Welcome to the second quarterly newsletter of Geosoundings for 2005. This has been a very productive quarter, resulting in 7 journal publications and 15 conference presentations being delivered at 5 conferences. The other good news as detailed below, is that the Department has been successful in obtaining another COE, which is to be jointly funded from the WA State Government and industry partners. We also welcome two new staff members, Dr Mark Lwin and Mrs Dina Makarynska to the Department. (See brief profiles.)

CENTRE OF EXCELLENCE

Our application for a Centre of Excellence (COE) in High Definition Geophysics has been conditionally approved by the State Government. The COE is planned to officially start on 1 Jan 2006 and will receive $2.3M in cash support over 4 years from the State Government, $1M from Curtin University and pledges from industry that will total more than $10M over 5 years to support the COE research projects. Industry partners currently pledging support for the COE include: ISA Technologies, Goldfields, Placer Dome, Sydney Gas, Griffin Coal, Jubilee Mines, WMC, IGO, and Anglo-Gold.

The principal focus of research in the COE will be in the introduction of seismic methods into new environments and further developments in the application of geophysical methods that are capable of high resolving power. This COE will be a very significant addition to the Department in both research activity (to more than double) and in staffing profiles as it is expected that there will be at least six new staff members added.

JOURNAL PUBLICATIONS


Hashemi, A., Meyers, J., and Rothery, E., 2005, Sub-audio surveying for shallow occurrences of conductive manganese ore, Woodie Woodie area, Western Australia; Exploration Geophysics, 36, No 2, p 170-175

CONFERENCES PRESENTATIONS

3RD Biot Conference on Poromechanics, 24-27 May, Norman, Oklahoma, USA

Lambert, G., Gurevich, B., and Brajanovski, M., 2005, Frequency dependent anisotropy of porous rocks with aligned fractures

Muller, T., and Gurevich, B., 2005, Attenuation and dispersion of compressional elastic waves due to wave-induced flow in random porous media

Ciz, R., Toms, J., and Gurevich, B., 2005, Reflection at an interface between a free fluid and porous material: theory versus experiment

67TH EUROPEAN CONFERENCE & EXHIBITION, 13-16 June, Madrid, Spain

Gurevich, B., Lambert, G., and Brajanovski, M., 2005, Seismic attenuation due to fluid flow between pores and fractures

Lambert, G., Gurevich, B., and Brajanovski, M., 2005, Frequency dependent anisotropy of fractured porous rocks
Muller, T., Toms, J., Ciz, R., and Gurevich, B., 2005, Seismic attenuation due to wave induced fluid flow in heterogeneous reservoirs
Muller, T., and Gurevich, B., 2005, Seismic signatures of permeability fluctuations in porous rocks
Slater, J., and Urosevic, M., 2005, Appraisal of fault connectivity and reactivation potential, Laminaria High, North West Shelf
Toms, J., Ciz, R., and Gurevich, B., 2005, Seismic attenuation due to regular and random distribution of fluid patches in porous rocks
Toms, J., Muller, T.M., and Gurevich, B., 2005, Seismic attenuation due to wave induced fluid flow in heterogeneous reservoirs
Urosevic, M., Stoltz, N., and Massey, S., 2005, Seismic Exploration for Gold in Hard Rock Environment - Yilgarn Craton, Western Australia

WASTEENG 2005 INTERNATIONAL CONFERENCE, 15-17 MAY, FRANCE
Li, Q., Harris, B., Aydogan, C., Ang, M., and Tade, M., 2005, Feasibility of recharging reclaimed wastewater to the coastal aquifers of Perth, Western Australia

IST INTERNATIONAL CONFERENCE ON ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT, 26-28 JUNE, Abbottabad, Pakistan
Street, G., Abbott, S., and Beckett, K., 2005, Geophysical aids for detailed soil maps

MINERAL EXPLORATION THROUGH COVER CONFERENCE, 24 JUNE, ADELAIDE
Meyers, J., 2005, State of the art in ground airborne electromagnetic prospecting for mineral deposits

PRIZES/AWARDS
We would like to announce the winners of the business card draw, held at our Booth at the EAGE Conference in Spain. The winners are:

Joe Moser, ConocoPhillips, Dubai
Wolfram Gödde, DMT, Germany
Osman Khan, Veritas, Singapore

Thank you to all of those who participated.

WINNERS OF THE AusIMM - 2005 AWARDS FOR ACADEMIC EXCELLENCE:
These awards have been offered to the following students who attained the highest scores for their studies in 2004.

Best First Year Student: Matthew Little
Best Second Year Student: Owen Davis
Best Third Year Student: Jacob Paggi
Best Fourth Year Student: Michael Whitford

K A RICHARDS MEMORIAL SCHOLARSHIP - 2005:
Awarded to PhD Student – Robert Galvin

ASEG RESEARCH FOUNDATION GRANT - 2005:
Awarded to PhD Student – Gracjan Lambert

STAFF NEWS
We welcome two new academic staff appointments to the Department. They are:

Dr Mark Lwin has commenced a 3 year appointed as a Post Doctoral Fellow, which is being funded by the C02CRC. Mark will be working closely with Brian Evans and will be responsible for developing and operating a PVT chamber, which is being used to sense changes in seismic wave propagation during CO2 injection. Mark has a BSc, MSc and PhD, all from Queensland Institute of Technology.

Mrs Dina Makarynska has been appointed for the duration of 2005 as a Research Associate and will be assisting Professor Boris Gurevich with his ARC Discovery Grant Project. Dina’s duties include numerical computation of elastic properties of fractured media. Dina has a Diploma of Engineer-Oceanographer from Odessa, Ukraine.

On a lighter note, we offer our congratulations to the newly married couple Luke and Shelly Brown. Luke is a PhD student with the Department and we wish them all the best for a long and happy future together.