

ASEG innovation, deep exploration and the results of the recent Member questionnaire

Last Thursday night (9 September) I had the pleasure of attending WA's Branch Meeting, which was addressed by Tim Hopper from NMR Services. Tim talked about borehole logging and what he had to say was relevant for oil and gas as well as for minerals. I could not hope to summarise Tim's talk here, but I never cease to be amazed at the innovation of ASEG Members. I still hope to make it to at least one meeting of each Branch during my term as ASEG President.

Australia's high profile in mineral discovery is one of the reasons the EAGE (European Association of Geoscientists and Engineers) is keen to involve the ASEG in its meetings. Strategic thinkers in the EAGE have concluded that 'the reliable and secure supply of non-energy raw materials is of growing concern within not only Europe but also worldwide. It is fundamental for our economic growth, improved living style and to develop green technologies. The primary production of raw materials must increase to sustain the increasing demand for several strategic minerals throughout the whole value chain.' The EAGE will be holding a one-day workshop on 'Deep mineral exploration: chasing both land and sea deposits' in Münster in Germany on Friday 18 March 2016 (my italics). See: <http://www.eage.org/event/?eventid=1398§ion=1>

The EAGE deliberations reminded me of Ken Witherly's article in the last issue of *Preview* (PV 177) where he draws attention to programmes such as the DETCRC (Deep Exploration Technologies Cooperative Research Centre), the UNCOVER Initiative in Australia and the CMIC (Canada Mining Innovation Council) Footprints in Canada, which are major efforts attempting to deal with the transition to deep exploration. As Ken points out, 'While mining companies don't have to grow, they do, by definition, have to replenish what they mine or they will cease to exist.' The problem we have in Australia is that the DETCRC is strongly focussed on drilling technology at the expense of geophysics and geochemistry and the UNCOVER Initiative has so far failed to generate enough government interest for

significant federal funding. I suspect that it will not be long before other geophysical societies also prioritise deep mineral discovery, both on-shore and off-shore. Intersociety collaboration on deep exploration should be encouraged, but it is far from clear who will pay for these research initiatives.

The responses to the recent ASEG Member Questionnaire, which was overseen by Tania Dhu (Chair of State Branches), have been analysed and will be reported and discussed in *Preview* over the next few issues. We had 340 responses from approximately 1000 Members, which means that the findings represent the views of a fair cross-section of our membership. The response to the question about what OzStep courses Members would attend demonstrates how successful this initiative has been. Without pre-empting the reports, and as Kim Frankcombe points out, some of the responses to the open ended question about 'what the Society could do to improve things for you' indicate that some Members are unaware of the services we already offer. Clearly we are failing to communicate with the membership at large. Some examples of these responses include: suggestions for Emeritus membership (we already have the equivalent in 'retired membership'), conference concessions for the unemployed (never refused to my knowledge) and the removal of charges for colour pages in *Exploration Geophysics* (we have always had such for authors of papers from ASEG conferences and workshops and two years ago extended free colour to all authors as we transition to online delivery of *EG*). There also seems to be some misapprehension about the ASEG as a professional organisation vs a learned society. As Kim points out 'we cannot by our Charter represent the professional interests of our Members. To do so would see us fail the test for an organisation promoting science for which we gain tax exempt status. We need to state that case clearly and encourage people to also join the AIG or AusIMM as well as the ASEG for those benefits'. Kim found several other (somewhat surprising/alarming) examples of misunderstanding

and/or ASEG's failure to communicate, which I will leave for the report(s) in *Preview*.

On a recent trip to the Kimberley I felt obliged to find a dinosaur footprint near Broome (see photo), being interested in things 'palaeo-'. Because of a series of thefts some years ago the authorities do not encourage visitors to seek them out. Signage emphasises that they are only visible at very low tide and climbing down the jumbled rock mass to the beach is fraught with danger and, anyway, the imitation ones in concrete at the top are just as good (they're not, the ones set in concrete look like the foot was webbed, like some giant duck). Needless to say, right on low tide hordes of visitors appear and clamber over the rocks to the exposed shelf where the foot prints may be found. The signage also states that although the genus of dinosaur is unknown, it could be that of a Late Jurassic North American creature. I assumed they meant similar to, rather than actually coming from, North America.



Photo taken by Greg Baker.

Phil Schmidt
ASEG President
president@aseg.org.au

Magnetic Field Instrumentation

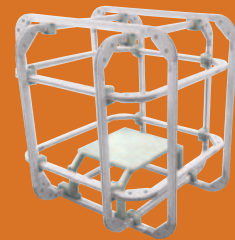
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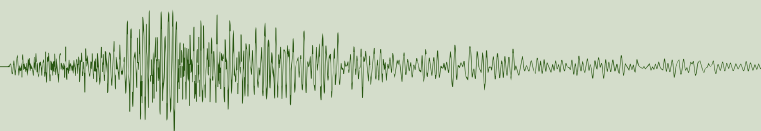


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Welcome to new Members

The ASEG extends a warm welcome to 28 new Members approved by the Federal Executive at its August and September meetings (see table).

