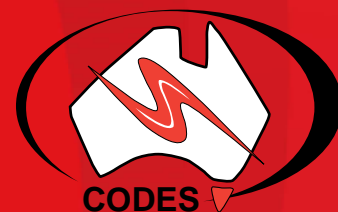


a short course on

Ore Deposit Models and Exploration Strategies

October 22 – November 2, 2012

incorporating the four-day symposium



RED METAL

21st Century Cu and Cu–Au exploration and research

October 22–25, 2012

Forecasts for the world's great economies indicate an increasing demand for both copper and gold in the coming decades. From where, and how, will these future needs be met?

This four-day symposium focuses on Cu and Cu–Au fundamentals: geochemistry, metallogeny, deposit genesis and exploration. The programme provides an up-to-date and in-depth analysis of many world-class Cu and Cu–Au systems formed throughout Earth history.



CODES, ARC Centre of Excellence in Ore Deposits
University of Tasmania, Hobart

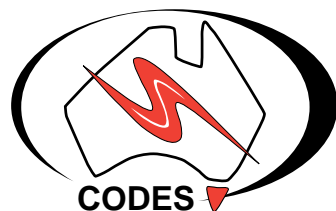


CIRCOS Provider
Code 05586B

The RED METAL symposium forms the first four days of CODES' Minerals Geoscience Masters short course Ore Deposit Models and Exploration Strategies. Together, the symposium and short course provide an up-to-date synopsis of key ore deposit types, presented by a range of Australian and international experts. Deposit types covered in the RED METAL symposium include Archean magmatic-hydrothermal and VMS Cu-Au, Proterozoic sediment-hosted Cu (Central African Copperbelt), Olympic Dam IOCG, and magmatic-hydrothermal (porphyry and epithermal) Cu-Au deposits of the SW Pacific.

Deposit types covered in the Masters short course include, orogenic, sediment-hosted and Archean palaeoplacer (Witwatersrand) gold, volcanic-hosted massive sulfide and sea-floor hydrothermal deposits, northern Australian Proterozoic sediment-hosted Zn-Pb-Ag, and magmatic Ni and PGE. A full day of lectures and practical exercises, addressing the location, characteristics, genesis and exploration strategies for each deposit type will be presented.

Ore Deposit Models and Exploration Strategies is offered as part of the national Minerals Geoscience Masters program. Non-MGM student participants may attend either the entire course or individual days from the program.



COURSE PRESENTERS

RED METAL invited speakers

Kathy Ehrig (Principal Geometallurgist, BHP-Billiton)

Terence Hoschke (Chief Geophysicist, Newmont)

Patrick Mercier-Langevin (Geological Survey of Canada and 2011 SEG Lindgren Award winner)

Graeme Reynolds (Superintendent of Geology – Boddington, Newmont)

David Selley (Principal Geologist, BHP-Billiton)

Noel White (Independent Consultant, Enargite Pty Ltd and CODES)

Carl Young (Chief Geologist – Randalls Gold Project, Integra Mining)

CODES presenters

Stuart Bull, David Cooke, Bruce Gemmell, Dima Kamenetsky, Ross Large, Jocelyn McPhie, Robert Scott

Masters short course invited speakers

Jeff Foster (Sirius Resources)

Andy Tomkins (Monash University)

CODES presenters

Stuart Bull, David Cooke, Garry Davidson, Bruce Gemmell, Julie Hunt, David Hutchinson, Ross Large, Peter McGoldrick, Andrew McNeill, Karin Orth, Robert Scott

TRAVEL AND ACCOMMODATION

Participants are responsible for their own travel to and from, and accommodation in, Hobart.

