industry.

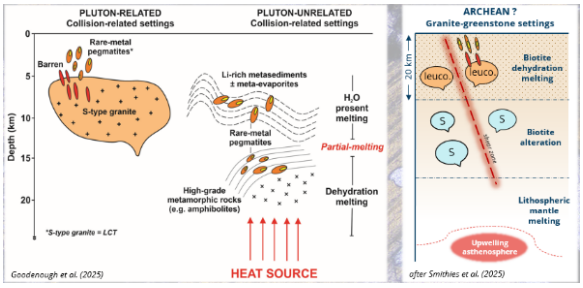
Congratulations to Olivia and Lexi on their achievements and contributions — both wonderful examples of how early-career researchers at CCRF are leading innovation and conversation across the critical resources sector.

Research Activities

Research Updates

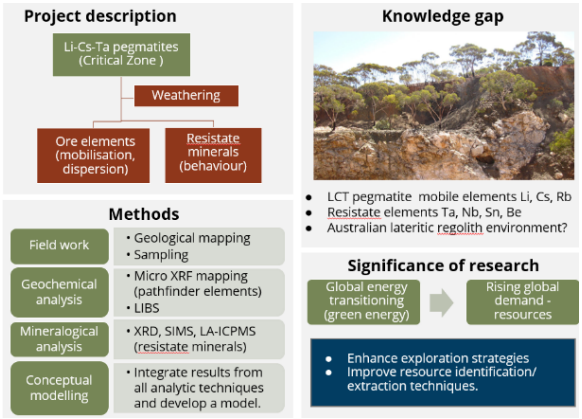
Our Centre's research continues to evolve with exciting new projects addressing critical challenges in resource exploration, processing, and sustainability. In the last CCRF newsletters in Quarter 1, 2025 we were introduced to the research of Jemi Ahnaf, Matthew Demmer and Michael Wawryk and in CCRF Newsletter Q2 2025 we gave you snapshots of the research conducted by Cooper Ferguson, Rachman Fauzi, Rachel Jones, LeXi K'ng and Collins Adoko. In this newsletter we introduce you to the following research that was presented by our researchers at the Annual Workshop in September:

TRACING LI-CS-TA PEGMATITE MELT SOURCES IN THE PILBARA CRATON



Dr Lillian Kendall-Langley investigates LCT pegmatites and critical metal systems, with expertise in melt evolution, fertility indicators, and crustal architecture. At the Centre, she is contributing to two projects on pegmatite fertility and their expression in the critical zone. Using tools such as mineral chemistry, isotopic records, and geochemical modelling, her work aims to develop predictive tools for exploration and advance training in geochemical and mineralogical techniques.

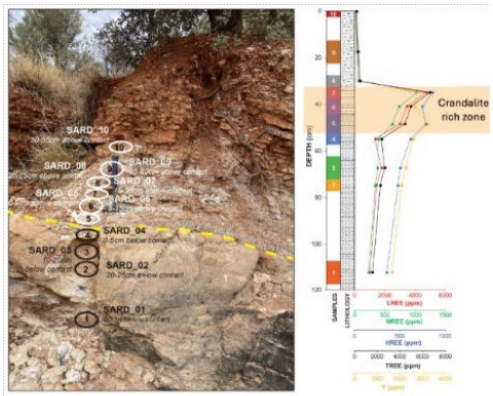
EXPRESSION OF LI-CS-TA PEGMATITES IN THE CRITICAL ZONE



Frank Ndudzo is investigating how Li-Cs-Ta pegmatites evolve during weathering in the critical zone. His project tracks ore element mobility and the behaviour of resistate minerals like tantalite and cassiterite with the goal of identifying fertility signals in weathering profiles.

His research will improve exploration strategies for lithium and other critical minerals, helping Australia meet growing global demand.

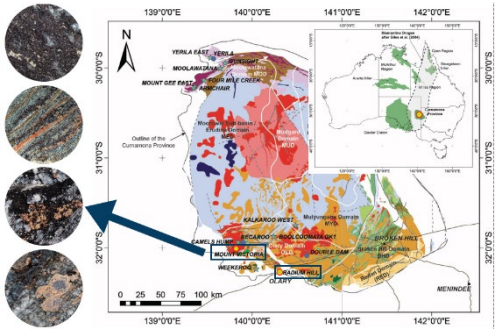
CLAY & PHOSPHORITE-HOSTED REES: REE SOURCE, WEATHERING IMPACT AND TIME FRAME OF ENRICHMENT



