

**PROCEEDINGS OF THE THIRTY SIXTH SYDNEY
BASIN SYMPOSIUM**

on

**“ADVANCES IN THE STUDY OF THE
SYDNEY BASIN”**

27-29 November, 2006

Technical Program

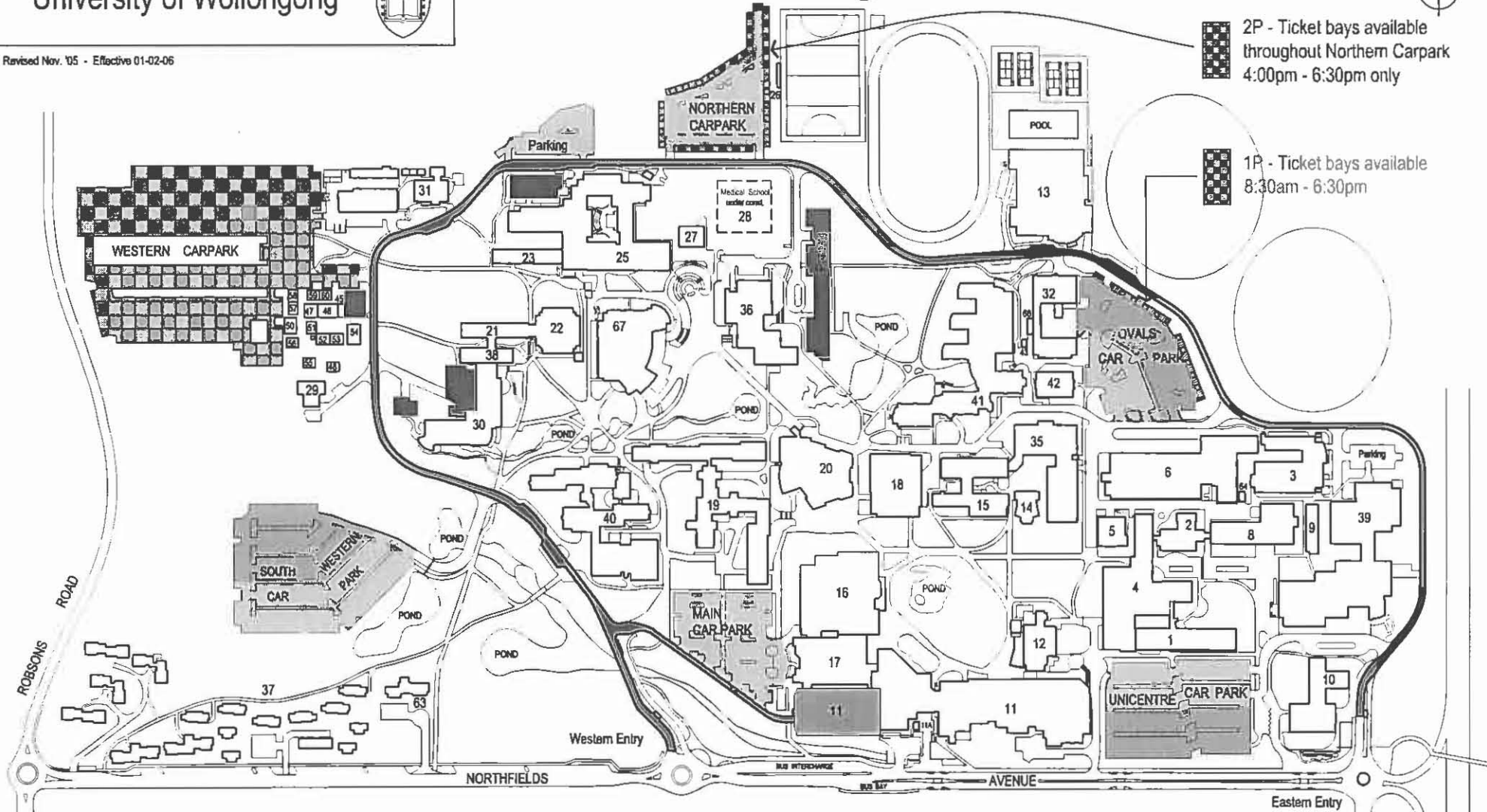



**University of Wollongong
NSW 2522 AUSTRALIA**






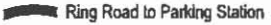


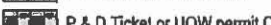

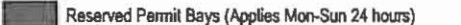

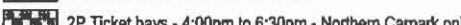
2006 Parking Conditions



 2P - Ticket bays available throughout Northern Carpark 4:00pm - 6:30pm only

 1P - Ticket bays available 8:30am - 6:30pm

LEGEND

-  Ring Road to Parking Station
-  UOW permit Carpark / bays
-  P & D Ticket Parking Only
-  P & D Ticket or UOW permit Carpark
-  Parking Station (Parking Levels E - L only) Open 24 hours
-  Reserved Permit Bays (Applies Mon-Sun 24 hours)
-  1P Ticket bays - 8:30am to 6:30pm
-  2P Ticket bays - 4:00pm to 6:30pm - Northern Carpark only

Note: P & D denotes Pay and Display.
Pay and Display Ticket conditions, 1P, 2P and UOW Permit Conditions apply 8:30am to 6:30pm Monday to Friday

PARKING RATES

Pay & Display	0-4hrs	4-6hrs	6+hrs	2P Parking	1P	2P
Unicentre Carpark				Northern Carpark	\$1	\$2
Ovals Carpark	\$2	\$4	\$6	1P Parking	1P	
South Western Carpark				Ovals Carpark	\$1	
Western Carpark	\$1	\$2	\$3	Parking Station	Hourly Rates Apply	

For more information about parking go to: www.uow.edu.au/about/parking/

**36th SYDNEY BASIN SYMPOSIUM
2006
ADVANCES IN THE STUDY ON THE SYDNEY BASIN**

Technical Program

Monday, 27 November 2006

08.00 –09.00 REGISTRATION Function Centre (Building 11)

Symposium Opening Function Centre (Building 11)
09.00- 09.05 Welcome Associate Professor Paul Carr

