	MONDAY 22 AUGUST 2016				
Key	**Petroleum**	**Minerals**	**Near Surface**	**Keynote Presentation**	
07:30	**Registration** - Foyer H				
08:00	**Trade Exhibition Open**				
08:30	Conference Opening and Planary Address Hall L				
08:35	Welcome to Country				
08:40	Chris Picton MP Member for Kaurna				
09:00	ASEG, PESA and AIG presidents address				
09:15	ASEG awards				
09:40	Plenary Address: Exploring on the frontier: policy, regulatory and management lessons from the Great Australian Bight, Peter Metcalfe, Director, Upstream External Affairs, BP Australia				
10:10	Morning Tea - Halls F & H				
10:40-12:20	**Concurrent Session 1A - 1E**				
	Petroleum 1.A **Offshore Case Studies** Hall L Chair: Simon Brealey	**Petroleum 1.B** **Gravity & Applications** Room L2 Chair: Terry Crabb	**Minerals 1.C** **Characterising Cover (1) Passive Seismic** Hall M Chair: Philip Heath	**Minerals 1.D** **Distal Footprints (1) Case studies** Hall N Chair: Mike Dentith	**Near Surface / Engineering 1.E** **Hazards and Engineering** Room L1 Chair: Adam Davey
10:40	Basement influences on structural styles in the Bremer and Eyre Sub-Basins, southern Australia *Jane Cunneen, Curtin University, Australia*	**Keynote Address:** The Direct Detection of Gravitational Waves: the discoveries so far, prospects for the future and benefits for exploration technology *David Blair, Winthrop Professor Director, Australian International Gravitational Research Centre*	Passive seismic surveying for depth to base of paleochannel mapping at Lake Wells, Western Australia *Matt Owers, Resource Potentials, Australia*	Understanding the 3D structure of the Gilmore fault zone through geophysical modelling: implications for Lachlan tectonic reconstructions *Deepika Venkataramani, University of Newcastle, Australia*	Finding bedrock in uncontrolled clayey fill - success with GPR profiling *Roderick Lawrence, Macquarie University, Australia*
11:05	Kraken 3D - acquisition to interpretation on the edge of the Browse *Jarrod Dunne, Karoon Gas Australia, Australia*	Comparison of satellite altimetric gravity and ship-borne gravity - offshore Western Australia *Asbjorn Norlund Christensen, Nordic Geoscience, Australia*	Benchmarking passive seismic cover depth assessments *Sarah Buckerfield, Geoscience Australia, Australia*	2½-D inversion constraints on the palinspastic retro-deformation of Siluro-Devonian structures in the Black Range region, western Victoria – the "Crab Nebula" untangled *Phil Skladzien, Geological Survey of Victoria, Australia*	An integrated geophysical survey at a landslide-prone area *Koya Suto, Terra Australis Geophysica Pty Ltd, Australia*
11:30	Multi-source design and penta source case study from the NWS Australia *Edward Hager, Polarcus, Singapore*	Interpreting the direction of the gravity gradient tensor eigenvectors: The main tidal force and its relation to the curvature parameters of the equipotential surface *Carlos Cevallos, CGG Multi-Physics, Australia*	**Keynote Address:** Effective Mineral Exploration Under Cover: Addressing the Challenge Using Passive Seismic Methodology *Nick Smith, PassiveX Pty. Ltd., Australia*	The discovery of the Artemis polymetallic deposit *Andrew Thompson, Minotaur Exploration, Australia*	3D aeromagnetic imaging of Iwate volcano, northeast Japan *Shigeo Okuma, Geological Survey of Japan, AIST, Japan*