Ardmore weathering profile

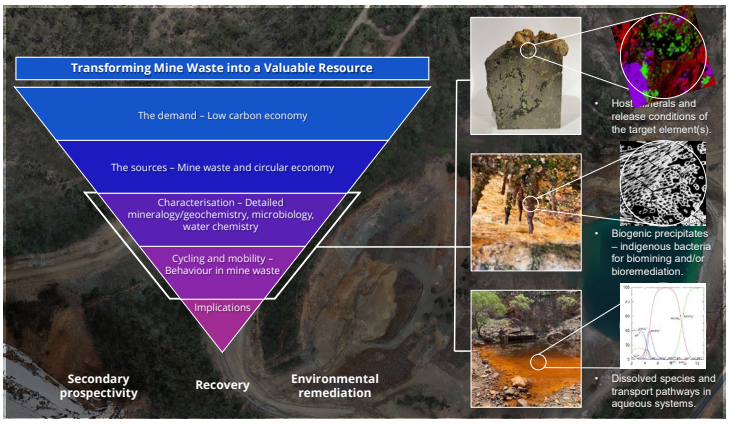
Dr Stefan Löhr investigates clay- and phosphorite-hosted rare earth elements (REEs), focusing on high-value heavy REEs in regolith environments in South Australia and Queensland. His research examines the sources and controls on REE enrichment, including the impact of weathering processes and time frame of deposit formation. He employs a combination of elemental and isotopic tools, coupled to sequential leaching approaches and mineralogical and microbeam analysis to improve understanding of REE accumulation, support targeted exploration strategies, and help unlock new REE resources.

GEOLOGICAL EVOLUTION & CRITICAL MINERAL POTENTIAL OF THE CURNAMONA PROVINCE



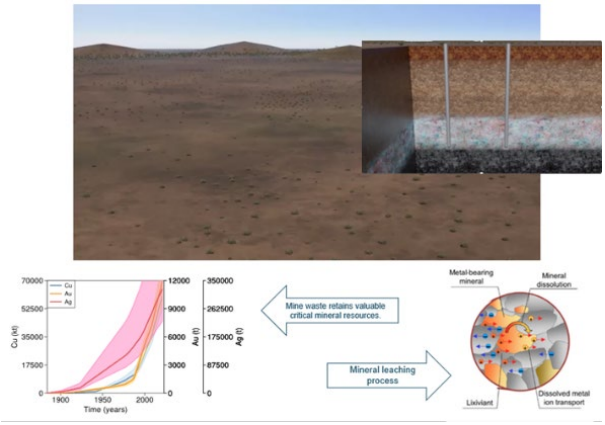
Chang Wang is investigating the geology of the Curnamona Province in eastern South Australia, focusing on the Olary Domain. Her project examines crustal architecture, magmatism, and mineralising processes, including alkaline magmatic episodes such as Mount Victoria. By clarifying tectonic links with neighbouring regions, her research aims to unlock the mineralisation potential of the Curnamona Province and support Australia's future critical mineral exploration.

UNDERSTANDING INDIUM & ASSOCIATED CRITICAL METALS BEHAVIOUR IN MINE WASTE ENVIRONMENTS



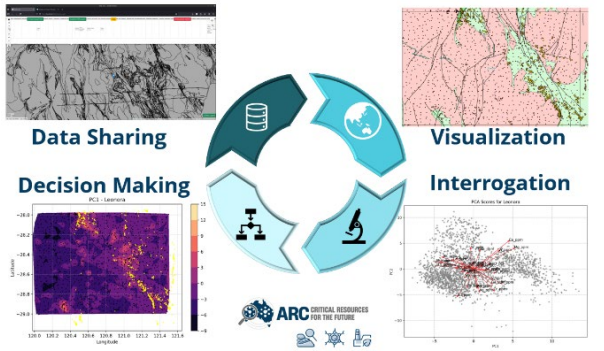
Olivia Mejías is researching indium, a critical metal used in technologies such as touchscreens and solar panels. As there are no dedicated indium mines worldwide, her work focuses on understanding the biogeochemical behaviour of this overlooked metal within mine waste facilities. She characterises indium-bearing minerals in waste residues through a multi-scale geochemical and mineralogical approach that integrates LIBS, automated mineralogy, and synchrotron-based techniques. Her research aims to connect these insights with recovery methods such as bioleaching and biosorption. Through this work, she seeks to transform mine waste into a valuable source of critical minerals and support strategies to secure future supply chains.