09.05-09.15 Official Opening Prof Lee Astheimer
Pro Vice-Chancellor Research,
University of Wollongong

Technical Session 1 Function Centre (Building 11)

Chair – Paul Carr

09.15-09.40 C McMahon Exploratory Blend Optimisation Modelling
09.40-10.05 S Thomson, S Adam, Enhanced Geological Modelling through
P Hatherly Advances in Logging and Interpretation
of Inseam Boreholes

10.05-10.40 Kenneth George Mosher Memorial Lecture
Emeritus Prof. Jim Galvin The Elevated Role of Geology in Today's
World

10.40-11.00 Morning Tea - Function Centre (Building 11)

11.00-11.25 T Peters, N Hendrick Applications Of Seismic Reflection In The
Coal Environment

11.25-11.50 K Bartlett, J Edwards The Use of Acoustic Scanner Results for
Mine Design

11.50-12.15 P Hatherly, S Thomson, Geophysical Log Analysis for the Southern
M Armstrong Sydney Basin

12.15-12.40 J Edwards, K Bartlett, Exploration of Coal Deposits
P Hatherly, J. Lea

12.40-13.30 Lunch – Function Centre (Building 11)

Technical Session 2

Chair – Chris Fergusson

13.30-13.55 C. Hopley, B Jones

13.55-14.20 W McLean, A Averkiou

14.20-14.45 M O'Donnell, G O'Brien,
A.Hutton

14.45-15.10 C Hopley, B Jones
Puotinen, M.

15.10-15.40 **Afternoon Tea - Function Centre (Building 11)**

15.40-16.05 C Ward, D French,
C Heinrich, H Bowman

16.05-16.30 W Pickel

16.30-16.55 C Ward, Z Li, L Gurba

16.55-17.20 A Hutton, M Johnson,
M Gentz

Function Centre (Building 11)

Morphological and Stratigraphic Evolution
Of The Wandandian Creek Delta,
St Georges Basin, New South Wales
The Port Botany Hawkesbury Sandstone
LPG Cavern: An Overview of Cavern Design
Operation And Monitoring.

