



24th International Geophysical Conference & Exhibition

Monday, 16 February 2015

0730 – 1800	Registration Open					
0830 - 1810	Trade Exhibition Open					
0830 – 1010	<p>Opening Plenary Room: Riverside Theatre Welcome To Country – Marie Taylor Conference welcome from Platinum Sponsor - Roger Dowdney, <i>WesternGeco</i> Conference official opening – Hon. Bill Marmion, WA Minister for Finance, Mines and Petroleum ASEG President address – Greg Street PESA President address – Max Williamson ASEG Award presentations Addressing market challenges through collaboration and technology - Aparna Raman, <i>WesternGeco</i></p>					
1010 – 1030	Morning Tea					
1030 - 1210	Petroleum Theme: Marine Seismic Acquisition Room: Riverside Theatre Chair: Andrew Long	Petroleum Theme: 4D Seismic Monitoring 1 Room: Meeting Room 2 Chair: James Deeks	Petroleum Theme: Seismic Signal Processing Room: Meeting Room 3 Chair: Andrej Bóna	Minerals Theme: Exploration Case Studies 1 Room: River View 5 Chair: Jayson Meyers	Minerals Theme: Gravity and Magnetics 1 Room: Meeting Room 7 Chair: David Isles	Near-Surface Theme: Groundwater Geophysics 1 Room: Meeting Room 1 Chair: James Reid
1030 – 1055	KEYNOTE Evolution of Marine Acquisition Technology after Wide Azimuth Nick Moldoveanu <i>Schlumberger</i>	Overburden heterogeneities influence on time-lapse seismic repeatability: a finite difference modelling study Lisa Gavin <i>Chevron, ETC</i>	True-azimuth 3D inverse scattering series method for internal multiple attenuation Min Wang <i>CGG</i>	SPONSORED PRESENTATION +40 years of Geophysics in Pilbara and beyond Asmita Mahanta <i>BHP Billiton</i>	Magnetic mapping of river channel and palaeochannel deposits - An example from Teetulpa, South Australia Clive Foss <i>CSIRO</i>	Compilation of a resistivity atlas of Danish lithologies based on direct resistivity measurements and wireline logging data Ingelise Moller <i>Geological Survey of Denmark and Greenland</i>
1055 - 1120		4D seismic over the Pyrenees Fields Guy Duncan <i>BHP Billiton</i>	Adaptive primary-multiple separation using 3D curvelet transform Xiang Wu <i>CGG</i>		Automated estimation of uncertainties in a 3D geological model of the Sandstone Greenstone Belt, Yilgarn Craton, Western Australia Ruth Murdie <i>Geological Survey of Western Australia</i>	Optimizing airborne electromagnetic (AEM) inversions for hydrogeological investigations using a trans disciplinary approach Ken Lawrie <i>Geoscience Australia</i>



