



Geo-soundings

NEWSLETTER – JUNE 2008

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WELCOME

Welcome to the second quarterly Geosoundings Newsletter for 2008. As listed below, journal and conference papers have continued, resulting in **6 Journal publications** and **10 conference presentations**. We're also happy to report on a number of student prizes and awards that have been bestowed on some of our gifted geophysics students during the past quarter. We hope that you will enjoy this edition and as always, we are very happy to receive any feedback from our readers.

JOURNAL PUBLICATION

Bona, A., Slawinski, M.A., *Comparison of two inversions for elasticity tensor: Journal of Applied Geophysics*, 65(1), p. 6-9.

Makarynska, D., Gurevich, B., Ciz, R., Arns, C.H., & M.A. Knackstedt, *Finite element modelling of the effective elastic properties of partially saturated rocks: Computers & Geosciences* 34, p. 647-657.

Baker, B.R., Gessner, K., Holden, E.J., & **A.P. Squelch**, *Automatic detection of anisotropic features on rock surfaces: Online publication, Geosphere*, 4(2), pp. 418-428.

Pervukhina, M., & M. **Lebedev**, *Comments on "Electrical conductivity of open-cell metal foams" by K.P. Dharmasena and H.N.G. Wadley [J. Mater. Res. 17, 625 (2002)]*: *Journal of Materials Research*, 23, pp. 1202-1206.

Lebedev M., & S. Krumdieck., *Optically transparent, dense alpha-Al₂O₃ thick films deposited on glass at room temperature: Current Applied Physics*, 8, pp. 233-236,

Karpfinger, F., Gurevich, B. & A. Bakulin, 2008, *Computation of Wave Propagation Along Cylindrical Structures Using the Spectral Method*, *J. Acoust. Soc. Amer.*, 124(2),

CONFERENCE PAPERS

Grochau, M., & B. Gurevich, *Testing Gassmann fluid substitution using sonic logs and core measurements in a sandstone reservoir: EAGE Annual Conference, Rome, Italy, 9-12 June 2008.*

Makarynska, D., Gurevich, B., Ciz, R., & K. Osypov, *Fluid substitution in rocks saturated with heavy oil: EAGE Annual Conference, Rome, Italy, 9-12 June 2008.*

Urosevic, M., Sherlock D., Kepic A., & S. Nakanishi, *Time lapse VSP program for Otway Basin CO₂ sequestration pilot project: EAGE Annual Conference, Rome, Italy, 9-12 June 2008.*

Nadri, D., & B. Hartley, *Non-linear estimation of Thomsen's anisotropic parameters in a dipping TI media: poster presentation, EAGE Conference & Exhibition, Rome, Italy, 9-12 June 2008.*

Al Ramadhan, A.A. & B.M. Hartley, *3D Tomography imaging using micro-seismic events: poster presentation, EAGE Conference & Exhibition, Rome, Italy, 9-12 June 2008.*

Stuermer, K., Ciz, R., Shapiro, S.A., Saenger, D.H., & **B. Gurevich**, *Microscale Modeling of Heavy Oil Rocks: EAGE Conference & Exhibition, Rome, Italy, 9-12 June 2008.*

Harris, B.D., Urosevic, M., Kepic, A., & M. Sykes, *Design and installation of a permanent three-component geophone string at an aquifer storage and recovery site: Beenyup Western Australia: SAGEEP Symposium, Philadelphia, Pennsylvania, 6-10 April 2008.*

Kepic, A., Campbell, T., & C. Hinz, *Mapping the extent and activity of tree root zones with self potential and misse a la masse: SAGEEP Symposium, Philadelphia, Pennsylvania, 6-10 April 2008.*

Hatherly, P.J., **Urosevic, M.**, & B. Zhou, *Seismic inversion for geotechnical properties relevant to coal mining: SAGEEP Symposium, Philadelphia, Pennsylvania, 6-10 April 2008.*

Brajanovski, M., *Seismic anisotropy in Exmouth Basin: ARRC Seminar, Perth, 3 June 2008.*

AWARDS/GRANTS/HONOURS

2008 AusIMM AWARDS FOR ACADEMIC EXCELLENCE IN 2007

Mr. Christopher SEMENIUK was nominated as the best **fourth** year student in the BSc (Geophysics) Honours degree program. Christopher graduated at the end of 2007 with **First Class Honours**. His Honours thesis was entitled: *"3D seismic reflection survey design and modelling at the Beenyup Waste Water Treatment site, Western Australia"*, co-supervised by Dr. Milovan Urosevic and Dr. Brett Harris.

Mr. Richard PRESSER was nominated as the best **third** year student in the BSc (Geophysics) degree program. Richard completed the BSc Geophysics degree at the end of 2007 and is currently enrolled full time (2008) in the BSc (Geophysics) Honours course and is undertaking a 'minerals' related research project provisionally entitled *"Modelling of the Marra Mamba Iron Formation based on gravity, magnetic and borehole datasets within the Kangeenarina Well tenement"*. His Curtin project supervisor is Mr. Paul Wilkes. This project is supported by Rio Tinto.

Mr. Sean HUGHES was nominated as the best **second** year student within the BSc (Geophysics) degree program.

Mr. Jason VALURI was nominated as the best **first** year students in the BSc (Geophysics) degree program.

PETROLEUM ENGINEERING SOCIETY OF AUSTRALIA (PESA) STUDENT PRIZE 2007 - ELWOOD HORSTMAN PRIZE AWARDED TO THE BEST FULL TIME HONOURS STUDENT

A requirement for nomination for this prize required that the nominee be a student who was enrolled full time in an Honours degree and undertook a 'Petroleum' related research project.

Mr. Matthew SAUL has been awarded the Elwood Horstman Prize for the best Petroleum Honours student in the BSc Geophysics (Honours) degree program in 2007. Matthew graduated at the end of 2007 with **Second Class Honours**. His Honours thesis was entitled: *"The virtual source method - verifying the concept using numerical and physical modelling"*. His research was co-supervised by Prof. Brian Evans and Assoc. Prof. Bruce Hartley. Matthew received his award at a recently held PESA Committee Meeting.

STAFF

John McDonald (now retired but currently holds an adjunct professorship with the Department), recently advised of his further appointment as an Adjunct Senior Principal Research Fellow with the School of Earth and Environmental Sciences at James Cook University. The appointment is to 31 January 2011.

During the appointment, John McDonald will continue to work on geophysical related activities in collaboration with Dr. Paul Nelson and Professor Curtis Link at Montana University.

We congratulate John on his further Adjunct appointment at JCU.

Prof Brian Evans recently accepted a secondment to manage the Department of Petroleum Engineering at Curtin University. This has now resulted in Professor Evans receiving a 3 year contract as Head of the Department of Petroleum Engineering.

We congratulate Brian on this achievement.

UPCOMING EVENTS

SEG SUMMER RESEARCH WORKSHOP
Galway, Ireland, 20-24 July

13 IWSA (SEISMIC ANISOTROPY)
Denver, Colorado, 10-15 August

GEOPHYSICS AT THE CROSS-ROADS
5th Congress and Technical Exhibition
5-8 October, 2008, Belgrade, Serbia

SEG ANNUAL CONFERENCE
Las Vegas, USA, 9-14 November 2008

CHDG ANNUAL MEETING
Rottneest Island, Nov/Dec 2008