

President's piece

ASEG news

President's piece



Katherine McKenna

Well 2017 is upon us and so much has happened to the world in the past year. Good or bad we are seeing new leaders, changes to the EU, continuing war, volatile metal and oil and gas prices, and the list just goes on. So much changed in 2016 that there is a solid hope that 2017 stabilises a little, especially in the exploration industry.

What I have noticed around me is the continual use of the word innovation. For example, it is being used politically, by media to identify an institution's stand out character, and as a "buzz" word for fund raising. Over January I had a look at the Australian Government's National Innovation and Science Agenda report (<http://www.innovation.gov.au/page/national-innovation-and-science-agenda-report>). An interesting read, especially when looking at where Australia sits in comparison to other countries with respect to government investment (see Figure 1).

The Australian Government is recognising the talent that is in the

country, and the importance of the development of ideas for future employment and growth of the country. The agenda also identified key sectors of competitive advantage. Three of these sectors would include many ASEG Members being: mining equipment, technology and services, and oil, gas and energy resources.

Our industry in Australia has thrived on innovation and I sat back and thought about what has been developed in Australia for mineral and oil and gas exploration. Such things as Falcon, Sirotec, Hoistec, Startem24, Xtem, Altantis probe, SAMSON, SAM, Tempest and HiSeis equipment. This is a list based on my memory, age and exposure, so I know I have not listed everything and I apologise for what I have missed as I know there will be many. For every piece of equipment developed software has been written and commercialisation of the technology has occurred. The list and the other items that are missing from the list,

shows that the exploration geophysical industry in Australia has evolved and grown through innovation. The Australia geophysical industry has that history of developing solutions for exploration. I believe that this has been driven by many factors, including the environment in which we are trying to explore. However, success has resulted from the talent that is a part of the Australian geophysical community.

The employment of graduate geophysicists, during this volatile time, is also changing. In the past exploration companies would hire geophysicists and these young employees would learn and be mentored by people within the company. For some of us, if we sit back with a glass of red and think about the start of our career, we think about the funny stories and the people we worked with and for. Everyone, I suspect, would acknowledge the influence of these people on their present career. My fear is that this is not happening as much now, with many companies increasingly outsourcing their geophysics to consultants. A lot of geophysics has now become a part of the service industry to exploration companies. The other topic in the Government's innovation agenda is the importance of developing talent and skills. We must, as a community, look at how our new graduates are mentored and help in developing their skills. Millicent Crowe and the ASEG Young Professional Committee should be commended for their work in trying to ensure mentoring is accessible to new graduates. If you have any ideas, or are willing to assist, please I encourage you to get in contact with this group.

Well I have rambled on long enough I think and there are roads out there to cycle. If you take anything away from this small piece, it should be that Australia has had a history of great geophysical innovation and it needs to continue. The Government seem to be supporting this so there may be some money available. As an industry, we should also be supporting Australian geophysical innovation and the future talent that is required to see it continue.

vivere est cogitare
(to live is to think)

Katherine McKenna
ASEG President
president@aseg.org.au

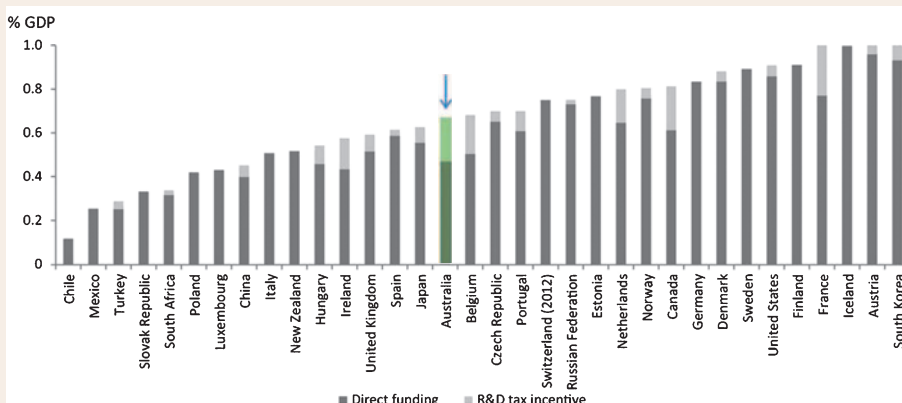


Figure 1. Government investment in R&D, by country, 2011.