First name	Last name	Organisation	State	Country	Membership type
Erick	Adam	Wolf Geophysics Pty Ltd	Quebec	Canada	Active O/S
Julie	Buchanan	Macquarie University	NSW	Australia	Student
Giada	Bufarale	Curtin University	WA	Australia	Student
Anders	Christiansen	Aarhus University		Denmark	Active O/S
James	Cleverly	REFLEX Geochemistry	WA	Australia	Active
Jesse	Cotterill	University of Adelaide	SA	Australia	Student
Raphael	Doutre	University of Western Australia	WA	Australia	Student
Thomas	Dubos		NSW	Australia	Associate
Max	Fry	University of Adelaide	SA	Australia	Student
Tsige	Gebremariam	Axum University		Ethiopia	Student
Tm	Horrocks	University of Western Australia	WA	Australia	Student
Piva	Jonathan	James Cook University	QLD	Australia	Student
Seogi	Kang	University of British Columbia	Vancouver	Canada	Student
William	Kovach	Macquarie University	NSW	Australia	Student
Paul	Larkin		VIC	Australia	Active
Andrew	Lovell	Heathgate Resources	SA	Australia	Associate
Samuel	Macdonald	Golder Associates	ACT	Australia	Active
Michael	McMillan	University of British Columbia	Vancouver	Canada	Student
Hassan	Mohamed	Kyushu University		Japan	Student
Muriel	Naguit	Research School of Earth Sciences	ACT	Australia	Student
Parkash Kumar	Rajasekaran	University of New South Wales	NSW	Australia	Student
David	Ross	Macquarie University	NSW	Australia	Student
Janelle	Simpson	University of Adelaide	QLD	Australia	Student
Leo	Snowman		Texas	USA	Active
Jarrad	Trunfull	Southern Geoscience Consultants	WA	Australia	Active
Patrick	Tutty	Earth Signal Processing Ltd	Alberta	Canada	Active
Kevin	Ung	Curtin University	WA	Australia	Student
Gavin	Ward	Subsurface Team Lead	WA	Australia	Active



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12th SA Exploration and Mining Conference

Friday 11 December 2015

20 PRESENTATIONS

- New companies • Exploration projects
- Feasibility studies • Mining operations

KEYNOTE ADDRESSES

- Opening address (TBA) • DSD Review

WRAP UP

- Q&A session, chaired by Derek Carter

NETWORKING

- Four hours of networking in five sessions

WORKSHOPS

- AIG Roger Taylor – 2-day **Breccia Workshop, 9–10 Dec**
- Geological Survey of SA – Half-day **Seismic & MT Workshop, 10 Dec**
 - AusIMM/AIG – 1-day **Monograph 30 Roadshow – Resource and Reserve Estimation, 10 Dec**
 - AIG – 1-day **McLaren Vale Wine Tour, 12 Dec**

ADELAIDE CONVENTION CENTRE

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- Sessions in Hall L
- Catering breaks and displays in Halls M and N
- Registration 7.30 to 8.30 am
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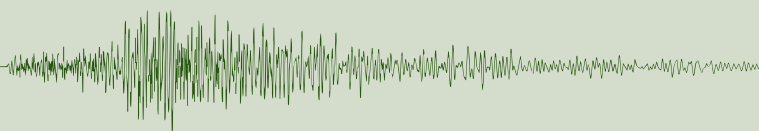


Australian Society of
Exploration Geophysicists



Registration and more information available via website:

www.saexplorers.com.au



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The ASEG Federal Executive signs off on new By Law

The ASEG Federal Executive approved a new By Law to establish Conference Organising Committees at its meeting on 16 July 2015.

By Laws are used frequently by the Federal Executive. They are an interface between the rather more general words in the Constitution and the more detailed administrative arrangements needed to operate a society with over a 1000 members scattered across Australia and around the world. Changes to the Constitution have to be approved by Members of the Society. By Laws can be approved by the Federal Executive but Members can vote to have a By Law overturned. Therefore all Members have to be notified of any new By Laws or changes to existing By Laws, this is done by publication in *Preview*.

The Society's Conferences and Exhibitions are significant events in our calendar. They are a mechanism to bring new science to our Members, provide networking experiences especially through the technical exhibition and social functions, and the conference surpluses give a major boost to the Society's finances. The planning and conduct of each conference and exhibition are overseen by a Conference Organising Committee (COC) that acts independently (but is overseen by) the Federal Executive and another committee – the Conference Advisory Committee – that is made up of Members with experience in running previous conferences. Our conferences and exhibitions have very large budgets that are managed by the COC. But, a review

of our practices revealed that although the delegation of financial powers to each COC was implied in various unofficial documents, financial powers were not explicitly delegated under the terms of our Society's Constitution. The new By Law addresses this issue.

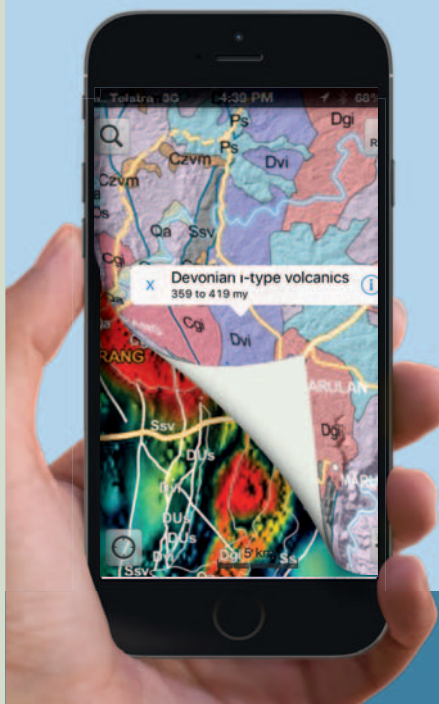
The new By Law is published below for the information of Members. Anyone wishing to challenge this By Law should contact the Honorary Secretary through the ASEG Secretariat, PO Box 576, Crows Nest, NSW 1585. Tel: (02) 9431 8622, Fax: (02) 9431 8677 or directly by email: fedsec@aseg.org.au.

