



# FUTORES

Future understanding of tectonics, ores,  
resources, environment and sustainability

**Townsville, Australia**  
2nd - 5th June 2013

## SECOND CIRCULAR

### Themes

- *Noel White Symposium on ore deposits: current understanding and future directions in research and exploration*
- *Tectonics Symposium*
- *Basins and Energy Symposium*
- *Mineral Systems Approach to GIS-based Prospectivity Mapping Symposium*
- *Environment Preservation Symposium*
- *Future Trends in the Minerals Industry Symposium*

# Welcome

The FUTORES (Future and Understanding of Tectonics, Ores, Resources, Environment and Sustainability) conference will be held in tropical Townsville, Australia, on 2-5 June 2013. FUTORES will address all issues related to sustainable supply and utilisation of mineral and energy resources. The conference will have diverse themes, including a Noel White Symposium on current understanding and future directions in research and exploration of ore deposits, and concurrent symposia on the tectonic and structural setting of mineral and energy resources, basins and energy, prospectivity mapping, and environmentally sustainable earth resource exploitation. The Economic Geology Research Unit (EGRU) of James Cook University is proud to host this event and we welcome colleagues, industry partners, and students to attend this inspiring and exciting conference.

## FUTORES 2013 Conference themes:

### *Noel White Symposium on ore deposits: current understanding and future directions in research and exploration*

Co-sponsors: EGRU, SEG and SGA

Conveners: Zhaoshan Chang, David Cooke and Richard Goldfarb



Exploration for mineral resources is becoming more challenging geologically, at a time when the demand for mineral resources has greatly increased and the inventory of known resources is being rapidly depleted. Future exploration will need to target resources at increasing depths below the Earth's surface. To maintain a sustainable supply of mineral resources to society, more advanced exploration techniques, and in turn improved understanding of ore deposits, are needed. This symposium, in honour of Noel White, will highlight recent developments in the exploration and understanding of major types of mineral deposits, examine the key issues and techniques critical to future exploration, and discuss the way forward. This symposium will run for 3 days.

Noel White is a passionate geologist and sharp thinker with rich and diverse experience in both exploration and research. He has carried out exploration for ~40 years, and was the Chief Geologist of BHP Minerals Exploration 1992-1999. After retiring from BHP, he has been the director for several companies, and has provided advice on conducting comprehensive exploration programs to companies and governments globally. Noel is renowned as a global authority on epithermal and porphyry deposits, with expertise that spans geology, geochemistry and geophysics. He has published numerous significant papers, guided and participated in research, co-supervised PhD students at several universities as an adjunct professor, and has informally and unselfishly advised hundreds of students and junior geologists. Noel has taught numerous short courses on mineral resources in many countries. He has served on editorial boards of top journals including *Geology*, *Mineralium Deposita*, and *Journal of Geochemical Exploration*. He has also served on numerous committees for international economic geology societies such as the Society of Economic Geologists (SEG) and AusIMM, and was selected as both an SEG Thayer Lindsley and International Exchange lecturer. With deep insights into what is important for both industry and academia, and never afraid to voice his opinion, Noel continues to contribute significantly to exploration geoscience and continues to be a well-respected leader in such. This symposium will honour the career of Noel White by robustly discussing the origins of, and exploration for, the world's major types of ore deposits.

#### **Confirmed speakers:**

Noel White	Looking back from over the hill
John Thompson	Industry perspectives
David Cooke, Anthony Harris	Porphyry deposits
Larry Meinert	Skarns
Jeff Hedenquist	High - sulfidation epithermal
Stuart Simmons	Low - and intermediate-sulfidation epithermal
John Holliday	Geophysics in porphyry and epithermal deposits exploration
Robert Loucks	Magma fertility
Martin Fairclough	U-bearing IOCG
Steve Scott	VHMS
Jean Cline	Carlin-type
Ross Large	Sediment-hosted Au
Richard Goldfarb	Orogenic Au
Craig Hart	Intrusion related Au systems
Campbell McCuaig	Multiscale structural controls on mineral systems
David Leach	SEDEX and MVT
Chusi Li	Magmatic Ni-Cu-PGE deposits
David Groves	Summary and discussion on future directions

