



The Institute of Electrical and Electronics Engineers, Inc.

VOLUME 46 Issue 1

Secretariat

AUSTRALIAN PROFESSIONAL CENTRE
PO Box 576
CROWS NEST NSW 1585
Tel: +61 2 94318600

March 2019

IEEE NEW SOUTH WALES SECTION
ARBN 078 576 495 ABN 34 078 576 495

Editor: Bill Sloman
e-mail: bill.sloman@ieee.org
Web page:
<http://sites.ieee.org/nsw/>

Contents:

Page 2	New committee.
Pages 3- 4	Chairman's message
Page 5	2018 AGM and Annual Dinner
Pages 6 - 7	IEEE Awards
Page 8	Mentoring
Page 9	Opening Doors
Page 10	Strategic Plan progress
Page 11	New NSW IEEE Fellow and a message from SSIT
Page 12	Australia Council Meeting
Pages 13-14	Region 10 Meeting
Page 15	Karu's orbiting antenna
Pages 16-17	Power and Energy Society Chapter
Pages 18-19	Sydney University Research Conversazione 2018
Page 20	New and upgraded members, if only the IEEE had been able to tell us how to access the data
Page 21	Free Student Membership
Page 22	If you want this on paper by post, and aren't already getting it that way.

Editorial:

This is the thirteenth newsletter I've edited. This one is being edited with the usual newly downloaded copy of the very latest stable version of Libre Office – 6.0.7.3 - which still doesn't necessarily mean that I'll be able to process .docx submissions – if they come in as .docx, they may get translated to .doc, though the current version of Libre Office now seems to handle .docx documents better than it did. This edition of the newsletter is now being edited as a .docx document because the .doc version had a tendency to put images in new and unexpected places when I saved what I'd done.

We've got the same chairman and vice-chairman as last year, but a new secretary (albeit coming back after a break) and I'm now the new treasurer. I've already had to pay a couple of bills in my assistant treasurer role while the putative new treasurer was overseas, finding out that he wasn't going to be able to do the job.

IEEE NSW Section 2019 Executive Committee

The IEEE NSW Section 2019 executive committee is much the same as last year's.

The committee is listed below. There weren't any elections involved, and the secretary hadn't been persuaded to take on the position for a second time until after last year's AGM.

Section Chair – Sasha Nikolic

Section Vice Chair – Georgios Konstantinou

Section Secretary – Dushmantha Thalakituna

Section Treasurer – Bill Sloman

Past Section Chair – Karu Esselle

Assistant Secretary – Sherry Moghadassi

Mahmoud Elkhodr was planning on taking up the treasurer position, but ran into family issues.

The Australia Council Officers can be seen at

<http://ewh.ieee.org/r10/australia/council/committee.html>

Sasha is still the NSW representative.

Please visit the IEEE NSW Section web page for details of all Committee Officers and positions at

<http://sites.ieee.org/nsw/committe/>

Members to are encouraged to consider nominating for service on the Section Committee as well as for elected office – it's the only sure way of stopping the committee from trying to get you to do something else that you might fancy even less.

Chairman's Message

2019 sees the NSW Section grow stronger each day. It was such an honour to see local membership hit the 3,000 mark on the 19th of February (3001 on the 24th as can be seen below - provided by Bruce Poon)

I thank you all for your commitment to the organisation, and I strongly believe that if you engage with our activities value for money is easily found. While many sections globally struggle to grow their membership numbers, this has not been a problem in NSW for a number of years thanks to the dedication of a large number of volunteers to the organisation. A long list of people have been using their spare time to create opportunities for members such as yourself. As current Chair I thank all those who have contributed over the many years.

Being an IEEE Member is not simply about access to Xplore, obtaining a regular copy of Spectrum/Potentials magazine and receiving discounts to conferences. At the very least it is about networking, sharing, discovering and learning and this occurs by engaging in events.

One of the best events for networking over the years has been the AGM and dinner, and in 2018 this was further supplemented by UNITE. In 2019 we hope to push this further and provide even more opportunities.

In 2018 the executive committee concentrated on strengthening the student branches. By the end of the year we had strong student committees in place at all the major universities: UNSW, USYD, MQU, UTS and UOW. The students are the foundation of our organisation and it is important that we help them develop and grow. In 2019, I reach out to staff at Charles Sturt, Western Sydney and Newcastle universities to help us find students that we can develop to be great leaders and establish strong branches. Please contact me if you can help.

With a solid base in place for our student members, 2019 will see the section concentrate on growing opportunities of interest for our Young Professionals (YP). A YP is a member that is within 10 years of graduating. As YPs launch their careers and develop into experts in the field, they have so much to learn and so many people that they need to meet. Many also want to give back to their local university. This year we are going to try and make more of this happen. Hopefully, you will see more activity in this space from late March to early April.