Barry Drummond
Honorary Secretary
fedsec@aseg.org.au



Department
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Updated NSW geophysical imagery and geological maps for phones



More geophysical images are now available, including a composite image of pseudocolour isostatic gravity data superimposed on a greyscale intensity layer of tilt-filtered total magnetic intensity (reduced to the pole).

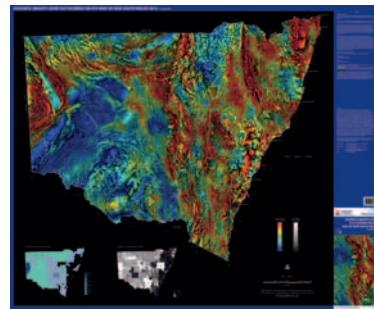
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The interactive geology map of NSW displays 106 simplified rock types. Touching the screen creates a pop-up displaying the name and age of the underlying rock type. When the pop-up is touched, additional information is displayed.

High Resolution Map

The tilt-filtered magnetic & gravity image of NSW is also available as a poster (flat or folded) at 1:1 500 000 scale. Purchase for \$19.80 through <https://search.geoscience.nsw.gov.au/product/9075>.



Geological Survey of New South Wales

A By Law to establish and disband a Conference Organising Committee (COC)

This By Law is established under the terms and conditions of Clause 8 [FEDERAL EXECUTIVE], Clause 11 [COMMITTEES], Clause 13.3 [BANKING] and Clause 15 [By Laws] of the Constitution of the Australian Society of Exploration Geophysicists (ASEG).

1. Purpose of this By Law

- i. To define how a COC will be established to plan, host and operate all aspects of each International Conference and Exhibition (Conference) of the Society, including how financial powers are delegated from the Federal Executive of the ASEG to the COC.
- ii. Recognising that the ASEG also organises other conferences, workshops and seminars either solely or jointly with other societies, the principles and practices set out in this By Law will also apply to those other events when
 - a. the ASEG holds the primary financial accountability for the event, and
 - b. a Member of the ASEG is to hold the financial delegation; except that the Federal Executive shall have the discretion of appointing one Chair rather than two Joint-Chairs as set out below in Clause 3.

2. Background

- i. The ASEG conducts an International Conference and Exhibition ('Conference') approximately every 18 months.
- ii. These Conferences are often co-hosted by one or more other professional societies, with the ASEG taking the role as lead host.
- iii. The ASEG will provide written advice to the COC through the provision of a committee charter and a conference handbook which

are based on the cumulative knowledge of the ASEG acquired through having organised past meetings, and oral advice from a Conference Advisory Committee (CAC) that the Federal Executive has established or will establish, comprised of members who have been involved in the planning and running of previous Conferences.

3. Appointment of Committee Members

- i. The Federal Executive of the Society will appoint two Joint-Chairs of the COC.
- ii. In the event that the Conference is to be conducted jointly by another society or societies, the ASEG will give consideration to the appointment of Joint-Chairs who represent fairly the interests of all host societies.
- iii. The Joint-Chairs will then appoint the other members of the COC, subject to the right of veto of any appointment by the Federal Executive if the Federal Executive is of the opinion that a member of the COC is or becomes unsuitable and this is not dealt with appropriately by the Joint-Chairs.

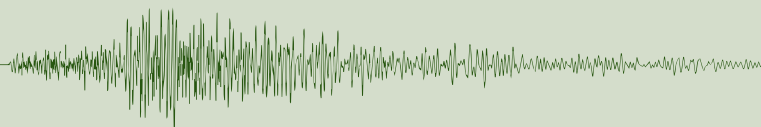
4. Make up of a COC

- i. The Joint-Chairs of a COC may appoint members to perform any tasks they think appropriate.
- ii. Notwithstanding the discretion allowed to the Joint-Chairs by 4(i), the Joint-Chairs will appoint a Treasurer for Conference to the COC.
- iii. The COC may establish sub-committees to assist in the planning and conduct of the Conference.
- iv. The COC may engage the services of a Professional Conference Organiser (PCO) to assist it with the planning and conduct of the Conference.

