



Geo-soundings

NEWSLETTER – SEPTEMBER 2009

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WELCOME

We welcome you to this edition of *Geosoundings*. Two reviewed papers have been published in internationally recognised journals, and six conferences presentations were made. We hope you enjoy the contents of this newsletter.

JOURNAL PUBLICATION

Galvin, R. J., & **B. Gurevich**, *Effective properties of a poroelastic medium containing a distribution of aligned cracks*, J. Geophys. Res., 114, B07305.

Sun, Z., **Squelch, A.**, Bartlett, A., Cunningham, K., & Lawrence-Brown, M., *3D Stereoscopic Visualization of Fenestrated Stent Grafts*, Cardiovasc Intervent Radiol, 32, pp. 1053–1058.

CONFERENCE PRESENTATIONS

Cantwell, N., Cooper, M., **Meyers, J.**, Martin, N., & R. Sainty, *A review of the Jaguar Cu-Zn-Ag VMS discovery and subsequent geophysical trials*, Abstract, ASEG Conference, February 2009, Adelaide, S.A.

**SEG 2009 Summer Research Workshop
23-27 August 2009, Banff, Canada**

Oral presentations:

Pevzner, R., Urosevic, M., Shulakova, V., & A. Kepic, *Limits of seismic land data repeatability.*

Urosevic, M., Kepic, A., Pevzner, R., & S. Sharma, *Injection of CO₂ into a depleted gas reservoir - can we monitor it?*

Shulakova, V., Pevzner, R., Urosevic, M., & A. Kepic, *Incorporating various vintages into time-lapse studies: Otway Basin example.*

Poster presentations:

Urosevic, M., Pevzner, R., & S. Vidal-Gilbert, *CO₂ monitoring with time-lapse seismic anisotropy?*

Wisman, P., & M. Urosevic, *Fluid substitution: identifying in-situ saturation type from well logs to predict 4D seismic response for CO₂ sequestration, CO₂CRC Otway Project,*

PUBLIC PRESENTATIONS

Harris, B., *Measurement and analysis of acoustic velocities in shallow high permeability sands/sandstones at different transmission frequencies and confining pressures*, Curtin-CSIRO geophysics group seminar, 6th August, ARRC Building.

AWARDS/GRANTS/HONOURS

Congratulations to the following students on being awarded their PhD degrees:-

Grochau, M.H., *Investigation of pressure and saturation effects on elastic parameters: An integrated approach to improve time-lapse interpretation.*

Toms, J.J., *Effect of fluid distribution on compressional wave propagation in partially saturated rocks.*

Harrison, C.B., *Feasibility of rock characterization for mineral exploration using seismic data.*

Vice Chancellor's List:-

Mr. Reece Murrell was nominated for the **Vice-Chancellor's List** as the best overall performing geophysics student at the conclusion of Semester 1 2009.

PATENT APPLICATION

Imanaka; Y., Akedo; J., Lebedev; M., have lodged a patent application for "Aerosol deposition process" patent number US 7579251, granted August 25, 2009.

RESEARCH HIGHLIGHTS

A new national research centre, the

Deep Exploration Technologies Cooperative Research Centre

which includes Curtin University and UWA, is aiming to achieve a change in the development of mineral exploration technologies. **Anton Kepic** was interviewed by journalist Mark Beyer, and an article and photo was published on 13 August in WA Business News, p.3. In this article, Anton told WA Business

News that there are plenty of minerals to find, but it needs new technology. The CRC also aims to recruit drilling contractors, equipment manufacturers and junior miners as affiliate partners. Much research will be done by Curtin in association with the main partners namely CSIRO, University of Adelaide and Geoscience Australia.

PUBLIC RELATIONS/EXPOS

The following expos were held, where staff and students were involved:

- 9th July** *Australian Student Mineral Venture:* **Dominic Howman** spent the day with a group of students who are interested in Earth Sciences, demonstrating geophysical techniques.
- 12th August** *ASEG Student night:* **Dominic Howman**, assisted by **Sean Simpson**, talked to school students about what geophysics is and which TEE subjects are suitable for entry.
- 16th August** *Curtin Open Day:* **Dominic Howman**, **Anton Kepic**, **Andrew Squelch** and **Maxim Lebedev** demonstrated laboratory and field equipment on Henderson Court.



Andrew Squelch with visitors during Curtin Open Day

- 18th August** *Maths/Science Futures @ Como:* Maths and Science week activity organized by Como High School. **Dominic Howman** displayed and explained career paths in geophysics as well as hands-on-activities.
- 24th August** *National Science week @ Curtin:* **Dominic Howman** demonstrated to students the use of RADAR and magnetic techniques in geophysics.

Once again, thank you to all those who volunteered their time to support these promotional activities each year. We are very grateful to you.

3rd YEAR FIELD TRIP

The annual 3rd year field trip was held at Hampton Hill Station, East of Kalgoorlie. The fieldwork was sponsored by Bulong Mining Pty. Ltd. and concentrated on finding alluvial gold around the old town site of Bulong. Party leaders **Anton Kepic**, **Dominic Howman**, **Vladimer Gacesa**, **Elmar Strobach** and **Luke Gibson** took charge of the 31 students attending. Students were instructed in the methods of seismic reflection, electromagnetics, resistivity, surveying and magnetics. A highlight for the students was the last night around the campfire where **Cranston Edwards** (Bulong) gave away two gold nuggets to two lucky students whose names were pulled out of a hat.



31 students and leaders around the campfire

STAFF NEWS

Milovan Urosevic's application for promotion to *Associate Professor* has been successful and we congratulate him on his promotion.

We also want to congratulate **Brett** and **Jen Harris** on the arrival of their new-born baby-girl **Chelsea Ling Harris**, on 24th August.

We would also like to acknowledge the contributions made to Exploration Geophysics by **Paul Wilkes** and **Pier Bruno**, and it is with regret that we fare-welled them recently. Paul will be still lecturing until the end of the year, but Pier and his family moved back to Italy. We wish them well in their future careers, and we would like to offer our thanks for their contributions to the Department.

UPCOMING EVENTS

SEG INTERNATIONAL EXPOSITION & ANNUAL CONFERENCE

Houston, Texas, USA, 25-30 Oct.

AAPG INTERNATIONAL CONFERENCE & EXHIBITION

Rio de Janeiro, Brazil, 15-18 Nov

2009 CO2CRC SYMPOSIUM

Coolum, Sunshine Coast, 30 Nov - 3 Dec

CURTIN RESERVOIR GEOPHYSICS CONSORTIUM (CRGC)

Rottneest Island, 10-11 Dec