Industry/corporate members are pivotal to the IEEE. If our non-academic members engage and open up their knowledge and opportunities to students and YPs then huge potential can be unlocked. For this reason in March we are launching initiatives for companies to partner with us and open up their doors to our members to create mutually profitable interactions.

The first initiative is a mentoring program and we are asking our industry/corporate members to help support our younger members in this way. Please see page 8 for more detail.

The second initiative is that we are asking interested companies to open up their doors and host a technical talk and technical demonstration for our students and YPs. This is a useful opportunity, see page 9 for more details.

At our AGM we announced the winners of our inaugural NSW Outstanding Volunteer Awards. Congratulations to Prof Subhas Mukhopadhyay, Dr Raheel Hashmi, Dr Sudipta Chakraborty, Asanga Jayawardana and Mohamed Mahmoud Zakaria Awadallah for the recognition received. Also congratulations to Macquarie University, University of Wollongong and University of Technology Sydney for recognition in the Australia Council Student Branch Competition. Details about these awards and more are available on pages 6 and 7

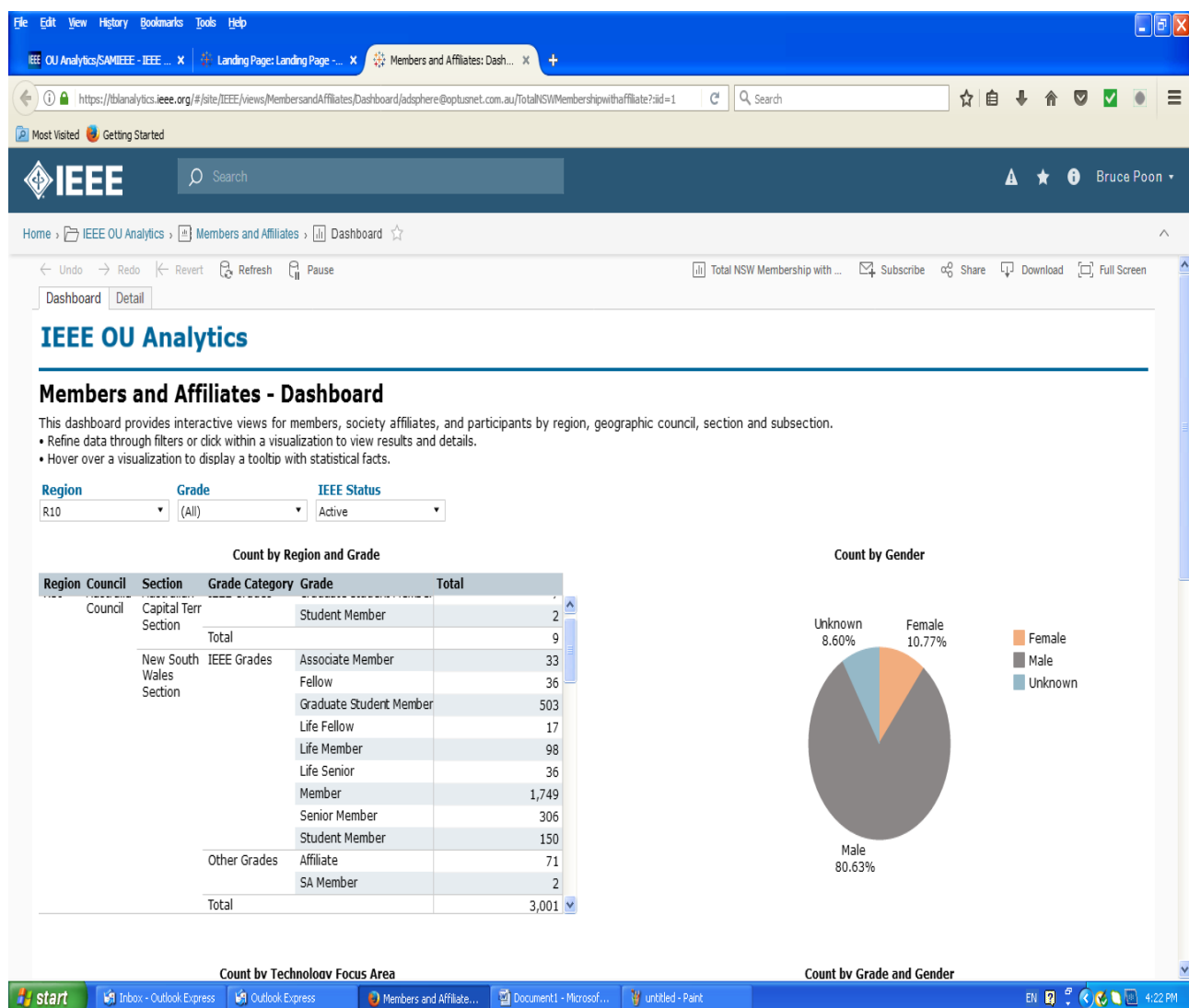
The first section meeting for 2019 was held in February and the committee will be working hard on continuing to make progress on the strategic plan. Progress to date can be seen in section xxx.