5. Financial Arrangements:

- i. The Federal Executive of the ASEG will provide a Charter Letter of the form set out in Attachment A to this By Law to the Joint-Chairs of the COC delegating financial powers to the Joint-Chairs and the Treasurer¹ under the terms and conditions allowed by the Constitution of the ASEG.
- ii. Under Clause 8.12 of the ASEG Constitution no member of the COC including the Joint-Chairs and the Treasurer has the power to further delegate their financial powers to any other person.
 - a. Where the Joint-Chairs or Treasurer require financial powers delegated to another person, that delegation must be done directly by a Director of the ASEG.
 - b. The delegation of financial powers to a PCO will be done through specific clauses included in a contract signed by a Director of the ASEG and the PCO.
- iii. The Treasurer of the COC will prepare a budget for the Conference and the COC will monitor the performance of the planning and conduct of the Conference against that budget.
- iv. After the Conference, the Federal Executive will appoint independent auditors to review the accounts for the Conference.
- v. After all financial matters have been dealt with by the COC, including any raised by the independent auditors,
 - a. if the conference has returned a surplus, any surplus funds will be transferred to the accounts of the ASEG and other societies which are co-hosts for the Conference in the proportions

¹ Note: Each Joint Chairs will receive and be named in a Charter Letter. In contrast the delegation to the Treasurer is to the position of Treasurer. The Treasurer is appointed by the Joint-Chairs, who obviously cannot make the appointment until they themselves are appointed through their Charter Letters. The Federal Executive in effect has a veto over the appointment of someone as Treasurer to whom the Federal Executive does not wish to delegate financial powers [Clause 3(iii)].



agreed at the beginning of conference planning, or

- b. if the conference has made a loss, then the COC will negotiate with the Federal Executive and representatives of the other societies which are co-hosts for the Conference to determine how the loss will be apportioned to each of the hosting societies.
- vi. All conference accounts will then be closed.
6. Winding up the COC
 - i. The Federal Executive will consider the COC to have been wound up when
 - a. the conference has been held, and
 - b. all accounts for the Conference have been settled and audited, and
 - c. any surplus funds transferred to the ASEG and co-host societies or losses funded, and
 - d. the COC has delivered a final conference report to the Federal Executive, and
 - e. the contract with the PCO has been terminated, at which time its financial delegations will be withdrawn.
 - ii. The financial delegations to the COC will cease when the activities at 6(i) (a-e) have been completed.

This By Law was approved by the Federal Executive on 16 July 2015

ATTACHMENT A

ON ASEG Letter Head Paper

Legal Address of the Society

To Go Here

Dear [Name of Joint-Chair]

Charter Letter to Appoint Joint-Chair of the Conference Organising Committee

For [Name of Conference]

Through this Charter Letter and with the endorsement of the Federal Executive of

the Australian Society of Exploration Geophysicists I am pleased to appoint you as Joint-Chair of the Conference Organising Committee (COC) for the [NAME OF CONFERENCE] ('Conference').

A similar letter will be sent to your other Joint-Chair, [Name of Other Joint Chair].

I now ask you and [Name of Other Joint Chair] to formally appoint the rest of your Conference Organising Committee, including a Treasurer to manage the financial matters of the Conference.

Under the Terms of Clause 8 of the ASEG's Constitution, the Federal Executive delegates its financial powers to you and to [Name of Other Joint Chair]. These financial powers are also delegated to the position of Treasurer of the COC. Because of the financial responsibilities of the position of Treasurer, his or her appointment will require endorsement by the Federal Executive.

You do not have the authority to delegate those financial powers further to any other person whether a member of the COC or not, or to a Professional Conference Organiser. Should you wish other people to have a financial delegation you must ask the Federal Executive to provide that delegation directly to them.

This letter is sent to you under the terms set out in the ASEG's By Law governing the establishment of Conference Organising Committees. You must use that By Law and the ASEG's Constitution as the governing documents for your Conference Organising Committee.

Your appointment as Joint-Chair, the financial delegation and the existence of the Conference Organising Committee will cease when the terms set out in Clause 6 of the By Law have been met.

Let me take this opportunity to thank you for taking on this role.

Yours sincerely,

[Name of President or Delegate]

ASEG President

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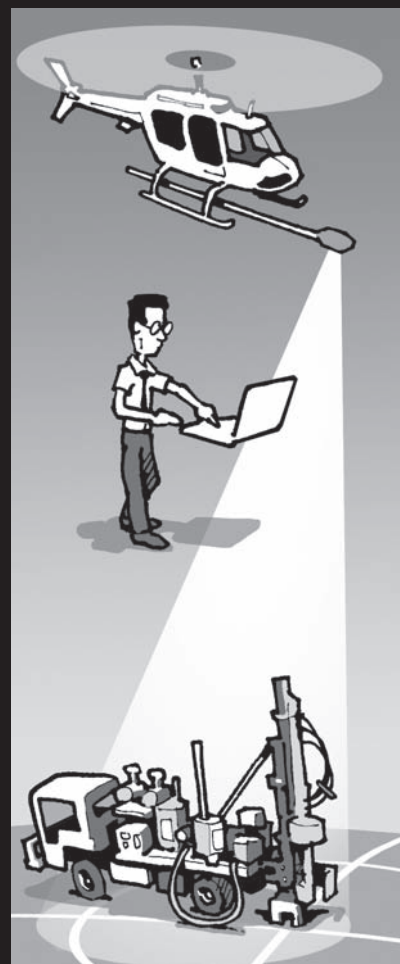
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First call for nominations for the 2016 ASEG Honours and Awards



To be presented at:

ASEG-PESA 2016: 25th Geophysical
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2016 – Adelaide, South Australia.

