

Geo-soundings

NEWSLETTER, MAY 2015



Welcome to Geo-soundings.

Welcome to this edition of Geo-soundings. This edition acknowledges the achievements of our 2014 graduated students, reports on recent awards and grants, publications and conference presentations. We hope you enjoy the contents and look forward to our future editions.

ENROLMENTS 2015

The total enrolments for 2015 are:

BSc (Geophysics Major) Undergraduate	20
BSc (Geophysics) Honours	6
MSc (Geophysics Major) - Coursework	26
MPhil (Geophysics) - Research	5
PhD - Research	31

GRADUATES 2014/2015

2014 Graduates were:

Doctor of Philosophy

Faisal Alonaizi	Majed Almalki
Mehdi Asgharzadeh	Eva Caspari
Sofia Correia Lopes	Konstantin Tertyshnikov

Master of Science (Geophysics) by Coursework

Vanessa Gutierrez Acevedo	Zacharia Hoidi
Raqatim Seru	Ridha Soedarsono

Graduate Diploma in Geophysics

Stuart Paisley (Mid-year)	Julie Vine (Mid-year)
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BSc (Geophysics) Honours

Alexander Costall	Mathew Fleay
Sandy Jones	Matthew Kovacevic
Mahesh Raghvani	Benjamin Williams

BSc (Geophysics)

Tegan Hanson	Sharna Lambert
Joshua Meertens	Jason Robbshaw
Stephen Stark (Mid-year)	Bryce Teo
Yazdari Murtaza (Mid-year)	

BOOK

Bona, A., and M. A. Slawinski, 2015, Wavefronts and rays as characteristics and asymptotics: World Scientific Publishing Co. Pte. Ltd.

JOURNAL PUBLICATIONS

Gurevich, B., and R. Pevzner, 2015, How frequency dependency of Q affects spectral ratio estimates: Geophysics, **80**, no 2, A39-A44. Doi: 10.1190/GEO2014-0418.1.

CONFERENCE PRESENTATIONS

Australian Society of Exploration Geophysics - 2015 (ASEG-PESA), Perth, Australia, February 2015

Oral Presentations

Gurevich, B., 2015, Using time-lapse VSP data to constrain velocity-saturation relations.

Qi, Q., 2015, Joint effect of capillary force and fluid distribution on acoustic signatures in rocks saturated with two immiscible fluids.

Alkaff, M., 2015, Integration of stratigraphic & rock physics models to generate synthetic seismic data.

Bona, A., 2015, Joint inversion of P- and S-wave travel times for characterisation of anisotropic materials using laser doppler interferometry measurements.

Pevzner, R., 2015, Layer-induced scattering attenuation and VTI anisotropy - NW Shelf Australia synthetic study.

Khoshnavaz, M. J., 2015, Pre-stack time migration in common source domain without velocity model.

Greenwood, A., 2015, Logging during diamond drilling - Autonomous logging integrated into the bottom hole assembly.

Ziramov, S., 2015, Kevitsa Ni-Cu-PGE deposit, north Finland - A seismic case study.

Hossain, M., 2015, Seismic volumetric interpretation of a disseminated copper system in Kevitsa, northern Finland.

Kieu, D. T., 2015, Seismic impedance inversion with petrophysical constraints via the fuzzy cluster method.

Kieu, D. T., A. Kepic, and C. Kitzig, 2015, Classification of geochemical and petrophysical data by using fuzzy clustering.

Ahmadi, P., 2015, Laser doppler interferometry (LDI) to obtain full stiffness tensor: a case study on a deformation zone in Sweden.

Poster Presentations

Takam-Takougang, E., B. Harris, and A. Kepic, 2015, A workflow for cooperative inversion of seismic and magnetotelluric data.

Bossilkov, V., and A. Kepic, 2015, Optical Frequency Domain Strain Sensors for use in Compact Pressure Detectors.

Menu, F., A. Greenwood and, A. Kepic, 2015, Cross-hole seismic reflection to delineate a relatively thin volcanogenic massive sulphide deposit in shale hosted environment.