A huge congratulations to the University of Wollongong PES SB Chapter for winning the IEEE PES High Performing Student Branch Chapter Award.

Congratulations to Past Section Chair Karu Esselle and his team for sending up the first Australian-designed antenna system deployed in space in almost two decades. You can find out more on page 15.

2018 memberships expired on the 23rd of February. If you are reading this and have not renewed please do so to ensure you do not miss out on any benefits. Have a great 2019 and make the most of your IEEE membership today!

Sasha Nikolic
Chair, IEEE NSW Section



2018 NSW Section AGM and Annual Dinner



All members of the NSW Section of the IEEE were invited to the 2018 Annual General Meeting at Rydges Sydney Central that was held on the 21st of November 2018.

Chapter meetings were held at 6 pm, the AGM at 6:45 pm and they were followed by an international buffet dinner at 7:45.

Approximately 120 people attended the AGM and dinner, gaining an insight to the progress made and future direction, as well as networking with a very diverse membership base. We had members attend from all over NSW.

More photos of AGM and other Events at https://www.facebook.com/pg/IEEE-NSW-Section-146048629397751/photos/?ref=page_internal

Thank you to those that attended, contributed to the discussion and engaged!

IEEE Awards



Section Awards

At the 2018 AGM, the inaugural winners of NSW Section Outstanding Volunteer Awards was announced. The awards recognise the contribution of our members that donate enormous amounts of their time to a diverse range of activities that benefit the IEEE membership. Congratulations to all recognised and thank you for making such a difference!

NSW Outstanding Volunteer – Prof Subhas Mukhopadhyay for his outstanding contributions to the IEEE especially IEEE Sensors Council, IEEE IMS society and IEEE NSW

NSW Outstanding Young Professional – Dr Raheel Hashmi for excellence in leadership and notable contributions to IEEE Young Professionals and IEEE in New South Wales, demonstrated through technical and professional development initiatives

Commendation Young Professional – Dr Sudipta Chakraborty for her contributions to IEEE in NSW, the Education Chapter and Women in Engineering Education

NSW Outstanding Student Volunteer – Asanga Jayawardana for his outstanding contributions to IEEE Student Branch of the University of Wollongong, IEEE Xtreme competition and IEEE NSW

Commendation Student Volunteer – Mohamed Mahmoud Zakaria Awadallah for his contributions to IEEE in NSW and IEEE Student Branch of the University of Technology Sydney

Australia Council Awards

2017 Australia Council Winners (Based on previous year)

- 2nd Place Student Branch Competition: Macquarie University and University of Wollongong (equal placing)
- Commendation, Student Branch Competition: University of Technology Sydney
- 2nd Place Postgraduate Student Paper Competition: Mohamed Mahmoud Zakaria Awadallah (University of Technology Sydney)
- 1st Place Undergraduate Project Competition: Yang Lin
- Commendation, Postgraduate Student Paper Competition: Harith Roshana Wickramasinghe (University of New South Wales)

Region 10 Awards

- R10 Best Membership Growth Large Section Award: IEEE New South Wales Section
- R10 Outstanding Volunteer Award – Past Section Chair Dr David Tien in recognition of outstanding contribution and services to the IEEE New South Wales Section and IEEE Region 10.
Professor Karu Esselle accepted the award on behalf of David Tien who was away on business.
- R10 Student Paper Contest Winners: 1st Place Postgraduate: Ali Lalbakhsh from Macquarie University

2018 IEEE Xtreme

- Top 100 World Placing (84/4094) and 1st Place in Australia: Anh Minh Le, Duc Thien Bui, Minh Nguyen (University of Wollongong)

IEEE Mentoring



New South Wales Section

EOI - Mentors

Prepared give back?

We are looking for IEEE members working in industry/corporate roles to mentor our student and young professional members. By giving back you will help open doors by providing knowledge and experience

More Information:

<http://sites.ieee.org/nsw/opportunities/>

In 2018 the NSW Section commenced working towards establishing a mentoring program for our student and young professional members. We are seeking industry/corporate members to give back and help open doors by providing knowledge and experience to the new generation of IEEE members.

How it will work:

Stage 1: Call for mentors

Stage 2: Call for people to be mentored. Registered mentors will be advertised and candidates for mentoring will apply to the mentor that looks appropriate.

