IEEE

The Institute of Electrical and Electronics Engineers, Inc.

Contents:

Editorial:

This is the sixteenth newsletter I've edited. This one is being edited with the usual newly downloaded copy of the very latest stable version of Libre Office – 6.3.5.2 – up-dated in mid-edit

This is the first newsletter where I've had to put in a new ad. Nicholas Sheppard wants to publicise his new business at https://www.alittleresearch.com.au. He will search the academic literature for you, and aims to help people get in contact with useful academics (who do exist). A lot of the value in exploiting people like him comes from articulating your ideas clearly enough - and in sufficiently conventional terms - to let somebody else do your searching for you.

Chair's Message

Welcome to 2020 and a change in the leadership of NSW Section.

We thank Sasha for the tremendous effort he put into the Section, including the creation of the UNITE event. We wish Sasha all the best as he cares for his wife at this time.

Let me briefly introduce myself, I am a Senior Life Member.

Over my career, I have been involved in the system design and registration of the Optus (Aussat) satellite and mobile satellite systems, OptusVision HFC PayTV service, and the transition of free-to-air TV from analog to digital, especially transmitters. I have also been involved with local and international standards as well as the International Telecommunications Union (ITU). This gives me a different perspective on being Section Chair.

Last year, in October, Australia had its first IEEE Milestone Event - the Reception of First Communication to Earth from a Human Walking on the Moon, 1969 - at Parkes Radio Telescope. (Further details https://ethw.org/Milestones:Parkes_Radiotelescope). The Section is currently looking at other events which could be offered to the IEEE as IEEE Milestones. A great deal of effort is required to create the documentation that the IEEE likes to see for a proposed IEEE Milestone.

Do you know of such an event, and would you be willing to help documenting it?

February is the month when IEEE HQ goes through the membership lists and puts aside those who have not renewed. In the most recent report, the Section membership has dropped from approximately 3000 to 2100. I realise there are many reasons why members do not renew early, especially in these hectic and financially demanding times. Life members must also remember to renew, even though they don't have to pay any more. If you have not renewed, could I encourage you to be involved again?

While on membership, could I suggest that every member should consider joining at least one society that they have an interest in.
(List of societies - https://www.ieee.org/communities/societies/index.html)

By joining a society, you get up-dates on what is happening in that area and you also tell the Section about your areas of interest, which helps us see the kind of audience we have for planned activities. Where the Section has enough particular Society members, a local chapter can be formed to cater for their needs.

(List of local chapters – https://site.ieee.org/nsw/chapters/).

If you have been at Member grade for over 10 years, you should consider upgrading to Senior Member (details – https://www.ieee.org/membership/senior/). The fees for a Senior Member are the same for a Member, so it doesn't costs you any more. I notice that the Section has a number of Members with over 20 years membership who have not upgraded yet, and others with higher grades in other institutions.

The Section, Chapters and Affinity Groups are always looking for volunteers to assist. Most groups have small committees, but in many instances only a single person is doing the work, especially within the Section. If for some reason that person is unable to do IEEE work, then things do not happen. It would be good if there was at least an assistant for every position and better if there was a committee. We need succession planning, as well. Can you help?

May be you have a particular event or activity you would like to see happen? A site visit, a lecture on a particular topic, or a social get-together? Please let us know.

One of my aims is to have the Section, Chapters, Affinity Groups and Student Branches work together to ensure the best outcome for our membership. Charles Sturt University (Sydney Campus) has formed a student branch and is proposing running a conference around November-December.

I am trying to ensure that IEEE conferences held in Sydney do provide some benefit to our local members, such as an evening lecture by a distinguished person.

Initial planning for UNITE 2020 has started with David Tien taking the lead.

The R10 AGM this year was a virtual meeting by Webex because of coronavirus. Further details can be found in a separate article on pages 12 and 13.

A member of the Section is currently looking at forming a local project group as part of SIGHT (Special Interest Group on Humanitarian Technology) (https://sight.ieee.org/). Details about the local group will be distributed when they come to hand.

The Institute of Instrumentation, Control and Automation (IICA)is holding a Technical Expo at Doyalson-Wyee RSL Club, Pacific Hwy. Doyalson NSW 2262 on Wednesday 29 April from Midday to 6pm. (https://bookings.iica.org.au/bookings/events/event.asp?bookingid=1235). I am proposing that the NSW Section invites IEEE members to join each other for dinner at the Club after the IICA event. If anyone is interested in attending, could they please let me know and I will create an IEEE event. I see this as an opportunity for the Section to involve those outside Sydney.

IEEE NSW Section and the IICA do have a memorandum of understanding (MOU) on collaborations.

I am still coming up to speed, so there are many of things that still need sorting out. These includes finalising some committee positions, reviewing and updating the website, re-establishing our communications channels and other day-to-day activities.