Award categories requiring nominations
from ASEG members prior to the
conference include:

- Outstanding contributions to the
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- Outstanding contributions and service
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- Recognition of innovative technological
developments
- Promotion of geophysics to the wider
community
- Significant achievements by younger
ASEG members

Lists of previous awardees, award criteria
and nomination guidelines can be found
on the ASEG website at: [https://aseg.org.
au/honours-and-awards](https://aseg.org.au/honours-and-awards)

For further information and submission of
nominations, please contact:

Andrew Mutton
ASEG Honours and Awards Committee
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ASEG Branch News

Australian Capital Territory

August saw great minds unite at the Spanish Club for the annual Geo-Society Quiz Night. ASEG members fielded two tables – ‘The Dirty Ores’ and ‘Magnetic Storm’. Magnetic Storm struggled to find their flare but showed consistency, trailing in last place after every round. The Dirty Ores, on the other hand, struck gold early and continued to expand their lead, taking out first place. The questions were a great balance of the interesting and scientific with a favourite round being ‘Geoscientist or Mass Murderer?’ (some images are attached for you to try). The ACT Branch would like to thank the team that put the night together. The team, which was led by **Millicent Crowe** (ASEG), included **Sarah Marshall** (IAH rep), **Col McInnes** (AusIMM rep), **Claire Orlov** (PESA rep), **Phil Main**, **Neil Symington**, **Sarah Buckerfield** and our MC’s for the night, **Dr Chris Folkes** and **Adam Bailey**. We look forward to seeing more people at the event next year.



Images from the ACT Geo-Societies Quiz-night for the Round ‘Geoscientist or Mass Murderer?’.

Answers

1. Alice Wilson – Geoscientist
2. Dr Harold Shipman – Mass Murderer
3. Rosemary West – Mass Murderer
4. Douglas Mawson – Geoscientist

Geoscience Australia (GA) celebrated National Science Week by welcoming the community to its annual Open Day on Sunday 23 August 2015. The ASEG has around 40 Members who work at or have been associated with GA and many volunteered at this event. Interactive and innovative geoscience displays kept visitors busily engaged with Geoscience Australia’s work across the six Strategic



Open Day at Geoscience Australia: Exploring undercover.



Open Day at Geoscience Australia: Mineral identification.

Priorities. Visitors found out how earthquakes are detected, chatted with geoscientists, learnt how a dancing robot can help make Australia’s GPS system more accurate, discovered a dazzling array of mineral specimens and explored a wide variety of geoscience career options. We appreciated the opportunity to engage with the community and young scientists as well as to catch up with ASEG Members who travelled from other states for this event.

Dr Josef Holzschuh repeated his Near Surface SEG talk, which he presented in

Hawaii in September, for ASEG ACT Branch Members. The talk was titled ‘Extracting near surface information from complex regional seismic data with thick limestone and sand dunes at the near surface’. Josef talked about how near surface information can be obtained from regional seismic data highlighting the weathering and layering properties, as well as dipping bedrock structures. In his case study he showed how hard limestone layers overlying soft sediments in the near surface make complex refracted arrivals and refraction statics which are

difficult to define. Josef also spoke about very large surface sand dunes (over 10 m high) causing significant time delays for reflected data. He commented that refraction statics were essential prior to further reflection processing. You will all know Josef from the front cover of the last edition of *Preview* – climbing out of a lava tube! He also featured in the Hula Dancing photo – practicing his seismic moves.



Dr Josef Holzschuh presenting his Hawaiian Near Surface SEG talk at Geoscience Australia.

Phillip Wynne presented a talk on the Australian Fundamental Gravity Network (AFGN) to the ACT Branch. The AFGN is a set of permanently marked and documented stations providing the datum for gravity surveys conducted throughout Australia. Geoscience Australia is the custodian of this network and collaborates with the states and territories to maintain

it. Phil spoke about the most recent field campaign, which checked existing stations, replaced old stations, and established some new stations in locations readily accessible to users of gravity data. Phil has been with Geoscience Australia and working with gravity for over 20 years.

By the time this edition of *Preview* hits the streets we will have also run two OzStep courses, the **David Lumley** reservoir monitoring OZSTEP course on 12 October at Geoscience Australia and the **Bob Musgrave** potential fields OZSTEP course on 19 of October, also at Geoscience Australia. We are also gearing up for visiting lecturers towards the end of the year with **Alessandro Ferretti** presenting on 'Satellite InSAR data: reservoir monitoring from space' on 25 November and **Hansruedi Maurer** presenting on 'The curse of dimensionality in exploring the subsurface' on the 9 December, both lectures will be held at Geoscience Australia.



AFGN 2015 A-10 recording at Mt Nelson.



AFGN 2015 trip.

Keep the date free – 20 November - for the ACT Branch Christmas Event with our very own **Ted Lilley** talking about MT and the history of geophysics!

For more information about any of these events please email **Marina Costelloe** at actpresident@aseg.org.au or see the ASEG website.

Marina Costelloe
(ACT Branch President)

New South Wales

In July, we held our annual dinner. Once again, it was held in a steakhouse; we ate lots of steak, drank lots of red, and discussed lots of geophysical and non-geophysical topics. We had a good turnout and a great time was had by all.

In August, **John Triantafilis** from the University of NSW gave a presentation entitled 'Digital mapping to measure, monitor and map soil and hydrological properties in 2D and 3D'. John spoke about how he uses EM techniques to study the spatial variation of soil properties. John discussed generating 2D and 3D models of the calculated electrical conductivity at any given depth. John looked at examples of his research from an irrigated agricultural field in an extensive Quaternary alluvial clay plain northwest of Moree in NSW, to a pivot-irrigated field growing Lucerne in San Jacinto, USA.

