





The Institute of Electrical and Electronics Engineers, Inc.

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Secretariat

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

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Editorial:

This is the fifteenth newsletter I've edited. This one is being edited with the usual newly downloaded copy of the very latest stable version of Libre Office – 6.2.7.1. It's not behaving quite as it should, but can be persuaded to give us a .pdf document we can live with

Passing on Libre Office .docx files to people who use Microsoft Word isn't currently working too well either.

Chairman's Message

October brings the final edition of Circuit for the year and my final Circuit Chairman's message.

At the end of the year my two one-year terms as NSW Section Chair come to an end. It has been an honour to serve as Chair, a time filled with excitement and opportunity. It was such a pleasure to work with so many talented individuals, using their free time to make a difference. I would like to thank everyone for the contributions made.

In particular I would like to thank the executive committee members over the last 2 years: Past-Chair Prof Karu Esselle; Vice-Chair Dr Georgios Konstantinou; 2019 Secretary Dushmantha Thalakotuna and Treasurer Bill Sloman; and 2018 Secretary John Aitken and Treasurer Ray Brown.

While the list of items on my to-do list never came to an end, I am proud of the many things that the NSW Section community was able to achieve together. As at the 23 of September contributions from the NSW committee for 2018 and 2019 included:

277 events held as reported on vTools

Held important local events that include TENSYMP2018 and IEEE Milestone 2019.

Technically sponsored many local conferences and helped win bids to bring multiple premiere conferences to NSW.

Seting up UNITE - a networking opportunity for the entire Section.

Greater outreach with Student Branch Committees now located at more universities MQU, UNSW, UOW, UYSD, UTS and WSU.

Development of Position Descriptions.

Training and strategic planning with student branches and chapters.

Refreshed the NSW Section website.

Engaged with social media by opening accounts on multiple platforms

Facebook https://www.facebook.com/IEEE-NSW-Section-146048629397751/

Linkedin https://www.linkedin.com/groups/13578458

YouTube https://www.youtube.com/channel/UCcHapDQ69e6XXlzH2R1Ui9Q

Incentivised funding models

Worked with universities to increase member opportunities.

Started recognising the contributions local members make with NSW Section Awards.

Started a mentoring program.

Streamlined communication to members.

Showcased opportunities and events available from across the IEEE network.

Worked hard to obtain funding beyond the standard IEEE allocation

\$4,200 from R10 \$19,500 from conference sponsorships

Creation of new chapters

Sensors Council Robotics and Automation

Lots of awards

2018 R10 Best Membership Growth Large Section Award 2018 R10 Outstanding Volunteer Award: David Tien 2019 R10 Outstanding Volunteer Award: Subhas Mukhopadhyay

And a long list of more available at http://sites.ieee.org/nsw/awards-recognition/

To achieve the outcomes listed required a lot of work from a lot of volunteers.

With the right mindset great contributions can be made and I highly encourage as many young people as possible to get involved and start volunteering. You get to meet incredible and motivating people, you get the opportunity to learn and try new things, and get to make a difference in people's lives.

To learn more about our recent journey and to find out where the NSW Section is headed we invite all members to attend the 2019 AGM to be held on Wednesday the 20st of Nov 2019. This will be held at Rydges Sydney Central. See page 4 below.

Before the AGM a number of the technical chapters will be holding their own AGMs. After the AGM will be the Section Dinner at a cost of \$6 per person and this is limited to the first 120 to purchase tickets.

October also brings on one of the best competitions that IEEE organises for students, IEEE Xtreme. This is a 24hour team-based programming and problem solving competition aimed at pushing students from undergraduate to postgraduate to their limits.

Participation in events like this look good in the CV and I encourage all students to participate. If you are a student join in. Academics please encourage to compete.

We had a good number of submissions for our 2019 IEEE NSW Section Outstanding Volunteer Awards. We will be announcing the winners at our section AGM.

