



IEEE AUSTRALIA COUNCIL

THE ANNUAL REVIEW 2016

EXECUTIVE SUMMARY

The IEEE Australia Council (AC) provides a forum for Sections in Australia to connect with each other and explore the opportunities for joint or in coordination activities such as IEEE Distinguished Lecturers visits, conferences and workshops. The AC also acts as the sole representative of all IEEE Sections in Australia to negotiate and deal matters at national level with IEEE HQ, Region 10 and other professional bodies in Australia and overseas.

The AC coordinated with seven Australia Sections on a number of national activities and liaised with the Region 10 and IEEE HQ to deal with number of issues surfaced in 2016. The AC also conducted activities for the benefit of student members including Student Paper Competition for post-graduate and undergraduate categories as well a competition for the Best Student Branch in Australia.

In 2016, AC members agreed on an updated formula for the collection of a levy from all member Sections to support the operation of AC.

Based on the Members Geographic Activities Board (MGAB) guidelines for Councils and Sections, AC Bylaws were updated in 2016, which was approved by R-10 and submitted for approval by the MGA Board in November 2016 Meeting. IEEE AC Bylaws were subsequently approved by the IEEE Member and Geographic Activities Board on 19 November 2016.

This report summarized the activities of Australia Council in 2016.



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From the IEEE Australia Council Chair



Welcome to IEEE AC activities report of 2016. We had a busy and successful 2016. We had one face-to-face meeting and six WebEx meetings.

IEEE AC 2015 Student Paper Contest and IEEE AC Outstanding Student Branch Competition 2015 was conducted by the AC. This year AC received a very large number of papers for the student paper contest. Finally, with the help of Section Chairs and their nominated judges, the paper contest was completed and winners were announced for both undergraduate and postgraduate categories as well as for the WIE category. Outstanding Student Branch Competition 2015 was also completed and winners were announced. Congratulations to all winners!

Several important issues were discussed during the 2016 meetings. AC levy issue was updated in 2016 with the full support of Section Chairs. ANZSCON rules were comprehensively discussed, finalised and approved by the Australia & NZ Councils and 2017 ANZSCON venue (Sydney) and date (either immediately before or after the Section Congress) has been approved by the Australia and NZ Councils.

AC Bylaws has been updated and approved by the AC, which was subsequently approved by R-10 Director and sent to IEEE MGA Board for approval in its November 2016 meeting. IEEE AC Bylaws were approved by the IEEE Member and Geographic Activities Board on 19 November 2016.

Election of IEEE AC was conducted as per the AC bylaws. Thanks to Dr Vaughan Clarkson and Dr Lance Fung for their helps during the election process. Congratulations to Dr Zia Ahmed and his team for being elected for 2017 AC committee.

Thanks to all the section Chairs for their collaboration and engagement with the AC during 2016. Without their collaboration, nothing could have been achieved.

Look forward to see IEEE AC continues to excel under the leadership of Dr Zia Ahmed in 2017.

Professor Tapan K Saha
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Digest of IEEE Australia Council Activities in 2016

1. INTRODUCTION

The IEEE Australia Council (AC) provides a forum for Sections in Australia to connect with each other and explore the opportunities for joint or in coordination activities such as IEEE Distinguished Lecturers visits, conferences and workshops. The AC also acts as the sole representative of all IEEE Sections in Australia to negotiate and deal matters at national level with IEEE HQ, Region 10 and other professional bodies such as Engineers Australia. The AC coordinated with seven Australia Sections on a number of national activities and dealt with number of issues surfaced in 2016. This report summarized the activities of Australia Council in 2016.

The IEEE Australia Council has 7,756 active members as at November 2016.

<u>Section</u>	<u>Membership</u>	<u>% Change from 12/2015</u>
Australia Capital Territory	481	-8.2%
New South Wales	2,643	-3.3%
Northern Australia	192	15.0%
Queensland	1,117	-4.0%
South Australia	523	-5.8%
Victoria	2,087	5.2%
Western Australia	713	-5.4%
Total in IEEE Australia Council	7,756	-1.6%

2016 AC OFFICE BEARERS

There have been a number of changes in key volunteer positions in the Australia Council during 2016. Below is the list of 2016 office bearers and its members:

AC Executive Committee Members

Chair	Tapan Saha (QLD)	tk_saha@ieee.org
Vice Chair	Mohan Jacob (NA)	mohan.jacob@jcu.edu.au
Secretary	Zia Ahmed (SA)	zia.ahmed@ieee.org
Treasurer	Martin Leaver (ACT)	martinleaver@ieee.org