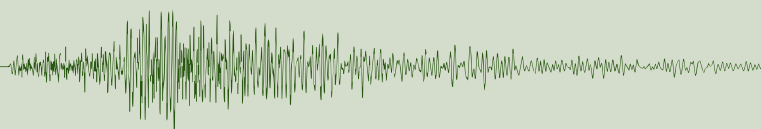
An invitation to attend NSW Branch meetings is extended to interstate and international visitors who happen to be in town at that time. Meetings are held on the third Wednesday of each month from 5:30 pm at the Rugby Club in the Sydney CBD. Meeting notices, addresses and relevant contact details can be found on the NSW Branch website.

Mark Lackie
(NSW Branch President)

Queensland

The Queensland ASEG/PESA Branches' Annual Trivia night held in August was a great success with the alcoholic spirits identification round being the most popular among our Branch Members!

Emma Brand's talk 'From UQ to the US and back: a story of one UQ grad's international adventures' also held in August was equally a great success. The meeting had over 40 attendees, this year's biggest attendance at a local Branch meeting.



Emma Brand being thanked for her presentation to the QLD Branch.

September brings **Noll Moriarty** presenting his talk 'Predicting timing of commodity prices booms & busts: a scientific approach'. This talk is sure to bring a crowd of interest given the current climate in the industry.

Queensland will also host three OzSTEP courses in the following months. The first is **David Lumley's** course on 14 October which will focus on reservoir monitoring and 4D seismic. **Bob Musgrave** will host a course on potential fields on 30 October and **Brian Russell** will give his course on concepts in AVO and inversion on 4 November. Local Branch meetings will also be attended by OzSTEP presenters while they are in Brisbane. Queensland has kept Member's prices for these OzSTEP courses low in an attempt to encourage attendance. Non-members can sign up for full 2016 ASEG membership and receive the Member's rate on all workshops.

Megan Nightingale
(QLD Branch Secretary)

South Australia & Northern Territory

In early August the South Australia and Northern Territory Branch of the ASEG hosted **Duncan Cogswell** from Borehole Wireline for our monthly technical evening at the Coopers Alehouse. Duncan's talk 'Geophysical logging – understanding the measurement' was a fantastic overview of the versatility of geophysical logging (adopted primarily from wireline logging in the oil and gas industry) when used in the mining, groundwater, geotechnical and environmental fields. Duncan also discussed the various measurement types, specific applications and interpretation of the results. The event had a great turnout

and was well received by all in attendance.

The annual wine tasting was held in late August at the Public Schools Club. As always it was a great hit with all who attended. Two worthy winners were chosen after much tough deliberation, a testament to the strength, diversity and quality of South Australia's not so well-known wineries. Details of the winning wines, as well as the order forms, are available in this issue of *Preview*. If you are interested in attending the wine tasting there are three easy ways to get an invitation – join the SA/NT committee, sponsor our local state branch or give a presentation at one of our technical evenings!

Our next technical evening will be our annual Industry Night, 22 September starting at 5:30 pm at the Coopers Alehouse, which will include presentations from some of our sponsors from 6:15 pm. Other events include the upcoming OzSTEP courses, with '4D reservoir monitoring' presented by Prof **David Lumley** on 16 October and 'Potential Fields: a (re)introduction for geophysicists and geologists' presented by **Bob Musgrave** on 28 October. Both courses will be held in the Balcony Room at the Hotel Richmond, more information and bookings under the events tab @ <https://aseg.org.au/>. We will also be hosting the SEG Near Surface honorary lecturer Dr **Hansruedi Maurer** on 19 November.

As ever, without the generous support from our sponsors we would not be able to hold so many great technical events. This year thanks go to Beach Energy, the Department of State Development, Geokinetics, Minotaur Exploration, Petrosys, Santos, Schlumberger, Borehole Wireline and Zonge.

Finally, new Members and other interested persons are always welcome to local events and we are always on the lookout for people interested in giving a technical presentation for the local Branch membership. For further details on events or if you wish to present, please contact Josh at Joshua.Sage@beachenergy.com.au or Michael at mdello@hotmail.com.

Josh Sage
(SA/NT Branch President)

Tasmania

The Tasmania Branch is hosting **Bob Musgrave's** OzSTEP course 'Potential

fields: a (re)introduction for geophysicists and geologists' on 15 October in the CODES Conference Room at the University of Tasmania, Sandy Bay. Details of this one-day course, covering physical properties, data presentation, filtering and inversion can found in this edition of *Preview*.

Tasmania will be squeezing Bob pretty dry as later that same evening (15 October) he has kindly agreed to back up to address a joint meeting of the ASEG and Geological Society of Australia on 'What can geophysics tell us about the mobile phase of the Lachlan Orogen?' This will get under way from 6 pm in the UTas School of Earth Sciences lecture theatre, preceded by drinks and nibbles at 5:30 pm.

30 November will see the Tasmania branch hosting the SEG 2015 Near Surface Honorary Lecturer, Dr **Hansruedi Maurer** of ETH Zurich, on 'The curse of dimensionality in exploring the subsurface, illustrated by several examples from near-surface geophysics including 3D tomographic inversions.' This lecture will be held at noon in the CODES conference room.

Interested members and other parties should also keep an eye on the seminar program of the University of Tasmania's School of Earth Sciences, which regularly delivers presentations of geophysical as well as general earth science interest. Contact Mark Duffett taspresident@aseg.org.au for further details.

