

ASEG-PESA 2010 CONFERENCE AND EXHIBITION PRELIMINARY PROGRAM

Sunday 22 nd August 2010				
1600-1900	Registration Opens			
1700	Exhibition Opens			
1700-1900	Welcome Reception in Exhibition Area			
Monday 23 August 2010				
0700	Registration Opens			
0715	Chair and Speaker Breakfast			
0845	Opening Ceremony			
0900-1015	Plenary Session and Society Awards			
	Dr Chris Pigram, Geoscience Australia, Chief Executive Officer			
	John McGagh, RioTinto, Head of Innovation			
1015-1100	Morning Tea in Exhibition Area			
1100-1230	Minerals Discovery N. Stolz Parkside Auditorium	Technology Advances J. Lee Parkside 110A	Prospecting with Gravity D. Robson Parkside G04	Petroleum in Onshore Basins M. Dentith Parkside 110B
1100-1130	Modelling ironstones using magnetic dipoles <i>R Clifton</i>	A systematic approach to the evaluation of the quality of time domain AEM data <i>Y Wallace</i>	The present situation and development trend of airborne geophysical technique in China <i>S Xiong</i>	Seismic exploration in desert area of Tarim basin <i>J Guo</i>
1130-1200	Flying Doctor case history <i>K Godber</i>	Evolution of VTEM – technical solutions for effective exploration <i>J Legault</i>	Requirements for airborne gravity gradient terrain corrections <i>M Dransfield</i>	The properties of the near surface layers at Naylor Field, Otway Australia <i>Y Al-Jabri</i>
1200-1230	Discovery case history of the Moran massive nickel sulphide deposit, Kambalda, Western Australia <i>D Johnson</i>	The concept and development of a truly flexible HTEM system <i>J Rudd</i>	FTG gravity data for prospecting exploration play models <i>C Murphy</i>	Seismic stratigraphy and geological evaluation of the upper Cambrian to middle Ordovician sequence, northwestern Blantyre sub-basin, Darling Basin <i>M Khalifa</i>
1230-1330	Lunch and Exhibition Viewing			
1300-1330	Poster Viewing Session 1 in Exhibition Area			
1330-1500	Minerals Discovery R. Clifton	Technology Advances TBA	Prospecting with Gravity M. Dransfield	Petroleum in Onshore Basins TBA
1330-1400	Experience with the issues of seismic surveying over basalts <i>B Zhou</i>	Feasibility of in-phase airborne TEM utilising gradient measures <i>J Lee</i>	FTG data imaging techniques for geological interpretation <i>J Dickinson</i>	Understanding the architecture and petroleum potential of Australia's onshore sedimentary basins with deep seismic reflection data <i>L Carr</i>
1400-1430	Deep crustal seismic surveys for identifying prospective areas under cover <i>N Stolz</i>	Fast direct resistivity transforms for TEM systems <i>A Davis</i>	Airborne Gravity & Magnetics – A Fast Track multi-system approach for petroleum exploration <i>J Joseph</i>	Using potential field data for petroleum exploration targeting, Amadeus Basin, Australia <i>M Dentith</i>
1430-1500	Hydrophone VSP imaging in the Agnew-Wiluna Belt, WA <i>A Greenwood</i>	Disrupted layered lithology can jeopardise airborne electromagnetic interpretation <i>Y Ley Cooper</i>	Integrated interpretation of Falcon airborne gravity gradiometer, magnetic & seismic data acquired over the Chirete Block Argentina <i>L Braga</i>	Proven and possible petroleum plays of the northern Cooper and Eromanga Basins, South Australia <i>S Menpes</i>
1500-1530	Afternoon Tea in Exhibition Area			
1530-1700	Minerals Discovery D. Johnson	In Memory of Shanti Rajagopalan: Magnetic Innovation P. Schmidt	Industry Perspective M. Smith	Petroleum in Onshore Basins S. Menpes
1530-1600	Mineral exploration in the St Ives area, Eastern Goldfields, using geophysical and hyperspectral data <i>R Murdie</i>	A superconducting magnetic tensor gradiometer for underwater UXO detection <i>J Young</i>	KEYNOTE ADDRESS: Financing upstream oil and gas projects <i>V Lenthall</i>	Interpretation and modeling of the Pedirka Basin (central Australia) using magnetics and gravity <i>C Bishop</i>