Welcome to new Members

The ASEG extends a warm welcome to 18 new Members approved by the Federal Executive at its December and January meetings (see table).

First name	Last name	Organisation	State	Country	Membership type
Aqeel	Abbas	Quaid-i-Azam University		Pakistan	Student
Paul	Belfrage	Beach Energy	SA	Australia	Active
John	Boast		East Java	Indonesia	Active
Mark	Bunch	University of Adelaide	SA	Australia	Active
Louis	Coleshill		SA	Australia	Active
Daniel	De Oliveira	AngloGold Ashanti Brasil	MINAS GERAIS	Brazil	Active
Irina	Emelyanova	ARRC	WA	Australia	Active
Noel	Guppy	Beach Energy Ltd	SA	Australia	Active
Hamza	Hamid	Quaid i Azam University	Islamabad	Pakistan	Student
Ravi	Jonnalagadda	Osmania University	Telangana	India	Student
Afnan	Khan	Quaid i Azam University	Islamabad	Pakistan	Student
Shawn	Kovacs	McMaster University		Canada	Student
Dmitry	Pankin			Belarus	Active
Christopher	Parker	Gap Geophysics Australia	QLD	Australia	Active
Adam	Ramage	CSIRO	WA	Australia	Active
Samantha	Thomas	University of Adelaide	SA	Australia	Student
Mehdi	Tork Qashqai	Macquarie University	NSW	Australia	Student
Lianping	Zhang	Western Geco	WA	Australia	Active



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Executive brief

The Federal Executive of the ASEG (FedEx) is the governing body of the ASEG. It meets once a month, via teleconference, to see to the administration of the Society. This brief reports on the last monthly meeting, which was held in December. We hope you have found these reports interesting and informative. If there is more you would like to read about on a regular basis just get in touch with me (Marina) and I will expand the 2017 briefs accordingly. Anyone who would like to see the full minutes of the monthly meetings should add their name to the mailing list maintained by the Secretariat. FedEx also holds planning meetings twice a year.

To everyone who has renewed for 2017 – congratulations and a very big thank you!

A particular welcome to the new student Members, student membership is up 51%!!! Remember early and mid-career Members can join the ASEG Young Professionals Network <https://www.aseg.org.au/about-aseg/aseg-young-professionals>.

I hope you have had a chance to look at our new website, its looking really great. Join us on Facebook and please let me know if you found it easy to renew this year.

The planning for the AGM in Brisbane has started, if you would like to attend the AGM in Brisbane let me know and I will keep you in the loop regarding time and location. If you are interested in volunteering for the Federal Executive please let us know. A very big thank you to the 2016 Federal Executive committee and a very big thank you to the local state Branch Committees for all of your hard work during 2016.

Cheers to 2017!

Marina Costelloe
Honorary Secretary
fedsec@aseg.org.au

Society finances

The Society's financial position at the end of November:

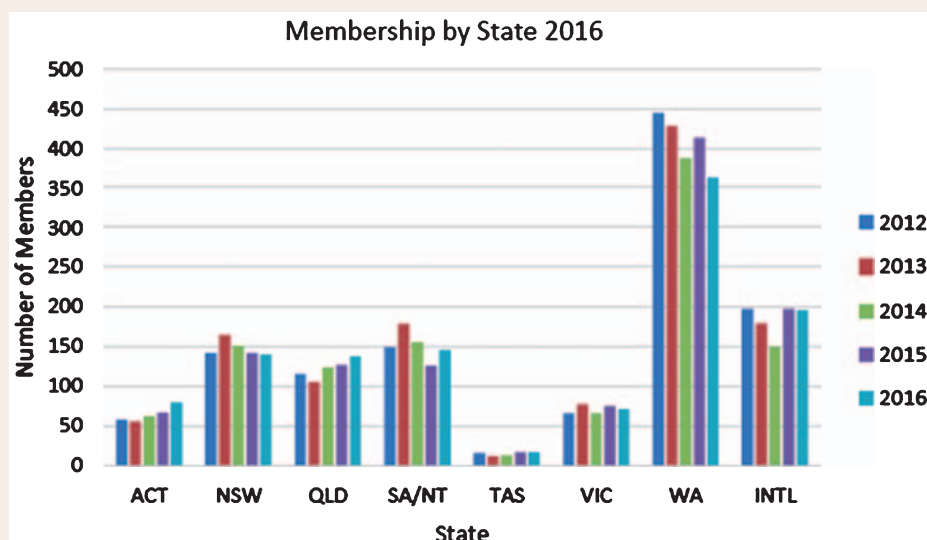
Year to date income \$529 541.95

Year to date expenditure \$720 780.59

Net assets \$1 104 494.70

Membership

At the end of 2016, the Society had 1151 Members. Overall membership is down slightly on 2015, Active/Associate membership is down 11%, and retired membership is up. The ACT and SA/NT membership is up, but unfortunately numbers in WA and Vic have decreased.



This **Jalander fluxgate magnetometer** is from the ASEG virtual museum collection and was generously donated by John Stanley, formerly lecturer at the University of New England and inventor. Fluxgate magnetometers were a new breed of 'electronic' magnetometers, more sensitive than variometers, first invented in Germany in 1928 but not used extensively until just before, and during, WWII. This instrument was built in the 1950s to 60s by the Jalander Company in Helsinki, Finland, and weighed a light 1.3 kg. Like all fluxgates, it only measures the vertical component of the field.

The fluxgate module is mounted internally concentric with the instrument housing. To operate, after turning the instrument on, it must be suspended to hang vertically and steadied to align the levelling bubble in the centre of its bull's eye. When steady, the relative value of the vertical component of the magnetic field can be read off the analogue scale. A switch can be used to select the most appropriate range scale. The typical measurement time is only 15 seconds and best resolution for this non-stabilised unit is 10 nT.

News from the ASEG Research Foundation

At the 2016 ASEG Conference in Adelaide two events were held that were of particular significance to the ASEG Research Foundation; the conference dinner and the lunch held to acknowledge Professor David Boyd's ASEG Gold Medal.

The conference dinner was held at the Adelaide Cricket Ground with a cricketing theme. It proved to be a very enjoyable night. A number of fund raising activities were carried out including an auction of several bottles of Australia's finest wines and a blind auction for a variety of cricket memorabilia gathered together by the Adelaide Conference Organising Committee. In total nearly \$3000 was raised on the night, and several commitments were made for further donations after the conference.

The success of the evening was made possible by the assistance of fellow Foundation Members and also with the help of the Conference Organising Committee, in particular Kelly Keates of Zonge in Adelaide who was a great support in making it all happen.

Also at the conference a lunch was held to celebrate the award of the ASEG Gold Medal to Professor David Boyd. Donations from those attending the lunch were directed to the ASEG Research Foundation and totalled in excess of \$2500. Sadly David passed away just a couple of months after the conference. Nevertheless his life's work, as a practical geophysicist and as a truly great teacher, were well honoured at the lunch. It seems fitting that money raised at the lunch should be directed towards assisting future students. Thanks to Dave Isles for taking the lead on this event and for thinking of the Research Foundation as a beneficiary.

The Research Foundation has passed its 25th year and has over the years supported numerous projects with the total moneys granted now exceeding \$1.2m. It was set up with the fairly modest aim of providing financial support to enable geophysical students in Australian institutions to carry out the field and laboratory work necessary to

complete their post graduate degrees, be it at Honours, Masters or PhD level. Each year students' supervisors submit work proposals on behalf of their students. Two committees of the Research Foundation, one for minerals and the other for petroleum, assess the merit of the various proposals and make recommendations about which projects to support.

