



Geo-soundings

NEWSLETTER - DECEMBER 2004

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WELCOME

Welcome to the 4th and final edition of Geosoundings for 2004. During this last quarter, staff and students have been very active, receiving awards and prizes in recognition of their worthy achievements. Also there have been **4 journal publications, 13 conference presentations** at 4 major conferences and **11 public presentations**.

We hope you enjoy this edition and sincerely wish all recipients the very best of Seasons Greetings and a very prosperous and satisfying New Year.

AWARDS/PRIZES/SCHOLARSHIPS/GRANTS

2004 SEG DISTINGUISHED ACHIEVEMENT AWARD FOR THE CRGC

As previously reported in Geosoundings (2nd Edition), the **Curtin Reservoir Geophysics Consortium** received this prestigious award at the October SEG Conference in Colorado. **Prof. John McDonald**, the Founding Director, proudly accepted the award on behalf of the Consortium & Department and is pictured below accepting the plaque. John also received a certificate for recognition and appreciation for service as a Technical Program Session Chair.



John McDonald receiving the Distinguished Achievement award from the SEG President, P. Duncan.

Prof. Brian Evans has been appointed as a member of **MERIWA's Mineral Research Advisory Committee (MRAC)**, representing Curtin University of Technology. The appointment was made by the Government Minister and approved by Cabinet on 25 October 2004. Responsibilities and duties as a member of MRAC include the attendance at meetings of the Committee; provide technical expertise to special Sub-Committees that assess grant applications; and consider and provide advice to the Board on any matter referred to MRAC. Following this appointment, Brian has also been appointed as **Chairman of the Hydrocarbon Sub-Committee**, one of five technical sub-committees associated with MRAC. This appointment will involve the assessment of 3 or 4 hydrocarbons research proposals per year.

Dr Peter Hatherly, a long-standing adjunct staff member of the Department has received the '**2004 Ingall Memorial Award**'. This award was presented in Sydney at the ASEG-PESA conference in August. Dr Peter Hatherly received the award for his promotion of geophysics to the wider community. We congratulate him on receiving this award.

We would like to congratulate **Jill Slater** on her new position at **Preview** journal. Jill will be writing their '**Web Waves**' column. Congratulations Jill.

Don Hunter received a student prize of \$500 from ASEG to attend the SEG in Denver, Colorado.

Winners of the **ASEG (WA Branch) Student Night** presentations were:

Mr. Michael Whitford - Best Technical Content Prize
and

Ms. Jill Slater - Best Presentation Prize

Both students will be presented with their prizes (Laser Pens) at the forthcoming AGM of the ASEG (WA Branch) to be held on Wednesday 8th December 2004.

Mr Owen Davis, a gifted undergraduate student in the BSc Geophysics course has been awarded a **Science and Innovation Studentship Award for 2004**. This will involve Owen undertaking a project with GEOAG during the summer vacation (December 2004 – February 2005). Owen will receive his award at an official presentation ceremony to be held on the 2nd December in the Premier of Western Australia's Boardroom. We congratulate Owen on this achievement.

JOURNAL PUBLICATIONS

Li, R., Uren, N., McDonald, J., and Urosevic, M., 'Recovery of elastic parameters for a multi-layered transversely isotropic medium' *Journal of Geophysics and Engineering*, 327-335.

Muller, T., Hardy, B., and Gurevich, B., 'Attenuation and dispersion in partially saturated porous rocks: theory and numerical simulation' *Preview* 112, 15.

Norvill, M., 2004, 'Getting to know your noise' *Preview* 111, 50.

Shepherd, A., and McDonald, J.A., 2004, 'Numerical modelling of sea movement on seismic streamers in relation to swell noise on data' *Preview* 111, 71.

CONFERENCES PRESENTATIONS

NEAR SURFACE 2004 10TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS, UTRECHT, THE NETHERLANDS, 6-9 SEPTEMBER

Norvill, M., and Kepic, A., 2004, *Improving signal-to-noise in electrical and EM methods with sensor arrays.*

SEG INTERNATIONAL EXPOSITION AND SEVENTY-FOURTH ANNUAL MEETING, DENVER, COLORADO, 15-10 OCTOBER

Gurevich, B., 2004, *Seismic attenuation in a porous rock with spherical heterogeneities.*

Hunter, D., and Kepic, A., 2004, *The effect of magnetic gradients on SNMR measurements.*

Kepic, A., and Rosid, M., 2004, *Enhancing the seismoelectric method via a virtual shot gather.*

Lambert, G., Gurevich, B., and Brajanovski, M., 2004, *Numerical modelling of attenuation and dispersion of P-wave in porous rocks with planar fractures.*

Muller, T., and Gurevich, B., 2004, *Seismic attenuation and dispersion due to wave-induced flow in 3-D inhomogeneous porous rocks.*

Thompson, T.A., Lambert, M.G., Hartley, B.M., and Glinsky, M.E., 2004, *Prestack hyperspace propagation for automated event picking.*

1ST NATIONAL SALINITY ENGINEERING CONFERENCE, PERTH, 9-12 NOVEMBER

Hunter, D.R., and Kepic, A., 2004, *Surface nuclear magnetic resonance - A new geophysical technique for hydrogeological investigations.*

Hunter, D.R and Kepic, A., 2004, *SNMR - a new geophysical technique for hydrogeological investigations.*

Meyers, J.B., and Hashemi, A., 2004, *HoistEM time-domain helicopter electromagnetic surveying for subsurface salinity mapping.*

Wilkes, P., Abbott, S., Harris, B., and Dogramaci, S., 2004, *Ground geophysics for rapid location of buried valleys below high value salt-affected land at Tammin, WA.*

Street, G., and Abbott, S., 2004, *Geological controls on salinity reflected in geophysical data.*

Rosid, M., and Kepic, A.W., 2004, *Mapping changes in salinity and hydraulic permeability via the seismoelectric method.*

PUBLIC PRESENTATIONS

ASEG WA BRANCH STUDENT NIGHT, 13TH OCTOBER

Kriege, R., 2004, *Determination of interfaces within the regolith using near surface geophysical and petrographic methods at the Whirling Dervish gold prospect, Western Australia.*

Newman, J., 2004, *Acoustic inversion and AVO analysis of time-lapse analogue reservoir modelling data.*

Slater, J., 2004, *Appraisal of fault connectivity and reactivation potential, Laminaria High, North West Shelf: implications for the preservation of hydrocarbons.*

Whitford, M., 2004, *Geophysical properties of the regolith near the Victory Gold Mine, Kambalda, Western Australia.*

CHINA UNIVERSITY OF GEOSCIENCES, 18TH OCTOBER

Li, R., 2004, *Analysis of wave propagation in layered transversely isotropic medium.*

Li, R., 2004, *Numerical simulation of seismic response to CO2 storage.*

CRC LEME WESTERN REGOLITH SYMPOSIUM, 18-19 NOVEMBER 2004

Abbott, S., 2004, *Airborne geophysical data, including electromagnetics, enhances rapid catchment appraisal in the Upper Kent Recovery Catchment.*

Beckett, K., 2004, *Observations on the correlation between uranium and thorium radioelement channels in Western Australia airborne radiometric surveys.*

Hashemi, A., 2004, *HoistEM data processing for discovery of conductive manganese ore under cover.*

Hunter, D., 2004, *The effect of magnetic gradients on SNMR measurements.*

Whitford, M., 2004, *Geophysical properties of regolith near the Victory Gold Mine, Kambalda, Western Australia.*

*We take this opportunity to wish each
and every one of you a Merry
Christmas and a very Happy, Safe
and Prosperous New Year.*