11:55	First results of inaugural deployments of the Australian National Ocean Bottom Seismograph Fleet *Alexey Goncharov, Geoscience Australia, Australia*	Full Spectrum Gravity - Improving AGG data quality at both ends of the spectrum *Chris van Galder, CGG, Canada*		Application of vertical electrical sounding method to identify distribution of hot groundwater around the hotsprings in geothermal prospect area *Mariyanto Mariyanto, Institute of Technology Bandung, Indonesia*	Delineation of tunnel valleys across the North Sea coastline, Denmark based on reflection seismic data, boreholes, TEM and Schlumberger soundings T*heis Raaschou Andersen, VIA University College, Denmark*
12:20	Lunch				
13:20	Posters: Hall F				
13:45-15:00	**Concurrent Session 2A - 2E**				
	Petroleum 2.A **Onshore Case Studies** Hall L Chair: Andrew Long	**Petroleum 2.B** **Exploration Techniques** Room L2 Chair: Selina Wallace	**Minerals 2.C** **Characterising Cover (2) Potential Fields** Hall M Chair: Dave Isles	**Minerals 2.D** **Distal Footprints (2) Heat Flow** Hall N Chair: Philip Heath	**Minerals 2.E** **4D Geodynamics (1)** Room L1 Chair: Chris Wijns
13:45	New insights into the petroleum potential of the onshore Otway Basin *Lucas McLean-Hodgson, SRK Consulting, Australia*	Exploration chance of success predictions - statistical concepts and realities *Balakrishnan Kunjan, Cue Energy, Australia*	Large Scale Magnetotelluric Sounding at the Periphery of the Songliao Basin, NE China *Weijun Zhao*	Heat flow: The neglected potential field for mineral exploration *Graeme Beardsmore, Data61, Australia*	Next generation resource discovery linking geophysical sensing, modelling and interpretation *Klaus Regenauer-Lieb, UNSW Australia , Australia*
14:10	Exploring the sub-salt play in the frontier Amadeus Basin - Insights from regional 2D seismic and potential field data *Emma Hissey, Santos Ltd, Australia*	Improving prediction of Total Organic Carbon in prospective Australian basins by employing machine learning *Irina Emelyanova, CSIRO Energy, Australia*	Revising gravity terrain corrections in Tasmania *Mark Duffett, Mineral Resources Tasmania, Australia*		
14:35	Waveform classification as a pseudo for reservoir thickness *Bonnie Lodwick, Santos, Australia*	X-ray computed tomography of structures in opalinus clay from large scale to small scale after mechanical testing *Gerhard Zacher, GE Sensing & Inspection Technologies GmbH, Germany*		238 Numerical modelling of the Sydney Basin using temperature dependent thermal conductivity measurements *Alexandre Lemenager, Macquarie University, Australia*	Microseismic characterization of brittle fracture mechanism in highly stressed surrounding rock mass *Yupeng Jiang, Centre for Geoscience Computing, The University of Queensland, Australia*
15:00	Afternoon Tea - Halls F & H				
15:30-17:10	**Concurrent Session 3A - 3E**				
	Petroleum 3.A **Seismic Acquisition** Hall L Chair: Doug Roberts	**Petroleum 3.B** **Alternative Technologies** Room L2 Chair:Terry Crabb	**Minerals 3.C** **Characterising Cover (3)** Hall M Chair: Jonathan Ross	**Minerals 3.D** **Distal Footprints (3) Case studies** Hall N Chair: Tim Keeping	**Near Surface / Engineering 3.E** **New Technologies** Room L1 Chair: Kim Frankcombe
15:30	**Keynote Address:** Making waves - towards a new era of seismic recording equipment *Jason Criss, INOVA Geophysical, United Kingdom*	Black Swan airborne geophysical survey structural interpretation for hydrocarbons targeting in the Perth Basin *Carlos Cevallos, CGG Multi-Physics, Slovakia*	**Keynote Address:** Mapping cover-thickness to UNCOVER basement and deep Earth architecture and processes *Karol Czarnota, Geoscience Australia, Australia*	Mapping the Punt Hill IOCG system using geophysical, geochemical and spectral methods - an integrated approach *Adrian Fabris, Department of State Development, Australia*	Extracting IP information from AEM data to improve the hydrogeological interpretation *Andrea Viezzoli, Aarhus Geophysics ApS, Denmark*

15:55		Potential field data guided seismic forward modelling of basement structures: a case study from offshore Nile Delta Basin *Shastri Nimmagadda, Curtin University, Australia*		Looking into a 'Blue Hole' - Resolving magnetization and structure from the complex negative Coompana Anomaly, South Australia *Clive Foss, CSIRO Mineral Resources, Australia*	Transient surface impedance (TranSIM) measurements using discrete lightning for electromagnetic mapping at audio frequencies *Artyom Emelyanenko, Griffith University, Australia*
16:20	Low-Fold 3D Seismic: A Key to Unlocking Exploration Potential Cost-Effectively in the Eromanga Basin *Jennifer Clifford, Santos Ltd, Australia*	High resolution magnetic anomaly modelling and its implication for petroleum prospectively on Seram Island, Maluku, Indonesia *Harry Siagian, Center for Geological Survey, Indonesia*		Integrated geological and geophysical interpretation for the Koodaideri Detrital Iron Deposits, Fortescue Valley, Western Australia *James Reid, Mira Geoscience Asia-Pacific Pty Ltd, Australia*	
16:45	Application of Interferometric MASW to a 3D-3C Seismic Survey *Shaun Strong, Velseis, University of Qld, Australia*	Analysis of electromagnetic depth sounding responses over a layered earth: investigating oil & gas seeps in the petroleum provinces *Shastri Nimmagadda, Research Fellow, Australia*		Application of the airborne electromagnetic method for Banded Iron-Formation mapping in the Hamersley Province, Western Australia *Regis Neroni, Fortescue Metals Group, Australia*	Mapping groundwater and soil moisture using multi-depth electrical conductivity data from AgTEM4™ cart *David Allen, Groundwater Imaging Pty Ltd, Australia*
17:10	**Close of Sessions**				
17:10-18:10	**Happy Hour - Halls F & H**				