Funding the Research Foundation is an ongoing challenge and relies on the donations of companies, individual Members and importantly the ASEG itself. Funds available fluctuate from year to year with the level of donations and also with the overall financial health of the ASEG. The Foundation is only ever able to commit to support projects when

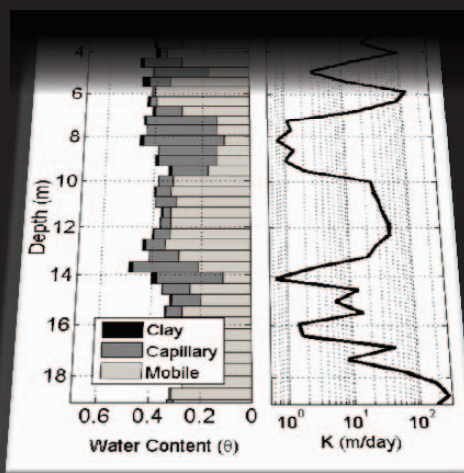
it has sufficient funds in the bank to cover its forward commitments.

I thank everyone who attended the ASEG conference in Adelaide for their generosity in supporting the ASEG Research Foundation. I encourage you all to think of the ASEG Research Foundation among the charitable donations that you make every year. It is a worthwhile cause that is investing in the future of geophysics and the future professionals of our industry. It is easy to donate through the ASEG website and all donations are fully tax deductible.

Phil Harman

ASEG Research Foundation Chair
research-foundation@aseg.org.au

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News from the ASEG History Committee

The ASEG History Committee is one of the largest ASEG Committees and is very active. 2016 was another busy year. Some of the highlights and a summary of the Committee's plans for the future are presented here.

An exciting recent development has been the initiation of the 'virtual' or 'online' museum. The first inputs to this museum can now be viewed in the History Section of the website, including 15 contributions from John Stanley. More contributions are in the pipe-line but if you think you could add to the museum please contact the Chair of the History Committee. High definition photos are required, where possible, plus a brief description of the item – like the descriptions of the items already on display. This digital museum has evolved from the aim to collect and document old equipment but so much has been received, or is forthcoming, that the physical space required for storage and a

suitable and convenient location are yet to be found.

The History Committee aims to add other items of interest to the History section of the website as they come to hand. Two new papers were added in 2016: 'A Brief History of Exploration Geophysics Education in Australia' and 'A Survey of Educators in Australian Universities'. The Committee also aims to have items of historical interest in as many issues of *Preview* as possible. In 2016 there were history feature papers in *Previews* 180, 181, 184, and 185. The second part of John Stanley's paper on the development of cesium magnetometers in Australia appears in this issue of *Preview* and three other papers are in preparation for future issues.

A full list of all items of published since *Preview* 166 (October 2013), which continues from an earlier list published in

Preview 173 for the period covering *Preview* 53 – 166, appears in Table 1.

Activities planned for the future include firstly, continuing to add to the virtual museum and other parts of the History section of the website, and continuing to contribute articles to *Preview*. Also, a series of biographies is planned of key Members of ASEG, such as Lindsay Ingall, the second President; Laric Hawkins, the first 1st Vice-President, etc. If you have other names to add to this list or, more importantly, are able to assist with writing a biography, please contact the Chair.

Also contact the Chair if you would like to serve on the History Committee or to be on the mailing list for regular reports.