NATIONAL MINERALS GEOSCIENCE MASTERS PROGRAM

THE MOST COMPREHENSIVE MASTERS DEGREE IN MINERAL EXPLORATION AND MINING GEOLOGY ANYWHERE IN THE WORLD

The national Minerals Geoscience Masters program is intended for geoscientists seeking up-to-date skills and knowledge across the spectrum of economic geology applied to mineral exploration. A total of 16 two-week courses are offered over a 2 year period, by four participating universities: University of Tasmania (CODES), University of Western Australia (CET), James Cook University (EES) and Curtin University of Technology (WASM).

Course structure

At UTAS the Masters course can be completed in either of two ways:

Option 1: Completion of six course work units and a small research thesis. Four of the units must be completed at CODES, the remainder may be completed at other participating universities.

Option 2: Completion of eight course work units, at least four of which must be undertaken at CODES.

Duration: 18-24 months full time; up to 30 months part time (flexible in recognition of industry participants).

Entry qualifications: BSc (Hons) or BSc in geoscience with at least two years industry experience. English language proficiency requirements also apply.

Courses offered by CODES

- Ore deposit models and exploration strategies, 22 Oct – 2 Nov, 2012
- Ore deposits of South America (Chile, Peru), 10 – 24 Mar, 2013
- Ore deposit geochemistry, hydrology and geochemistry, 24 Jun – 5 Jul, 2013
- Geometallurgy, 21 Oct – 1 Nov, 2013
- Volcanology and mineralisation in volcanic terrains, next offered 2014
- Exploration in brownfield terrains, next offered 2014

Fees

In 2012, UTAS tuition fees are \$ 904 (AUD) per unit for domestic students and \$ 2,513 (AUD) for full-fee paying international students (FFPOS). Additional costs apply to field-based courses. Fees vary for courses at other MGM partner institutions.

For further information contact:

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CODES, Private Bag 126,
Hobart 7001, Australia.

Tel: + 61 3 6226 2786, Fax: + 61 3 6226 7662,
E-mail: Robert.Scott@utas.edu.au,
Website:
<http://www.utas.edu.au/codes/masters-short-courses>

PROGRAM

RED METAL SYMPOSIUM

Monday
22 October
Analysis of Archean magmatic-hydrothermal and VMS Cu-Au systems in both the Canadian Shield (*Mercier-Langevin*) and Yilgarn craton (*Reynolds, Young*). New research on copper metallogeny of seawater (*Large*). Talks will evaluate potential for major Cu-Au systems in Archean terranes, which are primarily explored for orogenic Au and magmatic Ni.

Tuesday
23 October
Proterozoic deposits: Central African Copper Belt and Olympic Dam IOCG. Day 2 is largely devoted to highlights from two 3-year, AMIRA research projects on sediment-hosted copper deposits of the CACB (Zambia and DRC). Talks will address deposit distribution, characteristics, genesis and exploration implications (*Selley, Bull, Scott*). Day 2 concludes with presentations on recent research into the formation of the giant Olympic Dam IOCG deposit, South Australia (*Ehrig, Kamenetsky, McPhie*).

Wednesday
24 October
Australia's backyard and current focus of frenetic exploration activity. Presenters will offer new perspectives on Cu-Au magmatic-hydrothermal systems in the southwest Pacific (*White, Cooke, Gemmell*) and geophysical expression of porphyry copper deposits (*Hoschke*).

Thursday
25 October

Course dinner: Wednesday 24 October, evening

Friday
26 October
New perspectives on orogenic gold. Models for orogenic gold deposits will be examined from a variety of perspectives, including structure (*Scott*), alteration and metamorphism (*Tomkins*) and source of metals (*Large*).

Saturday
27 October
Private study

Sunday
28 October
Sediment-hosted gold deposits. Results of recent research into Carlin-type, sediment-hosted, disseminated gold deposits, Nevada (*Scott, Large*) and Archean paleoplacer gold deposits of the Witwatersrand Basin, South Africa (*Large*).