TUESDAY 23 AUGUST 2016

07:30 **Registration** - Foyer H

08:00 **Trade Exhibition Open**

08:30-10:10 **Concurrent Session 4A - 4E**

	Petroleum 4.A **Seismic Facies** Hall L Chair: Paul Strong	**Petroleum 4.B** **Rock Physics** Room L2 Chair: Frank Nicholson	**Minerals 4.C** **Characterising Cover (4) Electromagnetics** Hall M Chair: Graham Heinson	**Minerals 4.D** **Distal Footprints (4) Airborne Geophysics** Hall N Chair: Dave McInnes	**Near Surface / Engineering 4.E** **Acquisition Approaches** Room L1 Chair: Jonathan Ross
08:30	**Keynote Address:** Seismic facies mapping-getting more geology into your play *Rob Kirk, Consultant, Australia*		Integrated inversion of electromagnetic and geological data for regolith characterisation *Andrew King, CSIRO, Australia*	Results of an Integrated Helicopter ZTEM-Gravity-Magnetic system test survey over the Vredefort Dome Structure, South Africa *Jean Legault, Geotech Ltd., Canada*	**Keynote Address:** The Pareto principle - Something for hydrogeophysical practitioners to remember when employing geophysical data in groundwater resource assessment? *Tim Munday, CSIRO, Australia*

8:55		Integrating core and wireline log datasets- a pathway to permeability from AvO seismic? *Lahra Lanigan, Australian School of Petroleum, Australia*	Towards 3D inversion of ground based TEM data *Kristoffer Andersen, Aarhus University, Denmark*	Extending geobandwidth using the multipulse configuration *Tianyou Chen, CGG, Canada*	
9:20	Control on Pleistocene shelf drainage by post-Eocene stratigraphy of the Gippsland Basin *Mark Bunch, Australian School of Petroleum, Australia*	Laboratory experiments and numerical simulation on Bitumen Saturated Carbonates: A Rock Physics Study for 4D Seismology *Jason Nycz, University of Alberta, Canada*		The Balboa ZTEM Cu-Mo-Au porphyry discovery at Cobre Panama *Jean Legault, Geotech Ltd., Canada*	The emperor's new clothes- opportunities and limitations applying AEM to geotechnical design work *Andi A Pfaffhuber, NGI, Australia*
9:45	Spatial mapping of seismic facies variations to mitigate reservoir risk in coal prone fluvial-deltaic settings *Dylan Cremasco, Santos Ltd., Australia*	Ultrasonic measurements on thin samples: numerical modelling *Alexey Yurikov, Curtin University, Australia*	Achieving accurate interpretation results from full-waveform streamed data AEM surveys *Magdel Combrinck, TAU Geophysical Consultants, Canada*	Airborne IP detects only fine-grained minerals when compared to conventional IP *James Macnae, RMIT University, Australia*	Neotectonic intra-plate fault zone mapping and hydrogeology in floodplain sediments: an inter-disciplinary approach *Ken Lawrie, Geoscience Australia, Australia*
10:10	Morning Tea - Halls F & H				
10:40-12:20	**Concurrent Session 5A - 5E**				
	Petroleum 5.A **Seismic Interpretation** Hall L Chair: Rod Lovibond	**Minerals 5.B** **Electromagnetic Inversion (1)** Room L2 Chair: Mike Hatch	**Minerals 5.C** **Characterising Cover (5) AEM and MT methods** Hall M Chair: Stephan Thiel	**Minerals 5.D** **Distal Footprints (5) Potential Field Inversion** Hall N Chair: Terry Crabb	**Near Surface / Engineering 5.E** **Groundwater** Room L1 Chair: Dave McInnes
10:40	**Keynote Address:** Structural Interpretation of seismic, geological realism and 3D thinking *Pete Boult, Santos Ltd, Australia*	Fast 3D inversion of "total field" resistive limit TEM data *Peter Fullagar, Fullagar Geophysics Pty Ltd, Canada*	Magnetotellurics: Imaging basement through deep and conductive cover *Tristan Kemp, Geoscience Australia, Australia*	**Keynote Address:** Applying advanced gravity and magnetic inversion methods to expand the Platreef PGE-Ni-Cu resource in the Bushveld Complex *Nicholas Williams, High Power Exploration, Canada*	The East Kimberley Ord Bonaparte Plains Project: de-risking investment in agriculture and water infrastructure through airborne and ground geophysical investigations *Neil Symington, Geoscience Australia, Australia*
11:05		Geologically constrained 2D and 3D airborne EM inversion through cross-gradient regularization and multi-grid efficiency *Shane Mulè , CGG, Australia*	Improved structural mapping and conductive targeting delivered by a new 2.5d AEM inversion solver *Rod Paterson, Intrepid Geophysiccs, Australia*		Uncovering the groundwater resource potential of Murchison Region in Western Australia through targeted application of airborne electromagnetics *Tim Munday, CSIRO, Australia*
11:30	The geology and structural style of the Juha Gas Field Papua New Guinea, *Amanda Hanani, Papuan Oil Search , Australia*	**Keynote Address:** Effective and accurate processing and inversion of airborne electromagnetic data *Esben Auken, Aarhus University, Denmark*	Summarising AEM data for mapping applications *David Annetts, CSIRO, Australia*	VK1^{TM} — A Next-Generation Airborne Gravity Gradiometer, *Theo Aravanis, Rio Tinto Exploration, Australia*	An inter-disciplinary approach to airborne electromagnetics (AEM) survey design for groundwater exploration using the Australian Geoscience Data Cube and Morphotectonics *Ken Lawrie, Geoscience Australia, Australia*