Stage 3: Mentors assess the applications and select the people they will mentor

Stage 4: A mentoring agreement is worked out and the process gets under way.


The NSW Section Mentor Chair Trevor Kleinert will assist in the process and keep an eye on the developing relationships between the mentors and mentored.

To apply please visit <http://sites.ieee.org/nsw/opportunities/>

Opening Doors



New South Wales Section



EOI - Opening Doors

Prepared to open your door?

Host a technical talk, demonstration and site tour at your company to our student and young professional members and unlock opportunities to connect, engage and promote

More Information:
<http://sites.ieee.org/nsw/opportunities/>

Opening Doors is a 2019 initiative of the IEEE NSW Section to bring together our industry/corporate members with our student and young professional members (plus any other member that may be interested).

We are looking for companies to open up their doors and host a technical talk, demonstration and site tour, based on their cutting edge technologies or at least on technologies that can be made to look cutting edge. What do you do? How do you do it? How will society be changed by your work? What opportunities exist?

IEEE Members look for opportunities to discover new technologies, trends and possible new areas of work and also appreciate the chance to build networks. Participating in this initiative will allow your company to unlock opportunities to connect, engage and promote with an audience that is interested in exploiting new technological opportunities - potential new employees, development collaborators or customers.

Events will be advertised through the local IEEE network especially through the Young Professional and Student Branch Network – branches at University of NSW, University of Sydney, University of Technology Sydney, Macquarie University and University of Wollongong.

To express an interest please contact Sasha Nikolic sasha@uow.edu.au

Strategic Plan Progress

Item	Date Approved	Progress	Target Date	Completed
1.1 Position Descriptions	5/2/18	Most PD's have been developed and placed on the website. There are about 5 more to approve.	September 2018	
1.2 Section Documents	5/2/18	No action	August 2019	
4.1a Refresh of section website	5/2/18	Section approved the new site. Gradual improvements going forward.	August 2018	August 2018
4.1b Section Facebook and LinkedIn pages	5/2/18	Complete. Facebook engagement substantially more than LinkedIn to date	March 2018	March 2018
4.1c Link SB and YP funding to social media compliance	5/2/18	Tied in with Goal 2.2	May 2018	April 2018
2.1a review financial stake in conferences	9/4/18	Discussion commenced in Feb meeting on the section approach to technical sponsorship with an option to be tabled at March meeting	April 2019	
2.1b Review income received	9/4/18	No action	May 2019	
2.2 SB funding model changed to incentive based	9/4/18	Model discussed with SBs and have been endorsed & active	May 2018	April 2018
3.2 Work with uni Deans to cross promote lectures & seminars. >5 in 18	9/4/18	Agreement reached with most uni's. Over 5 events promoted to date. This will be ongoing	Dec 2018	June 2018
3.3 Mid year IEEE networking event	9/4/18	Held 10 Aug with 165 members attending	August 2018	September 2018
4.4 IEEE Rising Stars Australia	9/4/18	General call made for 2 YPs to join USA committee. Arslan & Abbas have joined. Arslan attended RS in Jan 2019 and will report at the March meeting.	May 2020	
6.1a IEEE NSW Section Awards	7/5/18	Policy created and awards have commenced advertisement	July 2018	June 2018
4.2 Review and identify support for inactive branches	2/7/18	An item for discussion at the SC/SB meeting on the 22 nd of Feb	April 2019	
4.3 Review support and incentives for student branch councillors	2/7/18	An item for discussion at the SC/SB meeting on the 22 nd of Feb	April 2019	
5.1 Mentor program for students and YP	6/8/18	Call for mentors to commence in March	March 2019	
5.2 Identify junior section positions for students and YPs	6/8/18	No action	July 2019	

NSW Section IEEE Fellow - Class of 2019



Professor Yonghui Li is the Professor and Director of the Wireless Engineering Laboratory in School of Electrical and Information Engineering, University of Sydney.

He was the recipient of an Australian Queen Elizabeth II Fellowship in 2008 and an Australian Future Fellowship in 2012.

His fellowship was awarded for "For contributions to Cooperative Communications Technologies"

Society on Social Impacts of Technology

SSIT Australia held its AGM on 26 February. Elected officer holder positions were

Kieran Tranter (Chair)

Michael Guihot (Deputy-Chair),

Morgan M Broman (Secretary)

and Communications (Tony Nolans).

Lyria Bennett Moses was elected the NSW Coordinator,

Samuli Hataaja, the Queensland Coordinator

and Greg Adamson and Michael Arnold as the joint Victorian coordinators.