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1120 – 1145	Fast cycle time broadband seismic for exploration Peter Chia <i>Shell Australia</i>	Estimation of reservoir fluid saturation from seismic data: amplitude analysis and impedance inversion as a function of noise Rafael Souza <i>University of Western Australia</i>	Improving imaging through specular amplitude enhancement in the local angle domain Karl Hosgood <i>Paradigm Geophysical</i>	Geophysical responses over the Cannington Ag-Zn-Pb deposit- Queensland Ken Witherly <i>Condor Consulting Inc.</i>	3D joint gravity and magnetic inversion at regional scale - what can it tell us about geology? Alan Aitken <i>University of Western Australia</i>	<p>KEYNOTE Advancing geophysical methods for groundwater evaluation and management Rosemary Knight <i>Stanford University</i></p>
1145 – 1210	New Insights into the North Taranaki Basin from New Zealand's first broadband 3D survey Marjosbet Uzcategui Salazar <i>Schlumberger</i>	4D inversion of borehole gravity data for monitoring fluid fronts Hyoungrea Rim <i>KIGAM</i>	Interferometric OBC Surface Related Multiple Attenuation Kunlun Yang <i>CGG</i>	The Camelwood and Musket nickel deposits - Discovery of a new nickel sulphide camp in the north eastern goldfields of Western Australia Antonio Huizi <i>Southern Geoscience Consultants</i>	Paleo-drainage and structural deformation during Gondwana breakup: insights from the 3D geometry of the Bunbury Basalt Hugo Olierook <i>Curtin University</i>	
1210 - 1300	Lunch					
1300 – 1330	Room: Exhibition Hall 2 & Poster Display					
1330 – 1510	Petroleum Theme: Passive Seismic Room: Riverside Theatre Chair: Andrew Long	Petroleum Theme: 4D Seismic Monitoring 2 Room: Meeting Room 2 Chair: Lisa Gavin	Petroleum Theme: Potential Fields + Seismic Room: Meeting Room 3 Chair: Jane Cunneen	Minerals Theme: Exploration Case Studies 2 Room: River View 5 Chair: Joel Jansen	Minerals Theme: Gravity and Magnetics 2 Room: Meeting Room 7 Chair: Alan Aitken	Near-Surface Theme: Groundwater Geophysics 2 Room: Meeting Room 1 Chair: Geoff Pettifer
1330 – 1355	<p>KEYNOTE Microseismic frac monitoring: yesterday, today and tomorrow Peter Duncan MicroSeismic</p>	Stochastic time-lapse Inversion of a CO2 sequestration synthetic seismic data Mateus Meira <i>Petrobras</i>	Estimation of the petrophysical model via joint inversion of seismic and EM datasets Garrett Kramer <i>Schlumberger</i>	<p>KEYNOTE Geophysics of the Tropicana gold deposit Keith Martin <i>Anglogold Ashanti Ltd.</i></p>	Constraining regional scale fault architecture in the southern New England Orogen: integration of seismic, multiscale edges and surface mapping Jamie Robinson <i>Geological Survey of New South Wales</i>	An investigation of the hidden precious water resources of Dampier Peninsula using airborne electromagnetic method John Joseph <i>Geophysical Consultancy Services</i>
1355 – 1420		Integrating 3D seismic data and hydraulic units to improve reservoir property models Mohammad Emami Niri <i>University of Western Australia</i>	Airborne gravity gradiometer surveying of petroleum systems under Lake Tanganyika, Tanzania Douglas Roberts <i>Beach Energy</i>		A new interpretation of Cambrian basement geology increases the prospectivity for Cu porphyries in western Victoria Phil Skladzien <i>Geological Survey of Victoria</i>	Adiabatic pulses enhance speed and sensitivity of geophysical surface NMR measurements for groundwater investigations Elliot Grunewald <i>Vista Clara</i>



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1420 – 1445	Velocity model estimation by full waveform inversion of time-lapse 4D passive seismic array data Rie Kamei <i>University of Western Australia</i>	Using time-lapse VSP data to constrain velocity-saturation relations Boris Gurevich <i>Curtin University</i>	New geological insights from the Barbwire Terrace using Falcon® data, Canning Basin Tony Rudge <i>Buru Energy</i>	Geophysical response of the Atlántida Cu-Au porphyry deposit, Chile - An undercover discovery in an old district Matthew Hope <i>First Quantum Minerals</i>	KEYNOTE 3D gravity and magnetic modelling - its past and future contribution to understanding the geology of Australia Richard Lane <i>Geoscience Australia</i>	Using airborne EM and borehole NMR data to map the transmissivity of a shallow semi-confined aquifer, western New South Wales Ko Piang Tan <i>Geoscience Australia</i>
1445 - 1510	Passive seismic imaging at depth using ambient noise fields recorded in a shallow buried sensor array Nader Issa <i>University of Western Australia</i>	Multi-objective optimization for reservoir modelling and seismic data matching: proof of concept and field application Mohammad Emami Niri <i>University of Western Australia</i>	Integrated interpretation and simultaneous joint inversion of 3D marine CSEM and seismic datasets Garrett Kramer <i>Schlumberger</i>	Passive airborne EM and ground IP/resistivity results over the Romero intermediate sulphidation epithermal gold deposits, Dominican Republic Jean Legault <i>Geotech Ltd.</i>		An efficient and automatic procedure for integrating resistivity and borehole information for large scale groundwater modelling Anders Vest Christiansen <i>Aarhus University</i>
1510 – 1530	Afternoon Tea					
1530 – 1710	Petroleum Theme: Full Waveform Inversion 1 Room: Riverside Theatre Chair: Andrew Long	Petroleum Theme: Borehole Geophysics Room: Meeting Room 2 Chair: TBC	Petroleum Theme: Rock Physics 1 Room: Meeting Room 3 Chair: Boris Gurevich	Minerals Theme: Exploration Case Studies 3 Room: River View 5 Chair: John Hart	Minerals Theme: Gravity and Magnetics 3 Room: Meeting Room 7 Chair: Clive Foss	Near-Surface Theme: Groundwater Geophysics 3 Room: Meeting Room 1 Chair: Geoff Pettifer
1530 – 1555	KEYNOTE Full model wavenumber inversion Tariq Alkhalifah	Instantaneous frequency-slowness analysis applied to borehole acoustic data Marek Kozak <i>SuperSonic Geophysical</i>	Changes in microstructure and mineralogy of organic-rich shales caused by heating Marina Pervukhina <i>CSIRO</i>	Discovery of the Eureka volcanogenic massive sulphide lens using down-hole electromagnetics Mike Whitford <i>Independence Group</i>	Constraints on interpreting magnetic spectral depths Roger Clifton <i>Department of Mines & Energy</i>	Derivative analysis of geophysical borehole traces Aaron Davis <i>CSIRO</i>
1555 – 1620		Look ahead rig source vertical seismic profile (VSP) applications - Case studies Muhammad Shafiq <i>Schlumberger</i>	Effective medium modelling the effects of saturation on the joint elastic-dielectric properties of carbonates Marina Pervukhina <i>CSIRO</i>	Helicopter AFMAG (ZTEM) EM and magnetic results over sedimentary exhalative (SEDEX) lead-zinc deposits at Howard's Pass, Selwyn Basin, Yukon Jean Legault <i>Geotech Ltd.</i>	Constraining gravity gradient inversion with a source depth volume Cericia Martinez <i>Colorado School of Mines</i>	The Application of AEM to mapping sea-water intrusion at La Grange, Western Australia David Annetts <i>CSIRO MRF</i>