11:55	Fault geometry and deformation history, Northern Carnarvon Basin *Chris Elders, Curtin University, Australia*		Magnetotelluric monitoring of hydraulic fracture stimulation at the Habanero Enhanced Geothermal System, Cooper Basin, South Australia *Yohannes Didana, University of Adelaide, Australia*	Applicability of standard Euler deconvolution, modeling and amplitude magnetic data inversion in Greenfield programs: The Leite target case study - Carajás Mineral Province – Brazil *João Paulo Souza, Universidade de Brasilia, Brazil*	Frontier groundwater Investigations in the West Kimberly (Fitzroy) Region: preliminary assessment of groundwater resource potential and the salinity hazard to proposed irrigation developments from AEM and drilling data *Alastair Hoare, DoW WA , Australia*
12:20	Lunch - Halls F & H				
13:20	Posters: - Hall F				
13:45-15:00	**Concurrent Session 6A - 6E**				
	Petroleum 6.A **VSP** Hall L Chair: Josh Sage	**Petroleum 6.B** **Depth Conversion and Interpretation** Room L2 Chair: Rod Lovibond	**Minerals 6.C** **Uncertainty & Big Data (1)** Hall M Chair: Philip Heath	**Minerals 6.D** **Distal Footprints (6) Case studies** Hall N Chair: Tim Keeping	**Minerals 6.E** **4D Geodynamics (2)** Room L1 Chair: David Clark
13:45	Mapping of fracture zones and small faults using VSP and Cross Dipole Sonic in Eastern Siberia Carbonate Reservoirs, Yurubchansky Field, Russia *Sergey Shevchenko, SIS Exploration, Australia*	A statistical approach to assessing depth conversion uncertainty on a regional dataset: Cooper-Eromanga Basin, Australia *David Kulikowski, University of Adelaide, Australia*	**Keynote Address:** Taming uncertainty in geophysical inversion *Malcolm Sambridge, Australian National University, Australia*	Preliminary interpretations from the 2015 Coompana aeromagnetic survey *Rian Dutch, Geological Survey of South Australia, Australia*	**Keynote Address**: Geophysical responses from mineral system components in the deep crust and upper mantle *Michael Dentith, University of Western Australia, Australia*
14:10	Multi-Azimuthalwalkway VSP for full azimuth seismic calibration *Konstantin Galybin,Schlumberger Australia Pty Ltd, Australia*	North West Shelf 3D Velocity Modeling *Laureline Monteignies, Estimages, Australia*		Magnetotelluric inversion, carbonaceous phyllites and an ore zone: Kevitsa; Finland *Cuong V. A. Le, Curtin University, Australia*	
14:35	Application of fullwaveform tomography to VSP walkaway data *Eric Takam Takougang, Petroleum Institute, United Arab Emirates*	New Interpretation and Modelling Results for a Late Triassic Isolated Pinnacle Reef Complex on the Exmouth Plateau, Western Australia *Jarrad Grahame, CGG, Australia*	A Bayesian inference tool for geophysical joint inversions *Graeme Beardsmore, Data 61, Australia*	Interpreting the Eromanga and Georgina Basins from magnetotelluric data *Janelle Simpson, Geological Survey of Queensland, Australia*	Imaging fracture permeability using magnetotellurics *Alison Kirkby, University of Adelaide, Australia*
15:00	Afternoon Tea - Halls F & H				
15:30-17:10	**Concurrent Session 7A - 7E**				
	Petroleum 7.A **Acquisition & Processing** Hall L Chair: Doug Roberts	**Petroleum 7.B** **Unconventional** Room L2 Chair: Sandy Menpes	**Minerals 7.C** **Uncertainty & Big Data (2)** Hall M Chair: Alex Ross	**Minerals 7.D** **Distal Footprints (7) Hard Rock Seismics** Hall N Chair: Greg Turner	**Minerals 7.E** **Inversion (2)** Room L1 Chair: Dave McInnes