Many of the initiatives undertaken throughout the year have been driven by our strategic plan aimed at reviewing and improving the section structure, membership value, and community and technical contribution. Progress can be seen on page 6.

Make the most of your IEEE membership today!

I wish you all the best for the rest of 2019 and hope to meet you at one of our events, especially at the AGM in November.

I would like to end by thanking the University of Wollongong for providing strong support to me by giving me time to undertake work in this role over the last 2 years.

Sasha Nikolic Chair, IEEE NSW Section



IEEE NSW Section Annual General Meeting



New South Wales Section



Description

All members of the NSW Section of the IEEE are invited to the 2019 Annual General Meeting at Rydges Sydney Central. Chapter meetings start at 6 pm. The AGM begins at 6:45 pm and will be followed by an international buffet dinner with vegetarian and halal options. Please register here for the AGM (which of course is free).

We also invite you to stay for the optional AGM dinner, for which there is a very modest charge of \$6 (the value of the buffet dinner is \$55). Dinner has a limit of 120 tickets. First come, first served. **FAOs**

Are there ID or minimum age requirements to enter the event?

The AGM and dinner are for IEEE NSW Section members and their partners.

What are my transport/parking options for getting to and from the event?

Rydges Sydney Central is conveniently located within a four minute walk from Central Station (Elizabeth St Entrance/Exit) as well as the Central Bus Stands located on Eddy Avenue. Parking is available at the hotel and at Goulburn Street Car Park.

What's the refund policy?

We will refund your payment if you cancel your registration before 6 pm on 14 November.

Do I have to bring my printed ticket to the event?

Your registration ticket should be presented on the night, together with an IEEE membership card (not required for the accompanying partners).

Register at:

https://www.eventbrite.com.au/e/2019-ieee-nsw-section-annual-general-meeting-dinner-tickets-73890491449

We haven't been able to find enough candidates for next year's executive committee to offer any choice of candidates for election.

At the AGM we will be offering only one candidate per position for the 2020 Section Executive Committee.

Chair: Colin Elston Vice Chair: Sudipta Chakraborty

Secretary: Dushmantha Thalakotuna Treasurer: Bill Sloman

IEEE UNITE 2019

We held our second annual IEEE NSW UNITE event on the 9th of August and united 194 IEEE Members (Student, Young Professional, Women In Engineering, Life Members, Academia & Industry etc.) in one place with technical sessions, professional development sessions, free food and loads of activities focused on networking and making the most from the IEEE.

Participants discovered the latest trends and opportunities provided by the various IEEE societies, discussed membership elevation options, and more!

Video highlights available here: https://www.youtube.com/watch?v=M-gMH91_DOc
Photos available here:

https://www.facebook.com/pg/IEEE-NSW-Section-146048629397751/photos/?tab=album&album_id=362801191055826





Exhibitors













Technology Care













Strategic Plan Progress

Item	Date Approved	Progress	Target Date	Completed
1.1 Position Descriptions	5/2/18	All PD's now on website	September 2018	July 2019
1.2 Section Documents4.1a Refresh of section website	5/2/18 5/2/18	No action Section approved the new site. Gradual improvements going	August 2019 August 2018	August 2018
4.1b Section Facebook and LinkedIn pages	5/2/18	forward. 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 19 meeting on the section approach to sponsorship. Final version approved at May meeting	April 2019	May 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 Section flagship 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 reported at the April meeting. Proposal was to combine the idea with UNITE moving forward	May 2020	April 2019
6.1a IEEE NSW Section Awards	7/5/18	Policy created and awards program in place	July 2018	June 2018
4.2 Review and identify support for inactive branches	2/7/18	An item discussed at the SC/SB meeting on the 22 nd of Feb. Tabled at March meeting. Moved to April meeting	April 2019	April 2019
4.3 Review support and incentives for student branch councillors	2/7/18	An item discussed at the SC/SB meeting on the 22 nd of Feb. Tabled at March meeting. Moved to April meeting	April 2019	April 2019
5.1 Mentor program for students and YP	6/8/18	Call for mentors commenced in March. 3 have signed up to date	March 2019	March 2019
5.2 Identify junior section positions for students and YPs	6/8/18	No action	July 2019	
5.3 Creation of annual meeting of student branch leaders and section executive to exchange	4/2/19	Meeting was held on the 22 nd of Feb	Feb 2019	February 2019