COUPLED TRANSPORT & REACTION PHENOMENA DURING ELECTROKINETIC IN SITU RECOVERY OF GOLD FROM TAILINGS



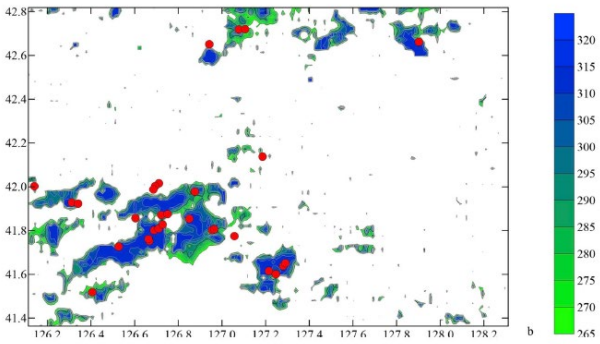
Jaqueline Lopes Diniz is investigating electrokinetic in situ recovery (EK-ISR) to extract gold from mining tailings. Her project examines how coupled transport and chemical reactions in unconsolidated tailings affect metal recovery. By combining experiments with natural and synthetic tailings and computer modelling, her research aims to turn tailings from an environmental challenge into a valuable resource, supporting sustainable mining and a circular economy.

WEB PLATFORM DEVELOPMENT & TOOLS FOR DATA SHARING AND INVESTIGATION ACROSS SCALES



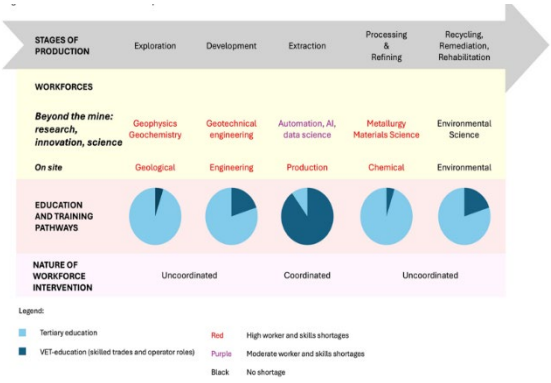
Dr Chris Gonzalez with the data-to-knowledge team is codeveloping a data platform to enhance integration and interpretation across exploration, characterization, and processing stages. Building on our team's expertise, we aim to improve data accessibility, support scientific discoveries, and facilitate objective-based decision-making. This research will advance data-driven insights, enhance collaboration between the themes, train future geoscientists in big data techniques, and strengthen Australia's leadership in mining research and technology.

TRACE ELEMENT CAUSAL NETWORK DISCOVERY & GENERATIVE MODELS FOR EXPLORATION TARGETING



Dr Yihao Ding investigates geochemical anomaly detection to identify unusual element concentrations in exploration, environmental monitoring, and geological research. His project applies deep learning and statistical methods to large-scale, high-quality geochemical datasets, distinguishing background variation from true anomalies. By improving the detection and interpretation of geochemical signals, his research supports mineral exploration, environmental assessment, and understanding of hydrothermal processes

ASSEMBLING A WORKFORCE FOR CRITICAL MINERAL PRODUCTION IN AUSTRALIA



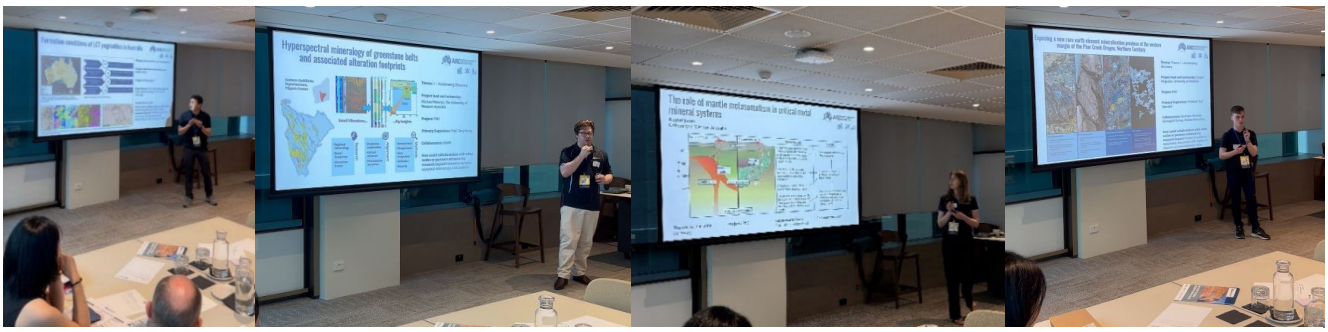
Rohini Anant (Affiliated PhD from University of Sydney) is researching how workforces for critical mineral production are developed and regulated in New South Wales. Her project examines key factors, workforce pathways, and the influence of energy transition targets, capturing perspectives from industry, government, and education sectors. This work contributes to training the next generation of geoscientists to support the transition to a high-tech, clean energy society, with a focus on integrating mineral systems science, exploration, and processing across the value chain.