## ***Tectonics Symposium***

Convener: Tom Blenkinsop

This theme will address tectonics and structural geology through time from the Hadean to the present, at any scale from the microscopic to the whole earth. New results from field, experimental and numerical modelling are encouraged, as well as contributions that address the relation between tectonics, resources and sustainability.

### ***Confirmed Speaker:***

Mike Sandiford

## ***Basins and Energy Symposium***

Convener: Eric Roberts

This theme will address new insights into sedimentary basins and energy resources. The need for fossil fuels and alternative energy resources is continuing to drive the re-evaluation of mature basins and increased exploration into frontier basins. This symposium will highlight recent studies in stratigraphy, palaeontology, sedimentology, as well as those focused on coal geology, petroleum geology and other emerging resources such as coal seam and shale gas, that contribute to our understanding of sedimentary basins through time and space.

## ***Mineral Systems Approach to GIS-based Prospectivity Mapping Symposium***

Convener: John Carranza

Adoption of a mineral systems approach to GIS-based mineral prospectivity mapping has been advocated and implemented in the last decade as a key to effective delineation of exploration targets. We encourage contributions describing success stories of applying the mineral systems approach as well as contributions describing innovations in the application of this approach.

### ***Confirmed Speakers:***

Ignacio Gonzalez-Alvarez

Vladimir Lisitsin

Alok Porwal

Greg Partington

## ***Environment Preservation Symposium***

Convener: Christa Placzek

A rapidly growing interest in minimizing the environmental impacts of the development of mineral and energy resources presents a suite of new challenges. In particular, future resource extraction will emphasize minimizing impacts on the landscape. We encourage submissions that address both broad issues of environmental and economic sustainability of the minerals and energy resources industry, as well as innovative technical approaches to extraction and closure of operation.

## ***Future Trends in the Minerals Industry Symposium***

Convener: Trevor Shaw

This symposium will cover all other topics related to the minerals industry, including but not limited to, resource evaluation, mining, metallurgy, research-industry relationships and regional metallogeny.

### Sponsors



## Abstract

Deadline: 1 March 2013 - Please see website for formatting requirements. Limited to 250 words.

Published as digital abstract volume and included in the registration.

**Presentation** - Oral and poster

**Registration Fees** - register at <https://alumni.jcu.edu.au/futuresconference2013>

All fees are in Australian Dollars and inclusive of GST

Cancellation policy does apply - please see website for details

	Early Bird	Full Registration
EGRU member	\$610.00	\$660.00
non-EGRU member	\$770.00	\$880.00
Student		\$440.00
One Day		\$330.00
Accompanying person		\$165.00
Conference Dinner		\$110.00

## Short Courses

Title	Leader	Date	Fees	
Predictive Guides to Copper & Gold Mineralisation at Convergent Plate Margins	Robert Loucks	01 June 2013	EGRU Member	\$440.00
			Non- EGRU Member	\$550.00
			Student	\$220.00
Sediment Hosted & Orogenic Gold Deposits and their Exploration	Ross Large Neil Phillips	01 - 02 June 2013	EGRU member	\$770.00
			Non-EGRU Member	\$990.00
			Student	\$440.00
Mineral Spectroscopy for Analysis of Regolith and Hydrothermal Systems	Carsten Laukamp	06 June 2013	EGRU Member	\$440.00
			Non-EGRU Member	\$550.00
			Student	\$165.00
Gold In and Near Continental Margins (epithermal, porphyry, orogenic)	Stuart Simmons Richard Goldfarb	06 June 2013	EGRU Member	\$440.00
			Non- EGRU Member	\$550.00
			Student	\$220.00
Investing In Australia's Minerals Industry (designed for Chinese Investors)	Andrew White	11 - 17 June 2013		\$1500.00