1600-1630	Mapping nickel mineralization ahead of mining using DHTEM and BHR <i>C Kemp</i>	Precision geolocation of active electromagnetic sensors using stationary magnetic sensors <i>K Leslie</i>	The history of seismic resolution <i>J Denham</i>	Carbonate fracture permeability characterization – a case history <i>B Link</i>
1630-1700	Direct detection of iron ore mineralization with induced polarisation at the Marampa Iron Ore Deposits Sierra Leone <i>M Cooper</i>	Effect of magnetic field direction and source orientation on depth estimation solutions <i>M Lee</i>	Collaborative R&D – A 50 year journey <i>J Cucuzza</i>	Shallow vertical seismic profiling experiments with a surface impact source and a cemented 3-C geophone string; Perth Basin, WA <i>B Harris</i>
1700-1730	Structural analysis of the southern Ashanti Belt, Ghana using airborne geophysical data <i>S Perroudy</i>	Compensation of the full magnetic tensor gradient signal <i>D Argast</i>	Myths exposed on what controls base metals and gold prices <i>N Moriarty</i>	2.5 D forward modeling – a cost effective solution that runs on small computing systems <i>A Kostyukevych</i>
1730-1830	Happy Hour in Exhibition Area sponsored by Mosaic Oil			
1830	Post Graduate Student Reception sponsored by Santos			

Tuesday 24 August 2010				
0700	Registration Opens			
0715	Chair and Speaker Breakfast			
0830-1030	Innovations in Geophysical Inversion G. Wilson Parkside Auditorium	Technology Advances J. Vrbancich Parkside 110A	Geophysics and Geothermal Applications P. Milligan Parkside G04	3D Technologies in Off-shore Basins TBA Parkside 110B
0830-0900	KEYNOTE ADDRESS: Integrated interpretation of geology and geophysics, using inversions, to predict geology under cover N Williams	Approaching 10 microsec (and earlier) with the Skytem system E Aukun	Characterising uncertainty when solving for 3D temperature: New tools for the Australian geothermal energy exploration sector H Gibson	KEYNOTE ADDRESS: Novel advances in simultaneous source acquisition and processing I Moore
0900-0930	Data inference in the 21 st Century: Some ideas from outside the box M Sambridge	Deriving the complete gravity gradient tensor from the vertical component of gravity by a Cosine transform technique F Jiang	A method for calibrating Australian temperature-depth models D Fitzgerald	A multi-component seismic azimuthal imaging trial: preliminary results S Strong
0930-1000	Down the borehole but outside the box: innovative approaches to wireline log data interpretation A Reading	Rapid gravity and gravity gradiometry terrain corrections via a quadtree mesh discretisation A Kass	The application of geologically-constrained 3D heat conduction models to geothermal exploration C O'Neill	3-D tomographic Q inversion for compensating attenuation anomalies K Xin
1000-1030	Gravity modeling of the Capel-Faust region- a workflow with global to local scale elements R Lane	AuScope National Virtual Core Library – SA node A Mauger	3D thermal modeling verses down-hole temperature extrapolation in the Sydney-Gunnedah-Bowen Basin and the implications for targeting potential geothermal anomalies C Danis	Value-add and safe drilling from 4D AVO evaluation in the Enfield oil field P Thomas
1030-1100	Morning Tea in Exhibition Area			
1100-1230	Innovations in Geophysical Inversion M. Sambridge	Technology Advances M Hatch	Geophysics and Geothermal Applications C. O'Neill	3D Technologies in Off-shore Basins TBA
1100-1130	The role of geological uncertainty in developing combined geological and potential inversions L Ailleres	Delineating lake bottom structure by TEM on water surface C Chen	KEYNOTE ADDRESS: The Energy Portfolio Downunder: What's new and enabling? B Goldstein	The TUI 3D seismic survey, Taranaki Basin, New Zealand reprocessing 2009 J Montalbetti