SSIT Australia organizes and hosts public events around the human and social dimensions of technological change. It also engages with government and policy makers. In 2018 the Society hosted three public events. Its flagship event in 2018 was a day-long workshop in response to the Human Rights Commission's Human Rights and Technology Discussion Paper hosted in conjunction with the Law Futures Centre, Griffith University. The workshop concluded with the drafting of a submission to the Commission. A copy of the submission is available from the Commission's website

<https://tech.humanrights.gov.au/sites/default/files/inline-files/41-%20Society%20on%20Social%20Impacts%20of%20Technology%2C%20IEEE%20and%20Law%20Futures%20Centre%2C%20Griffith%20University_1.pdf>

Australia Council Meeting



Prior to the commencement of the Region 10 meeting, the Australia Council took the opportunity to meet face to face to collaborate and discuss opportunities for the future. Members from New Zealand also joined the discussion.

Of most interest was the time taken by Region 10 Director Prof. Akinori Nishihara to lay out a range of options to ensure that R10 has a greater say in the IEEE based on membership size. Some options include aligning regions more closely with region populations, dividing regions 8 and 10 and merging some other regions, though the most likely scenario would be to seek an extra director within R10. The difficulties of splitting R10 in two were made very clear.

Prof Lance Fung outlined a number of new initiatives which the sections could exploit. A key discussion was about ways the Australia Council could get its own income and stop having to rely on funding from the sections which might allow it to have a greater impact. ANZSCON 2019 - to be held in NZ came under discussion as well as a variety of other housekeeping items. Replicating the NSW Outstanding Volunteer awards across the other sections was mooted, with an option that the winners might be considered for an Australia Council Outstanding Volunteer award.

Region 10 Meeting



Leaders within the IEEE, in particular Region 10 Section Chairs and Executive Committee members met in Melbourne to discuss the challenges and strengths faced by the region. Some highlights from the discussions included:

- R10 has large financial reserves compared to all other regions. Sections have been asked to draw down their reserves and invest that money back into value for local members
- R10 has the largest number of student branches with no student members when compared with other regions.
- Region realignment options discussed
- 5 million unique visitors accessed IEEE Xplore in 2018. This contrasts with 420,000 people who are actually members of the IEEE . Questions were asked on how we could bridge that gap.
- Participants were also asked to consider a scenario where the IEEE would have 4 million members and we would have to provide value for all those members. How could we use more modern technology to increase value?
- It was recognised that MGA and TAB need to work better together to support chapters and take responsibility
- The need to provide better value and service to our industry members was an important theme

within discussions.

- IEEE Standards to be recognised by Australians Standards Board

(Editors note: presumably this give them the same status as other international standards - UK, US or EU - even if they haven't been backed by a national standards organisation.)

- Focus on moving to Open Journal access

- Moving to an online reimbursement model

- New IEEE data access and use policy

- The importance of winning awards within the IEEE was highlighted. However, it was acknowledged that many people deserving of such an award don't get one due to the following common reasons:

1. Not enough evidence
2. Too much irrelevant information
3. Poorly written referee report
4. Section endorsement with no supporting words.

- IEEE Potentials magazine is received in print across America and digitally elsewhere in the world. The greatest readership comes from R10, especially from India and China. A call for papers has been issued for future issues <https://students.ieee.org/potentials-magazine/>

At the R10 dinner, plaques were presented to the NSW Section for the R10 Best Membership Growth Large Section Award, and an R10 Outstanding Volunteer Award to David Tien.

A number of other ANZ sections shared the spotlight in winning a range of R10 awards. Special mentions to the Queensland Section for taking out the R10 Best Medium Section award. We congratulate all sections for their achievements.



Aussie-Designed Antennas Shine in Space, on board The World's First Entirely Ka-band CubeSat Satellite

The twin-array antenna system aboard the world's first entirely Ka-band CubeSat satellite – Audacy Zero – was designed by a team of researchers led by Professor Karu Esselle.

Karu was the Chair of the IEEE NSW Section from 2016-2017 and Vice Chair from 2014-2015. He is a professor of Electronic Engineering at Macquarie University.

Audacy Zero was launched to space and deployed in December 2018 by SpaceX Falcon 9 rocket.

A senior engineer of Audacy Space – a company spun off Stanford University and located in California, USA - attended Professor Esselle's 2017 IEEE Antennas and Propagation Society Distinguished Lecture held at the Texas Instruments headquarters in Santa Clara, Silicon Valley, California, and initiated this industry collaboration.

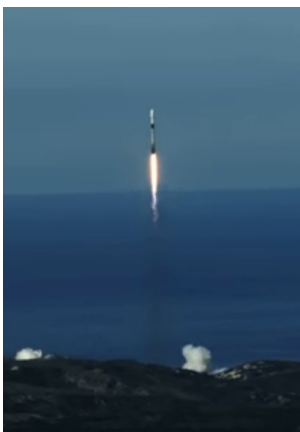
In a recent email to Professor Esselle, Audacy Chief Engineer James Spicer confirmed: "Hi Karu, We are indeed flying your antennas on Audacy Zero, .. Many thanks for you and your team's hard work on the project ..".