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1620 – 1645	High resolution anisotropic earth model building on conventional seismic data using full waveform inversion: a case study offshore Australia Bee Jik Lim <i>Schlumberger</i>	Automated structure detection and analysis in televiewer images Daniel Wedge <i>University of Western Australia</i>	Joint effect of capillary force and fluid distribution on acoustic signatures in rocks saturated with two immiscible fluids Qiaomu Qi <i>Curtin University</i>	Identification of massive sulphide targets using the galvanic source EM (GSEM) signal from a sub-audio magnetic (SAM) survey at the Far South Project, Western Australia William Peters <i>Southern Geoscience Consultants</i>	Remanent Magnetisation Inversion Peter Fullagar <i>Fullagar Geophysics Pty. Ltd.</i>	Airborne electromagnetic survey for water supply planning - Cane River, Western Australia James Reid <i>Mira Geoscience Asia-Pacific</i>
1645 – 1710	Making anisotropy in PSDM depth-velocity models conformal with geology and velocity. Case study from the NW Australian shelf Sergey Birdus <i>CGG</i>	Imaging by multiples: a case study in the Carnarvon Basin Konstantin Galybin <i>Schlumberger</i>	Integration of stratigraphic & rock physics models to generate synthetic seismic data Mohammed Alkaff <i>Curtin University</i>	Follow up drill hole surveying to determine unidentified EM targets Paul Mutton <i>Touchstone Geophysics</i>	The application of the Signum transform to the interpretation of magnetic anomalies due to prismatic bodies Jeferson De Souza <i>Universidade Federal do Parana & University of Western Australia</i>	3D geological modelling of a buried-valley network based on AEM and borehole data Anne-Sophie Høyer <i>Geological Survey of Denmark and Greenland</i>
1710	Close of Session					
1710 – 1810	Room: Exhibition Hall 1 & 2 Happy Hour					