15:30	A robust gradient for long wavelength FWI updates *Andrew Long, PGS, Australia*		**Keynote Address:** Big data techniques for applied geoscience: compute and communicate *Anya Reading, University of Tasmania, Australia*	Introducing 3rd dimension into 2D reflective seismic exploration in the complex hard rock environment *Aleksandar Dzunic, Curtin University, Australia*	Quantitative magnetization vector inversion *Ian MacLeod, Geosoft Inc., Canada*
15:55	Advanced reprocessing and imaging: enhancing legacy surveys *Dominic Fell, WesternGeco, Australia*			Interpretation of hard rock seismic data using prestack diffraction imaging *M. Javad Khoshnavaz, Department of Exploration Geophysics at Curtin University, Australia*	AEM cross-gradient constrained inversion of gravity and magnetic data *Adrián Misael León Sánchez, CICESE, Mexico*
16:20	Hybridised weighted boot-strap differential semblance *Hamish Wilson, University of Queensland, Australia*	Application of Nuclear Magnetic Resonance (NMR) logs in tight gas sandstone reservoirs pore structure evaluation *Liang Xiao, China University of Geosciences, Beijing, China*	Quantifying the errors in gravity reduction *Philip Heath, Geological Survey of South Australia, Australia*	Olympic Dam seismic revisited: reprocessing of deep crustal seismic data using partially preserved amplitude processing *Tom Wise, Geological Survey of South Australia, Australia*	Inverse and forward modelling using random dipoles - case study *Roger Clifton, NTGS, Australia*
16:45	Advanced deblending scheme for independent simultaneous source data *Min Wang, CGG, Singapore*	A new method of evaluating tight sandstone reservoirs pore structure from conventional logs *Liang Xiao, China University of Geosciences, Beijing, China*	Resource management through machine learning *Eldad Haber, University of British Columbia, Canada*	Anexample of imaging deeper using extended vibroseis cross-correlation *Ross Costelloe, Geoscience Australia, Australia*	The 3D resolution power of the full tensor gravity gradient *José Paúl Calderón-Magallón , CICESE, Mexico*
17:10	**Close of Sessions**				
17:10-18:10	**Happy Hour - Halls F & H**				
19:00-23:00	**Conference Dinner** *(optional)* Adelaide Oval, Ian McLachlan Room				

WEDNESDAY 24 AUGUST 2016

07:30	**Registration** - Foyer H				
08:00	**Trade Exhibition Open**				
08:30-10:10	**Concurrent Session 8A - 8E**				
	Petroleum 8.A **Inversion** **Hall L** Chair: Andrew Long	**Petroleum 8.B** **Unconventional / Monitoring** Room L2 Chair: Luke Gardiner	**Minerals 8.C** **Lithospheric Architecture (1)** **Seismology & Potential Fields** Hall M Chair: Stephan Thiel	**Minerals 8.D** **Distal Footprints (8)** **Hard Rock Seismics** Hall N Chair: Greg Turner	**Minerals 8.E** **Uncertainty & Big Data (3)** Room L1 Chair: David Annetts
08:30	**Keynote Address:** What's new and exciting in seismic inversion? *Dennis Cooke, ZDAC Geophysical Technology, Australia*	Using fluid-induced seismicity to infer permeability *Andrew King, CSIRO, Australia*	**Keynote Address:** 3D imaging of the Earth's lithosphere using noise from ocean waves *Yingjie Yang, Macquarie University, Australia*	Examples of the use of seismic reflection to re-invigorate a mature field: Tennant Creek *Greg Turner, HiSeis, Australia*	Dealing with uncertainty in AEM models (and learning to live with it) *A. Yusen Ley-Cooper, CSIRO, Australia*

