



37th Symposium on the Geology of the Sydney Basin

PRELIMINARY PROGRAM

www.dpi.nsw.gov.au/minerals/info/symposium

6-7th May 2010

**Mercure Resort
Hunter Valley Gardens,
Pokolbin**

In the heart of the Hunter Valley

Initiated by the University of Newcastle in 1967, the long-running series of symposia on *Advances in the Geology of the Sydney Basin* has become a well-established focal point for the discussion of research findings and other studies of academic, industrial and community interest for one of the most significant geological provinces in Australia.

The 2010 symposium aims to continue this role, with broad coverage of fundamental geology, coal, coal seam gas, mineral, energy and groundwater resources, developments in geological technology and geological aspects of the natural and urban environment.

SCHEDULE & HIGHLIGHTS

Wednesday 5 May

7:00 PM **Welcome BBQ**
Riesling Room, Mercure Resort

Thursday 6 May

9:00 - 5:20 **Day 1 Symposium**
Opening Session One, with Session Two (A) & (B) running parallel after lunch.

6:30 **Symposium Dinner**
Shiraz Room, Mercure Resort.
Welcome wine reception followed by 3 course formal dinner with a guest speaker.

Friday 7 May

9:00 - 4:00 **Day 2, Symposium**
Session One (A) & (B) running parallel, followed by closing Session Two.

4:00 - 4:30 **Post-symposium afternoon coffee**

with support from



Hunter Region Branch



Mine Managers Association
of Australia

Registration Enquiries:

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Mercure Resort
Hunter Valley Gardens, Pokolbin
Program

Program - Day 1 Thursday 6 May 2010

Registrations 8:15 - 9:00

Session One (Open)

- Chair: Malcolm Ives**
- 9:00 **Welcome & Announcements from the Chair**
- 9:15 **Ralf Oppermann**
Application of Hi-Res Fault Imaging Technology in the Resource Industries
- 9:45 **Kaydy Pinetown**
Delineation of Coal Seam Gas domains in the Hunter Coalfield, Sydney Basin
- 10:15 **J. B. Ross and L. Webb**
Groundwater supplies across the Southern Sydney Basin - the Importance of the Geological structure
- 10:45 **Morning Tea**
- 11:15 **Brad Mullard**
NSW Energy Resources - Now and In the Future; Kenneth Mosher Memorial Lecture
- 11:45 **Zach Casley, Oil Bertoli, Clare Mawdesley, Grenville Davies & Doug Dunn**
Benchmarking Estimation Methods for Coal Resource Estimation
- 12:15 **Gareth Cooper & Graeme Beardsmore**
Geothermal Systems Assessment - Understanding risks in geothermal exploration in the Sydney Basin
- 12:45 **Lunch**

Session Two (A)

- Chair: John Edwards**
- 1:45 **Peter Hatherly, Terry Medhurst & Binzhong Zhou**
The Geological Strata Rating and its derivation from geophysical logs and seismic reflection data
- 2:15 **George Poropat**
Correlaton of 3D Deformation Measurement and Slope Stability Radar Monitoring
- 2:45 **Hamish Guthrie**
Whittle optimisations in coal
- 3:15 **Afternoon Tea**
- 3:45 **M. Campbell & R. England**
Options for Sink/Float Analysis - Economic & Technical Review
- 4:15 **Dick Sanders**
Novel Coal Interpretation Strategies
- 4:45 **Scott Thomson**
Reservoir Pressure, Stress and Tectonics
- 5:15 **Summing up & Announcements**
- 5:20 **Close of Day 1**

Session Two (B)

- Chair: Harry Bowman**
- 1:45 **Andrew Bray**
Tectonic subsidence in the Sydney Basin during the Late Permian to Mid Triassic
- 2:15 **Kevin Ruming**
East Australian Sand River
- 2:45 **Ray Nolan**
Wingecarribee Swamp - Its Rise and Fall in Geological Terms
- 3:15 **Afternoon Tea**
- 3:45 **J.G. Bailey, L. Hugo, & A. Callendra**
Char from Tailings - Waste to fertiliser and soil ameliorant: a win-win situation
- 4:15 **Phillip Blevin, Bruce Chappell & Heejin Jeong**
Heat producing potential of igneous rocks within and underlying the Sydney Basin: Some preliminary observations
- 4:45 **J.G. Bailey & M. Davis**
Feasibility of Mineral Carbonation in Serpentine of the Great Serpentine Belt, Bingara to Barraba, NSW
- 5:15 **Summing up & Announcements**
- 5:20 **Close of Day 1**



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Program - Day 2 Friday 7 May 2010

Registrations 8:15 - 9:00

Session One (A)