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Tuesday, 17 February 2015						
0730 – 1710	Registration Open					
0830 – 1810	Trade Exhibition Open					
0830 – 1010	Petroleum Theme: Full Waveform Inversion 2 Room: River View 4 Chair: Andrew Long	Petroleum Theme: Faults and Structures Room: Meeting Room 2 Chair: Dushyan Rajeswaran	Minerals Theme: MT Methods 1 Room: Meeting Room 7 Chair: Ian Ferguson	Minerals Theme: Mine Scale Geophysics 1 Room: River View 5 Chair: Andrew Fitzpatrick	Minerals Theme: Petrophysics Room: Meeting Room 3 Chair: David Clark	Near-Surface Theme: Archaeological Geophysics Room: Meeting Room 1 Chair: Greg Street
0830 – 0855	KEYNOTE Randomized algorithms in exploration seismology Felix Herrmann UBC	3D seismic analysis of normal fault growth and interaction within a gravitational detachment delta system in the Ceduna Sub-Basin, Great Australian Bight Alexander Robson <i>University of Adelaide</i>	3D magnetotellurics for mineral exploration beneath cover Graham Heinson <i>University of Adelaide</i>	KEYNOTE Step-changes in geoscientific inputs to mining value chain configuration John Vann <i>Anglo America PLC.</i>	A moving 3-component fluxgate magnetometer to measure remanent and induced magnetizations in drill core Clive Foss <i>CSIRO</i>	KEYNOTE An Overview of Australian Archaeology: a near surface guide Fiona Hook ARCHAE-AUS
0855 – 0920		Kinematic reconstruction of the Hastings Block, Southern New England Orogen, Australia Paul Lennox <i>The University of New South Wales</i>	The 3D joint inversion of MT and ZTEM data Daniel Sattel <i>EM Solutions LLC</i>		Evaluation of banded iron formation using magnetic susceptibility Robert Howard <i>Case Consulting Pty. Ltd.</i>	
0920 – 0945	Full waveform inversion comparison of conventional and broadband marine seismic streamer data, NW Shelf Australia U Geun Jang <i>University of Western Australia</i>	Quantitative sonic transit time analysis defines multiple Permian– Cretaceous exhumation events during the breakup of Gondwana Hugo Olierook <i>Curtin University</i>	Natural field electromagnetics using a partially known source: Improvements to signal to noise ratios Lachlan Hennessy <i>RMIT University</i>	Improving resource density models via surface gravity inversion Chris Wijns <i>First Quantum Minerals Ltd.</i>	A methodology for density determination from core imagery and assays Adel Vatandoost <i>Fortescue Metals Group Ltd</i>	Geophysical remote sensing of a historical aboriginal gravesite in Quairading, Western Australia Lisa Gavin <i>University of Western Australia</i>
0945 – 1010	Do we really need a very accurate starting velocity model for full waveform inversion? Fabio Mancini <i>Woodside</i>	A prospective deep basin in southern Papua New Guinea? Michael Alexander <i>Integrated Geophysics Corporation</i>	The effect of highly magnetic material on ZTEM data Daniel Sattel <i>EM Solutions LLC</i>	Seismic resonance modes for mine roof stability monitoring Andrew King <i>CSIRO</i>	Casing correction of slimline density logs for iron ore exploration Duncan Hinton <i>Weatherford</i>	



1010 – 1030	Morning Tea				
1030 - 1210	Petroleum Theme: Stratigraphy and Facies 1 Room: River View 4 Chair: Andrew Long	Petroleum Theme: Laboratory Measurements Room: Meeting Room 2 Chair: Boris Gurevich	Minerals Theme: MT Methods 2 Room: Meeting Room 7 Chair: Graham Heinson	Minerals Theme: Mine Scale Geophysics 2 Room: River View 5 Chair: Chris Wijns	Near-Surface Theme: Engineering Geophysics Room: Meeting Room 1 Chair: Hugh Tassell
1030 – 1055	KEYNOTE Integration of seismic stratigraphy and seismic geomorphology for prediction of lithology: Applications and workflows Henry Posamentier <i>Independent Consultant, ex-Chevron</i>	Joint inversion of P-, and S-wave travel times for characterisation of anisotropic materials using laser doppler interferometry measurements Andrej Bóna <i>Curtin University</i>	Interpretation of resistivity and magnetic anomalies from the Fox River Sill, Trans Hudson Orogen, Canada Ian Ferguson <i>University of Manitoba</i>	Geostatistically and Drilling Constrained Magnetic Inversion for Predicting Mineralisation at the Basil Cu-Co Deposit Matthew Zengerer <i>Intrepid Geophysics</i>	KEYNOTE Developing urban and mining geophysical instruments and methods: pushing the boundaries Alireza Malehmir <i>Uppsala University</i>
1055 - 1120		Broadband laboratory measurements of dispersion in thermally cracked and fluid-saturated soda-lime-silica glass Yang Li <i>Australian National University</i>	Deep conductivity anomaly of the Darling Fault Zone: Implications for fluid transport in the Perth Basin Thomas Hoskin <i>University of Western Australia</i>	Magnetic modelling and geological modelling come together at the Kintyre uranium deposit Andrew Fitzpatrick <i>Cameco Corporation</i>	
1120 – 1145	KEYNOTE Geophysics of stratigraphic facies identification: Emergent phases of self-organisation and the Mallat Scattering Transformation Michael Glinsky <i>Halliburton</i>	Stress-associated scattering attenuation and intrinsic attenuation from ultrasonic measurements Li-Yun Fu <i>Institute Of Geology And Geophysics</i>	Resistivity structures of western Victoria, Australia from 2D and 3D modelling of magnetotelluric data Sasha Aivazpourporgou <i>Monash University</i>	Mine scale constrained geophysical inversion; a case study at the Darlot-Centenary gold mine Sarah Monoury <i>SRK Consulting</i>	Multichannel 3D ground penetrating radar - Advances in civil infrastructure scanning Lee Tasker <i>University of Western Australia</i>
1145 – 1210		X-ray computed tomography investigation of structures in claystone at large scale and high speed Gerhard Zacher <i>GE Sensing & Inspection Technologies</i>	Carpentaria conductivity anomaly revisited with preliminary magnetotelluric results from the southeast Mt Isa survey 2014 Millicent Crowe <i>Geoscience Australia</i>	Blind test of muon geotomography for mineral exploration Joel Jansen <i>Teck Resources Limited</i>	Detection of deep buried metal objects with the UltraTEM Stephen Billings <i>Gap Explosive Ordnance Detection</i>
1210 - 1300	Lunch				
1300 – 1330	Room: Exhibition Hall 2 Poster Display				