Sasha Nikolic Chair, IEEE NSW Section

Awards and Recognition



It is with great pleasure that I learned that the R10 Outstanding Volunteer Award has been awarded to Prof Subhas Chandra Mukhopadhyay, FIEEE, of Macquarie University. The Award was announced on 12 September 2019 by Prof. Elmer P. Dadios, 2019 IEEE R10 Award and Recognition Committee Chair and was in recognition for Prof Mukhopadhyay's Outstanding Contribution and Services to the IEEE New South Wales Section and IEEE Region 10. The other winners were Jong Chang Yi IEEE Seoul Section and Rajesh Ingle IEEE Pune Section.

Prof Mukhopadhyay is the current and founding Chair of the IEEE NSW Instrumentation and Measurement Chapter(founded 2017). He also was the Founding Chair of the NZ IMS Chapter(recognized as the best in 2012) and initiated the NZ Central Subsection which in 2005 became a Section.

Prof Mukhopadhyay is a topic editor of the IEEE Sensors Council, and Associate Editor of the IEEE Transactions on Instrumentation and Measurements. He is also a Distinguished Lecturer of the IEEE Sensors Council and has delivered many seminars and lectures around the world.

Prof Mukhopadhyay is recognized as a leader in the field of sensors and has published and has contributed to many books. His numerous articles in scientific and technical journals and his contributions to conferences are frequently cited.

Nominations for the IEEE NSW Section 2019 Outstanding Volunteer Awards closed on 31 August 2019. Eight nominations were received;

One for NSW Outstanding Volunteer Three for NSW Young Professional Outstanding Volunteer One for NSW WIE Outstanding Volunteer Three for NSW Student Outstanding Volunteer.

The winners will be announced at the IEEE NSW Section AGM to be held at the Rydges Sydney Central on Wednesday 20 November 2019.

The NSW Awards policy as well as the nomination form can be found at http://sites.ieee.org/nsw/awards-recognition/ please consider nominating someone in 2020.

Tony Zaglas
IEEE NSW Section Awards and Recognition Chair



Moonwalk Milestone Plaque at Parkes

The Moonwalk Milestone plaque at Parkes was unveiled on the 11th October 2019. The March 2019 Circuit had a couple of pages on the Moonwalk Milestone. Here is one of the many photographs available.

https://www.facebook.com/pg/IEEE-NSW-Section-146048629397751/photos/?tab=album&album_id=395233591145919





It shows - from left to right - Sasha Nikolic,
Toshio Fukuda (2019 IEEE president elect),
then Trevor Bird,
Akinori Nishihara (region 10 president elect),
Eddie Fong,
R.A.Zakarevicius (Zak),
and Graeme Gwilliam.

Trevor, Eddie, Zak and Graeme - with Karu Esselle, who wasn't present - did the work organising the event.

The dish behind is the object that did the actual work commemorated by plaque.

Life Members Affinity Group

The Group has over 165 Members. There has not been much activity of recent times. Suggestions for activities from members would be appreciated.

There are two activities planned.

The first being the unveiling of the 'Milestone plague' at Parkes Radio Telescope on 11 October. The 'Milestone' is in recognition of the part Parkes played in the transmission of the television signals when Neil Armtrong was on the Moon on 20 July 1969.

The Second planned is a visit to UTS Data Arena on 7 November followed by lunch. The Data Arena is a 360-degree interactive data visualisation facility set to change the way we view and interact with data. Viewers stand in the middle of a large cylindrical screen, four metres high and ten metres in diameter. A high performance computer graphics system drives six 3D-stereo video projectors, edge-blended to create a seamless three-dimensional panorama.

