

PORPHYRY Cu-Au One Day Short Course

Audience: The course is aimed at geoscientists from both industry and academia who wish to gain a better insight in the latest advances in Porphyry Cu- Au and magmatic-hydrothermal process in the formation of Porphyry Cu-Au deposits.

Language: English

Course Content: This one-day short course will provide a comprehensive overview of Porphyry Cu- Au and magmatic and hydrothermal processes in the formation of Porphyry Cu- Au deposits. Invited scholars and experts will present on the following key topics:

- Case Studies of Porphyry Cu-Au deposits
- Critical magmatic-hydrothermal processes in the formation of Porphyry Cu-Au deposits
- ❖ Debate: Fertility indicators -Do they work?
- ❖ Panel Discussion: What makes a high-grade Porphyry Cu-Au deposit?

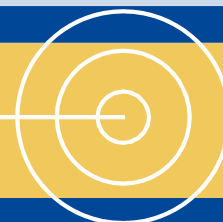
Duration: 1 day- 08:30 to 17:30, 17:30 onwards sundowner (Perth time - GMT+8)

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

Cost: CET Members AU\$300 + GST | Non-Members AU\$450 + GST | University Postdocs and Fellows AU\$100 + GST | UWA and Curtin Students attend for free

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**



Who will be looking after you -



Brian
Tattitch

Brian is a Senior Research Fellow of the CET at UWA. His research focuses on using fluid inclusions in natural and experimental systems to study the critical fluid mediated reactions that control high - temperature alteration and high-grade ore formation.



Steffen
Hagemann

Steffen is a Professor of Economic Geology and Director of the CET at UWA. His research focuses on structurally controlled hydrothermal mineral systems and their translation into exploration targeting. Steffen has supervised and co-supervised 91 PhD, MSc and honors students.

Schedule

TIME	TOPIC	PRESENTER
Monday 20/03/2023	PORPHYRY Cu-Au	
08:00-08:25	REGISTRATION	
08:25-08:30	Welcome and Overview of this short course	Steffen Hagemann & Brian Tattitch (CET)
	TOPIC: CASE STUDIES PORPHYRY Cu-Au Deposits Convenors: Brian Tattitch and Giulia Consuma	
08:30-09:30	Tops & bottoms of porphyry magmatism	John Dilles (Curtin Fulbright)
9:30-10:00	Ok Tedi - geological setting and discovery of the New York breccia pipe	Jerry Dunga (CET PhD student)
10:00-10:30	COFFEE BREAK	
10:30-11:30	The deep porphyry Cu-Mo Butte system in Montana, USA	John Dilles (Curtin Fulbright)
11:30-12:00	Stavely Cu-Au project: The Cayley lode discovery in Victoria	Chris Cairns (CEO Stavely Minerals Ltd)
12:00-12:30	The Boddington Au-Cu-Mo deposit: A hybrid magmatic-hydrothermal system	Steve Turner (Ex Newmont Chief Geologist)
12:30-13:30	LUNCH BREAK	
	TOPIC: MAGMATIC AND HYDROTHERMAL PROCESSES IN THE FORMATION OF PORPHYRY Cu-Au DEPOSITS: Convenors: Marco Fiorentini	
13:30-14:15	Ore fluids from source to surface: degassing, alteration and mineralization	Brian Tattitch (CET)
14:15-14:35	Molecular simulation of copper transport in hydrothermal and vapour fluids: implications for ore formation in PCDs	Yuan Mei (CSIRO)
14:35-15:20	Oxidation of magmas during gain and loss of water recorded by trace elements in zircon	Bob Loucks (CET Adjunct Professor)
15:20-16:00	COFFEE BREAK	
16:00-16:45	DEBATE: FERTILITY INDICATORS - DO THEY WORK? John Dilles and Bob Loucks	Convenors: Brian Tattitch and Marco Fiorentini (CET)
16:45-17:30	DISCUSSION: WHAT MAKES A HIGH GRADE PORPHYRY Cu- Au DEPOSIT?	Panel: G. Begg, J. Hronsky, M. Fiorentini, J. Dilles, B. Loucks, S. Turner, B. Tattitch, J. Dunga Convenor: Steffen Hagemann (CET)
17:30	SUNDOWNER (at CET- Robert Street Building Courtyard) <i>Organized by joint UWA-Curtin University SEG and SGA student chapters</i>	