	Petroleum Theme: Stratigraphy and Facies 2 Room: River View 4 Chair: Andrew Long	Petroleum Theme: Theoretical Studies Room: Meeting Room 2 Chair: James Deeks	Minerals Theme: Electrical-Electromagnetic Methods Room: Meeting Room 7 Chair: Andrew Duncan	Minerals Theme: New Ways to Analyse Data Room: River View 5 Chair: Eun-Jung Holden	Near-Surface Theme: Shallow Seismic 1 Room: Meeting Room 1 Chair: Jeffrey Shragge
1330 – 1510					
1330 – 1355	KEYNOTE Seismic geomorphology of mixed-influence coastal-deltaic systems Simon Lang <i>Chevron</i>	Broadband Data from Flat Streamers: Considerations for Acquisition and Processing Edward Hager <i>Polarcus</i>	Correcting EM system bandwidth limitations James Macnae <i>RMIT University</i>	Combining machine learning and geophysical inversion for applied geophysics Anya Reading <i>University of Tasmania</i>	KEYNOTE Advances in seismic surface wave analysis and integration with body waves data Laura Valentina Socco <i>Politecnico di Torino</i>
1355 – 1420		Linking electrical and hydraulic conductivity through models of random resistor networks Alison Kirkby <i>University of Adelaide</i>	Using induction coil sensor optimization techniques for designing compact geophysical transmitters Joseph Hamad <i>RMIT University</i>	Comparison between manual and automated targeting for Nolans Bore-style rare earth element (REE) deposits Sharon Lowe <i>Southern Geoscience Consultants</i>	
1420 – 1445	Quaternary isolated carbonate build-ups in the Timor Sea (NW Australia) – Understandings and implications Muhammad Mudasar Saqab <i>University of Western Australia</i>	Layer-induced scattering attenuation and VTI anisotropy – NW Shelf Australia synthetic study Boris Gurevich <i>Curtin University</i>	Pareto efficient multi-objective joint optimisation of EM data Sebastian Schnaidt <i>University of Adelaide</i>	KEYNOTE The future of mineral exploration – and what it means for geophysics Jon Hronsky <i>Western Mining Services</i>	Integrated reflection and refraction processing of an ultra-shallow seismic survey Alan Meulenbroek <i>Velseis Pty Ltd</i>
1445 - 1510	Geomorphology and seismic stratigraphy of the early Cretaceous delta in the Vlaming Sub-Basin and implications for seal quality Chris Southby <i>Geoscience Australia</i>	Pre-stack time migration in common source domain without velocity model Mohammad Javad Khoshnavaz <i>Curtin University</i>	Determination of model reliability in 3-D resistivity and I.P. inversion M.H. Loke <i>Geotomo Software</i>		Is it time to modernize near-surface refraction seismology with full waveform methods? Derecke Palmer <i>University of New South Wales</i>