8:55		Relating electrical resistivity to permeability using resistor networks *Alison Kirkby, University of Adelaide, Australia*		Shoot first, ask questions later: application of seismic reflection to a greenfields zinc exploration project *Darren Hunt, Teck Australia, Australia*	Quantifying the effect of primary field modelling on TEMPEST data - The importance of uncertainty *Anders Vest Christiansen, Hydrogeophysics Group, Aarhus University, Denmark*
9:20	Obtaining low frequencies for Full Waveform Inversion by using augmented physics *Eldad Haber, UBC, Canada*	**Keynote Address:** Magnetotelluric monitoring of unconventional energy resource development: Disruptive technology or damp squib? *Graham Heinson, University of Adelaide, Australia*	Passive seismic studies show configuration of Paleoproterozoic subduction zones and their role in craton assembly in Western Australia *Ruth Murdie, GSWA, Australia*	Yathong Trough deep 2D reflection seismic - identifying major structures for the southern Cobar Basin, NSW *Rosemary Hegarty, Geological Survey of New South Wales, Australia*	Gravity gridding in South Australia *Philip Heath, Laslo Katona, Geological Survey of South Australia, Australia*
9:45	Estimation of reservoir fluid saturation from 4D seismic data: effects of noise on seismic amplitude and impedance attributes *Rafael Souza, Centre for Energy Geoscience/UWA, Australia*		Potential field studies along the 13GA-EG1 Eucla-Gawler deep crustal seismic reflection line *Ruth Murdie, Geological Survey of WA, Australia*	Development and Implementation of the Sparse Refraction method to exploration for Detrital Fe Deposits *Mike Haederle, Rio Tinto Exploration, Australia*	
10:10	Morning Tea - Halls F & H				
10:40-12:20	**Concurrent Session 9A - 9E**				
	Petroleum 9.A **Anisotropy** Hall L Chair: Bonnie Lodwick	**Petroleum 9.B** **Broadband** Room L2 Chair: Danny Burns	**Minerals 9.C** **Lithospheric Architecture (2)** **AusLAMP MT** Hall M Chair: Graham Heinson	**Minerals 9.D** **Distal Footprints (9) Constrained modelling** Hall N Chair: Marina Pervukhina	**Minerals 9.E** **Inversion (3)** Room L1 Chair: Philip Heath
10:40	**Keynote Address:** P- and PS-wave vector wavefields for anisotropic petrophysics *James Gaiser, GGC, USA*	**Keynote Address:** Back to basics on broadband seismic amplitudes, phase and resolution *Andrew Long, PGS Australia Pty Ltd, Australia*	**Keynote Address:** Insights into lithospheric architecture, fertilisation and fluid pathways from AusLAMP MT *Stephan Thiel, Geological Survey of South Australia, Australia*	Application of petrology & geology to the interpretation of geophysical data in defining economic porphyry-related Cu-Au mineralisation along the Ekuti Range, Morobe Province, PNG *Anthony Coote, APSAR, New Zealand*	Inversion of magnetotelluric data with fuzzy cluster petrophysical and boundary constraints *Duy Thong Kieu, Curtin University, Australia*
11:05				Getting the most out of existing exploration data: A new interpretation of the Mt Magnet Gold Camp, Western Australia *Sarah Monoury, SRK Consulting, Australia*	Geological and geophysical integrated interpretation and modelling techniques *Glenn Pears, Mira Geoscience, Australia*