1130-1200	Some comments on the inversion of multi-scale edges to create geological structure P Heath	Preliminary investigations using a helicopter time-domain system for bathymetric measurements in shallow coastal waters - Port Lincoln and Broken Bay, Australia J Vrbancich	ZTEM airborne AFMAG EM results over the Reese River geothermal test area central Nevada J Legault	3D mapping and gravity modelling of Capel and Faust basins P Petkovic
1200-1230	Generating a Resource Estimate by Magnetic Field Inversion – a Study of the Hawsons Magnetite Deposit, NSW C Foss	High resolution helicopter geophysics in support of a defence engineering project T Gamey	Monitoring fluid reservoir in an enhanced geothermal system using magnetotellurics S Thiel	Stress dependency of shale elastic properties: measurements, modeling and prediction M Pervukhina
1230-1330	Lunch and Exhibition Viewing			
1300-1330	Poster Viewing Session 2 in Exhibition Area			
1330-1500	Innovations in Geophysical Inversion A. Reading	Technology Advances TBA	Engineering Applications for Geophysics M. Tingay	Minerals Discovery S. Walker
1330-1400	A brief analysis of ZTEM data D Sattel	Automated identification of porphyry magnetic signatures EJ Holden	Engineering geophysics in China Y Zhao	Comparison of Dighem EM and magnetic results for detecting epithermal and shear zone gold deposits M Shademan
1400-1430	3D Inversion of entire AEM surveys using a moving footprint G Wilson	Application of automated detection techniques in magnetic data for identification of Cu-Au porphyries M Hope	Geophysics at Australian landfills: Case studies R Whiteley	Structure and mineralisation mapping using borehole radar at Charters Towers gold mine; successes, failures and where to next? C Kemp
1430-1500	Geologically-constrained 1D TEM inversion P Fullagar	Application of Poisson's relationship to geological interpretation of gravity and magnetic field data C Foss	Mapping pollution and coastal hydrogeology with helicopterborne transient electromagnetic measurements M Halkjaer	The power of frequency domain EM: principles and case histories D Annison
1500-1530	Afternoon Tea in Exhibition Area			
1530-1700	Innovations in Geophysical Inversion P. Heath	PNG Exploration TBA	Engineering Applications for Geophysics R. Whiteley	Uranium Exploration B. Dickson
1530-1600	Improved imaging of the subsurface using a gravity and magnetotelluric joint inversion R Maier	KEYNOTE ADDRESS: Science Reveals Hidden Wealth in PNG I Longley	Resistivity imaging using flexible electrode combination for multi-hole-surface resistivity surveys J Zhe	Application of 3D seismics in the delineation of U bearing structures at Ranger 3 Deeps A McCoy
1600-1630	Structurally based joint inversion of electromagnetic, seismic and potential field data for improved classification and characterization: Field examples from the vadose zone to mantle depths L Gallardo	Quantitative seismic interpretation for characterizing carbonate diagenesis an ELK/Antelope gas field study A Goldberg	Anatomy of the 'LuSi' mud eruption, East Java M Tingay	Airborne electromagnetic signature of a paleochannel uranium deposit S Walker

Tuesday 24 th August 2010				
1530-1700	Innovations in Geophysical Inversion	PNG Exploration	Engineering Applications for Geophysics	Uranium Exploration
1630-1700	Increased accuracy in mineral and hydrogeophysical modelling of AEM data via detailed description of system transfer function and constrained inversion A Viezzoli	The geophysical response of the Tupinda Cu-Au-Mo Porphyry prospect, Tabar Islands, Papua New Guinea B Howe	The application of seismic techniques in the development of the Millennium Uranium Deposit, Northern Saskatchewan, Canada G Wood	Unconformity-related uranium in SA-geophysical analysis of the Cariewerloo Basin T Dhu
