



Hybrid Conference

17 - 18 November 2026

GeoFutures 2026: Critical Minerals

CONFERENCE PROGRAMME



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Geological
Society

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Tuesday 17 November 2026		
0900 - 0930	Registration opens, tea & coffee	
0930 - 0940	Welcome address	
0940 - 1010	Keynote: <i>Title TBC</i>	Libby Sharman
Session one: Innovation in Understanding Critical Mineral Systems and Deposit Geology		
1010 - 1025	Evolving tectonic style governs metal mineralisation in mountain belts	Alex Copley, <i>University of Cambridge</i>
1025 - 1040	Magma recharge modulates major element evolution and REE mineralisation potential in alkaline-silicate rocks: a case study of Erongo, Namibia	Caroline Soderman, <i>Unviersity of Cambridge</i>
1040 - 1055	Magmatic Ni-Cu-Co-PGE deposits from craton to orogenic belt: new search space for battery metal discovery	David Holwell, <i>Unviersity of Leicester</i>
1055 - 1110	A 4D Petrogenetic Model for the Uis Pegmatite Field	Joseph Benson, <i>University of St. Andrews</i>
1110 - 1125	Liquid ores: the multi-commodity mineral potential of saline geofluids	Konstantin Nazarov, <i>University of Oxford</i>
1125 - 1140	Refreshment break	
1140 - 1155	Deformation and recrystallisation as a mechanism for critical metal enrichment: coupled microstructural-geochemical insights from the Rajapalot Au-Co deposit	Lily Dickson, <i>Unviersity of Leeds</i>
1155 - 1210	Processes to products in supergene enrichment of carbonatite-hosted REE deposits.	Martin Smith, <i>Unviersity of Brighton</i>
1210 - 1225	A Geology-Based Assessment of Mining Lease Adequacy and Land-Use Efficiency: A 3D Geological Modeling Case Study of a Manganese Deposit in the Eastern Ghats Mobile Belt, India	Ahmed Koko Suleiman Dalbon, <i>Andhra University</i>
1225 - 1240	Potential role of molten salts and metaevaporites for IOCG deposit formation	Michael Anenburg, <i>Australian National Unviersity</i>
1240 - 1255	Mineral Resource Estimation for Critical Mineral deposits :Challenges associated with RPEEE in early stage projects	Martin Pittuck, <i>SRK Consulting (UK) Ltd</i>
1255 - 1355	Lunch	
Session two: New Approaches to Critical Mineral Exploration and Targeting		
1355 - 1410	Predicting porphyry copper prospectivity with plate reconstruction models and machine learning	Edward Clennett, <i>University College London</i>
1410 - 1425	Diamonds to detect critical metal evolution in the mantle (DIADEM)	Hannah S. R. Hughes, <i>Camborne School of Mines, University of Exeter</i>
1425 - 1440	Look Up, not Down! Rare Earth Mineral Deposits in the Roof Zones of Alkaline Igneous Intrusions	Adrian Finch, <i>University of St. Andrews</i>
1440 - 1455	Prospectivity on a Plate: Tectonic Reconstructions for Critical Mineral Targeting	Jamie Price, <i>SRK Consulting</i>
1455- 1510	From Waste to Resource: Phytotechnologies for Sustainable Mine Closure	Rose Ridgeway, <i>Mine Environemtal Management</i>

Session two: New Approaches to Critical Mineral Exploration and Targeting continued...		
1510 - 1525	Beyond Lithium Grade: A Geochemical Framework Enhancing LCT Pegmatite Project Evaluation, Exploration and Geometallurgy	Radu-Gabriel Miron, <i>SRK Exploration Ltd</i>
1525 - 1540	Refreshment break	
1540 - 1555	Tectonic settings for porphyry copper formation in the Northern Great Basin, USA	Hero Bain, <i>University of St.Andrews</i>
1555 - 1610	Characteristics of chromite-bearing serpentization in the Robusha Peridotite Massif, Tibet, and their relationship to regional tectonics	Hongyuan Zhang, <i>China University of Geoscience</i>
1610 - 1625	A Systems Approach to Viable Mineral Exploration	Matthew Grimshaw, <i>Worth Discovery</i>
1625 - 1710	Panel discussion: Critical Minerals Policy Panel	Speakers tbc
1710 - 1720	End of day 1 wrap up	
1720 - 1830	Drinks Reception	