Co-opted AC Members

Student Activities Coordinator	Sharon Lim (ACT)	sharonlim@ieee.org
Web Master	Mike Robinson (QLD)	blackmagic1943@gmail.com

AC Members

Chairs, Australia Capital Territory Section	Fouad Karouta	fouad.karouta@anu.edu.au
Chairs, New South Wales Section	Karu Esselle	karu.esselle@mq.edu.au
Chairs, Northern Australia Section	Mathew Whelan	mathew.whelan@ghd.com
Chairs, Queensland Section	Garry Einicke	garry.einicke@csiro.au
Chairs, South Australia Section	Karl Sammut	karl.sammut@flinders.edu.au
Chairs, Victoria Section	Eddie Custovic	E.Custovic@latrobe.edu.au
Chairs, Western Australia Section	Cesar Ortega-Sanchez	C.Ortega@exchange.curtin.edu.au

2. AC COORDINATED ACTIVITIES IN 2016

Some noticeable issues dealt and activities conducted in 2016 by IEEE Australia Council are summarised below:

2.1 Proposed Changes to the IEEE Constitution

The IEEE Board of Directors in 2015 proposed sweeping changes to the IEEE governing structure to meet the demands of changing business environment and to transform IEEE into a more robust organisation. Considerable discussions took place within the AC and the Australian sections. Amendment was voted in 2016 and was rejected by the members of IEEE.

2.2 Registration of IEEE Sections in Australia

The IEEE embarked four years ago on a process to register all IEEE Sections worldwide under the local laws to obtain a legal status for the Sections in their country. The process was revitalised in 2016 and discussions continued. AC nominated Mr. Ray Brown as the AC representative to take the views of all Australian IEEE Sections and Council to discuss with IEEE HQ. This will be further continued in 2017.

2.3 Future Collaboration with IEEE New Zealand on ANZ Students Congress

The ANZ Students Congress (ANZSCON) has been a joint venture of IEEE AC and NZC since its inception in 2010. To continue with this activity, a formal document was prepared by the AC to outline the policies and procedure for the congress. The policies and procedure of ANZSCON was approved by Australia and NZ Councils. Financial obligation of ANZCON remained with AC and the host Section. ANZSCON-2017 will be held in Sydney either immediately before or after the 2017 Section Congress.

2.4 AC Bylaws

AC committee updated AC Bylaws based on MGA guidelines for Councils and Sections. After comprehensive discussions, updated Bylaws were approved by the AC and subsequently by the Director R-10. IEEE AC Bylaws were approved by the IEEE Member and Geographic Activities Board on 19 November 2016.

2.5 AC election

A nominating committee was formed with Tapan Saha as the Chair and Dr Vaughan Clarkson and Dr Lance Fung as two additional members. AC 2017 committee was elected as below by the Section Chairs.

Chair - Zia Ahmed (SA)

Vice Chair- Andre Oboler (Vic).

Treasurer- Ray Brown (NSW)

Secretary and Student Activities Chair: Vacant and to be filled by the incoming AC committee.

Web Master: Mike Robinson

2.6 AC representation in Australian Standard Committees

- The IEEE Australia Council endorsed Franco D'Alessandro as an IEEE representative on Standards Australia committee EL-024, Protection against lightning.
- The IEEE Australia Council endorsed Ollencio D'Souza of the IEEE NSW Section as an IEEE representative on Standards Australia committee EL-051 Non-Broadcast Television.

2.7 Memorandum of Understanding with Engineers Australia

The previously signed MOU by IEEE and Engineers Australia (EA) expired in 2013. Glen Crawley, Registrar Engineers Australia sent an updated MOU to Martin Lever on 21st December 2016. This updated MOU has been forwarded to 2017 incoming AC Chair Zia Ahmed for discussion and approval by the AC.

2.8 2015 IEEE AC Student Paper Contest

The IEEE Australian Council wishes to thank all student participants in the 2015 Student Paper Contest. It was great to see the extent of interests, dedication and hard work, demonstrated by students in the electrical and electronics and related engineering disciplines. The IEEE Australia Council thanks all the judges for their contributions and efforts and is pleased to announce the following results.

Postgraduate Category Winners

- Shenlong Yu – University of Western Australia (First Prize \$500 + certificate) for his paper “State Estimation of Doubly Fed Induction Generator Wind Turbine in Complex Power Systems”
- Muhammad Yasir - University of South Australia (Runner Up prize \$300 + certificate) for his paper “Indoor Position Tracking using Multiple Optical Receivers”.

