

Technical and Business Poster Presentations

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The APPEA Conference technical and business program incorporates an extensive poster series comprising of over 50 outstanding papers. The extended abstracts or full papers of these posters will be included in *The APPEA Journal* (conference proceedings) provided online after the conference.

The poster series will be on display within the Exhibition Hall of the Brisbane Convention & Exhibition Centre from 8:00am to 6:00pm Tuesday and Wednesday, and 8:00am to 3:00pm Thursday. Delegates are encouraged to attend the special 'Meet the Authors Session' in the poster area during lunch on Wednesday 29 May, 1:00pm–2:00pm to meet the authors and discuss their work.



PROGRAM IS SUBJECT TO CHANGE | * DENOTES PRESENTER IF NOT LEAD AUTHOR

GEOSCIENCE

How can we reduce the environmental impact of marine seismic surveys?

A Long, M Widmaier, J F Wisloff, O Orji, S Hegna, T Kluever, M Christiansen and R Tenghamn (PGS)

The Roebuck Basin and Beagle Sub-basin well folio

D Nguyen, N Rollet, E Grosjean, D Edwards, S Abbott, C Orlov, G Bernardel, C Nicholson, A Kelman, K Khider, K Higgins and T Buckler (Geoscience Australia)

Proxy modelling for multi-well simulations — enabling identification of major input variables and reduced computation time over Monte-Carlo sampling

T McCourt (Craigslea State High School), R Blackmore (Cyber & Electronic Warfare Division), I Rodger, S Hurter, B Thompson, M Reilly and D Donovan* (University of Queensland)

Revisions to the chronostratigraphic framework of the Upper Jurassic Walloon Coal Measures of the Surat Basin, Australia

C Wainman and P McCabe (University of Adelaide)

Integration of biostratigraphy into a sequence stratigraphic framework for the Surat Basin, Eastern Australia

C L A Vieira Filho*, M Reilly*, S Hurter and Z Hamerli (University of Queensland)

An integrated approach to the Surat Basin stratigraphy

M Reilly*, S Hurter, Z Hamerli* and C de Andrade Vieira Filho (University of Queensland)

Case study — impacts of groundwater extraction in the Surat Cumulative Management Area

K Phillipson (Department of Natural Resources, Mines and Energy)

Well log data analytics — overview of applications to improve subsurface characterization

I Emelyanova (CSIRO Energy), C Dyt, C Viswanathan, S Maslin, B Clennell, M Pervukhina and J Peyaud (CSIRO)

Coal permeability stimulation by NaClO oxidation

R Balucan, Z Jing, K Steel and J Underschultz (The University of Queensland)

Integrating multi-disciplinary data for building fit-for-purpose 3D mechanical earth models

P Boothby, S Thakur (Chevron), R Puspitasari, Z John (Schlumberger) and C Walton (Chevron)

An integrated approach to determining natural fracture development through time: a case study and new insights from Castle Cove in the eastern Otway Basin

H Burgin, K Amrouch and P Robion

Effect of the number of water alternating CO₂ injection cycles on the CO₂ trapping capacity

E Al-Khdheaw, S Vialle, A Barifcani, M Sarmadivaleh (Curtin University) and S Iglauer (Edith Cowan University)

Micro CT analysis to determine effective stress coefficient associated with the laboratory validation

H Salemi and M Sarmadivaleh (Curtin University)

Estimating smectite content from seismic data

R Beloborodov, M Pervukhina, V Shulakova (CSIRO), D Chagalov (ExxonMobil Australia), M Josh, J Hauser, B Clennell (CSIRO), G Ward and M Waugh (Chevron Australia)

Variation of vertical stress in the onshore Canning Basin, Western Australia

A Bailey and P Henson (Geoscience Australia)

ENGINEERING

Challenges in modelling of hydraulic fracturing in low-permeability coal seams with complex cleat networks and stress regimes | M Aghoghi, R Johnson Jr* and C Leonardi (University of Queensland)

Digital oil recovery— learning from past data enables reserves increase | E Boto (Deloitte Consulting)

Improving decision making through data analytics to drive best-in-class CSG rig performance
K Koziol (Easternwell)

Coal identification using neural networks with real-time Coalbed Methane (CBM) drilling data
R Zhong, R Johnson, Z Chen and N Chand (University of Queensland)

Real-time drilling optimisation— driving drilling excellence | A Barhate and P Patel (Drill Insight)

Technology and innovation— lined tubing improves CSG well run life
J Martin (Southern Alberta Institute of Technology)

A practical fracability evaluation for tight sandstone reservoir with natural interface
R Feng, R Chen and M Sarmadivaleh