11:30	Characterizing heterogeneities in a clastic reservoir using joint/simultaneous PP/PS inversion, 4D timelapse, Multi Attribute Analysis, and PSDM *Jason Nycz, Synterra Technologies Pty Ltd., Australia*	Improved subsurface imaging and interpretability through broadband reprocessing of legacy seismic data. examples from North West Shelf Australia *Stephen Malajczuk, Geotrace Technologies, Australia*	AusLAMP MT over Victoria: New insight from 3D modelling highlights regions of anomalously conductive mantle and unexpected linear trends in the crust *Karol Czarnota, Geoscience Australia, Australia*	**Keynote Address:** Geophysics for Ni-Cu – Where are we at and where are we going? *W. S. Peters, Southern Geoscience Consultants, Australia*	Geophysical joint inversion using statistical petrophysical constraints and prior information *Jeremie Giraud, Centre for Exploration Targeting, Australia*
11:55	Uncovering seismic HTI anisotropy of the Cooper Basin *Stephanie Tyiasning, The University of Adelaide, Australia*	Demultiple for wide-tow broadband acquisition in a shallow water environment: a case study from the NW shelf, Australia *Alex Browne, CGG, Australia*	The Flinders Conductivity Anomal(ies) revisited using AusLAMP Magnetotelluric Data in the Ikara-Flinders Ranges and Curnamona Province *Kate Robertson, University of Adelaide, Australia*		3-D resistivity inversion with electrodes displacements *M.H. Loke, Geotomosoft Solutions, Malaysia*
12:20	Lunch - Halls F & H				
13:20	Posters: - Hall F				
13:45-15:00	**Concurrent Session 10A - 10E**				
	Petroleum 10.A **Coal** Hall L Chair: Henk van Paridon	**Petroleum 10.B** **Regional** Room L2 Chair:Peter Boult	**Minerals 10.C** **Lithospheric Architecture (3) Joint inversion** Hall M Chair: Stephan Thiel	**Minerals 10.D** **Distal Footprints (10) Airborne Geophysics** Hall N Chair: Greg Street	**Near Surface / Engineering 10.E** **NMR** Room L1 Chair: Mike Hatch
13:45	Enhancing coal quality estimation through multiple geophysical log analysis *Binzhong Zhou, CSIRO Energy, Australia*	Time slicing the Cooper Basin *Witold Seweryn, Department of State Development, Australia*	**Keynote Address:** Multi-observable thermochemical tomography: a new approach to an old problem *Juan Afonso, Macquarie University, Australia*	Towards the resolution of dipping structures in the Capricorn Orogen using AEM *Sasha Banaszczyk, CET UWA, Australia*	Determination of Formation Specific NMR Calibrations for Water Well Evaluation in a Semi-Consolidated Aquifer *Phil Hawke, Wireline Services Group, Australia*
14:10	Thickness prediction of tectonically deformed coal using calibrated seismic attributes: A case study *Tongjun Chen, China University of Mining and Technology, China*	Pattern and origin of the present-day tectonic stress in the Australian sedimentary basins *Mojtaba Rajabi, Australian School of Petroleum, the University of Adelaide, Australia*		Airborne IP: Drybones kimberlite VTEM data Cole-Cole inversion *Andrea Viezzoli, Aarhus Geophysics ApS, Denmark*	Designing adiabatic pulses for surface NMR *Denys Grombacher, Aarhus University, Denmark*
14:35	Imaging of shallow coal structures using 2D6C Mini-SOSIE *Shaun Strong, Velseis, Australia*	Monitoring of unconventional resources using magnetotellurics *Nigel Rees, The University of Adelaide, Australia*	Integrating gravity, seismic, AEM and MT data to investigate crustal architecture and cover thickness: modelling new geophysical data from the Southern Thomson region *Chris Folkes, Geoscience Australia, Australia*	Identifying potential mineralisation targets through airborne geophysics - The Western Papua New Guinea Case study *Nathan Mosusu, PNG Geological Survey, Papua New Guinea*	Development of rapid scanning surface-NMR for wide area hydrogeologic mapping *Elliot Grunewald, Vista Clara Inc., United States*
15:00	Afternoon Tea - Halls F & H				
15:30	**Conference Awards & Closing Ceremony - Hall L**				
16:30	**Close of Conference**				
16:30-18:00	**Farewell Drinks -** Foyer F				