Roger Henderson
History Committee Chair
history@aseg.org.au

Table 1. Items of historical interest published in *Preview* since October 2013

Issue no.	Starting page	Title	Type
169	12	Kenneth Zonge 1936–2013 (by Larry Hughes et al.)	Obituary
171	17	Hugh Rutter 1941–2014 (by Kim Frankcombe, Bob Smith, Jim Lalor & Phil Schmidt)	Obituary
171	18	The geophysics of the Olympic Dam discovery (H. Rutter and D. J. Esdale)	Feature
172	22	Alan Appleton 1934–2014 (by Dave Cockshell)	Obituary
172	39	SIROTEM – Australia's first locally invented TEM system (Roger Henderson)	Feature
173	16	History articles in <i>Preview</i> (Roger Henderson and Ann-Marie Anderson-Hayes)	News
173	18	Don Gray 1931–2014 (by Alla Metlenko)	Obituary
173	18	Trevor Jones 1949–2014 (by Marina Costelloe)	Obituary
173	44	The ASEG Research Foundation celebrates its 25th anniversary (Doug Roberts)	Feature
174	13	Robert Sheriff 1922–2014 (by Norm Uren)	Obituary
175	34	Peter Gunn remembers his life as a geophysicist (by Peter Gunn)	Feature
176	14	Alex Copeland 1950–2015 (by Kim Frankcombe et al.)	Obituary
176	17	Dave Hutchins 1948–2015 (by Bob Timmins)	Obituary
177	14	Christopher Wiles 1947–2014 (by Mike Sexon et al.)	Obituary
179	53	The first gravity meter in Australia in 1890s (Roger Henderson)	Feature
180	40	The first lecturer in exploration geophysics in Australia (Roger Henderson)	Feature
181	38	Lewis Albert Richardson: a pioneer of exploration geophysics in Australia (Bob Richardson)	Feature
184	36	High productivity vibroseis techniques: a review (Tim Dean)	Feature
185	46	The development of optically pumped magnetometer systems and their applications in Australia: Part 1 (John Stanley)	Feature

Notice of Annual General Meeting (AGM)

The 2017 AGM of the Australian Society of Exploration Geophysicists (ASEG) will be held at the XXXX Brewery, Black St and Paten St, Milton, Brisbane, on 10 April. The meeting will be hosted by the Queensland Branch. Details to be supplied via email. Drinks will be available from 6:00 pm and the meeting will begin at 6:30 pm.

The business of the Annual General Meeting will be:

- To confirm the minutes of the last preceding general meeting;
- To receive from the Federal Executive reports on the activities of the Society during the last preceding financial year;
- To receive and consider the financial accounts and audit reports that are required to be submitted to Members pursuant to the Constitution and to law;
- To consider and if agreed approve any changes to the ASEG Constitution;
- To report the ballot results for the election of the new office holders for the Federal Executive;
- To confirm the appointment of auditors for 2017.

The AGM will be followed by a scientific presentation. The speaker and title will be advised closer to the event.

Invitation for candidates for the Federal Executive

Members of the Federal Executive serve in an honorary capacity. They are all volunteers and Members are encouraged to consider volunteering for a position on the Executive or on one of its committees. Current members are listed in *Preview*; please contact one of them if you wish to know more about volunteering for your society.

In accordance with Article 8.2 of the ASEG Constitution ‘...The elected members of the Federal Executive are designated as Directors of the Society for the purposes of the [Corporations] Act.’

The Federal Executive comprises up to 12 members, and includes the following four elected members:

- (i) a President,
- (ii) a President Elect,

- (iii) a Secretary, and
- (iv) a Treasurer.

These officers are elected annually by a general ballot of Members. Andrea Rutley was elected as President-Elect in 2016 and as such will stand for the position of President.

The following offices are also recognised:

- (i) Vice President,
- (ii) the Immediate Past President (unless otherwise a member of the Federal Executive),
- (iii) the Chair of the Publications Committee,
- (iv) the Chair of the Membership Committee,
- (v) the Chair of the State Branch Committees, and
- (vi) up to three others to be determined by the Federal Executive.

These officers are appointed by the Federal Executive from the volunteers wishing to serve the Society.