Workshops Delivered

CCRF Annual Workshop 2025

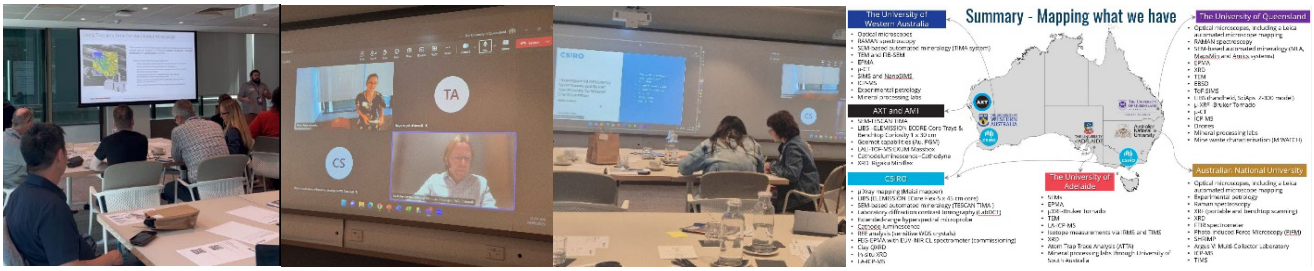
The CCRF Annual Workshop, held in Brisbane, brought together our research fellows, higher degree research students, Chief Investigators, and partners for a dynamic day of presentations, collaboration, and networking.

A highlight of the day was the outstanding **three-minute presentations** and poster sessions delivered by our PhD candidates and early career researchers. Many of these were prepared at very short notice, yet the professionalism and clarity shown were remarkable, setting a strong tone for the workshop.

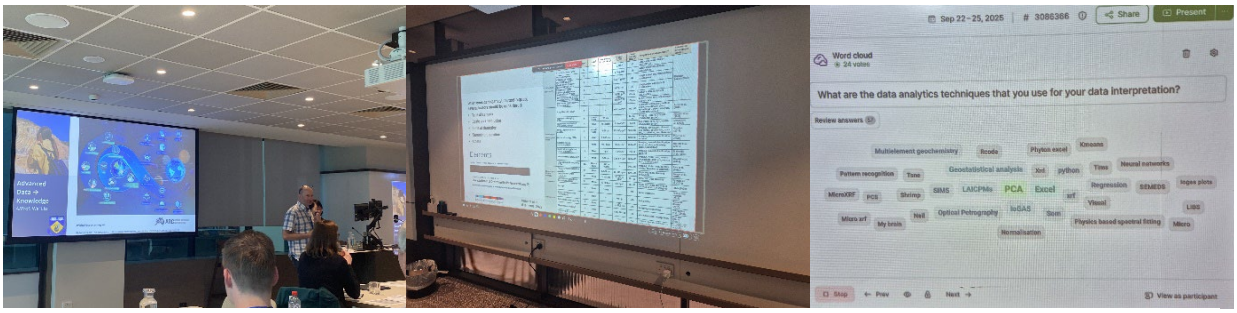


ANU Jemi Anaf, UWA Michael Wawryk, Rachel Jones and UoA Cooper Ferguson were four of our PhD candidates presenting 3 minute research introductions

Our Partners and Chief Investigators also contributed significantly, **leading technical and analytical workshops on imaging, analysis technologies, and geodata analytics**. These sessions showcased the breadth of expertise available across the Centre and provided participants with valuable insights and tools to advance their research.