This appears to be the first Australian-designed antenna system deployed in space in almost two decades, since antenna systems designed at CSIRO in the 80's and 90's such as those for Australian FedSat satellite, which was launched in 2002.

Audacy is building a space relay network to provide continuous connectivity to commercial and other CubeSats. Without such a space relay network, a CubeSat can be seen from a fixed ground station only for a few minutes per day and that is often not enough to download all the data collected by the CubeSat.

Further, Professor Esselle and his team has been invited to join Audacy Alliance as space antenna experts. Audacy Alliance is a consortium of industry leading spacecraft product and technology providers that aim towards an open global standard for spacecraft communication.

Snapshot of the launch of the Audacy satellite equipped with the Australian-designed antenna system (and several other satellites) in the SpaceX Falcon 9 rocket,



Audacy Zero satellite. Australian-designed twin-array antenna system can be seen on centre right.

The high gain array has a 3 dB beamwidth of 21.5° and a gain of 18 dBi,



Editors note: I've cut a couple of links to YouTube video sequences out of this report. For a link which would chew up less of your internet data transfer allocation see

<https://audacy.space/>

IEEE Power and Energy Society Chapter in 2019

The executive committee of the NSW PES Chapter has remained the same after the AGM in November. The committee is:

- Chair: Dr Georgios Konstantinou,
- Vice-chair: Dr Harith Wickramasinghe
- Secretary and Treasurer: Mr Pouya Jamborsalamat
- Past Chair: Ray Brown

University of Wollongong PES Student Branch wins PES High Performing Award.

Congratulations to the University of Wollongong PES Student Branch Chapter for winning the IEEE PES High Performing Student Branch Chapter Award.

IEEE PES hosts lecture at UNSW Sydney

The NSW Power and Energy chapter hosted a lecture on the 12th of February at UNSW Sydney. The presentation from Prof. Kai Sun of Tsinghua University addressed the topics of the energy internet with a special focus on the Chinese context, as well as power electronics for energy storage applications.



Recent Joint Institute Lecture

A Joint Institute Lecture took place on 1 March in the Engineers Australia Harricks Auditorium in Chatswood.

The topic of the lecture was “Transformers: Metering , heating and harmonics” and was presented by Michael Robert Larkin, Managing Director of Tortech Pty Ltd.

Further information can be found here:

<https://events.vtools.ieee.org/m/191598> <https://www.engineersaustralia.org.au/event/2019/01/joint-institution-lecture-series-transformersmetering-heating-and-harmonics>

PES Conferences around R10

A number of conferences supported by the Power and Energy Society take place around Region 10 in the next few months.

The IEEE PES GTD Grand International Conference & Exposition Asia 2019 will take place from March 19 to March 21 in Bangkok, Thailand.

The expo promises to be the largest event outside of North America with more than 5000 delegates and industries presenting products and services over three days.

The conference will take place in the Bangkok International Trade & Exhibition Centre.

More information at: <http://www.ieeeegt-d.org/> and a report of the event will be available in the next edition of Circuit.

The 2019 IEEE Innovative Smart Grid Technologies – Asia (ISGT ASIA 2019), will take place in Chengdu, China from 21-24 May. The theme of this year's conference is "Smart Grid Links Future" and includes industrial panel sessions, keynote speeches, tutorials, papers and poster presentation.

More information at: <http://sites.ieee.org/isgt-asia-2019/>

The 2019 IEEE PES Asia-Pacific Power & Energy Engineering Conference (APPEEC 2019) is scheduled from the 1st to the 4th of December in Macao. More information at: <http://www.ieee-appeec-2019.org/>

The 2019 9th International Conference on Power and Energy Systems (ICPES 2019) will take place in Perth, Western Australia from the 10 – 12 December 2019.

ICPES 2019 will provide a forum for academics, university researchers and industry experts in power engineering to share ideas and experiences, and discuss innovations.