1510 – 1530		Afternoon Tea			
1530 – 1710	Petroleum Theme: Stress & Seals Room: River View 4 Chair: Dushyan Rajeswaran	Petroleum Theme: Seismic Imaging Theory Room: Meeting Room 2 Chair: Andrej Bóna	Minerals Theme: Atomic Dielectric Resonance Room: Meeting Room 7 Chair: Kim Frankcombe	Minerals Theme: CRC DET Downhole Technologies Room: River View 5 Chair: Mike Haederle	Near-Surface Theme: Shallow Seismic 2 Room: Meeting Room 1 Chair: Ian James
1530 – 1555	Integrating geology & geophysics to assess seal risk – An example of seismic interpretation to address sand juxtaposition across faults Leonardo Molinari <i>Chevron Australia</i>	Solving the 3D acoustic wave-equation on generalized structured meshes: a FDTD approach Jeffrey Shragge <i>University of Western Australia</i>	Large depth exploration using pulsed radar Gordon Stove <i>ADROK</i>	KEYNOTE Coiled tubing drilling and real-time sensing — Enabling 'prospecting drilling' in the 21st century? Richard Hillis <i>Deep Exploration Technologies CRC</i>	The application of geophysics to the sport of Cricket Ben McCarthy <i>Curtin University</i>
1555 – 1620	The role of seal integrity in the Vlaming Sub-Basin (Perth Basin) for preservation of hydrocarbon accumulations Irina Borissova <i>Geoscience Australia</i>	Performance of the double absorbing boundary method when applied to the 3D acoustic wave equation Toby Potter <i>University of Western Australia</i>	Gold and sulfide targeting using Atomic Dielectric Resonance (ADR) Simon Richards <i>Citigold Corporation Ltd.</i>		An onshore and offshore seismic investigation across a creek Koya Suto <i>Terra Australis Geophysica</i>
1620 – 1645	Oblique reactivation of inherited fabrics in rift basins: applications to the Northern Carnarvon Basin Chris Elders <i>Curtin University</i>	Cross-Correlative Least-Squares Reverse Time Migration - Theory and Field Applications Yi Xie <i>CGG</i>	Discussion of ADR	Logging during diamond drilling - Autonomous logging integrated into the bottom hole assembly Andrew Greenwood <i>Curtin University</i>	Can near-surface velocity structure be improved via dispersion analysis of conventional reflection data? Shaun Strong <i>Velseis</i>
1645 – 1710	Evolution of detached listric fault systems in the Ceduna Delta, Bight Basin: insights from 3D seismic data Matthew Kovacevic <i>Curtin University</i>	Seismic prim waves generated by seafloor canyons and their effects on subsurface imaging James Deeks <i>University of Western Australia</i>		Evaluation of the looking ahead capability of conventional borehole radar Binzhong Zhou <i>CSIRO</i>	
1710		Close of Session			
1710 – 1810	Room: Exhibition Hall 1 & 2 Happy Hour				



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Wednesday, 18 February 2015					
0800 – 1530	Registration Open				
0830 – 1530	Trade Exhibition Open				
0830 – 1010	Petroleum Theme: Rock Physics 2 Room: River View 4 Chair: Mohammad Emami Niri	Petroleum Theme: Broadband Seismic Processing Room: Meeting Room 1 Chair: U Geun Jang	Minerals Theme: Airborne Electromagnetics 1 Room: Meeting Room 2 Chair: David Annetts	Minerals Theme: Geology from Geophysics 1 Room: River View 5 Chair: Mark Jessell	Minerals Theme: Hard Rock Seismic 1 Room: Meeting Room 3 Chair: Alireza Malehmir
0830 – 0855	KEYNOTE Seismic screening for hydrocarbon prospects using rock-physics attributes Per Avseth <i>Tullow Oil</i>	Unlocking the full potential of broadband data with advanced processing and imaging technology, a case study from NWS Australia Jingyu Li <i>CGG</i>	Quasi3D inversion of airborne EM data Robert Ellis <i>Geosoft Inc.</i>	KEYNOTE Structure and stratigraphy from aeromagnetic data within sedimentary basins David Isles <i>Southern Geoscience Consultants</i>	KEYNOTE Seismic exploration of the world's deepest gold and platinum orebodies in South Africa – Overview of the past, present and a look into the future Musa Manzi <i>University of Witwatersrand</i>
0855 – 0920		Pre-stack deghosting: Bringing out the seismic bandwidth in legacy marine data Jun Zhou <i>TGS</i>	Parametric 3D inversion of airborne time domain electromagnetics Michael McMillan <i>University of British Columbia</i>		
0920 – 0945	Relationship between shear wave azimuthal anisotropy, sand-shale content and depth in the Exmouth Sub-Basin, Western Australia Lisa Gavin <i>University of Western Australia</i>	Imaging through shallow gas: Integrating broadband acquisition, processing and high-end model building for improved imaging of deeper targets Gavin Menzel-Jones <i>Schlumberger</i>	Rapid 3D inversion of airborne TEM data from Forrestania, Western Australia Peter Fullagar <i>Fullagar Geophysics Pty. Ltd.</i>	KEYNOTE Structural geophysics: geological principles applied to geophysical data Peter Betts <i>Monash University</i>	Using seismic reflection profiles to model 3D geology of VMS districts in the Raahe-Ladoga belt, Finland Suvi Heinonen <i>Geological Survey of Finland</i>
0945 – 1010	Rock physics and quantitative interpretation using Lambda-Mu-Rho in the Shipwreck Trough, Otway Basin David Close <i>Origin Energy</i>	Innovative processing approaches to overcome sampling sparseness and irregularity in 3D OBC seismic data offshore Abu Dhabi Shotaro Nakayama <i>ADMA-OPCO</i>	Automated airborne EM anomaly picking and 3D model fitting James Macnae <i>RMIT University</i>		Seismic exploration for volcanogenic massive sulphides: the DeGrussa copper-gold mine, Western Australia Jai Kinkela <i>HiSeis Pty. Ltd</i>