Wednesday 18 November 2026		
0900 - 0930	Registration opens, tea & coffee	
0930 - 0940	Welcome address	
0940 - 1010	Keynote: Title TBC	Sarah Gleeson, <i>University College Dublin</i>
Session four: Supply Chain Mapping and Minerals Intelligence		
1010 - 1025	Understanding Resilience in Critical Raw Material Supply Systems	Lingli Zhou, <i>Durham University</i>
1025 - 1040	Evolving the UK Criticality Assessment: New Ideas, New Needs	Christian Bishop, Critical Minerals Intelligence Centre, British Geological Survey
1040 - 1055	The Critical State of Global Copper: For Whom the Bell Tolls?	Gavin M. Mudd, <i>British Geological Survey</i>
1055 - 1110	Critical minerals for digital technologies	Holly Anne Lydia Elliott, <i>British Geological Survey</i>
1110 - 1125	Refreshment break	
1125 - 1140	Building a domestic critical minerals supply chain for the UK	Jeremy Wrathall, <i>Cornish Lithium</i>
1140 - 1155	The potential supply of secondary minerals for UK’s energy transition	Jorge Torrubia, <i>British Geological Survey</i>
1155 - 1210	Mineral Systems and Mineral Criticality: Exploring the Intersection of Policy and Prospectivity	Edward Bunker, <i>Viridien</i>
Session five: Geometallurgy & Processing		
1210 - 1225	Why by-product critical minerals are a stubborn problem	Daniel J. Smith, <i>University of Birmingham</i>
1225 - 1240	Don’t dig it up! In situ reprocessing and remediation of mine tailings to recover critical metals	Gawen Jenkin, <i>University of Leicester</i>
1240 - 1255	Parys Mountain: An Old Mine, A New Mineral System	James McFarlane, <i>Anglesey Mining Plc</i>
1255 - 1355	Lunch	
1355 - 1410	Virtual Poster Presentations	
Session six: Geometallurgy, Downstream Processing and Circular Economy		
1410 - 1425	From Magma to Mineralisation to Groundwater: Deep Drilling a REE-Rich Carbonatite	Sam Broom-Fendley, <i>University of Exeter</i>
1425 - 1440	Unlocking Cobalt from Pyrite-Rich Mine Residues: What Diagnostic Oxidation Reveals About Metal Liberation	Ummul Sultana, <i>University of Queensland</i>
Session seven: ESG and Minimising Environmental Impact		
1440 - 1455	Roadmaps for Critical Minerals Sustainability—What Can Be Achieved, Where and by When?	Desire Runganga, <i>Western Australia School of Mines</i>
1455 - 1510	Integrating Socio-Political Impacts on Local Mining Communities into Low-Carbon Technology Production Systems to Facilitate a Just Transition	Diana Rincon Valbuena, <i>University of Warwick</i>
1510 - 1525	Refreshment break	

Session seven: ESG and Minimising Environmental Impact continued...		
1525 - 1540	Industry-Academia Outreach: Engaging Future Professionals in Responsible Critical Minerals Development	Ben Lepley, <i>SLR Consulting</i>
1540 - 1555	Co-creating a roadmap for responsible nickel production in the Philippines	Rowan T. Halkes, <i>British Geolgoical Survey</i>
1555 - 1610	Estimating global extractable copper in subvolcanic brines	Michele Paulatto, <i>Imperial College London</i>
1610 - 1655	Panel discussion	Speakers tbc
1655 - 1710	End of day 2 wrap up	

Porphyry Prospectivity Mapping and Targeting on the Arabian Shield	Alex Tunnadine, <i>SRK Consulting (UK) Ltd</i>
A Century of Copper Slag Generation: Global Production Trends and Implications as a Secondary Resource of Critical Metals	Alexandria Tanciongco, <i>University of Leicester</i>
Unlocking Cornwall's Geothermal-Lithium Resources: Fault Reactivation, Fluid Flow and Permeability Evolution Through Time	Catherine Mottram, <i>University of Portsmouth</i>
Critical raw material potential of volcanogenic massive sulphide (VMS) deposits in the UK	Hannah Grant, <i>British Geolgoical Survey</i>
Iron Recovering from Fluorspar Tailings via Magnetizing Roasting and Magnetic Separation: A Sustainable Waste Minimisation Approach	Kemane Kgwete, <i>University of Witwatersrand</i>
Carbonatite-Hosted REE Prospectivity Mapping Under Label Scarcity	Miaozhou Tang, <i>Imperial College London</i>
Challenges of Limiting the Number of Input Variables in Machine Learning: A Case Study on the Prediction of REE-Bearing Phosphorites	Nasreddine Tahar Belkacem, <i>Ouargla University</i>
Fingerprints of Nickel Exploration in the Pulivendla-Vemula (P-V) sill in Cuddapah Basin:Geological Complexity and Discovery Potential	P V Sunder Raju, <i>CSIR-National Geophysical research institute</i>
Characterization of a shear-controlled graphite mineralization zone within the Eastern Ghat Mobile Belt through integrated geophysical methods: A case study of the Bandhabhuin graphite block, India	Ramjit Marndi, <i>Indian Institute of Technology Bhubaneswar</i>
New Exploration Guides for Mn and Rare Earth Element Mineralizations Associated with Central Saharan Cenozoic Anorogenic Volcanism	Riad Ben El Khaznadji, <i>Université des sciences et technologie Houari Boumediene</i>
Consensus Prospectivity Mapping and Uncertainty Assessment of Graphite Deposits: A Multi-Workflow Machine Learning Approach	Suchitra Behera, <i>Indian Institute of Technology Bhubaneswar</i>
Beyond Sulfide Oxidation: New Pathways for Cu, Au and Sulfur Recovery from Complex Concentrates	Ummul Sultana, <i>University of Queensland</i>
Mineralogical Controls on Nickel Redistribution during Lateritic Weathering: Insights from the Batu Putih Ni Laterite Deposit, Sulawesi, Indonesia	Yu Shen, China university of Geosciences
Digestion Method Controls on Using Geochemical Data for Rock Classification: Insights from the Camp Creek Cu-Mo-(Au-Ag) Porphyry Deposit, Northwestern British Columbia, Canada	Maxwell Long Porter, Imperial College London
Is AI really helping Geoscience Microscopy?	Rich Taylor, <i>Zeiss</i>
Critical metal by-product recovery on site: a case study for co-extraction of bismuth, tellurium and tungsten using Deep Eutectic Solvents at Björkdal Gold Mine	Lara Tritton, <i>University of Leicester</i>

Convenors:

- **Kathryn Goodenough**, British Geological Survey
- **Nick Gardiner**, University of St.Andrews
- **Sarah Gordon**, Satarla & Imperial College London
- **Karen Hudson-Edwards**, University of Exeter

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