Nominations for all positions (except Past President) are very welcome. Please forward the name of the nominated candidate and the position nominating for, along with the names of two Members who are eligible to vote (as Proposers), to the Secretary:

Marina Costelloe
ASEG Secretary
Care of the ASEG Secretariat
PO Box 576
Crows Nest
NSW 1585
Tel: (02) 9431 8622
Fax: (02) 9431 8677
Email: fedsec@aseg.org.au

Nominations must be received via post, fax or email no later than COB Tuesday 7 March 2017. Positions for which there are multiple nominations will then be determined by ballot of Members and results declared at the Annual General Meeting.

Proxy forms and further details of the meeting will be sent to Members prior to the meeting by email and made available to Members on the Society’s website.

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ASEG Branch news

New South Wales

In November, **Ned Stolz** and **Bob Musgrave** from the Geological Survey of NSW presented a talk entitled 'What's been happening at the Geological Survey of NSW? Current and upcoming geophysics, geology and crustal interpretations'. Ned, the new manager of geophysics and modelling, provided an update on activities and products from the Geological Survey including airborne magnetic acquisition and field mapping programmes. This was followed by Bob Musgrave presenting results from potential field modelling and palaeomagnetic studies in the Tasmanides, and discussing implications for the interpretation of the middle crust in eastern Australia. Much discussion followed, with more questions being asked over a few reds.

In December, we held our quiz night. Many difficult and some not so difficult questions both geophysical and non-geophysical were asked and answered (well alright ... mostly answered). A fun night and a good way to have our last ever meeting at the Rugby Club.

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 generally held on the third Wednesday of each month from 5:30 pm at the 99 on York Club in the Sydney CBD. Meeting notices, addresses and relevant contact details can be found at the NSW Branch website.

Mark Lackie
nswpresident@aseg.org.au

Queensland

The Queensland Branch of the ASEG is looking forward to another exciting year. We plan to hold monthly meetings featuring local and international speakers as well as hosting our annual social events. We are currently looking for people to present to the Branch this year and welcome interstate Members to our Branch meetings. Our first meeting will be held in February with details to be posted on the QLD events tab on ASEG website. We will also be hosting the ASEG AGM at the XXXX Brewery in Milton on 10 April. All Members will be

sent information about the AGM as the date approaches.

Fiona Duncan
qldpresident@aseg.org.au

South Australia & Northern Territory

Since the last edition of *Preview* the SA/NT Branch has only held one event, the final for 2016, marking a very relaxed and enjoyable end to the year on the way to the Christmas and New Year period. Our November technical evening, the Annual Student Night and Christmas Party, did not disappoint, with a strong turnout as usual to support local students who gave presentations on their recently completed honours projects.

Hugh Merrett, **Gonghua Fan** and **Thomas Lynch** all did a brilliant job presenting the background and results of their chosen areas of study, with a very interesting variety of topics covering both the petroleum and minerals industry. The Branch thanks each of them for their efforts and willingness to present, with special congratulations going to Thomas Lynch who was awarded the prize for the best presentation. After the official business of the evening was complete all the attendees were invited to stay and celebrate the festive season.

The local Branch held a number of successful technical talks, student events and other industry events in 2016 with numerous local, interstate and overseas guest speakers, as well as a healthy social calendar, all with the added excitement brought about by the ASEG-PESA-AIG 25th Geophysical Conference and Exhibition. We would like to thank all of our 2016 sponsors, the Department of State Development, Beach Energy, Minotaur Exploration, Borehole Wireline and Zonge. Without their support we would not be able to hold such full programme of events for the local membership. We will be in touch with all our previous sponsors hoping they will return again for 2017. Of course, if you or your company are not in the list above and would like to offer your support, please get in touch at the email address below.

I would also like to thank the 2016 Branch Committee, with special mentions to **Adam Davey** our Treasurer and

Mike Hatch our Secretary for all of their hard work, especially given the amount of time that was also devoted by them and all the others on the committee who helped on the ASEG-PESA-AIG Conference Organising Committee. Every committee member's efforts are much appreciated by me and the local Branch alike. For everyone continuing I look forward to working with you in 2017. We also welcome any interested Members to the local committee and any commitment, large or small, is appreciated.