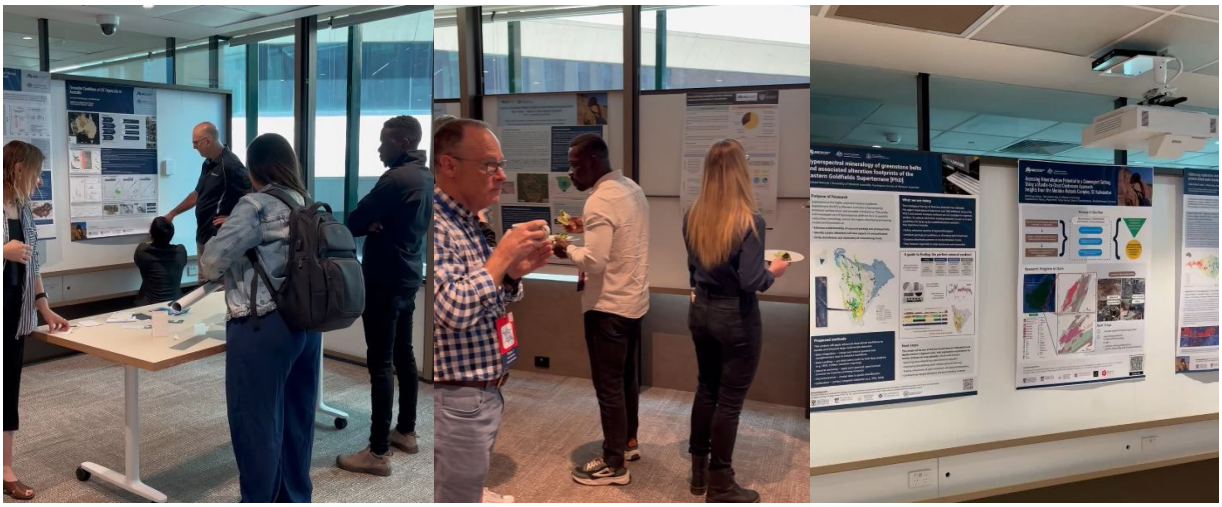
Workshop 1 was led by AXT's Victor Nogueira with Louise Schonveld and Daniel Patias, followed by a hybrid session led by CSIRO's Margaux Le Vaillant featuring Nick Farmer, Zanett Pinter, Coralie Siegel, Tiago Angelo, and Carsten Laukamp.



Wei Liu Eun Jung Holden, Yihao Ding and Chris Gonzalez lead an interactive discussion on Geodata analytics.

Interactive activities encouraged conversation and collaboration across research themes.

The workshop also marked the launch of our Mentoring and Professional Development Program (see Centre Activities for more information). This important initiative introduces a wide array of mentors now available to support our early career researchers, helping to build strong professional and career pathways.



Posters in the breakout area. All our researcher produced posters so members could walk around and learn more about their research during breaks.

Collins Adoko with the winning prize

Throughout the day, interactive activities encouraged conversation and collaboration across research themes, culminating in the social mixer “Critical Connections BINGO.”

Congratulations to PhD candidate Collins Adoko, who emerged as the winner of this engaging activity.

We received valuable feedback from participants, which will be implemented to further strengthen next year’s Annual Workshop.

A sincere thank you to everyone involved for making it such a valuable and enjoyable day. For a closer look at the energy and highlights from the workshop, please see our LinkedIn article capturing the activities and footage.

John Mavrogenes and Marco Fiorentini celebrating Collins win 😉

Centre Activities

CCRF Mentoring Program

The Centre in Critical Resources for the Future (CCRF) officially launched its Mentoring Program during the CCRF Annual Workshop in Brisbane. This key initiative is designed to foster the professional growth of our PhD candidates and postdoctoral researchers by connecting them with experienced academic, industry, and government mentors who can provide valuable guidance, perspective, and encouragement as they navigate their research and career paths.

We extend our sincere thanks to all those who have already committed to being mentors. Your willingness to share your experience, knowledge, and networks will make a lasting difference to our emerging researchers. Mentoring not only benefits mentees — it's also an enriching opportunity for mentors to reflect, learn, and engage with the next generation of innovators in our field.

The CCRF Mentoring Program includes both Academic Mentors and Industry/Government Mentors. These relationships will initially run for six months, followed by a review to ensure that both mentors and mentees are gaining value and that evolving needs are supported. Whether short- or long-term, these connections are invaluable for building confident, capable, and well-connected researchers.

We encourage our Chief Investigators to consider becoming Academic Mentors and our Partner Investigators to participate as Industry or Government Mentors. Mentoring is not only personally rewarding — it also helps build a strong and supportive Centre community, where members feel connected, respected, and comfortable seeking advice and collaboration.

This shared culture of support, curiosity, and connection is what will make our Centre thrive.

If you are interested in joining as a mentor, please get in touch with the CCRF Chair of the Mentoring Sub–Committee, Prof. Greg Yaxley, or CCRF Manager Natasha Bartlett for more information. Your involvement will make a real difference.

Researchers in the Field

COBALT BLUE HOSTS CCRF TEAM AT BROKEN HILL

Cobalt Blue recently hosted two of our researchers, Olivia Mejías and PhD student Lexi K'ng, at their Broken Hill Technology Centre (BHTC) — marking the official start of Lexi's PhD.