1700-1730	A generalized algorithm for gravity or self potential data inversion with application to mineral exploration K Essa	Logistics of data acquisition in tropical, rugged terrain – the airborne geophysical surveys of the PNG highlands and Papuan Peninsula G Street	Processing of borehole radar data for 3D location of structures and underground tunnels for shaft risk mitigation, case examples from the Bushveld of South Africa C Kemp	Spatial modeling of multi-disciplinary geoscientific data for uranium exploration over the Kunjar-Darjing Basin, Orissa – A GIS approach R Babu
1730-1830	Happy Hour in Exhibition Area sponsored by ROC Oil			
1900	Conference Dinner			

Wednesday 25 th August 2010				
0700	Registration Opens			
0715	Chair and Speaker Breakfast			
0830-1030	Geophysics and Carbon Dioxide Issues TBA Parkside 110A	Deeper Penetration and Greater Clarity TBA Parkside Auditorium	Formation Geophysics M. Pervukhina Parkside G04	Marine Acquisition TBA Parkside 110B
0830-0900	Rapid gas transport in the near-surface of the earth B Dickson	Interpretation of heliborne VTEM and magnetic survey data to refine geological understanding of base metal exploration in the Central African Copperbelt A Monoury	The virtual rock physics lab E Saenger	Breaking new ground – again!! The Pegasus sub-basin of the East Coast Basin, North Island, New Zealand C Uruski
0900-0930	4D seismic monitoring of CO ₂ sequestration D Lumley	The Drybones kimberlite: a case study comparison of ZTEM tipper AFMAG and VTEM airborne EM results J Legault	Estimation of carbonate elastic properties from Nanoindentation Experiments to reduce uncertainties in reservoir modelling O De Paula	Multi-azimuth 3D surface related multiple elimination – application to offshore Nile Delta M Farouki
0930-1000	Land VSP seismic sources evaluation: CO ₂ CRC Otway project case study S Tcherkashnev	Deep conductor delineation through improved EMFlow data processing J Macnae	Prospect identification using AVO inversion and lithology prediction B Bailey	Studies to enhance seismic data processing for fractured basement in the Cuu Long basin of Vietnam M Tan
1000-1030	Seismic monitoring of CO ₂ geosequestration: CO ₂ CRC Otway project case study R Pevzner	The impact of AEM receiver noise levels on detection, discrimination and resolvability of marginal targets M Combrinck	Quantitative 4D interpretation relating the seismic to production effects at Enfield, North West Shelf Australia M Smith	Seismic reprocessing and AvO inversion of the Northern Fields 3D (Gippsland Basin) J Dunne
1030-1100	Morning Tea in Exhibition Area			
1100-1230	Better Delineation of Groundwater Resources TBA	Deeper Penetration and Greater Clarity B. Musgrave	Formation Geophysics TBA	Marine Acquisition C Uruski
1100-1130	Using AEM data as part of an integrated assessment of the salinity hazard and risk to Gunbower State Forest and the River Murray floodplain in the Gunbower Island-Barr creek reach of the Murray River, SE Australia KP Tan	Geological interpretation of the 2008 seismic reflection, refraction and magnetotelluric data from the northern Eyre Peninsula, Gawler Craton R Korsch	Experimental verification of the physical nature of velocity-stress relationship for isotropic porous rocks M Pervukhina	Anisotropy estimation using VSP and surface seismic data L Dahlhaus
1130-1200	"The Times They Are a-Changin'" - Factors affecting observed spatio-temporal patterns in ground conductivity along the Murray River floodplains, in south eastern Australia T Munday	Can a borehole conductivity log discredit a whole airborne EM survey Y Ley-Cooper	An initial acoustic impedance modeling method based on seismic attributes S Cha	Broadband marine towed streamer acquisition; South China Sea case study B Lim
1200-1230	Seismic signature of high permeability sandstone; Perth Basin; Western Australia M AIMalki	Restoring the continent-ocean boundary: constraints from lithospheric stretching grids and tectonic reconstructions J Whittaker	Pore pressure prediction in HP/HT – Nile Delta area P Cibin	Converted wave velocity model using 4C Ocean bottom seismometer data S Rajput