Please keep an eye out for events in 2017 on the website and in your inbox, further technical meetings will be held monthly at the Coopers Alehouse on Hurtle Square in the early evening, starting in February with the Branch AGM, date TBA. If you are interested in joining the committee or holding a position on the Branch Executive, nomination forms will be sent out early next year. We invite all Members, both SA/NT and interstate to attend our events, and of course any new Members or interested persons are also very welcome to join us. For any further information or event details, please check the ASEG website under SA/NT Branch events and please do not hesitate to get in touch at joshua.sage@beachenergy.com.au, the email listed below, or on (08) 8338 2833.

Josh Sage
sa-ntpresident@aseg.org.au

Tasmania

ASEG Tasmania branch member **Anton Rada** will be giving a talk in the next few weeks on the UAV (unpiloted aerial vehicle or drone) geophysical survey technology he has been developing. The system acquires magnetic as well as LIDAR data, and has been deployed for UXO among other applications. The presentation is likely to be in the CODES Conference Room at UTas. Exact time/date details are yet to be confirmed; Tasmania Branch members will be advised directly.

An invitation to attend Tasmanian Branch meetings is extended to all ASEG Members and interested parties. Meetings are usually held in the CODES Conference Room, University of Tasmania, Hobart. Meeting notices,

ASEG news

details about venues and relevant contact details can be found on the Tasmanian Branch page on the ASEG website. Interested Members and other parties should also keep an eye on the seminar programme of the University of Tasmania's School of Earth Sciences, which regularly delivers presentations of geophysical as well as general earth science interest. Please contact ASEG Tasmania Branch President **Mark Duffett** with any queries.

Mark Duffett
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Victoria

Happy New Year dear Members! First of all I would like to thank the Victorian Members who took the time to answer the short survey that we run last December, your feedback was much appreciated.

Our last meeting was held on 15 November, with our annual student night. Congratulations to **Lachlan Hennessy** (PhD, RMIT) who won the 1st prize for his presentation, followed by **Hamish Stein** (Masters, Melbourne University, 2nd prize) and **Jesse Keegan-Osborne** (Honours, Monash University, 3rd prize). A big thank you to the other participants as well, **Elizabeth Grange** (Masters, Melbourne University) and **Andrew Pearson** (Masters, Melbourne University). We closed 2016 with the traditional PESA-ASEG-SPE Christmas lunch. A large assembly gathered at the Kelvin Club to listen to **Glen Nash** from ExxonMobil recapitulating the history of discovery in the Gippsland Basin.

The year 2017 will start on 22 February with a joint summer social event (details to be confirmed).

Seda Rouxel
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Western Australia

The WA Branch finished off 2016 with a technical presentation by **Allan Trench** on current trends in mineral economics, combined AGM and Christmas Party on 7 December. Allan drew from his vast experience in industry and on boards of directors to provide an insightful overview of what successful exploration companies do, and how innovation drives our sector.

During 2016 the WA Branch hosted seven technical nights, three SEG travelling lecturers and three workshops, and co-hosted the annual Golf Day.

We would like to thank our presenters: **Todd Mojesky, Mark Baigent, Keith Fisk, Stanislav Glubolovskikh, Jeremy Cook, Lee Steven, Allan Trench, Joe Dellinger, Steven Constable** and **How-Wei Chen** for presenting to our Members during the year. We would also like to thank our workshop presenters: **Serge Shapiro, James Gaiser** and **Jan Francke**. Finally, the WA Branch would like to extend its thanks to the committee members past and present for their assistance in planning and hosting the busy programme through 2016.

The WA Branch's technical nights were sponsored by the following companies: Globe Claritas (Platinum), Resource Potentials, Western Geco, CGG, Atlas Geophysics, First Quantum Minerals Inc, GPX Surveys, Paradigm (Gold), Geosoft, ExploreGeo, and Southern Geoscience (Silver). The Branch could not put together such a wide range of technical activities without the support of our Platinum, Gold and Silver sponsors, and we look forward to a long standing partnership with these companies.