1010 – 1030 Morning Tea					
1030 - 1210	Petroleum Theme: Seismic Imaging Practice Room: River View 4 Chair: Andrew Long	Petroleum Theme: Reservoir Characterization 1 Room: Meeting Room 1 Chair: Rafael Souza	Minerals Theme: Airborne Electromagnetics 2 Room: Meeting Room 2 Chair: Daniel Sattel	Minerals Theme: Geology from Geophysics 2 Room: River View 5 Chair: Mike Dentith	Minerals Theme: Hard Rock Seismic 2 Room: Meeting Room 3 Chair: Greg Turner
1030 – 1055	KEYNOTE Incorporating near-surface velocity anomalies in pre-stack depth migration models Ian Jones <i>ION GX Technology</i>	Using AVO to map Cooper Basin Permian sands in the presence of coal Stephanie Tyiasning <i>University of Adelaide</i>	Utilizing massively parallel co-processors in the AarhusInv 1D forward and inverse AEM modelling code Casper Kirkegaard <i>Aarhus University</i>	KEYNOTE Geochemistry, the new geophysics? Scott Halley <i>Mineral Mapping Pty. Ltd.</i>	Kevitsa Ni-Cu-PGE deposit, North Finland – A seismic case study Sasha Ziramov <i>Curtin University</i>
1055 - 1120		Targeted interpretative reprocessing for reservoir characterisation – A case study using the Satyr Field Dan Gillam <i>Chevron Australia</i>	Sharp SCI: a new practical tool for blocky models reconstruction Andrea Viezzoli <i>AARHUS Geophysics APS</i>		Seismic volumetric interpretation of a disseminated copper system in Kevitsa, northern Finland Muhammad Hossain <i>Curtin University</i>
1120 – 1145	Anisotropic depth imaging in presence of stress: transversely isotropic or orthorhombic? Olga Zdraveva <i>Schlumberger</i>	Prospect validation using geological expression in a gas discovery, offshore Mozambique Gaynor Paton <i>Foster Findlay Associates Australia</i>	Artificial neural networks for efficient removal of coupled airborne transient electromagnetic data Kristoffer Andersen <i>Aarhus University</i>	KEYNOTE Practical geological mapping under cover using electromagnetic data Gavin Selfe <i>GRS Consulting</i>	Seismic impedance inversion with petrophysical constraints via the fuzzy cluster method Duy Thong Kieu <i>Curtin University</i>
1145 – 1210	A stable tomographic solution for anisotropic Epsilon – A tool to aid in exploring for oil in the Northern Carnarvon Basin Ed Lewis <i>ION Geophysical</i>	Volcanic rock characterisation using the concept of extended elastic impedance: A case study from a Middle Jurassic gas reservoir in offshore Western Australia Syed Iftikhar Arsalan <i>INPEX</i>	Quasi-3D inversion of full size AEM datasets Esben Auken <i>Aarhus University</i>		Laser doppler interferometry (LDI) to obtain full stiffness tensor: a case study on a deformation zone in Sweden Pouya Ahmadi <i>Curtin University</i>
1210 - 1300	Lunch				
1300 – 1330	Room: Exhibition Hall 2 Poster Display				