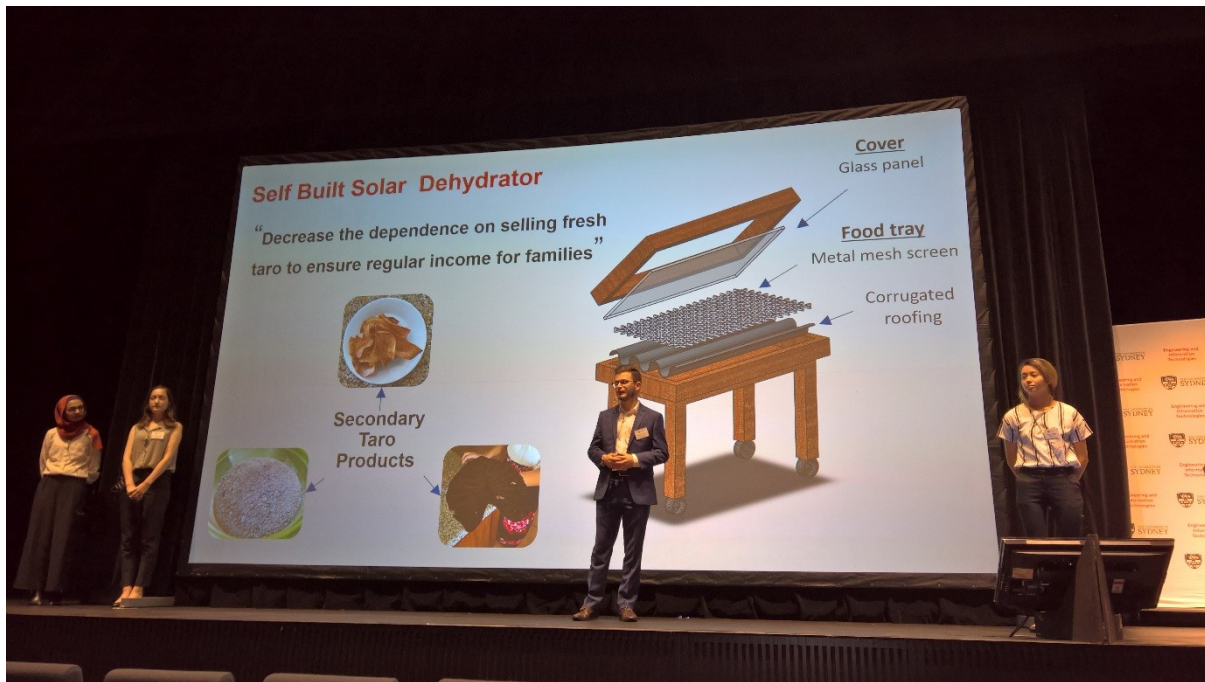
Full Paper submission due date is the 15 July 2019 and more information can be found at: <http://www.icpes.org/cfp.html>



Submitted by Georgios Konstantinou, chair of the NSW PES chapter

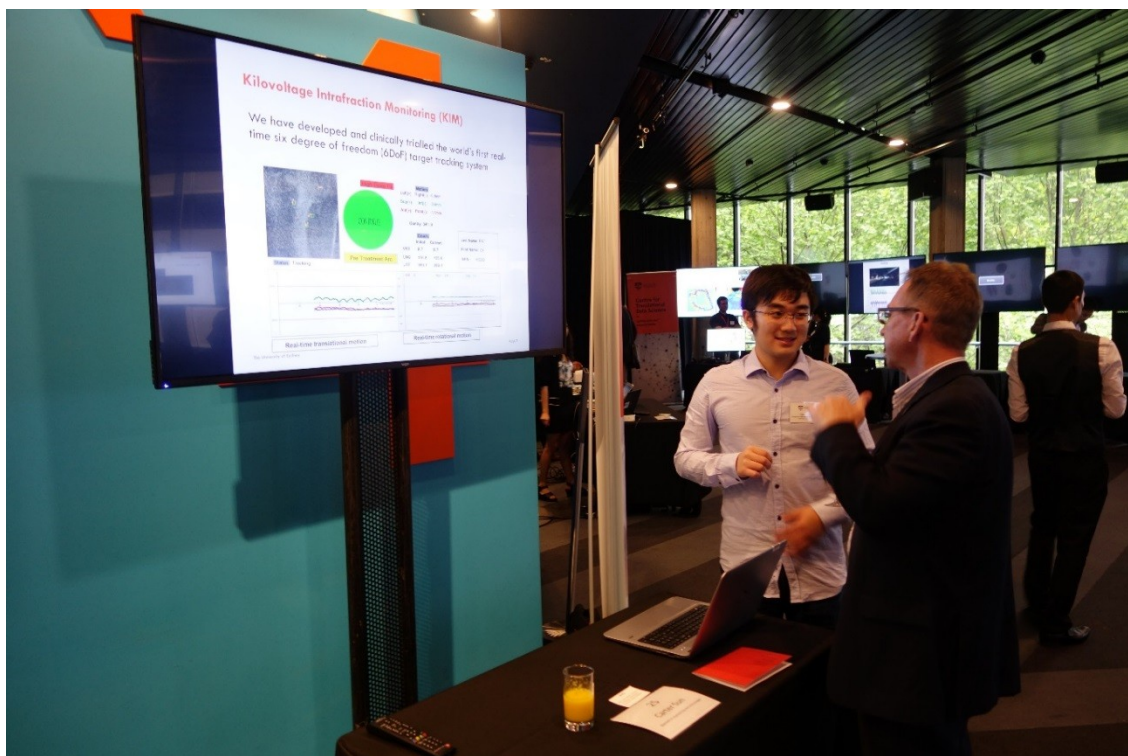
Sydney University Research Conversazione 2018

The Faculty of Engineering Research Conversazione 2018 took place on Wednesday 17 October 2018 at the Seymour Centre.