The Group will have AGM at the Section's AGM on Wednesday 20 November. It would be great to see as many as possible attend and even better if some of you would join the committee and make the Group more vibrant.

There are requests from the Student Branches for mentors, maybe some of us should consider that role.

There is a large number, over 100, of the group that are just Members, most of us with our experience could be Senior Members. Let us make it our target for 2020, to assist Members to upgrade to Senior Member. If you need assistance in upgrading, please contact me.

Colin Elston, Secretary (colin.elston@ieee.org)

IEEE MQ STUDENT BRANCH

IEEE Student Activity Chair welcome: On 19th September 2019, our IEEE student branch at Macquarie had the privilege of hosting the IEEE Student Activities Committee Chair Dr. Elisa Barney.

Dr. Elisa Barney, visited us from Boise State University, Idaho, U.S.A. She gave our committee a lot of insights on student engagement. Dr. Elisa also shared her experience at her university, of using video conferencing to connect students to industry.

She explained the benefits of IEEE membership and how one can experience active involvement, while doing so. She encouraged our team members to continue their membership as young professionals.

Our team organsied lunch for this meeting. She was impressed by the activities we conducted throughout the year. She also elaborated on her TEDx talk on 'Digital technology'. Dr Elisa also shared her knowledge about IEEE day and suggested various activities that our student branch might try out.

Engineering Breakfast: The IEEE MQ Student branch in collaboration with Macquarie University has initiated an Engineering Breakfast series. The idea is to bring together engineers from around Macquarie Park area to exchange ideas and gather industry specific knowledge. This event is started with a motto," By the engineers, for the engineers and about their engineering". We have already \got to a good start with a total of 52 registered participants. Both the students as well as the industry professionals were eager to share ideas, and their experiences as a part of a global industry. This event is focused on bridging the gap between industry and academia. Surprisingly, most of the industry professionals were IEEE professional members.

As an IEEE student branch, we are growing together and doing well. We bond over activities and share responsibility as a family. We are grateful to the IEEE for providing us with this platform.

Submitted by:

Khushboo Singh

Alice James

Joint Chapter Broadcast Technology, Consumer Electronics and Product Safety Engineering

The Joint Chapter was formed in 2016, but has never had an elected organising committee.

There are about 50 society members. Lectures on topics relevant to the Joint Chapter have been included in JILS lectures (Joint Institutions Lecture Series). The Joint Chapter liaises with SMPTE (Society of Motion Picture and Television Engineers) Australian Section. In the world wide broadcast industry, many people are members of both IEEE and SMPTE.

The Joint Chapter will have AGM at the Section's AGM on Wednesday 20 November. It would be great to see as many as possible attend and even better if some of you would form a committee and make the Chapter more active.

Colin Elston, Chair (colin.elston@ieee.org)

NESMA Morning at the PLUS-ES Lane Cove Test Station

I attended a presentation at the renamed PLUS-ES(formerly TCA) test station at Lane Cove on Thursday 19 September 2019.

The test station is no longer associated with Ausgrid due to a change in government policy.

The event was organised by the National Electrical Switchboard Manufacturers Association(NESMA

https://www.nesma.org.au/nesmahome

The Platinum sponsor for the event was Eaton. Gold sponsors were ABB, aps, ipd, NHP and Schneider.

The morning began with an address by Mark Betcher of Blacktown City Switchboards who welcomed those attending and outlined the morning's program.

There were Presentations by Martin Mulcahy(PLUS-ES High Power Testing Manager), Dane Horwood(R N Baker Switchboards P/L) NESMA Honorary President and Alan Mihovil of Eaton.

The presentations will be posted at http://www.nesma.org.au/ in the near future.