Posters Hall F	Monday 13:20-13:45		Tuesdsay 13:20-13:45		Wednesday 13:20-13:45
	Minerals		**Petroleum**		**Near Surface**
M-1	Estimating cover thickness using seismic refraction in the southern Thomson Orogen - An UNCOVER application James Goodwin, Geoscience Australia, Australia	P-2	Magnetotelluric modelling: towards a 4-D inversion Dennis Conway, University of Adelaide, Australia	NS-1	Three-dimensional Inversion of GREATEM Data: Application to GREATEM survey data from Kujukuri beach, Japan Sabry Abd Allah, Hokkaido university, Japan
M-2	Gravity gradient data filtering using translation invariant wavelet Dailei Zhang, Griffith University, Australia	P-3	Mapping sub-surface geology from magnetic data in the hides area, Western Papuan Fold Belt, PNG Irena Kivior, Archimedes Consulting, Australia	NS-2	Delineation of fault systems on Langeland, Denmark based on AEM data and boreholes Theis Raaschou Andersen, VIA University College, Denmark
M-4	Integrated Interpretation of Magnetotelluric and Potential Field Data: Assessing the Northeast Kimberley Region Mike Dentith, The University of Western Australia, Australia	P-4	Characterising extrusive and intrusive magmatism at the Kipper Field, Gippsland Basin, using 3D seismic data Peter Reynolds, The University of Adelaide, Australia	NS-4	Processing of airborne gamma-ray spectra: extracting photopeaks Eugene Druker, Geophysical Consultant, Australia
M-5	Determination of formation density through RC rods in iron ore environments Duncan Hinton, Weatherford, Australia	P-5	True-Triaxial-cell set up to estimate the stress induced anisotropy: Uniformity study Nazanin Nourifard, Department of exploration geophysics, Curtin University, Australia	NS-5	Processing of airborne gamma-ray spectrometry using inversions Eugene Druker, Geophysical Consultant, Australia
M-6	Toward 3D structural constraints from magnetic models: an example from the Montresor belt, Nunavut, Canada Victoria Tschirhart, Geological Survey of Canada, Canada	P-6	Petrophysical characterization of Gondwana Shales of South Karanpura Coal Field, Jharkhand, India. Piyush Sarkar, Indian Institute of Technology, Bombay, Mumbai, India	NS-6	Magnetotelluric imaging of a carbonatite terrane in the Southeast Mojave Desert, California and Nevada Jared Peacock , U.S. Geological Survey, United States
M-7	Edge detection of potential filed data using correlation coefficients Wei Du, College of Geoexploration Science and Technology, Jilin University, China	P-7	Active tectonic and mechanic interaction between Cusiana and Yopal faults interpreting seismic and terraces geometry Jose Fernando Gomez Martinez, Universidad Industrial de Santander, Australia	NS-7	Performance of Hankel transform filters for marine controlled-source electromagnetic surveys: a comparative study Hangilro Jang, Sejong University, South Korea
M-8	Lithological mapping via random forests: information entropy as a proxy for inaccuracy Steve Kuhn, University of Tasmania/CODES, Australia	P-8	The facies architecture of submarine basaltic volcanoes and their effects on fluid flow Peter Reynolds, University of Adelaide, Australia	NS-8	An analysis on MASW responses for ground subsidence in urban areas Bitnarae Kim, Department of Energy and Mineral Resources Engineering, Sejong University, South Korea

M-9	Characterising cover and exploring under cover with AEM Shane Mulè, CGG, Australia	P-9	Analysis of gravity-driven normal faults using a 3D seismic reflection dataset from the present-day shelf-edge break of the Otway Basin, Australia. Alexander Robson, University of Adelaide, Australia	NS-9	An analysis on changes in resistivity of general reservoir dams based on time-lapse inversion of resistivity monitoring data Seo Young Song, Department of Energy and Mineral Resources Eng., Sejong University, South Korea
M-10	A new source parameters estimation method of airborne gravity gradient tensor data Shuai Zhou, Jilin University, China	P-10	The application of seismic interferometry in oil and gas geological survey on the periphery of Songliao Basin Heng Zhu, Shenyang Geological survey center, Australia	NS-10	Geoscience Australia's Geophysical Network: critical infrastructure and observed and derived data for earth monitoring and community safety. Marina Costelloe, Geoscience Australia, Australia
M-11	Field-dependent susceptibility of rocks and ores - implications for magnetic petrophysics and magnetic modelling David Clark, CSIRO Manufacturing, Superconducting Systems and Devices Group, Australia			NS-11	Aeromagnetic compensation with partial least square regression Dailei Zhang, Griffith University, Australia
M-12	Magnetic susceptibility of Edmund Basin, Capricorn Orogen, WA Heta Lampinen, University of Western Australia, Australia			NS-12	Comparing test line inversion results from different helicopterborne transient instruments with regard to hydrogeological mapping Neil Symington, Geoscience Australia, Australia
M-13	Using remote sensing and potential field data to interpret basin fill compositional variations and structures Ashley Uren, University of Western Australia, Australia			NS-13	Electrokinetic monitoring groundwater flow in fractured rock media Dennis Conway, University of Adelaide, Australia
M-14	Lithospheric Thinning by Mantle Plumes Manon Dalaison, The Australian National University, Australia			NS-14	Wireline logging: cost effective methods for new water bore certification and old leaky bore rehabilitation assessment Duncan Cogswell, Borehole Wireline, Australia .
M-15	Inverting dynamic elastic moduli of a granular pack to get shear modulus of the grain Zubair Ahmed, Curtin University, Australia				

M-16 The bark without a dog - magnetic anomalies over holes in a volcanic sheet in the McArthur Basin, NT Clive Foss, CSIRO Mineral Resources, Australia

M-17 Towards an understanding of the effects of alteration on the physical properties of mafic and ultramafic rocks Cameron Adams, University of Western Australia, Australia

M-18 The electrical resistivity of the Australian lower crust Paul Soeffky, The University of Adelaide, Australia

M-19 Electric bipole antenna model study of a basin scale fault system Alexander Costall, Curtin Exploration Geophysics, Australia