

Copper Mineral Systems and Exploration Methods 21 February 2025

Audience: This one-day short course is designed for geoscientists at all levels who are keen to deepen their understanding of copper mineral systems.

Course Content: This course will provide insights into the major type of copper mineralization, including porphyry, IOCG and sediment-hosted systems. Presentations by recognized international and interstate experts in their fields will be complemented by talks showcasing the latest research being conducted at the Centre for Exploration Targeting (CET). The workshop is a collaborative effort between the Specialist Group in Economic Geology of the Geological Society of Australia, CET and the Centre in Critical Resources for the Future (CCRF), School of Earth and Oceans (SEO), University of Western Australia.

Date: 21 February 2025

Duration: 1 day- 08:00 to 17:00, 17:00 onwards sundowner (Perth time - GMT+8)

Location: The University Club of Western Australia, Entrance 1, Hackett Drive

Cost: CET, GSA or CCRF Members AU\$400 + GST | Non-Members AU\$800 + GST
University Postdocs and Fellows AU \$150 + GST | University Students \$100 + GST

Registration: For registration and payment information please visit our website:
www.cet.edu.au and for more information please email us at info.cet@uwa.edu.au



Specialist Group in Economic Geology
Geological Society of Australia

Centre for **EXPLORATION
TARGETING**



ARC CRITICAL RESOURCES
FOR THE FUTURE

Copper Mineral Systems and Exploration Methods

	SPEAKER	TOPIC
08:30 – 09:00		
REGISTRATION		
OVERVIEWS		
09:00 – 09:20	Pietro Guj (CET/SEO)	Will future copper resources and supply be adequate to meet the net zero emission goal?
09:20 – 09:40	Terry Hoschke (Alterrex)	The application of geophysics in exploration for porphyry Cu deposits
09:40 – 10:00	Walid Salama (CSIRO)	Geochemical behaviour of copper and its implications for mineral exploration in weathered terrains
10:00 – 10:20	Michael Outhwaite (Lithify)	Copper deposits of the Southwest Yilgarn Craton – Diversity through space and time
10:20 – 10:50		
COFFEE BREAK		
MAFIC INTRUSION-HOSTED, SEDIMENT-HOSTED AND VMS SYSTEMS		
10:50 – 11:20	Steve Beresford (Quantum)	Zoned polymetallic Cu-Ni-PGE deposits: or highest value copper deposits but rare
11:20 – 11:40	Weronika Gorczyk (CET/SEO)	What makes the Polish Kupfersheifer Cu deposit special?
11:40 – 12:10	Vince Crombez (Encounter Resources)	Exploring Australia for sediment-hosted copper: insights from Northern Territory basins
12:10 – 12:30	Chris Yeats (Outcrop Exploration)	The role of magmatic fluids in copper-rich VHMS – lessons from ancient and modern systems
12:30 – 13:30		
LUNCH BREAK		
MAGMATIC-HYDROTHERMAL SYSTEMS		
13:30 – 13:50	Tobias Schlegel (CSIRO)	Ingredients for high-grade IOCG mineralisation – insights from modal mineralogy and thermodynamic modelling
13:50 – 14:10	Adrian Fabris (GSSA)	Characteristics of IOGC deposits and implications for finding them
14:10 – 14:30	Giulia Consuma (CET/SEO)	The volatile element signature of zircon-hosted apatite from high-grade porphyry copper deposits
14:30 – 15:00	David Cooke (CODES)	Exploration targeting guided by whole-rock and detrital zircon chemical indicators of magmatic copper fertility
15:00 – 15:30		
COFFEE BREAK		
MAGMATIC-HYDROTHERMAL SYSTEMS		
15:30 – 16:00	Bob Loucks (CET/SEO)	Exploration targeting guided by whole-rock and detrital zircon chemical indicators of magmatic copper fertility
16:00 – 16:20	Jerry Dunga (CET/SEO)	Geology of the OK Tedi porphyry Cu-Au deposit: Recent understanding
16:20 – 16:40	Edmore Marima (CET/SEO)	Magmatic and metallogenic evolution of the Boddington Au-Cu deposit
16:40 – 17:00		
QUESTION & ANSWER		
17:00 onward		
SUNDOWNER		