AS/NZS 61439 Parts 1 & 2:2016 supersede AS/NZS 3439.1:2002 and align with IEC 61439 Parts 1 & 2:2011. The expiry date for AS/NZS 3439.1 is 24 May 2021.

Martin Mulcahy of PLUS-ES outlined the services and facilities offered by the test station and some of the changes incorporated in the new standards. This presentation also contained a shortened version of the Lecture delivered as part of the Joint Institutions Lecture Series at EA Chatswood, "Testing LV assemblies to the AS/NZS 61439 product standards", on 9 September 2019.

The test station has NATA and ASTA Certifications.

There followed a series of tests on a test board specially constructed for the demonstration.

Test 1 – Bolted short-circuit current of 50 kA rms for 0.2 s, 105 kA peak on the vertical phase busbars(about 50mm by 6mm copper). Two busbar support spacings were used(300mm and 500mm) to demonstrate the effects of support spacing on the assembly, supports and busbars. The 300mm spaced busbars and supports were not affected whereas the 500mm busbars were severely deformed and one of the support broke. The test was deemed a fail.





Test 2 - conditional short-circuit current of 50 kA rms at 415 V on a 3 pole MCCB (moulded case circuit-breaker). The Circuit breaker limited the trough fault current and magnetic forces on the cables connected on the load side. The blackening on the breaker was due to the material ejected from the arc chutes of the breaker.





Test 3 - Internal arcing-fault test at a prospective current of 50 kA rms at 415 V initiated on the load side of the MCCB (standard test). Fuse wire was 20A. There were minimal effects inside the compartment and no effects on the door. There was a small flash visible before interruption of the fault by the MCCB.





Test 4 - Internal arcing-fault test at a prospective current of 50 kA rms at 415 V for 0.2 s initiated on the line side of the MCCB (special test). Fuse wire was 20A. Part of the busbars on the line side of the MCCB disintegrated. The MCCB handle was propelled off the door, and some of the door fixings and hinges were damaged or broken.





Before and after each test the procedure and results were expertly explained and questions were answered by the test station staff.

Alan Mihovil of Eaton presented their solution to controlling arc flash energy and PPE reduction category - the Eaton Arc Flash Protection System ARCON.

The ARCON control unit optically detects arcing faults and triggers a once-only "explosion" device that places a short circuit on the busbars within 2ms. This causes the voltage across the busbars to collapse and the incoming protection device to trip, extinguishing the arc.

This device allows the lowest category of Personal Protective Equipment(PPE) to be used.

There were exhibits by the sponsors with switchboards and equipment demonstrating their offerings and solutions for the LV Power Distribution and Control market. The sponsors technical staff were at hand to answer questions and provide information.

Tony Zaglas

JILS lectures (Joint Institutions Lecture Series)

The JILS lectures are currently held at the EA Horricks Auditorium, Chatswood usually on second and fourth Thursday of the month except January, December and school holidays.

This year - due problems with EA's booking system - some lectures had to be scheduled on days other than Thursday.

The lectures are organised by a committee with representatives from EA, IET and IEEE.

Each organisation hosts about 5-6 lectures per year. The committee is currently planning the program for 2020. The committee meets on last Monday of the month at 6pm, currently at EA's office at Chatswood.

If other IEEE members would like to be involved in organising these lectures, they would be most welcome. Please let me know. If you have a lecture that you believe should be included, also let me know.

The JILS does not need to be the only section wide lectures. Other lectures can be organised at various locations, possibly universities, if members are willing to plan them. If you are interested in being involved in planning, please let me know.

If you have topics or locations, please let us know?

Currently, EA is moving their NSW office into the CBD. I understand near QVB. At this stage, the venue for 2020 JILS lectures has not been finalised. It is expected to be at the EA venue.