Experimental investigation of fluid thermal effects on fracture brittleness
A Rezagholilou, H Salemi, N Tarom, P Behnoudfar and M Sarmadivaleh (Curtin University)

Assessment of walk to work systems as an enabler of reduced maintenance and manning
D McCarthy (Granherne)

Safe autonomous systems require changes in business relationships
M Shadbolt (Nova Systems)

Natural gas separation at CO2CRC's Otway National Research Facility
A Qader and J Pandit (CO2CRC)

Subsurface engineering of CCUS in Australia (Case Studies)
M Bagheri and M Raab (Cooperative Research Centre for Greenhouse Gas Technologies)

Drilling fluid waste treatment using polysaccharides grafted copolymers
GP Karmakar and K Chandan (Indian Institute of Technology)

Flowing gas material balance— a useful tool to revise subsurface maps
B Haq (King Fahd University of Petroleum and Minerals)

Risk-based asset performance management in CSG production operations
P Carydias and J Gregory* (Wood)

Harnessing data and technology to drive efficient field developments
T Steffen (Advisian), A Low (IntecSea) and S Mavrovic (Optimus Consulting)

Decision making through Bayesian Network for a pipeline in design
J Zhang (DNV GL Australia), F Ayello and G Lin (DNV GL USA)

LNG production revenue enhancement
M Vines (Esso Australia)

Application of computerised radiography in lieu of film radiography to streamline on-site pipe weld inspection process | M Fernando (McConnell Dowell Constructors)

Managing escape, evacuation and rescue (EER) risk on aging offshore facilities
N Netscher* (ExxonMobil Australia) and J Thompson* (Advisian)

Construction into design— right to left thinking
M Crichton (Worley Parsons)

Asset management— listening to your asset
D Walker (Yokogawa Australia)

BUSINESS

State of origin — US Shale vs QLD Coal Seam Gas

A Abramov (Rystad Energy)

Forecasting growth of the Australian unconventional oil and gas services market

R Carbrey (Rystad Energy)

360 degree stakeholder management driving successful CO₂ storage research

A De Fina* (CO2CRC) and M Chable* (Upstream Production Solutions)

SEAR JIP: a showcase in successful industry collaboration | A Botto (Wood)

Blockchain in oil and gas — a collaborative approach

L Gallacher (Deloitte Consulting) and D Champion (Nottingham Trent University)

The state of industrial cyber security

B Dickinson (ABB)

Oil and gas project management and success — a critical evaluation of oil and gas project management success in Australia | C Ikediashi and B Bjeirmi (Robert Gordon University Scott Sutherland School of Architecture and Built Environment)

The tax profile of different models of infrastructure asset ownership and funding and investment vehicles

M Chang (EY)

Collaboration and learning lessons from other regions | J Peacock* and S Dow* (KPMG Australia)

LNG fuels — Australia's big opportunity in small scale LNG

C Jennings (Woodside Energy)

Blue hydrogen production: a case study to quantify the reduction in CO₂ emission in a steam methane reformer based hydrogen plant | N Kritzing (Fluor Australia), R Ravikumar and K Johnson (Fluor AV)

Enabling regulatory submission workflows on a cloud platform — application of industry standards

J Kozman (Woodside Energy)

From Initial Advice Statement to export — a 10 year retrospective of Queensland's liquefied natural gas industry | P Downey, J Thomas* and M Stone (Department of Natural Resources, Mines and Energy)

Darwin harbour — a partnership approach to understanding and evaluating environmental challenges

R Brinkman, E Butler (Australian Institute of Marine Science), T O'Connor (Darwin Port) and C Streten (Australian Institute of Marine Science)

Developing and applying an environmental competency framework

P Raitt* and S Fidgeon* (Green Light Environmental)

Western Australian marine oil pollution risk assessment — identification of protection priorities

R Morgan (Advisian), E Gifford (WA Department of Transport), A Jacobs (Advisian) and K Swain (Woodside Energy)

'Lawfare' and the oil and gas industry

X McMahon and J Williams (Clayton Utz Brisbane)

The power of digital — workplace tools to modernise safety compliance

N Shibi and K Ahlgren (Techs4biz)

Use of concept risk assessment for field development certainty

C Crowley, D Ashton and D Callus (Atkins Global)

Northern gas pipeline project — a case study in safe, professional gas pipeline construction

T Green (McConnell Dowell Constructors)

Safe and efficient delivery of logistics solutions to coal seam gas well sites, utilising our 'Well in a Box' methodology | E Kunkels, J King* and B Yeong (Arrow Energy)

Repositioning Australian LNG in a commoditising industry

A Abreu (S&P Global Platts)