1230-1330	Lunch and Exhibition Viewing			
1300-1330	Poster Viewing Session 3 in Exhibition Area			
1330-1500	HMAS Sydney Presentation	Deeper Penetration and Greater Clarity J. Macnae	Formation Geophysics TBA	CSEM G. Wilson
1330-1400	Finding Sydney T Graham	Construction of a regional-scale 3D geological model from geologically constrained potential field inversion R Musgrave	A practical rock physics model for AvO studies in clastics and carbonates J Dunne	Modelling tensor magnetic gradient responses of marine CSEM D Annetts

Wednesday 25 th August 2010				
1330-1500	HMAS Sydney Presentation	Deeper Penetration and Greater Clarity	Formation Geophysics	CSEM
1400-1430	Finding Sydney <i>T Graham</i>	Increasing confidence in depth imaging: Case study of anisotropic depth imaging from Australia's North West Shelf <i>D Fell</i>	Multiple analysis – a borehole seismic solution <i>K Galybin</i>	Interpreting CSEM data in complex resistivity regime <i>L Lorenz</i>
1430-1500		Geophysical signatures of chemical alteration <i>R Chopping</i>	Seismic facies analysis and reservoir characterization based on iso-time stratigraphy frame <i>J Yan</i>	Conditioning of the 3D marine Controlled Source Electromagnetic Inversion <i>A Pethick</i>
1500-1530	Afternoon Tea in Exhibition Area & Exhibition Official Closing Ceremony			
1530-1700	Advances in Seismic Processing TBA	Deeper Penetration and Greater Clarity <i>R. Korsch</i>	Formation Geophysics <i>M. Pervukhina</i>	CSEM TBA
1530-1600	Inline delayed shot migration in tilted elliptical-cylindrical coordinates <i>J Shragge</i>	A new method for high-resolution fault imaging delivers groundbreaking insights into drilling and production of resources <i>R Oppermann</i>	Least-squares inversion of refraction amplitudes for near-surface velocity control <i>A Meulenbroek</i>	3D inversion of transient electromagnetic data from the Alvheim field, North Sea <i>M Zhdanov</i>
1600-1630	Shallow Water Demultiple <i>B Hung</i>	Hunting for massive sulphides between density logs <i>C Wijns</i>	AVO analysis of a shallow reverse polarity in Sydney Basin <i>D Nadri</i>	A CSEM case study in Southeast Asia <i>T Lim</i>
1630-1700	Imaging of primaries and multiples using a dual-sensor towed streamer <i>D Whitmore</i>	Fractal scaling of airborne EM data: an indicator of lithology and fluid connection? <i>T Dhu</i>	Reducing uncertainty in seismic interpretation using Crosswell seismic <i>A Nalonnill</i>	The marine CSEM response of a submarine massive sulfide deposit <i>P Kowalczyk</i>
1700	Exhibition Close			
1730-1830	Happy Hour in Parkside Ballroom Foyer			

Thursday 26 th August 2010				
0700	Registration Opens			
0715	Chair and Speaker Breakfast			
0830-1030	Groundwater and Salinity TBA Parkside 110A	EM & MT: Keeva Vozoff Symposia R. Henderson Parkside Auditorium	Architecture and Development of Offshore Basins R Hackney Parkside 110B	
0830-0900	KEYNOTE ADDRESS: Guarding the long term sustainability of groundwater resources by defining aquifer characteristics and inter-aquifer leakage using airborne EM technologies <i>T Munday</i>	K. Vozoff's contribution to Lotem <i>K Strack</i>	Basement architecture and formation of an ocean-continent transform boundary off western Tasmania: insights from aeromagnetic and seismic reflection of data collected from a frontier petroleum province <i>G Gibson</i>	
0900-0930	Improvements in geological mapping using optimised airborne electromagnetic data <i>J Reid</i>	Magnetotelluric surveys across major Archean tectonic boundaries in southern Western Australia <i>M Dentith</i>	Structural architecture Otway and Sorell basins derived from gravity modelling <i>G Nayak</i>	
0930-1000	Utilising airborne electromagnetics (AEM) to map key elements of the hydrogeological system and salinity hazard in the Ord Valley, Western Australia <i>K Lawrie</i>	Detailed MT surveying on the western margin of the Murray Basin to map bedrock stratigraphic conductors and cover thickness for nickel exploration <i>G Jenke</i>	Quantification of Cretaceous-Cenozoic exhumation in the Otway Basin using sonic velocities and implications for hydrocarbon exploration <i>D Tassone</i>	