Mark Duffett
(Tasmanian Branch President)

Victoria

It was a busy winter in Melbourne.

On 22 July the well-attended technical luncheon at the Kelvin Club with **Jon Keall**, Chief Geoscientist at FAR Ltd, was a great success. Jon presented 'The world's largest oil discovery for 2014: What does it look like and how did we get there?' outlining the recent discoveries by FAR in offshore Senegal. It is always interesting to hear a success story! On Wednesday 12 August it was again time to network with the local geoscience and exploration community at the joint PESA-ASEG-SPE Mid-Winter Social at the Duke of Wellington Hotel. Finally, on Thursday 3 September, the ASEG Victoria Branch hosted a technical meeting at the Kelvin Club with **Andrew Button**, Caistor Geoscience, presenting

on 'Empirical geologic-geophysical search model for bulk mineable platinum-palladium-base metal deposits of the Platreef type'.

This spring promises to be even busier.

On Wednesday 7 October the ASEG Victoria Branch will host a technical evening meeting at the Kelvin Club with **Bill Lodwick**, Fletchwick International, recently returned from Malaysia. The title of Bill's talk is 'Geophysicists, petrophysicists, seismic data and well logs'. The meeting will be starting at 6 pm (drinks and nibbles) for a 6:30 pm presentation.

On Friday 9 October we will be hosting the all-day OzSTEP course on '4D reservoir monitoring' presented by **David Lumley** from the University of Western Australia. Registrations are open via the ASEG Events web-page.

On Tuesday 13 October we will be hosting the all-day OzSTEP course on 'Potential fields: a (re)introduction for geophysicists and geologists' presented by **Bob Musgrave** from the Geological Survey of New South Wales.

On Thursday 29 October it is time for the ASEG Victoria Branch 'Annual Student Night', where honours and graduate students from Melbourne's top geoscience education institutions will present their research results and compete for generous prizes. The meeting will be held at the Kelvin Club, starting at 6 pm (drinks and nibbles) for a 6:30 pm presentation.

Let me remind you all of the second annual 'Victorian Geoscience R&D Forum' to be held on 4 November at the KPMG offices in 147 Collins Street in Melbourne's CBD. The event is organised by the Victoria PESA branch, which extends an invitation to all interested ASEG Members. The event is generously sponsored by KPMG and will be free for all attendees.

On Friday 6 November we will be hosting the all-day OzSTEP course in 'AVO and inversion methods in exploration seismology' by **Brian Russell**, Hampson-Russell/CGG.

Make a big mark in your calendars for the Annual Joint PESA-ASEG-SPE Christmas Luncheon on Wednesday 9 December – as always, there will be an interesting talk from one of the remote coal faces of exploration (TBA), along with games, quizzes, excellent food and drink and even better company!

On Thursday 10 December the ASEG Victoria Branch will host a technical meeting with Dr **Hansruedi Maurer**, ETH Zürich and SEG Honorary Lecturer, presenting 'The curse of dimensionality in exploring the subsurface'. The meeting will be held at the Kelvin Club, starting at 6 pm (drinks and nibbles) for a 6:30 pm presentation.

Pre-meeting registration for any of the upcoming events is mandatory, and can be made via the ASEG Events web-page. We look forward to seeing many ASEG Victoria Branch members at the meetings in the coming months.

Ashbjorn Norlund Christensen
(Victorian Branch President)

Western Australia

The WA Branch held two technical sessions in July and August. **Andrew Long** (Petroleum Geo-Services) presented on 'Imaging and characterizing the earth using seismic multiples' in July and **Barry Bourne** (Terra Resources) presented on 'The geophysical response of intrusion related gold with

an example from Okvau, Cambodia' in August.

The WA Branch Committee also successfully experimented with phone conferencing at its August monthly meeting.

Three OzStep courses will be held in October and November in WA. These are: 'Potential fields: a (re)introduction for geophysicists and geologists' **Bob Musgrave** (26 October), '4D Reservoir Monitoring' **David Lumley** (30 October) and 'AVO and inversion methods in exploration seismology' **Brian Russell** (2 November). Registration opened in August, with ASEG Members pricing from \$220 for the one day courses and reduced rates available for student members.

Geophysics students from the University of Western Australia and Curtin University have been invited to apply for ASEG Student Awards. The applications closed at the end of September and the awards will be presented at the October Technical Meeting.

Prue Leeming
(WA Branch Preview correspondent)

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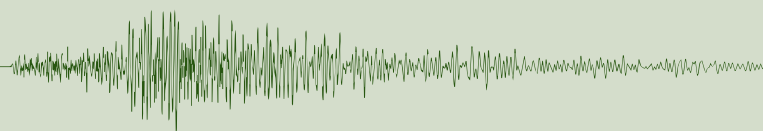
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ASEG calendar: technical meetings, courses and events