After the opening there were several three minute Presentations by Research students.

One of the presentations was by Jean-Paul Semaan, Tracy Huang, Edna Seyama-Heneghan and Rameen Hayat-Malik and related to Undergraduate Humanitarian Fieldwork. The presentation described work carried out in Agricultural post-processing of taro to increase earnings for small-hold farmers in Samoa. They demonstrated a self-built solar dehydrator for taro which decreased the farmers dependence on selling fresh taro and ensures a regular income.



There followed an exhibition at the Seymour Centre of Research and Projects carried out by the Students where guests were able to view the work carried out and ask questions. Students and Researchers presented their work in many fields including;

computing
internet of things
robotics
energy
resources
environmental engineering
infrastructure
transport
food engineering
chemical engineering

Some more photos can be viewed at

<https://www.facebook.com/media/set/?set=a.10156691441078426&type=3>

submitted by Tony Zaglas



New and upgraded Members of the NSW branch of the IEEE

Dr. Bruce Poon – e-mail adsphere@optusnet.com.au – would have extracted this data from the IEEE's SAMIEEE data-base if he could, but they've changed the system again and their revised instructions have not yet worked. We had a spell of this last year, and this looks like being more of the same.



IEEE Limited Offer*

If you are a 3rd, 4th or a post-grad student in 2019**

The IEEE NSW Section will sponsor your student membership fee !

Instructions :

1. Go to www.ieee.org/join and register as Student Member.
2. Type in all your details. On the check-out process, press 'Print & Mail/Fax order' instead of 'Proceed to checkout'. From the browser menu, print to PDF.

Ensure your postal address and contact details will be valid for the next 12 months or more. Instead of sending the form to IEEE HQ USA, please forward a PDF copy of this application with Member/Customer number under "Order Information" (Name of the File: **your name-IEEE NSW student membership offer.pdf**) and a copy of your current student card (Name of the File: **your name.pdf**) to:

Arslan Kiyani ----- IEEE NSW Student Activities Chair
e-mail: arslan.kiyani@gmail.com

cc Dr Bruce Poon ----- IEEE NSW Membership Development Chair
e-mail: bruce.poon@ieee.org

If you are students of the following universities, please cc a copy of your application to the student branch (SB) chairs :

1. Macquarie University SB Chair : Khushboo Singh (khushboo.singh@students.mq.edu.au)
2. University of New South Wales SB Chair : Luke Vincent Sy (l.sy@unsw.edu.au)
3. University of Sydney SB Chair : Robert Webster (r.webster@sydney.edu.au)
4. University of Technology Sydney SB Chair : Firas Al-Doghman (11930625@student.uts.edu.au)
5. University of Wollongong SB Chair : Angelos Theoharis (at925@uowmail.edu.au)

* The number of free student memberships is **limited** and will be awarded on a first come first serve basis. This offer excludes membership to individual IEEE societies which may be purchased separately. This offer is available only to students located in New South Wales. The free student membership offer covers the first year of membership only. Offer not available to current IEEE student members. Deadline for submission is 4:00pm on the **31st of March 2019 or when quota is filled (whichever comes first)** and all applications will be processed from the beginning of April 2019.

** Please attach a copy of your current student card.

Circuit is currently provided electronically from the IEEE NSW Section web site <http://sites.ieee.org/nsw/newsletters/>

Members will be notified by email when a new issue is posted on the Website. Future copies of *Circuit* will only be sent by paper mail on request.

If you require Circuit to be mailed to you in 2019 please complete the form below:

Don't bother if you were already getting it by mail in 2018.

Please Detach

Yes, I want to continue receiving future editions of *Circuit* by post

Name:

Member No:

Address: Postcode:

Tel:

(H)..... (W)..... (M)..... FAX.....

Email:

Post to: Bill Sloman, Circuit Editor, Unit 60, 1Tewkesbury Avenue, Darlinghurst NSW 2010



Patents | Trade Marks | Designs

View our attorney profiles at:

www.adamspluck.com.au

Phone us on 02 9476 0477 to discuss your IP requirements

Building Business Assets

Suite 3, Level 1, 20 George Street Hornsby NSW 2077

Fax: 02 9987 2405 E: email@adamspluck.com.au