Supported by Cobalt Blue Holdings Ltd, Lexi's research will focus on understanding the mechanisms of pyrite–pyrrhotite transformations, a key process in Cobalt Blue's innovative cobalt recovery technology.

The visit, hosted by Andrew Tong and Adam Randall, highlighted the tremendous value of our researchers being in the field with industry partners — gaining practical insight, building relationships, and directly linking their work to real-world applications. More details on this visit at the BHTC: UQ visit to BHTC – Cobalt Blue

EXPLORING THE MERATUS COMPLEX

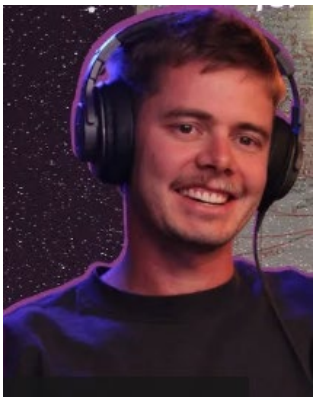
PhD student Rachman Fauzi, who has just commenced his project on the Meratus-Bobaris Complex, spent a productive week in the field in Kalimantan, Indonesia alongside Prof. Marco Fiorentini and Dr. Maria Cherdantseva. The team was warmly hosted by Dr Ernowo, Bambang Pardiarto, and Bambang Nugroho Widi from the National Research and Innovation Agency of Indonesia (BRIN), whose local insights greatly enriched the fieldwork.

Their study focuses on unravelling the metallogenic architecture of this geologically complex region — aiming to uncover the often hidden connections among diverse mineral systems that may, in fact, share the same geological "DNA."

This collaboration is expected to provide new perspectives on the tectonic framework, geology, and mineralization processes across South Kalimantan which were induced by the amalgamation between Sundaland and Gondwana during the Cretaceous period.

Communication & Outreach

WONDER PODCAST SERIES



Building on the podcasts Prof Marco Fiorentini and Dr Isra Ezad, Dr Ross Chandler joins Holly Cooke and Anthony Read to break down the world of mineral exploration, covering everything from why and how we find new deposits to the ways we can think about their value, see link to this podcast by Ross Chandler.

Stay tuned for our next podcast by Prof Carl Spandler and tune into all episodes and more at: www.thegeoco.com.au

NATIONAL SCIENCE WEEK – ROCKS AND SPACE

As part of National Science Week, two groups of Year 7 students from Halls Head College visited The University of Western Australia for a half-day in Molecular Biology, exploring *Plants for Space*, and a half-day in Geology, discovering *Rocks and Space*.

The *Rocks and Space* session, led by Olivia Johnson, Prof. Marco Fiorentini, and Dr Lillian Kendall-Langley, gave students a glimpse into the work of geoscientists and how their knowledge supports both space exploration and everyday technology. Drawing on her teaching background, Olivia designed three interactive activities that encouraged students to identify the types of rocks and minerals used in different satellite components — from the structural frame to electrical circuits and solar panels.

Through these activities, students saw how the materials beneath our feet are essential to the world around us — and even to technology beyond Earth.

Engaging students in science at an early age is vital to spark curiosity and help them appreciate the exciting possibilities and real-world impact of scientific discovery.

Conferences & Forums

2025 GOLDSCHMIDT CONFERENCE, PRAGUE, CZECHIA JULY 2025

The Goldschmidt Conference is the premiere international meeting on geochemistry. It is owned jointly by the Geochemical Society and the European Association of Geochemistry.

Professor Andrew Berry presented on the Imaging the connectivity of partial melts in three dimensions at the Goldschmidt Conference, Prague, Czech Republic, 6-11 July 2025.

2025 EXPERIMENTAL MINERALOGY, PETROLOGY AND GEOCHEMISTRY, ORLEANS

Professor Andrew Berry presented on Fluorescence tomography of basaltic melt in equilibrium with olivine Experimental Mineralogy, Petrology and Geochemistry, Orleans, France, 16-19 June 2025.

2025 AUSIMM CRITICAL MINERALS CONFERENCE

CCRF Researchers Support Critical Minerals Conference in Perth

Researchers from the ARC Centre for Critical Resources for the Future (CCRF) supported this year's Critical Minerals Conference in Perth, alongside our valued partners — the Centre for Microscopy, Characterisation and Analysis (CMCA) and the Centre for Exploration Targeting (CET).

The event brought together leading researchers, industry experts, and policymakers to discuss innovations and opportunities in Australia's critical minerals sector.