Date	Branch	Event	Presenter	Time	Venue
2015					
7 Oct	VIC	Technical night: Geophysicists, petrophysicists, seismic data and well logs	Bill Lodwick	1800–2000	The Kelvin Club, 14–30 Melbourne Place (off Russell Street), Melbourne
7 Oct	NSW	OzSTEP: 4D reservoir monitoring	Prof David Lumley, UWA	0900–1700	Rugby Club, off 31 Pitt Street Sydney
9 Oct	VIC	OzSTEP: 4D reservoir monitoring	Prof David Lumley, UWA	0900–1700	5 on 505, Level 5, 505 Little Collins Street, Melbourne
12 Oct	ACT	OzSTEP: 4D reservoir monitoring	Prof David Lumley, UWA	0900–1700	Geoscience Australia, Symonston
13 Oct	VIC	OzSTEP: Potential fields: a (re)introduction for geophysicists and geologists	Bob Musgrave	0900–1700	5 on 505, Level 5, 505 Little Collins Street, Melbourne
14 Oct	QLD	OzSTEP: 4D reservoir monitoring	Prof David Lumley, UWA	0900–1700	TBA
14 Oct	WA	Technical Night	TBA	1730–1900	City West, Function Centre, Perth
15 Oct	TAS	OzSTEP: Potential fields: a (re)introduction for geophysicists and geologists	Bob Musgrave	0900–1700	CODES Conference Room, University of Tasmania, Sandy Bay
15 Oct	TAS	Joint ASEG/GSA meeting: What can geophysics tell us about the mobile phase of the Lachlan Orogen?	Bob Musgrave	1730–1900	School of Earth Sciences, University of Tasmania, Sandy Bay
16 Oct	SA/NT	OzSTEP: 4D reservoir monitoring	Prof David Lumley, UWA	0900–1700	Balcony Room, Hotel Richmond
19 Oct	ACT	OzSTEP: Potential fields: a (re)introduction for geophysicists and geologists	Bob Musgrave	0900–1700	Geoscience Australia, Symonston
21 Oct	NSW	OzSTEP: Potential fields: a (re)introduction for geophysicists and geologists	Bob Musgrave	0900–1700	Rugby Club, off 31 Pitt Street Sydney
26 Oct	WA	OzSTEP: Potential fields: a (re)introduction for geophysicists and geologists	Bob Musgrave	0900–1700	TBA
28 Oct	SA/NT	OzSTEP: Potential fields: a (re)introduction for geophysicists and geologists	Bob Musgrave	0900–1700	Balcony Room, Hotel Richmond
29 Oct	VIC	Annual Student Night	Honours and Graduate students	1800–2000	The Kelvin Club 14–30 Melbourne Place (off Russell Street), Melbourne
30 Oct	QLD	OzSTEP: Potential fields: a (re)introduction for geophysicists and geologists	Bob Musgrave	0900–1700	TBA
30 Oct	WA	OzSTEP: 4D reservoir monitoring	Prof David Lumley, UWA	0900–1700	TBA
2 Nov	WA	OzSTEP: AVO and inversion methods in exploration seismology	Brian Russell	0900–1700	TBA
4 Nov	QLD	OzSTEP: AVO and inversion methods in exploration seismology	Brian Russell	0900–1700	TBA
4 Nov	VIC	Victorian Geoscience R&D Forum	Various	1300–1700	KPMG offices, 147 Collins Street, Melbourne
6 Nov	VIC	OzSTEP: AVO and inversion methods in exploration seismology	Brian Russell	0900–1700	5 on 505, Level 5, 505 Little Collins Street, Melbourne
6 Nov	WA	ASEG-PESA Golf Day	ASEG/PESA	TBA	Joondalup Golf Course
11 Nov	WA	Technical Night	Student presentations	1730–1930	City West, Function Centre, Perth
18 Nov	WA	SEG HL Near Surface: The curse of dimensionality in exploring the subsurface	Hansreudi Mauerer	TBA	City West, Function Centre, Perth
19 Nov	SA/NT	SEG HL Near Surface: The curse of dimensionality in exploring the subsurface	Hansreudi Mauerer	TBA	TBA
20 Nov	WA	EAGE (EET9) workshop: satellite InSAR data: reservoir monitoring from space	Alessandro Ferretti	0900–1700	CSIRO, Perth
20 Nov	ACT	Christmas Event: MT and the history of geophysics	Ted Lilley	TBA	TBA
23 Nov	QLD	SEG HL Near Surface: The curse of dimensionality in exploring the subsurface	Hansreudi Mauerer	TBA	TBA
24 Nov	WA	AGM and Christmas party		1730 till late	TBA
25 Nov	ACT	EAGE (EET9) workshop: satellite InSAR data: reservoir monitoring from space	Alessandro Ferretti	0900–1700	Geoscience Australia, Symonston
30 Nov	TAS	SEG HL Near Surface: The curse of dimensionality in exploring the subsurface	Hansreudi Mauerer	1200	CODES Conference Room, University of Tasmania, Sandy Bay
9 Dec	VIC	Annual joint PESA-ASEG-SPE Christmas luncheon	TBA	1200–1700	TBA
9 Dec	ACT	SEG HL Near Surface: The curse of dimensionality in exploring the subsurface	Hansreudi Mauerer	TBA	Geoscience Australia, Symonston
10 Dec	VIC	SEG HL Near Surface: The curse of dimensionality in exploring the subsurface	Hansreudi Mauerer	1800–2000	The Kelvin Club, 14–30 Melbourne Place (off Russell Street), Melbourne
11 Dec	SA	SA Exploration and Mining Conference	Various	0830–1700	Adelaide Convention Centre, North Terrace, Adelaide

TBA, to be advised (please contact your state branch secretary for more information).