Colin Elston, IEEE representative (colin.elston@ieee.org)

PES Joint Institute Lecture Series

From Inverter Standards to Understanding Inverter Behaviour for Small-scale Distributed Generation

The Power and Energy society hosted a seminar as part of the Joint Institute Lecture Series (JILS) on "Inverter Standards to Understanding Inverter Behaviour for Small-scale Distributed Generation". The seminar, presented by Prof. John Fletcher of UNSW Sydney, was attended by more than 55 professionals and society members. It addressed topics on control of small-scale, grid-connected power electronics in solar PV applications, the challenges in managing the millions of systems that comprise Australia's 9GW fleet of small-scale systems and inverter bench testing as part of a UNSW-led project funded by ARENA.



PES Conferences around R10

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 17 July 2019 and more information can be found at: http://www.icpes.org/cfp.html



Submitted by Georgios Konstantinou in his capacity as PES chair.

New and upgraded Members of the NSW branch of the IEEE

We don't seem to have any new Fellows, Life Fellows Life Members or Life Senior Members for the period from the 1st July 2019 to the 30th September 2019.

Senior Members

We do have six new Senior Members

Subrata	Chakraborty	Ling		Chen
Mohammad	Jafari	Jo	T	Tibbitts
Ivor	Tsang	Ashkan		Yousefi

Members

We have rather more new Members - 219 of them - which is more than half of this quarter's batch.

One of them - Firas Qais Al-Doghman - is an active volunteer with whom I've had dealings in my other capacity as treasurer.

Mohammad Hemraj Firas Sarah Andre	Mahmoud Jamil Qais P	Abuhilaleh Adhikari Al-Doghman Alnaghy Alves	Damilare Majid Usama Raed Adrian	Ezekiel Marc	Adewale Al-Ali Ali Alsurdeh
Mohammad Nicholas Mahmuda Bishal	Arsalan Mark	Arshad Banic Begum Bhandari	Alpha Tony Matthew Tarriq	Harm	Bah Bazouni Bekkema Bird
Linh Niras Cong Xu Ziqi Peng	Phuong C.	Bui Vayalil Cao Chang Chen Cheng	Stuart Yulian Hua Bikesh Zijiao Esther	Robin	Burns Cao Chai Chaudhary Chen Chong
Thai Son Jason Rajesh Rabin Isaac	Robert	Chu Collins Dhungana Dulal Dunne	Henry Max Yali Rabin Matthew	Lang	Clifton Crittenden Du Dulal Eagan
Warunika Yixi Joel David Michael Srinivasan Ehsan	Sithumini	Ekanayake Feng Ferguson Ford Fraser Ganesan Gatavi	Olivia Md Beau Gilad Alexander Qishuo Aida	Meftahul	Ell Ferdaus Fleming Francis Fuerbach Gao
Gharal Sahand Will Vincent Xinyi	nknam	Ghavidel Gilbert Gramoli Gu	Bikesh David Julian Jason	Shrestha	Ghinangju Gordon Grodzicky Ha