## Field Trips

Title	Leader	Date	Fees
Palaeozoic Gold Deposits of the Charters Towers Region Nth QLD	Gregg Morrison Simon Beams	06 - 09 June 2013	\$1000.00
IOCG, SEDEX and Skarn Deposits in the Cloncurry - Mt Isa Region Nth QLD	Zhaoshan Chang Richard Lilly James Austin George Case	06 - 10 June 2013	\$1650.00

### EGRU Alumni Reunion Event

Alumni BBQ - Sunday 02 June 2013 - 10am - 3pm (TBC)

FREE Event

Register: <https://alumni.jcu.edu.au/EGRUAlumniReunion>

## SPONSORSHIP PACKAGES

### PLATINUM Sponsorship Package

\$11000.00 (GST inclusive)

Included in sponsorship package

3 x full delegate registrations

3 x conference dinner tickets (Monday 3rd June)

1 exhibition booth\*

program sponsor

program advertising - 1 x A4 page

on screen logo display between talks

The exhibition booth will be 3 metre wide x 2.4 metre deep with grey panels and include

1 x double 4 amp power point

twin 75w spotlights

fascia sign - black text on white - Company name only

*Furniture (not included) - to be ordered separately from the supplier*

*Extra signage - to be ordered separately from the supplier*

*\* does not include delegate registration as described in the Exhibition Registration Package*

### GOLD Sponsorship Package

\$5500.00 (GST inclusive)

Included in sponsorship package

2 x full delegate registrations

2 x conference dinner tickets (Monday 3rd June)

half price exhibition booth (\$1500.00)\*

on screen logo display between talks

The exhibition booth will be 3 metre wide x 2.4 metre deep with grey panels and include

1 x double 4 amp power point

twin 75w spotlights

fascia sign - black text on white - Company name only

*Furniture (not Included) - to be ordered separately from the supplier*

*Extra signage - to be ordered separately from the supplier*

*\* does not include delegate registration as described in the Exhibition Registration Package*

### SILVER Sponsorship Package

\$2200.00 (GST inclusive)

Included in sponsorship package

1 x full delegate registration

1 x conference dinner ticket (Monday 3rd June)

on screen logo display between talks

## EXHIBITION PACKAGE

Registration \$3000.00 (GST inclusive)

Included in Exhibition Registration

- 1 full delegate registration
- exhibition booth

The exhibition booth will be 3 metre wide x 2.4 metre deep with grey panels and include

- 1 x double 4 amp power point
- twin 75w spotlights
- fascia sign - black text on white - Company name only

Furniture (not included) - to be ordered separately from the supplier

Extra signage - to be ordered separately from the supplier

Exhibitor Only Registration\*

Registration \$330.00 (GST inclusive)

Included in registration

- daily conference catering
- 1 reception ticket

\* Exhibition only registration - must be paid in full with Exhibition registration deposit.

## PAYMENT

50% deposit is required on registration as an Exhibitor to secure a booth.  
The remainder is required no later than 30th March 2013.

*Cancellation policy does apply - please see website for details*

### **Conference location**

Jupiters Townsville Hotel  
Sir Leslie Thiess Drive  
Townsville QLD 4810  
Australia  
Tel: +61-7-4722 2333

### **Website**

[www.jcu.edu.au/futures](http://www.jcu.edu.au/futures)

### **Conference Host**

EGRU  
(Economic Geology Research Unit)  
James Cook University  
Townsville QLD 4811 Australia

### **Conference Organising Committee**

Zhaoshan Chang  
Christa Placzek  
Tom Blenkinsop  
Eric Roberts  
Judy Botting  
Kaylene Camuti  
Jason Beckton

### **Contact**

[futures@jcu.edu.au](mailto:futures@jcu.edu.au)