At the AGM the Branch also recognised a number of Branch Members with awards including a Service Award (**Kathlene Oliver**), Student Awards (**Tahlia Downes** and **Marko Zegarac**), and 25 Year Membership Awards (**Paul Wilkes, Tony Weatherall, Lisa Vella, Laurence Roe, Bill Robertson, Andrew Long, Audrey Leonard, Jim Dirstein, Mike Dentith, Geoffrey Collis, Barry Bourne, and Andrew Bisset**). Unfortunately not all of the Award recipients could join us on the evening to accept their awards. Congratulations to all!!

The calendar for 2017 is filling up. The first events for 2017 include technical night presentations on 15 February by **Juerg Hauser** (CSIRO) and 8 March by **Shane Evans** (Moombarriga). The Branch will also host the SEG Distinguished Lecturer **Paul Hatchell** on 3 April. We are excited about the programme of events planned for 2017 and look forward to seeing our Members in attendance.

Kathlene Oliver
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Australian Capital Territory

The ACT Branch got in early for the Christmas party season with a combined celebration with the local PESA Branch on 25 November. About 25 ASEG Members and partners enjoyed a Mediterranean feast at the award winning Olive Restaurant (ranked 5 out of 1026 restaurants in Canberra!). The festivities were tempered by serious geoscientific discourse with a feature presentation by semi local structural geologist, **Titus Murray**. The talk's title, 'Road Side Structure of the Southern Sydney Basin: Where Sydney gets its Water, The World Gets Coal and Your Route to the New Year's Fireworks' nicely summarises Titus's ideas about the Hawkesbury Sandstone, and the coalfields around Campbelltown and Wollongong. I'm certainly taking a lot more notice when I drive the Hume motorway between Sydney and Canberra. Unfortunately everyone was having such a good time that no-one remembered to take any photographs to record the happy event!

For those who couldn't make it to the party, a more conventional Branch meeting was held at Geoscience Australia on 15 December. The meeting featured three short presentations. **Laurence Davies** gave an overview of the application of passive seismic techniques to Geoscience Australia's project areas, particularly for imaging cover thickness. Passive seismic is a relatively new and innovative method being used for near surface



Tim Jones presenting his PhD work at the end of last ACT Branch meeting for 2016.

exploration and it is good to see the national geoscience agency supporting development of acquisition processing and interpretation methods. **David McInnes** gave an update on the Virtual Geophysics Laboratory, an exciting project tapping in to the vast power of

High Performance Computing to process, model and deliver geophysical data and products. The evening was rounded out by **Tim Jones** (ANU) presenting his PhD work on quantitative modelling of mantle plumes to investigate the heterogeneity of the deep mantle.

The ACT Branch hopes everyone had a great Christmas and summer break, and wishes everyone a fantastic and prosperous 2017.

Ned Stolz
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ASEG national calendar: technical meetings, courses and events

Date	Branch	Event	Presenter	Time	Venue
2017					
Feb	SA-NT	AGM	TBA	1730	Coopers Alehouse, Hurtle Square, Adelaide
Feb	QLD	AGM	TBA	1730	XXXX Brewery, Corner of Black Street and Paten Street, Milton
15 Feb	WA	Tech night	Juerg Hauser	1730–1900	TBA
15 Feb	NSW	AGM	TBA	TBA	99 on York Club, Sydney CBD
22 Feb	VIC	Joint ASEG/PESA/SPE social event		TBA	TBA
8 Mar	WA	Tech night	Shane Evans	1730–1900	TBA
10 Apr	QLD	ASEG AGM	Various	1830–2030	XXXX Brewery, corner of Black Street and Paten Street, Milton
3 Apr	WA	SEG Distinguished Lecturer	Paul Hatchell	1730–1900	TBA

TBA, to be advised (please contact your state Branch Secretary for more information).



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