1330 – 1510	Petroleum Theme: Unconventional Oil and Gas Room: River View 4 Chair: Andrew Long	Petroleum Theme: Regional Basin Studies Room: Meeting Room 1 Chair: Dushyan Rajeswaran	Minerals Theme: Airborne Electromagnetics 3 Room: Meeting Room 2 Chair: James Macnae	Minerals Theme: Geology from Geophysics 3 Room: River View 5 Chair: Campbell McCuaig	Minerals Theme: Miscellaneous 1 Room: Meeting Room 3 Chair: David Howard
1330 – 1355	KEYNOTE Cultural and technical issues with development of unconventional reservoirs in Australia Dennis Cooke <i>University of Adelaide</i>	Interpretation and modelling of new Browse Basin airborne magnetic data for igneous rocks and basement Ron Hackney <i>Geoscience Australia</i>	The superparamagnetic response of transient AEM data Daniel Sattel <i>EM Solutions LLC</i>	KEYNOTE Geoscience Data Integration: Insights into Mapping Lithospheric Architecture Graham Begg <i>Minerals Targeting International</i>	Geophysics in greenfields regions to determine cover thickness: pre-competitive drilling in the Stavely region of Victoria Anthony Meixner <i>Geoscience Australia</i>
1355 – 1420		Using potential field data to map salt distribution in the Western Officer Basin, Western Australia Jane Cunneen <i>Curtin University</i>	Restoration of distributed IP information in airborne-time domain electromagnetic data Seogi Kang <i>University of British Columbia</i>		Processing gravity gradients to detect kimberlite pipes Thomas Meyer <i>Lockheed Martin MST</i>
1420 – 1445	Valuable lessons from acquiring 3D seismic for coal seam gas Andrew Aouad <i>Origin Energy</i>	Scientific ocean drilling and the capabilities of the IODP drillship JOIDES Resolution Neville Exon <i>Australian National University</i>	Airborne inductive induced polarization chargeability mapping of VTEM data Jean Legault <i>Geotech Ltd.</i>	KEYNOTE Building effective mineral system models; the importance of merging geophysical observation with geological inference Ken Witherly <i>Condor Consulting Inc.</i>	High precision terrain corrections for next generation airborne gravity data Mark Grujic <i>Rio Tinto Exploration</i>
1445 - 1510	Unconventional resource evaluation and applied geophysics utilising LMR David Close <i>Origin Energy</i>	3D geophysical model of the Glyde Basin, Northern Territory, based on curvatures derived from airborne gravity gradient data Carlos Cevallos <i>CGG</i>	Determining cover variability in the Capricorn Orogen with airborne EM Yusen Ley-Cooper <i>CSIRO</i>		The value of a combined approach: innovative mineral exploration techniques in the Irish Zn-Pb orefield Simone de Morton <i>University of Melbourne</i>
1510 – 1530 Afternoon Tea					



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24th International Geophysical Conference and Exhibition
15-18 February 2015 Perth, Western Australia

1530 – 1710	Petroleum Theme: Reservoir Characterization 2 Room: River View 4 Chair: Rafael Souza	Petroleum Theme: Reservoir Characterization 3 Room: Meeting Room 1 Chair: Mohammad Emami Niri	Minerals Theme: Radiometrics Room: Meeting Room 2 Chair: Stephen Mudge	Minerals Theme: Geology from Geophysics 4 Room: River View 5 Chair: Mike Dentith	Minerals Theme: Miscellaneous 2 Room: Meeting Room 3 Chair: Asbjorn Christensen
1530 – 1555	Insights of dielectric measurements from cuttings recovered along the deepest offshore well in the world (Nankai trough accretionary prism): IODP expedition 338, site C0002F Lionel Esteban <i>CSIRO</i>	Enhanced delineation of reservoir compartmentalization from advanced pre and post-stack seismic attribute analysis Mauricio Herrera Volcan <i>Schlumberger</i>	Monitoring airborne gamma ray spectrometer sensitivities using the natural background Robert Grasty <i>Gamma-Bob Inc.</i>	KEYNOTE Geological uncertainty and geophysical inversion Mark Jessell <i>Centre for Exploration Targeting</i>	Bad colour maps hide big features and create false anomalies Peter Kovesi <i>Centre for Exploration Targeting</i>
1555 – 1620	Using multivariate data classification on frontier exploration basins to enhance the information value of suboptimal 2D seismic surveys for unconventional reservoir characterization Andrea Paxton <i>Schlumberger</i>	Seismic waveform classification: Renewing the interest in Barrolka field, SW Queensland, Cooper Basin Yahya Basman <i>Santos</i>	The 3D inversion of airborne gamma-ray spectrometric data Brian Minty <i>Minty Geophysics</i>		Quantifying model structural uncertainty and facies prediction for locating groundwater supplies in Timor-Leste using AEM data Burke Minsley <i>U.S. Geological Survey</i>
1620 – 1710	Conference Awards & Closing Ceremony Riverside Theatre				
1710 – 1810	Closing Sundowner Riverside Theatre Foyer				