A special thanks to our CCRF UWA team for their strong presence and contributions throughout the conference — Marco Fiorentini, Tony Kemp, Wei Liu, Yihao Ding, Chris Gonzalez, Lillian Kendall-Langley, Maria Cherdantseva, and— for representing the Centre and showcasing our collaborative research at its best

2025 AUSTRALASIAN EXPLORATION GEOSCIENCE CONFERENCE (AEGC) 2025

The Australasian Exploration Geoscience Conference (AEGC) 2025 was held in Perth, bringing together geoscientists from across Australia and beyond to share the latest advances in exploration and Earth sciences.

A/Prof Anita Parbhakar-Fox and Dr Margaux Le Vaillant both delivered keynote addresses at the event. Anita shared her insights on recent advancements in Earth sciences and the evolving role of technology in shaping the industry's future. Margaux, leading the Orebody Geoscience Group, presented her research on improving understanding of polymetallic ore systems (Ni, Cu, Co, PGEs, V, Ti) hosted in mafic–ultramafic rocks. Her work focuses on key genetic processes and the development of practical prospectivity and vectoring tools for the exploration sector.

The next AEGC Conference will be held in Adelaide in 2027, continuing to build on the strong momentum from this year's event.

2025 - SEG 2025 CONFERENCE

Following the CCRF Annual Workshop, our researchers, students, and partners took advantage of the Society of Economic Geologists (SEG) 2025 Conference held in Brisbane, 26–29 September, hosted by The University of Queensland.

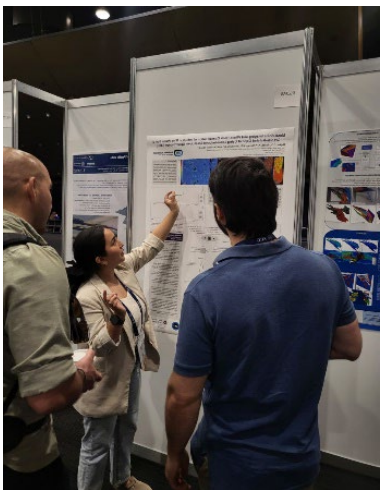
Professor Marco Fiorentini presented on *"Disruptive Thinking and Transformational Research to Shape the Future Resource Workforce,"* alongside PhD candidate Matthew Demmer (UWA) and Dr Ross Chandler (ANU), sharing CCRF-aligned research and perspectives on future geoscience innovation.

Nacho presenting a Keynote talk

CCRF Partners Dr Ignacio (Nacho) González-Álvarez (CSIRO) and Dr Greg Dipple (Arca Climate Technologies) were among the invited speakers. Ignacio delivered a keynote address on *Rare Earth Elements and their Global Context* to more than 1,200 delegates, co-authored two oral presentations, and supported four student contributions on critical minerals — including one CSIRO DISIPA internship project that received the Best Poster Award.

Our students and early-career researchers Lexi K'ng, Collins Adoko, and Olivia Mejías González— shared enthusiastic reflections on their learning, networking, and presenting experiences — highlighting how SEG 2025 broadened their perspectives and strengthened professional connections.

Together, these activities showcased CCRF's growing impact in fostering innovative research, collaboration, and capacity-building across the critical-resources community.



Olivia sharing her research at SEG conference

Upcoming events

Upcoming events

2025 GeoCopper Workshop – Adelaide, 3–4 November 2025

Hosted at The University of Adelaide and led by Professor Carl Spandler, the GeoCopper 2025 Workshop will bring together leading Earth science researchers to strengthen Australia's copper-focused geoscience community. This free two-day event will feature presentations and discussions on the major geoscience challenges related to copper exploration and resource development. Find full details and registration here: GeoCopper Workshop.

2025 SGGMP PORT MACQUARIE, 17–21 NOVEMBER 2025

Following GeoCopper, researchers are also encouraged to attend SGGMP 2025 in Port Macquarie. This conference will showcase advances across the fields of Sedimentary Geology, Geochemistry, and Mineralogy/Petrology, offering an excellent platform to connect with peers and share emerging research. More information and registration details are available at: SGGMP 2025.

2025 ANSTO AUSTRALIAN SYNCHROTRON USER MEETING

Olivia Mejías González will present at the Australian Synchrotron User Meeting 2025, sharing insights from her research using high-energy synchrotron XFM and XAS techniques to investigate indium–tin complex matrices. Find full details and registration here ANSTO 2025.