- Chair: Marianne Harvey**
- 9:00 **Welcome to Day 2 & Announcements**
- 9:15 **Abouna Saghafi**
A tier 3 method for estimating fugitive emissions from open cut coal mining:
Application to Hunter Coalfield
- 9:45 **Scott Thomson**
Gas Layering in the Subsurface: Implications for Greenhouse Gas Emissions
- 10:15 **James Douglas & B. F. J. Kelly**
3D Geological Modelling, and Basin Scale Assessment of Carbon Storage
Potential in the Sydney basin
- 10:45 **Morning Tea**
- 11:15 **Saju Menacherry, Alexandra Golab & John Kaldi**
A regional to site-specific assessment for potential CO₂ geological storage in
the Sydney Basin, Australia
- 11:45 **Lila W. Gurba, Alexandra Golab & Szczepan Polak**
CO₂ Geological Storage Opportunities in the Gunnedah Basin, and the
Southern Bowen Basin, NSW
- 12:15 **J. G. Bailey & K. A. Hyland**
Geosequestration potential of the Clare Sandstone, southern Gunnedah Basin
- 12:45 **Lunch**

Session One (B)

- Chair: Kevin Ruming**
- 9:00 **Welcome to Day 2 & Announcements**
- 9:15 **Colin Ward, David French, Maria Dubikova, Ken Riley & Zhongsheng Li**
Mobility of trace elements from fresh and long-stored fly ashes
- 9:45 **Colin Ward, Ken Riley, David French, Leanne Stephenson, Owen Farrell & Zhongsheng Li**
Leaching of trace elements from coal stockpiles in the Sydney and Collie
Basins
- 10:15 **Lei Zhao**
A Comparative Study of the Mineralogy and Geochemistry of the Bulli and
Great Northern Coal Seams, Sydney Basin
- 10:45 **Morning Tea**
- 11:15 **David Och, Ian Graham, Horst Zwingmann, Robin Offler & Lin Sutherland**
Significance of the Era Beach Dyke and Fault zone, Royal National Park, NSW
- 11:45 **Andrew Bray**
Numerically Modelling the Formation of the Lapstone Structural Complex
- 12:15 **Ian Graham, Zoe Hatzopoulos, Lin Sutherland & Horst Zwingmann**
The age, geochemical affinity and significance of the Maroota Basalt,
Hawkesbury, NSW
- 12:45 **Lunch**

Session Two (Close)

- Chair: Adrian Hutton**
- 1:45 **Chairul Nas**
Quality of Kalimantan Coking Coals Indonesia
- 2:15 **Jolanta Jaworska, Aristeo Mantaring & Andrew Alexander**
New geochemical and thermal data from RSDP Munmorah-1 and RSDP Vales Point-1 shed new light to the geothermal potential and the petroleum system in the north-eastern
Sydney Basin
- 2:45 **N. Bryant, W. McLean, J. Ross & S. Scarff**
Use of Environmental Isotopes for aquifer characterisation and connectivity assessment during CSG Exploration in the Hunter Valley, NSW
- 3:15 **D. Hunt, P. Dundon & J. Van Den Akker**
The Interpretation and Implications of Transient Groundwater Responses to Longwall Mining in NSW
- 3:45 **Summing up, thanks & farewell**
- 4:00 **Post-symposium coffee session**
- 4:30 **Close of Symposium**



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Registrations Close: 19 April 2010

REGISTRATION FORM

To Register

Complete and email this registration form to coal.geology@industry.nsw.gov.au or post to **Symposium Registrations, PO Box 344, HRMC NSW 2310.**

Delegate Details

TITLE:	FIRST NAME:	LAST NAME:	
POSITION:			
ORGANISATION:			
ADDRESS:			
CITY:	STATE:	POSTCODE:	
EMAIL:			
TELEPHONE: ()	FAX: ()	MOBILE:	

Student Package Details

STUDENT NUMBER:	CURRENT INSTITUTION:
CURRENTLY STUDYING (FULL TIME):	

Attendance Details

DATES:	EVENT:	NUMBERS/COST: <i>(All prices include GST)</i>
Wed 5 May	Welcome BBQ	1 Person \$25 <input type="checkbox"/> or 1 Person + Guest \$50 <input type="checkbox"/>
Thurs 6 May	Symposium Dinner	1 Person \$50 <input type="checkbox"/> or 1 Person + Guest \$100 <input type="checkbox"/>
Thurs 6 & Fri 7 May	Symposium	1 Person \$75* <input type="checkbox"/>
SPECIAL RATE:		
Student Package	Welcome BBQ, Symposium & Dinner	1 Student \$50* <input type="checkbox"/>
		Total Cost: \$ _____

DIETARY REQUIREMENTS:

Vegetarian Gluten Free Other (please specify) _____

*Includes presentations, morning & afternoon teas and lunch.

Payment Details

A cheque made payable to Industry & Investment NSW enclosed for \$ _____

Please charge the following credit card

Card Type:

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