

ASEG-PESA-AIG 2016

**25TH GEOPHYSICAL
CONFERENCE & EXHIBITION**

Interpreting the Past, Discovering the Future

CONFERENCE HANDBOOK



Australian Society of
Exploration Geophysicists



PESA
Petroleum Exploration
Society of Australia



**AUSTRALIAN
INSTITUTE OF
GEOSCIENTISTS**

BY BOAT. BY AIRCRAFT.
BY TRUCK. BY HELICOPTER.
ON MOUNTAINS. DESERTS.
ICY WASTES AND JUNGLE.
THROUGH ROCK. LIQUID. AIR.
TO A MUCH GREATER DEPTH.
OUR VIRTUAL BORING MEANS
LESS NEED FOR EXPLORATORY
BOREHOLES. SO WHATEVER WE
HUNT FOR. WHEREVER WE GO.
**IT'S LESS BORING
WITH ADROK**

FURTHER, DEEPER, FASTER, GREENER, CHEAPER.
THE ADROK DEEP SUBSURFACE EXPLORER.



Our ambition is simple - to fundamentally change the way our industry explores for its resources. Because we believe our technology is a game changer.

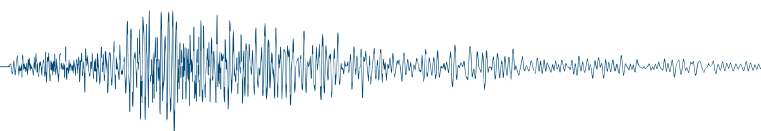
We invented the innovative Atomic Dielectric Resonance (ADR) scanner - a breakthrough in the exploration industry. Sending a narrow beam of energy into the ground using micro and radio waves, the beam reflected back has a fingerprint that positively identifies and maps hydrocarbons and minerals. This reduces the need for drilling lots of exploratory boreholes and can **SAVE UP TO 90% OF THE COST** of drilling projects.

Our exploration projects have taken us around the globe in search of oil, gas, water, coal and other minerals. The company has expanded from our head office in Edinburgh in the UK to Houston in the US, Canada and Australia and we are continuing to grow our business worldwide.

If you would like to talk to us about we can make your exploration projects greener, cheaper, faster, deeper and better please contact us at revolution@adrokgroup.com or visit www.adrokgroup.com



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Welcome to the ASEG-PESA-AIG 2016 Conference and Exhibition

In August 1979 the first Australian Society of Exploration Geophysicists conference was held at the AMF Centre in Adelaide, South Australia. Nearly 40 years later, the 25th ASEG Conference and Exhibition is again being held in Adelaide, this time at the Adelaide Convention Centre.

We're proud to be holding this conference once again in conjunction with the Petroleum Exploration Society of Australia. PESA has partnered with the ASEG for many conferences, sharing its members' expertise in the field of petroleum exploration.

We're also very excited to be joining forces with the Australian Institute of Geoscientists for this conference. Many AIG members are heavily involved in the geophysical industries so it's fitting that they're involved in this major event.

This is the 25th ASEG Conference and Exhibition. It's an opportunity to reflect on the past, as well as look to the future. Our conference theme 'Interpreting the past, discovering the future' is a nod to where we are now, not just as societies, but as geoscientists. Many of us find ourselves revisiting legacy data, reprocessing, and reinterpreting. Our conference logo is split into two halves: the greyscale past and colourful future. The wavefront pattern, the colour scales used, the fault in the rock: all nods to the geophysical world.

Low commodity prices and low demand mean that it's a difficult time for our industry. In November 2015, the AIG reported around 35% unemployment and underemployed in the sector. This doesn't mean that the industry is quiet. The conference organising committee have received over 240 extended abstracts to review for this conference. The vast majority of them are of excellent quality, and the programme committee has had the rather pleasant problem of fitting as many of them as possible into five concurrent streams

A major change for this conference is in the organisation of mineral presentations. Rather than organising talks as we have in the past mostly separating into themes based on a geophysical technique and then providing case studies, we're trying to integrate ourselves into the 'deeper' exploration truths of the Uncover initiative. Uncover is a nationwide

initiative to tackle the problem of discovering new resources under the Australian regolith. We have asked speakers to address the four Uncover themes. These are: Characterising Australia's cover, Investigating Australia's lithospheric architecture, Characterising and detecting the distal footprints of ore deposits, and Resolving the 4D geodynamics and metallogenic evolution of Australia. This is not a big stretch for exploration geophysicists, as to a large extent we already work in this space. To us this seemed like a small, but important, adjustment to make to think in these terms.

We have 23 keynote presentations giving perspectives from industry, government, and university scientists. From seismic, minerals, environmental, near surface, engineering and mining geophysics, there is something for all geophysicists in the programme.

We've also received many excellent extended abstracts for the posters. We've created a daily post-lunch poster session (without any conflicting oral sessions) to allow poster presenters to speak about

their posters directly to interested delegates.

Complementing the oral presentations and posters is the workshop programme. The Conference Organising Committee received many expressions of interest to hold workshops, so the 20 that were chosen really are the cream of the crop.

The dinner will be held at the newly redeveloped Adelaide Oval, a short walk from the Convention Centre. The Adelaide Oval was redeveloped in 2013/14, with new stands being opened and new facilities throughout the complex.

Thank you to all the sponsors who have come on board. Without you this conference simply could not happen. At the time of writing our sponsors are: BP (Silver), Austhail Geophysical, Beach Energy, CSIRO, Velseis, Santos (Bronze), First Quantum Minerals Ltd (Best Paper Awards Sponsor), and Wireline Services Group (Lanyard sponsor).

On behalf of the whole Conference Organising Committee, we welcome you all to ASEG-PESA-AIG 2016.



Philip Heath
(Minerals Co-Chair)



Luke Gardiner
(Petroleum Co-Chair)



ASEG-PESA-AIG 2016 Conference Organising Committee