Undergraduate Category Winners

- Rizhong Kang –University of Sydney (First Prize \$300 + certificate) for his paper “An Improved Decision Tree-Based Online Preventative Control Tool for Small-Signal Enhancement in Power Systems”.
- Joint Runner-ups sharing the runner up prize of \$100 and each receiving a certificate. Daniel Marshall, Australian National University for his paper “Performance Comparison of Device-to-Device Mode Selection Schemes” and Jason Wood, Griffith University for his paper, “Resonance Properties of a LiPo Battery as a proximity coupled S Band Patch Antenna”.

Women in Engineering Prize

- Meng Xu - UNSW Canberra (\$300 + certificate) for her paper “Cloud Removal Based on Sparse Representation via Multi-temporal Dictionary Learning”.

2.9 IEEE AC Student Paper Contest 2016

The IEEE Australia Council Student Paper Contest 2016 for postgraduate and undergraduate students was announced in 2016. Closing dates: Undergraduate papers - December 30th, 2016 and Postgraduate papers - January 30th, 2017. The Student Paper Contest offers an opportunity for IEEE Student Members to exercise and improve both written and verbal communication skills. The contest will be conducted for two separate categories: undergraduate students and postgraduate students. To

promote the engineering profession among female students, the contest also offers prizes in both categories to members of the IEEE Women in Engineering Affinity Group.

2.10 IEEE Australia Council Outstanding Student Branch Competition

The IEEE Australia Council Student Branch Awards recognise outstanding Student Branch achievements by student members engaged in activities conforming to IEEE objectives and purposes. These include, for example:

- Significantly improving the vitality of each student branch with regard to activities, membership, or finances
- Effective interaction of each student branch with the local Section or Region, or IEEE technical societies, through seminars, conferences etc.
- Community involvement that benefits local schools and/or the community, the IEEE's image, and the image of engineering in general.

For 2015, Best Student Branch Awards Winners: -

- First Prize -Melbourne University (\$700 + certificates)
- Runner Up - Macquarie University (\$300 + certificates)

There are also certificates of participation for all participating student branches.

We thank all participants of the 2015 Outstanding Student Branch Competition for their submissions and efforts in making 2015 a wonderfully interesting year.

The IEEE Australia Council Students Branch award for 2016 is closed on 30th November 2016. All IEEE Student Branches in Australia were eligible to enter the competition. Australia Council will provide a cash prize of \$1,000 for the competition. The prizes will be for a winner and a runner-up, which will be taken care by the 2017 incoming AC committee.

3. Summary of AC Meetings

In 2016, the IEEE Australia Council held one face-to-face meeting and six WebEx/teleconference meetings to discuss IEEE matter of interest to all Sections in Australia and share information about upcoming technical, professional and social activities organised by Sections, Chapters, Affinity Groups and Student Branches. Key points from 2016 meetings are summarised below.

First AC Meeting: The first IEEE Australia Council (AC) meeting for 2016 was held via teleconference on 16 February 2016 prior to the Region 10 (R10) annual meeting in Bangkok, Thailand. The meeting was attended by AC officers and Section Chairs (or their representatives). This meeting particularly discussed the planning issues related to R10 meeting and finalized an agenda for the AC meeting in Bangkok. The AC treasurer also updated the members about the financial position at the start of the year. AC Bylaws, ANZSCON policies and procedures and student paper contest issues were also briefly discussed. Professor Janina Mazierska gave a brief talk on the "Proposed Constitutional Amendment" based on a presentation by MGAB Chair Lawrence Wong, an email from the President Barry Shoop, relevant document shown on the IEEE websites and opinions of IEEE Past Presidents.

Second AC Meeting (Face-to-Face): The Region 10 annual meeting provides the only opportunity for all Australia Section Chairs to meet each other. Taking advantage of this gathering, the Australia Council organises a face-to-face meeting of its members each year prior to the R10 meeting.

Second IEEE Australia Council (AC) meeting for 2016 was a face-to-face meeting, held from 2:00 to 6:00 pm at the Intercontinental Bangkok Hotel on March 4, 2016. The meeting was attended by the following AC officers, members and representatives:

Meeting Chair: Professor Tapan Saha, Chair IEEE Australia Council

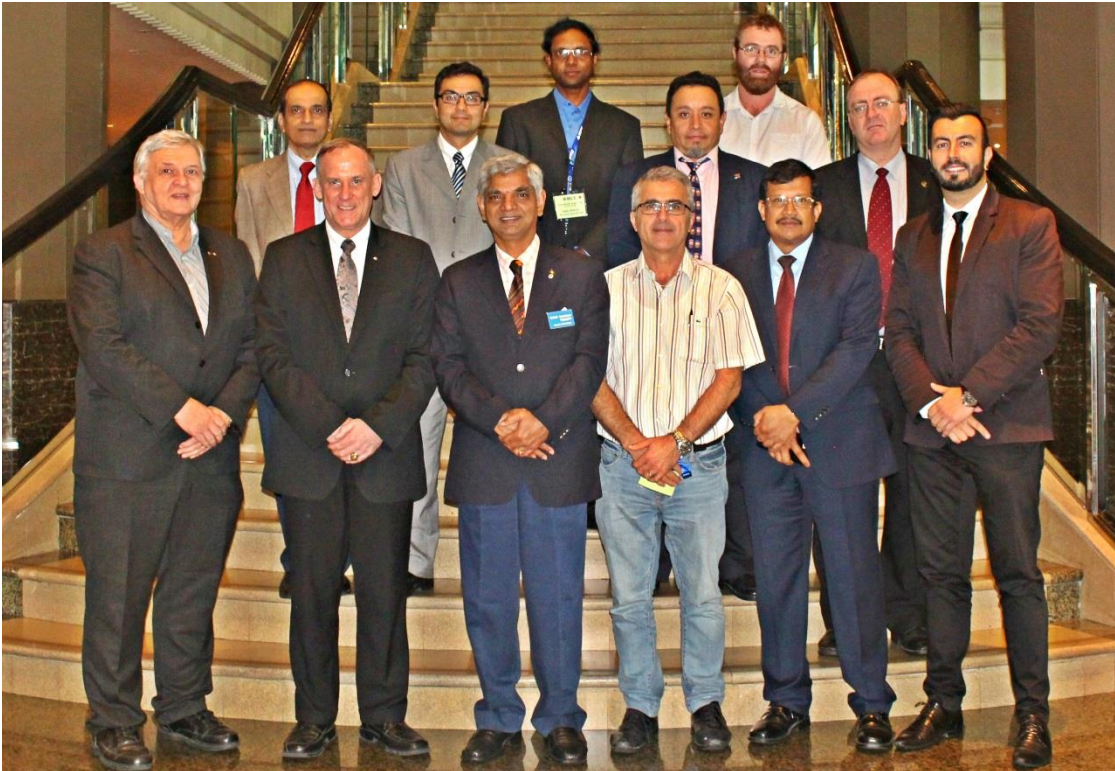
Attendees: Zia Ahmed (AC Secretary), Fouad Karouta (ACT Section Chair), Karu Esselle (NSW Section Chair), Daniel Eghbal (QLD Section), Mathew Whelan (NA Section Chair), Giuseppina (Pina) Dall'Armi-Stoks (SA Section), Eddie Custovic (VIC Section Chair) and Cesar Ortega-Sanchez (WA Section Chair),

Invited Guest: Vaughan Clarkson (Chair Sections Congress 2017), Lance Fung (AC Chair 2013-14), Ramakrishna Kappagantu (R10 Director 2015-16)

Observers: Janina Mazierska (NA Section), Stefan Mozar (R10 Coordinator for Sections Congress), Ray Brown (Secondary Delegate of NSW Section))

Apologies: Garry Einicke (QLD Section Chair), Karl Sammut (SA Section Chair)

All Section Chairs/their representatives provided comprehensive reports about their 2015 activities and plans for 2016. IEEE AC Students Paper Contest issue was one of the major activity discussed at the meeting. Vaughan Clarkson, General Chair Sections Congress 2017 gave a brief update on the SC-2017, which will be held on 13 – 15 August 2017 at the Convention Centre in Sydney. Comprehensive discussion took place on the issues of IEEE Sections Congress 2017, Lesson Learned from 2015 IEEE R10 SYW Congress held in Sri Lanka, ANZSCON rules and procedures, and Opportunities for Australia to Showcase Something Unique during the SC-2017.



Australian delegates at the 2016 Region 10 Annual Meeting in Bangkok with IEEE dignitaries.

Third AC Meeting: Third IEEE Australia Council (AC) meeting for 2016 was held via WebEx on 17 May 2016, 6:00 PM. Discussion took place regarding Metro Area Workshop proposal from R10. Ray Brown moved the motion that the AC Bylaws as circulated on 8th May 2016 with agreed amendments on 17th May be accepted as the final version. Motion carried. Section Chairs were asked to review the ANZSCON RULES & GUIDELINES document and provide their feedback before the next AC meeting in July.