Factors Affecting Water Quality in the
Wingecarribee Shire Council Local
Government Area

Morphological Changes, Assessed within
a GIS Framework, in the Prograding
Macquarie Rivulet Delta, New South Wales

Fly Ash – Waste Or Resource?

Organic Petrology – State of the Art
(An Overview)

Rank and Maceral Chemistry of the Greta
Coal Measures in the Sydney and
Cranky Corner Basins

Petrography of Hawkesbury Sandstone and
Water Movement

Tuesday 28 November 2006

Technical Session 3

Function Centre (Building 11)

Chair – Greg Poole

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|---------------------|--|--|
| 08.30 –08.55 | Prendergast E., Healy, B.,
Kyan, D., Demidjuk, Z.,
McCaughan, G., Woodfull, C.
and Munroe, S. | Multiple Data Sets Used to Evaluate Geology
and Structure: Bowen and Surat Basins
Queensland |
| 08.55-09.20 | C Fergusson | Review of Structure and Basement Control of
The Lapstone Structural Complex, Sydney
Basin, Eastern New South Wales |
| 09.20-09.45 | A Saghafi, M Faiz,
D Roberts | Gas Reservoir Properties of Sydney Basin
Coals and Impacts on CO ₂ sequestration |
| 09.45-10.10 | K Pinetown, A Saghafi,
P Grobler | Effects of Igneous intrusions in the Coal
Measures of the South African Karoo Basin
and Associated Coal Seam Gas |
| 10.10-10.35 | J Esterle, R Williams,
R Sliwa, M Malone | Variability in Coal Seam Gas Contents that
Impacts on Fugitive Gas Emissions for
Australian Black Coals |
| 10.35-11.00 | Morning Tea - Function Centre (Building 11) | |
| 11.00-11.25 | B Davis, J Esterle, D Keilar | Determining the Geological Controls on the
Spatial Distribution of Phosphorus within
Coal Seams Mined at South Walker Creek
Mine, Bowen Basin, Central Queensland,
Australia |
| 11.25-11.50 | B Beamish, F Clarkson | Self-heating Rates of Sydney Basin Coals –
The Emerging Picture |
| 11.50-12.15 | M Ahmed, H Volk,
S George, M Faiz | Organic Geochemical Characteristics of Late
Permian Coals from the Southern Sydney
Basin, Australia |
| 12.15-12.40 | D Och | Greater Sydney Region Audit and Gaps
Analysis |
| 12.40-13.30 | Lunch – Function Centre (Building11) | |

Technical Session 4

Chair - Joan Esterle

13.30-13.55 M Creech

13.55-14.20 L Daigle

14.20-14.45 M Williams, P Carr,
B Jones

14.45-15.10 A Hutton

Function Centre (Building 11)

RIP: The Wollombi Coal Measures
Primary Fabric and Fracture Distribution
Within the Cordeaux Crininite Intrusive
Identification of the Permian-Triassic
Boundary in the Southern Sydney Basin
OH&S Legislation in the Coal Industry
What Prompts Change?

15.10-15.30 Afternoon Tea - Function Centre (Building 11)

15.30-15.55 M Dawson, C Coxhead,
A McMinn,

15.55-16.20 K David

16.20-16.45 P Carr, B Jones, B Selleck

16.45-17.10 M Dawson

17.10-17.35 J Griffin, A Hutton

Greta Coal Measures in the Werris Creek
Area, New South Wales

Overview of the Hydrogeology of the
Western Coalfields – Ulan Coal Mine Case
Study

The Sydney Basin and Frozen Prawns –
the Cool Mineral Connection

Geology of The Willow Tree-Ardglen Area,
New South Wales: A Reappraisal

Wingecarribee Peat Swamp, Southern
Highlands, New South Wales – and Its Water