Okan, Evans., A. Kepic, M. Urosevic, and S. Ziramov, 2015, A Case for Regional Seismic Reflection Surveys in the Gawler Craton, South Australia.

Khoshnavaz, A., H. Siahkoochi, and M. J. Khoshnavaz, 2015, Multiple attenuation using non-linear predictive operators in F-X domain by Volterra Series.

Khoshnavaz, M. J., A. Bona, and M. Urosevic, 2015, Passive seismic imaging without velocity model prior to localization.

Khoshnavaz, M. J., M. Urosevic, and A. Bona, 2015, Velocity analysis using zero-offset attributes in common source domain.

Ung, K., A. Bona, and M. Madadi, 2015, Reciprocity principle in finite difference modelling of waves in elastic media.

Hossain, M. S., M. Urosevic, and A. Kepic, 2015, Interpretation of 3D high-resolution seismic data collected over an IOCG deposit in South Australia.

Beloborodov, R., M. Pervukhina, L. Esteban, and M. Lebedev, 2015, Changes in elastic properties of artificial shales due to compaction.

Hooshyari Far, I., A. Kepic, and A. Podolska, 2015, A new approach provides opportunities for spectral gamma analysis in boreholes for mineral exploration.

Hooshyari Far, I., A. Kepic, and S. Javadipour, 2015, Resistivity and Induction polarization technique for mapping hematite rich areas in Iran.

Le, C. V. A., B. D. Harris, E. Takam-Takougang, and A. Pethick, 2015, Application of seismic for constraining Magnetotelluric inversion.

HONOURS / GRANTS / AWARDS

Carbon Capture and Storage led by **Milovan Urosevic** is a finalist for the 2015 Premier's Award.

The Australian Deep Exploration Technologies Co-operative Research Centre has signed a commercialisation agreement with Boart Longyear for the in-hole sensor technology, the AutoSonde. "The AutoSonde agreement is the first of our three key pillar technologies to be commercialised, with the other two technologies, the coiled-tubing (CT) drill rig and Lab-at-Rig top-of-hole sensing, in development and

showing enormous promise", DET CRC chief executive professor Richard Hillis.

STAFF NEWS

We welcome back **Aleksander Dzunic** who commenced full time employment with our department on the 4th of May.



Andrew Greenwood has resigned from the department to pursue work in Europe.

We also farewell **Anna Podolska** who also resigned to take up an appointment in Switzerland. Last day of work was the 13th of May.

We wish both Andrew and Anna the very best in their future endeavours.

UPCOMING EVENTS

[77th EAGE Conference & Exhibition 2015](#)

1st-4th June, Madrid, Spain.

[Near-Surface Asia Pacific Conference 2015](#)

7th-10th July, Waikoloa, Hawaii.

[AAPG/SEG ICE 2015](#)

13th-16th September, Melbourne, Australia.

[SEG Annual Meeting 2015](#)

18th-23th October, Louisiana, USA.

Educational Software Grants and Programs

A big thank you to all our software vendors who provide us with the continuing support and software resources we need for our teaching and research programs.

[ALT - WellCAD](#)

[CGGVeritas - Hampson Russell Software](#)

[CGGVeritas - Geovation Software](#)

[DHI Group - FEFLOW](#)

[Down Under Geosolutions - Insight](#)

[ESRI - ArcGIS](#)

[Fugro Jason Software](#)

[Geosoft - Oasis Montaj](#)

[GNS Science - Globe Claritas](#)

[Golden Software - Surfer and Grapher](#)

[IHS - Kingdom Software](#)

[Ikonscience - RokDoc](#)

[Intergraph ERDAS - ERMapper](#)

[ION - MESA Expert](#)

[Landmark Graphics Corporation](#)

[Mathworks - MatLAB](#)

[Mira Geoscience](#)

[OpendTect](#)

[Paradigm Software](#)

[Petrosys Software](#)

[Pitney Bowes - Encom, MapInfo and Discover](#)

[RadexPro Software](#)

[Sandmeier - ReflexW](#)

[Schlumberger - Petrel](#)

[Tesseral Technologies Software](#)

[WesternGeco - Vista and Omni](#)



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