As part of her broader research, Olivia will be attending the Australian Synchrotron at ANSTO's Clayton campus in November this year, specifically working with the X-ray Absorption Spectroscopy (XAS) team. The experiments will focus on indium-rich chalcopyrite to better understand the atomic environment of indium within this mineral. The outcomes will be key to assessing the potential of chalcopyrite as an alternative source of indium as a by-product.

These experiments have been supported through a Merit Grant awarded to Olivia. Part of the sample set will include synthetic chalcopyrite produced by ANU researcher Chris Ingles, with the support of Prof. John Mavrogenes, showcasing the collaboration between UQ-SMI and ANU in advancing knowledge of the critical metal indium and its occurrence in lesser-known minerals.

2026 AUSTRALIAN EARTH SCIENCES CONVENTION (AESC 2026)

The ARC Centre of Excellence in Critical Resources for the Future (CCRF) will host a dedicated Critical Minerals Symposium at the Australian Earth Sciences Convention (AESC), to be held in Melbourne from 3–6 February 2026.

Dr Lucy McGee, is serving on the AESC 2026 Organising Committee, and Professor Carl Spandler will lead the organisation of the CCRF symposium. This session will highlight the Centre's contributions to critical minerals research and innovation, featuring several CCRF researchers and affiliates as invited speakers:

Keynote speaker: Isra Ezad

Invited speakers: Tony Kemp, Olivia Mejías González, and Ross Chandler.

AESC 2026 promises to be a forward-looking event, addressing global challenges including the transition to renewable energy, the use of AI and Big Data in geosciences, and the integration of geoscience with engineering, archaeology, and space research.Learn more and submit an abstract**:** https://aescgsa.com.au/pages/program/call-for-abstracts

2026 GORDON RESEARCH CONFERENCE (GRC)

Geochemistry of Mineral Deposits
Gordon Research Conference

2026 - Professor Marco Fiorentini, Director of the ARC Centre in Critical Resources for the Future, will be chair the 2026 Gordon Research Conference (GRC) on Geochemistry of Mineral Depositsto be held in Castelldefels, Barcelona, Spain, from 24–29 May 2026.

Under the theme *"Geochemistry at the Edge of Discovery,"* the conference will bring together geoscientists from diverse disciplines and career stages to explore the frontiers of economic geology and mineral deposit geochemistry. The program will highlight how geochemistry connects the geosciences across the entire critical minerals value chain — from discovery and characterisation to processing, extraction, and recovery — emphasising the transformative role of data and innovation in shaping the resource sector of the future.

Attendance is limited to 200 participants, so early registration is encouraged: **https://lnkd.in/gvYJCUbw**

2026 INTERNATIONAL SYMPOSIUM ON MAFIC-ULTRAMAFIC MINERAL SYSTEMS

ISMUMS2026

Dr Margaux Le Vaillant, CCRF Partner Investigator with CSIRO, will chair the International Symposium on Mafic-Ultramafic Mineral Systems (ISMUMS 2026), hosted by CSIRO in Perth, Western Australia, from 29 June to 3 July 2026,

Building on more than 50 years of Ni–Cu–PGE and platinum-group element symposia, ISMUMS 2026 broadens its focus to encompass the full spectrum of critical mineral systems associated with mafic and ultramafic rocks — including Ni, Cu, Co, PGE, V, Ti, and Cr. The program will feature three days of technical presentations, workshops, and field excursions exploring Australia's world-class mafic–ultramafic provinces — from the Windimurra Intrusion in the Youanmi Terrane to the Western Pilbara and Albany–Fraser Orogen. Sessions will cover magmatic ore-forming processes, secondary enrichment, and emerging geochemical, geophysical, and data-driven exploration techniques.

This symposium will provide a unique opportunity for collaboration between researchers, students, and industry, advancing innovation and understanding of the mineral systems critical to a sustainable future.

Save the date and stay tuned for abstract and registration details: wp.csiro.au/ismums2026.

2026 THE 11TH INTERNATIONAL SYMPOSIUM ON GRANITIC PEGMATITES (PEG 2026)

2026 – The 11th International Symposium on Granitic Pegmatites (PEG 2026) will be hosted by UWA on 16-17 August 2026. Led by an organising committee involving Professor Tony Kemp and Dr Lillian Kendall-Langley, the event will be the first international scientific meeting on granitic pegmatites held in Australia, with 150-200 delegates expected, including global experts, academics, and industry members. The program will feature presentations, poster sessions, exhibitor displays, and field trips in WA, with Centre researchers actively participating. You can register now - PEG2026: 11th International Symposium on Granitic Pegmatites.

For more information, please visit our website on ARC Centre in Critical Resources for the Future

criticalresources.org.au

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