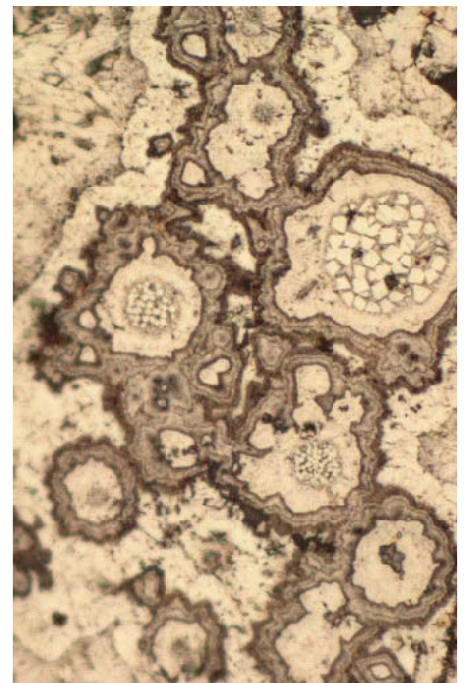
Monday
29 October
Volcanic-hosted massive sulfide (VHMS) and sea-floor hydrothermal deposits: formation, location, and exploration (*Gemmell, McNeill, Large*).

Tuesday
30 October
Northern Australian Proterozoic sediment-hosted Zn-Pb-Ag deposits (*McGoldrick, Bull*).

Wednesday
31 October
Magmatic Ni sulfide and PGE deposits (*Foster, Hutchinson*)

Thursday
1 November
Iron-oxide copper-gold and uranium deposits (*Davidson, Bull, Hunt, Orth*)

Friday
2 November
MGM student presentations and wrap-up



Ore Deposit Models and Exploration Strategies

October 22 – November 2, 2012
including the four-day symposium:

RED METAL

October 22 – 25, 2012

REGISTRATION FORM

PERSONAL DETAILS

Title – please circle (Prof / Dr / Mr / Mrs / Ms / Miss)

First name Last Name (Family name)

Preferred name (for name tag)..... Position

Company / affiliation

Address

City State Country Postcode / ZIP

Email Mobile / cell phone

Phone (home) Phone (work) Fax

Dietary requirements / allergies

Please return completed forms to:

Dr Robert Scott

CODES

ARC Centre of Excellence in Ore Deposits

University of Tasmania

Private Bag 126

Hobart Tasmania, Australia 7001

Email: Robert.Scott@utas.edu.au

Phone: +61 3 6226 2786

Fax: +61 3 6226 7662



REGISTRATION FEES

Fees are in Australian dollars and include 10% GST. Please tick box.

MGM student

CODES staff / students

Full course including Symposium (no charge*)

Course dinner – 24th October (\$80)

*Non-MGM students requiring course notes will be charged at cost of production

Industry participant

Full course, including RED METAL Symposium (\$3,960)

RED METAL Symposium only (\$2,640)

..... days (Masters course or Symposium) at \$660/day

Course dinner – 24th October (\$80)

Other students

Full course, including RED METAL Symposium (\$660)

RED METAL Symposium only (\$440)

..... days (Masters course or Symposium) at \$110/day

Course dinner – 24th October (\$80)

All participants please note

If not attending entire course, please circle selected days

October: 22 23 24 25 26 28 29 30 31

November: 1 2

PAYMENTS

Registrations (with full payment) must be received before October 12, 2012. Non-MGM students must provide proof of student status to obtain discount.

TOTAL AMOUNT DUE: \$

Payment options (please tick box)

Credit card (VISA/Mastercard only)

Payment reference number and web address for on-line payments will be issued upon receipt of your registration form.

Cheque or Bank Draft

Please make payable to "The University of Tasmania". Bank drafts must be made out in Australian currency.

Purchase Order

UTAS Account Number

Invoice

Please provide name and address of person/company to whom invoice should be sent. If same as above write "as above".

MGM STUDENTS: THIS FORM DOES NOT CONSTITUTE AN OFFICIAL UNIVERSITY ENROLMENT – YOU MUST ALSO ENROL THROUGH YOUR HOME INSTITUTION