Maryam Brendan Harini Pranar Wibowo Seok-Hee Chaoran Heqing Monsiyais	mi	Haghighat Halloran Hapuarachchi Hardjawana Hong Huang Huang	Noman Sai My Claire Andrew Zhonghao Xiandao Fernando	Haider at Myo Min Hue	Han Hardgrove Hill Hu Huang rta
Nathanael Ainun		Hutchison Jariyah	Hieu Asanga	Danh Priyankara	Huynh
Jayaw	ardana				
Sanjay		Jha	Sarah J		Johnson
Thisandu	Dulhara	Kahingala	Peng		Kang
Kallol	Krishna	Karmakar	David		Karpul
Mario	Mark	Kazangas	Julian	Robert	Keledjian
Shahabodin		Khadivizand	Shakil	Ahamed	Khan
Zaid	Ahmed	Khan	Hafiz Muha	mmad Umair	
Safal		Khanal	Prajjwal		Khanal
Bijay		Khatri	Sejeong		Kim
Carl		Kleinschmidt	Vichai		Konangi
Kenneth	John	Kozak	Alexander	Andre	Kroh
Ali		Lalbakhsh	Linh		Le
James	Ju Heon	Lee	Christopher	John	Lewis
Sheng		Li	Chai	Shing	Li
Jun		Li	Lina		Li
Hengyu		Ling	Bin		Liu
Anjin		Liu	Liyang		Liu
Jiaqi		Liu	Zachary	John Maurice	_
Aijun		Lu	Subir		Majumder
Zahra		Malekjamshidi	Inesh	_	Manandhar
Mathumathi		Manoharan	Benjamin	S	Meek
Peter	Rayhan	Mendis	Kerrod		Meyers
Shahzad	Iqbal	Mian	Adriana-Simo		Mihaita
Jakov		Mihaljevic	Nurul Izzah	Mohar	nmad
Afandi		36113611	. 1 .		3.6
Nurhakimah	mili veli	Mohd Mukhtar	Alois	**	Murapa
Chau	Thi Minh	Nguyen	Long	Hung	Nguyen
Minh		Nguyen	Rashmi		Nigam
Khan		Nishiyama	Hamed	3.4	Nosrati
Diego	Ignacio	Ocampo Herrera	Danielle	M	Ochangco
Vanessa	D 1 1 1 1	Page	Shankar	17	Pangeni
Binu	Pankajakshy	Raghavan	Rajesh	Kumar	Paudyal
Gavin		Paul	Zandra	M	Pavicic
Logan	Dominic	Peters	Hoai	Nam	Pham
Sanjeevan		Prabahar	Aiswarya	Prad	eepkumar
Meilin		Qian	Yichen		Qiao
Shameer	A 1 '1	Qureshi	Michal	т 1	Rac
Md.	Ashib	Rahman	Md	Lushanur	Rahman
Shahriar		Rahman	Shad	D	Rahman
Pooja		Rai	Marcelo	Kan	nos da Silva
Amrut Ranjar		Ray	Javad		Rezazadeh
Abubakar Sac	uiq	Sani	Francesco		Schiliro
Ransalu		Senanayake	Michael		Seymour

Negin		Shariati	Lei		Shi
Zihao		Shi	Ye		Shi
Muhammad	Asaf	Siddiqi	Ram	Kuber	Singh
Kiran		Singh	Suyesh		Singh
Bunyim		Sok	Alonzo	Daniel	Sparkes
Bjorn		Sturmberg	Shuyang		Sun
Seyedfoad		Taghizadeh	Nicole	Nathalie	Tan
Ronak	Himanshubhai	Thaker	Bikash		Thapa
Kanchana		Thilakarathna	Sorin		Toma
Shakila	M	Tonni	Alan	Le	Truong
John	C	Turner	Md. Tanvir	Ishtaique	ul Huque
Lize-Marie		Van Wyk	Raju		Varghese
Bogdan		Vatulya	Vishnu		
Vijayakrishna	n				
Thai	Tien	Vu	Jingya		Wang
Zhichao		Wang	Chester		Wang
Zhiqiang		Wei	Haijie		Wen
Jamon		Windeyer	Di		Wu
Jingyao		Wu	Peilun		Wu
Yang		Yang	Emily	Wern Jien	Yap
Bowen		Yi	Bochuan		Yin
Zuogong		Yue	Melek		Zarifi
Weizheng		Zhang	Shisheng		Zhang
Juan		Zhang	Daokun		Zhang
Hao		Zhang	Wenjie		Zhang
Ruiwen		Zhang	Zizhu		Zhang
Zeyu		Zhao	Lu		Zheng
Wei		Zhou	Yubo		Zhou
Xingyu		Zhu	Fujin		Zhu
Yan		Zhu			

Graduate Student Members

We have 86 new or upgraded graduate student members.

oahene
Amin
Ba
Bharadwaj
Boye
Chacon
Chen
Cheng
Darshana
Feng
Han
Hora
Ibrahim
Jalilian
/ [] [] [] []