Fourth AC Meeting: Fourth IEEE Australia Council (AC) meeting for 2016 was held on July 13 2016. Stefan Mozar informed the progress that speakers for the Metro Area Workshop have been selected but no date yet fixed; waiting for R10 to confirm funding. Stefan said that he is thinking to share the workshop with whole Australia via YouTube. Martin informed that the AC operating balance in the bank is now below the threshold of \$10k, which means that AC needs to collect the levy. He said he would get the membership numbers for 31 December 2015 and start preparing the levy invoices. Tentative plan for AC election was approved in this meeting. Zia informed that the draft AC Bylaws have been sent to R10 and MGA Board for approval. The R10 Sections Support committee was reviewing the document and would send its recommendation to R10 Director.

Fifth AC Meeting: Fifth IEEE Australia Council (AC) meeting for 2016 was held via WebEx on 20 September 2016, 6:00 PM. Tapan Saha proposed that a second face-to-face meeting of the Australia Council be held on Tuesday 15 November 2016 in Brisbane. Tapan Saha advised that nominations for positions on the AC for the term commencing 1 January 2017 had been received. Tapan Saha advised that, as the 2015 Student paper and Student Branch competition have been completed, the 2016 Competition can now commence. Mike Robinson will be asked to post details on the AC website. Ray Brown provided an update on the IEEE Registration Project as it affects Australia. Considerable support from meeting participants for the idea of holding ANZSCON 2017 in Sydney in conjunction with Sections Congress 2017. NSW Section to provide a proposal for hosting ANZSCON 2017. Considerable discussion again took place regarding the AC levy for 2016. A motion was proposed by Ray Brown that: 'The IEEE Australia Council collect a levy of 30 cents per member from constituent Sections in 2016 based on membership figures as at 31 December 2015'. The motion was PASSED.

Sixth AC Meeting: Sixth IEEE Australia Council (AC) meeting for 2016 was held on 15 Nov 2016 via WebEx. The meeting covered the routine matters such as updates from Sections about their activities and presentation of the AC finance reporting. Second face-to-face meeting in 2016 was not possible to arrange. Suggestion has been to fix the date of second face-to-face meeting during the first face-to-face meeting. 2017 second face-to-face meeting should be held during the section congress in Sydney. R-10 would like IEEE AC to organise a cultural event to demonstrate R-10 cultural diversity. Who will pay for this was an issue of discussion? A number of other relevant issues were discussed. Some suggestion was to organise a cultural function with dance/performance from different ethnic groups in Sydney area (e.g. Indian, Chinese, Malay, local aboriginal etc.). Discussion will be continued in 2017. Tapan thanked the AC committee for their support during the last two years. He, however, mentioned that the AC levy issue took much longer time than anticipated, which was often a distraction. He thoroughly enjoyed the IEEE AC Chair role with a number of major issues resolved. He tried twice to bring IEEE R-10 meeting in Australia without any success. Tapan mentioned that he has been with IEEE volunteering role for the last 20 years and he plans to continue in different directions, in particular, with the newly formed first Australian IEEE-HKN Honour

society in the University of Queensland and with IEEE Power & Energy Society. He also mentioned that he would be always available for IEEE volunteering in the future.

4. International Awards for the Australian IEEE Volunteers

4.1 2016 R10 Outstanding Volunteer Awards

On behalf of 2016 IEEE Australia Council, we would like to congratulate R10 Outstanding Volunteer Award winner Eddie Fong in recognition of services to IEEE New South Wales Section,

5. Oceanic Engineering Society (OES) Chapters under the AC

Mal Heron has been the Chair of Oceanic Engineering Society (OES) Chapter in 2017. OES Chapter Chair informed that the \$2151.61 income in the OES Chapter account was the complete proceeds of a \$USD2,000.00 establishment grant to the Chapter at its formation. The Chapter fund was transferred from the Northern Australia Section account to the Australia Council account. The Chapter signed an MOU for the Technical Co-Sponsorship of the Coasts & Ports Conference in Cairns in June 2017. Since it was too late for an active participation in the conference review process, the MOU was later withdrawn. The OES Australia Chapter depends on joint technical meetings with participating Sections for its core operation because of the widely spread and sparse membership. Mal urged Section Chairs to work with their respective OES Exec members to plan joint technical meetings when ocean-related topics arise. The OES Australia Chapter has a small annual budget to assist with these meetings. The combined OES Australia Chapter Executive are focused, as a group, on national issues like workshops and student activities.

6. Website Management

Mike Robinson revamped the Australia Council website. He has updated a lot of information about the Council & its activities. He has also updated some links with the Sections. Update of the AC website primarily depends on Sections willingness to provide information to Mike. Mike's contribution is much appreciated and he will continue to be the webmaster in 2017.