1000-1030	Defining spatial patterns of inter-aquifer leakage through the application of a-priori constraints when inverting airborne EM data <i>T Munday</i>	3-D magnetotelluric inversion of 2-D profiles: application to land and marine data for shallow crustal investigation <i>S Hautot</i>	Distribution of volcanic facies and results of potential field modeling of the Mentelle basin, southwestern margin, Australia <i>S Johnston</i>	
1030-1100	Morning Tea			
1100-1230	Groundwater and Salinity TBA	EM & MT: Keeva Vozoff Symposia G. Wilson	Architecture and Development of Offshore Basins G Gibson	
1100-1130	Time-lapse monitoring of a saline groundwater plume using electrical geophysical methods <i>T Campbell</i>	High resolution conductivity depth transformation of TEM data <i>P Fullagar</i>	Mentelle Basin- a result of the combined extensional history of the southwestern and southern Australian margins <i>I Borissova</i>	
1130-1200	Integrating ground penetrating radar and ground based, high resolution EM to improve understanding of floodplain dynamics <i>M Hatch</i>	An AEM system callibration <i>J Macnae</i>	Structure styles and tectonic evolution of the Abrolhos Sub-basin, Perth Basin, Western Australia <i>S Liu</i>	
1200-1230	AEM surveys of saline water interfaces <i>G Street</i>	Namibia AEM mapping: A case study of airborne EM data used as a geological mapping and interpretation tool <i>M Finn</i>	Challenges in the use of potential field data for studies of remote, deep water frontier basins <i>R Hackney</i>	
1230-1330	Lunch in Parkside Ballroom Foyer			
1330-1500	Groundwater and Salinity J. Reid	EM & MT: Keeva Vozoff Symposia T. Lilley	Architecture and Development of Offshore Basins B. Cameron	
1330-1400	Surface water-groundwater exchange in transitional coastal environments by airborne electromagnetics: the Venice lagoon example <i>A Viezzoli</i>	High resolution versatile time domain electromagnetic (VTEM) survey for the copper gold mineralisation in the Naracoota volcanics of Western Australia <i>M Cooper</i>	Revised plate tectonic history of the West Australian margin reveals how the Gascoyne terrane docked at West Burma <i>A Gibbons</i>	

Thursday 26 th August 2010			
1330-1500	Groundwater and Salinity	EM & MT: Keeva Vozoff Symposia	Architecture and Development of Offshore Basins
1400-1430	Quantitative hydrogeological framework interpretations using helibourne electromagnetic surveys for the North Platte Valley, Western Nebraska groundwater model J Abraham	Case histories of using magnetotellurics for geothermal exploration K Strack	Tectonics and direction of block movement in the northeastern South China Sea J Chen
1430-1500	Ground penetrating radar to resolve water-retentive layers found on the Gngara Mound, WA E Strobach	A global measure for depth of investigation in EM and DC modeling AV Christiansen	Geophysical delineation of volcanics and intrusives offshore NW Australia using global analogues M Rohrman
1500-1530	Afternoon Tea		
1530-1700		EM & MT: Keeva Vozoff Symposia M. Dentith	Architecture and Development of Offshore Basins S. Johnson
1530-1600		SkyTem System calibration: Two systems one dataset A Davis	Seismic velocity structure of the Wallaby Plateau and implications for its geology and evolution G Nelson
1600-1630		Magnetotelluric results along the N-S Curnamona seismic traverse to the east of Lake Frome, South Australia P Milligan	3D Goussev filter: a signal separation and edge detection filter applied to aeromagnetic data over the Great Australian Bight B Cameron
1700-1730	Official close and awards sponsored by Beach Energy		
1730-1830	Farewell drinks sponsored by Beach Energy		