Muhammad		Kasim	David	Alexander	Katzmarek
Farhan	Aziz	Khorsheed	Om	Prakash	
Lamic	hhane				
Huan		Li	Guang		Li
Wen	Jun	Lim	Nathan	Kush	Long
Sally	Kathryn	Longmore	Daniel		Mackinlay
Mohamed Ate	f Ali Rajab	Madni	Rebecca	Erin	Morgan
Benjamin		Moshirian	Mrunalini		Nalamati
Long	Bach	Nguyen	Nanduni	Indeewaree	Nimalsiri
Siri		Padmnabhan	Ahillanjan		
Panchalingam			· ·		
Amir	Mohammad	Pasdar	Wilder	Per	domo-
Charry					
Watcharakorn		Pinthurat	Jessie	Ann	Posar
Alejandro	Ranchal	Pedrosa	Kathleen	Francis	Ritchie
Arifur	Rahman	Sagar	Sadik	Al	Saim
Nazmus		Sakib	Arun		Sebastian
Indishe	Prabath	Senanayake	Irfan		Shahid
Tousif	Hasib	Siddiqui	Ricky		Sinclair
Chapman		Siu	Sajid	Akbar	Sium
Sheila		Sutjipto	Hassan		Talal
Praveen	Kumar	Thotakuri	Helene		Tran
Ihsan		Ullah	Guoqing		Wang
Ziqing		Wang	Zeheng		Wang
Qi		Wang	Qianli		Xing
Liang		Yuan	Lei		Yuan
Bo		Zhang	Ye		Zhang
Dalin		Zhang	David		Zhao
Weiming		Zhi	Jinling		Zhou
Yechen		Zhu	Bin		Zhu

Associate Members

We have five new associate members.

Jon	Bowden	Emily		Cole
Yunhao	Fu	Emi	Minghui	Gui
Felix	Theska			

Affiliate Members

We have four new affiliate members

Michel	Acuna	Ziyuan	Gu
Malith Prasanga Ranaweera	Kankanamge	William	Rowley

Student Members

We have 49 new student members, one of whom $\,$ - Alan Zehong Ngo - $\,$ is an active volunteer with whom I've had dealings in my other capacity as treasurer

Noah	Biddle	Duc	Thien	Bui
Zeam	Camdzic	Alex	Daniel	Carter

Brian		Chan	Rithwik	Kamal	Chhugani
Isaac		Gray	Timothy	Bq	Guo
Reuben		Hackett	Alex	Satoru	Hanrahan
Debao		Jian	Santosh		Khatri
Lai Ming		Lam	Anh	Minh	Le
Loc	Tien	Le	Zhongxia		Li
Jennifer		Liu	Ben		Marks
Luke		McElroy	Ja	Ba Dam	Nay
Alan	Zehong	Ngo	Quoc	Khanh	Ngo
Minh	Quang	Nguyen	Vinh	1 2110/1111	Nguyen
Hai	Ngoc	Nguyen	Sandeep		Nomula
Swraj	Guruprasad	Palekar	Thomas		Payne
Thomas	o wi wpi wowa	Philpott	Lorenzo		Saavedra
Diyari		Sabah	Gautam	Mahesh	Saaveara
Sadara	angani	Subuli	Guatum	TVIGITE SIT	
Angad	Deep Singh	Sethi	Conna	David	Sheedy
Macleay	Deep singn	Stephenson	Luke	Michael	Sturgiss
Aaron		Tootell	Anton	TVITOTIGOT	Tutoveanu
Andrei		Valdez	Hemanth		Vejandla
Lena	Yi	Wang	Bofei		Wang
Xuyang	11	Wang	Dominic		Wong
Elizabeth	Irenne	Yuwono			Zhen
	Henne		Liyee	Cin de	_
Ziwen		Zhou	Xingyue	Cindy	Zhu
Weina		Zhu			

Submitted by Dr. Bruce Poon - e-mail $\underline{adsphere@optusnet.com.au}$



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