I would like to express my thanks to the rest of the team and those in the background who help me manage the Section and tolerate my slowness to react at times.

Your input is welcome. It is your Section. We are here to organise events for everyone's benefit.

Colin Elston
Chair NSW Section.

2019 IEEE NSW Section Annual General Meeting

All members of the NSW Section of the IEEE were invited to the 2019 Annual General Meeting at Rydges Sydney Central that was held on the 20th of November 2019.

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 progress made and future direction, as well as networking with a very diverse membership base. We had members attend from all over NSW.

Outgoing Section Chair Dr Sasha Nikolic provided a comprehensive overview of the progress the section committee made over the previous 24 months, showcasing the achievements as mapped out in the 2018-2019 NSW Section Strategic Plan.

The incoming committee was also announced with Colin Elston being appointed as 2020 Chair and Dr Sudipta Chakraborty as Vice-Chair. Dr Dushmantha Thalakotuna remains Section Secretary, and Dr. Bill Sloman remains Section Treasurer.

Key to the night was the presentation of a wide range of awards, highlighting the talent available within NSW. Further details of the awards can be found on pages 8 and 9.

The dinner took the form of a buffet which was good value for $6 per head it cost. The AGM dinner is the annual event that you should really try to get to!

Thanks you all that attended, contributed to the discussion and engaged with the rest of members!

Dr. Sasha Nikolic, Past Chair, IEEE NSW Section

New Fellow

Hussein Abbass, University of New South Wales, Ausstralia

IEEE Fellow Citation

for contributions to evolutionary learning and optimization

Hussein Abbass is a Professor at the School of Engineering and Information Technology, University of New South Wales, Australia.

He works in Canberra at the Australian Defences Forces Academy.

He received his BA, PG.Dip., and M.Sc. from Cairo University in 1990, 1992, and 1995, respectively, and an M.Sc. in Artificial Intelligence (AI) from the University of Edinburgh in 1997, followed by a PhD in data mining from Queensland University of Technology in 2001.

He pioneered the Pareto-based Neural Network Ensemble algorithms, where multiple neural networks concurrently learn to solve problems with conflicting requirements and objectives.

His current research is developing the AI algorithms and architectures to design ground, air and software-based trusted autonomous systems with the same level of cognitive decision-making abilities as sheepdogs. He is an advocate for trusted autonomous and AI systems, and the need for ethical and responsible social integration of AI in the human society. His outreach activities promote AI4ALL, to educate the community on AI.

Prof. Abbass served as the Vice-President for Technical Activities for the IEEE Computational Intelligence Society (2016-2019) and the National President of the Australian Society for Operations Research (2016-2019).

He is an associate Editor of the IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Evolutionary Computation, IEEE Transactions on Cybernetics, IEEE Transactions on Cognitive and Developmental Systems, and four other journals.

He is also a Fellow the Australian Computer Society, the UK Operations Research Society, and the Australian Institute of Managers and Leaders.

First technical activity for the IEEE Sensors Council NSW Chapter in 2020

Prof. Sazonov delivering the seminar

The first technical seminar for 2020 for the IEEE Sensors Council NSW chapter was delivered by Prof. Edward Sazonov of University of Alabama, USA on 19th February 2020. The seminar was organized at Macquarie University.

The title of the talk was "From wearable sensors to behavioural informatics: frontiers in digital health"

The emergence of wearable sensor technology paves the way for objective, sensor-driven assessment of health-related behaviours, which in modern society are the major determining factors of life expectancy and quality of life. Modern sensor technology offers the possibility to objectively measure and quantify complex human behaviours such as physical activity, food intake patterns, addictions, sleeping patterns, and social interactions. Furthermore, real-time recognition of the behaviour enables novel approaches for just-in-time behaviour modification. The recognition, characterization and interpretation of behaviours from sensor data presents a challenging problem because of the complexity and variability of real-life behaviours as well as the indirect way in which events of interest have to be inferred from the behavioural and physiological manifestations registered by the sensors.

The talk provided an overview of his work on wearable sensors for monitoring of food intake in adults and infants, monitoring cigarette smoking and smoke exposure, and monitoring physical activity and energy expenditure. Special attention was paid to the sensors for monitoring food intake, which are of particular interest in understanding and treating related medical conditions, such as obesity and eating disorders.

Biography: Edward Sazonov (IEEE M'02, SM'11) received a Diploma of Systems Engineering from Khabarovsk State University of Technology, Russia, in 1993 and a Ph.D. in Computer Engineering from West Virginia University, Morgantown, WV, in 2002. Currently he is a Professor in the Department of Electrical and Computer Engineering at the University of Alabama, Tuscaloosa, AL and the head of the Computer Laboratory of Ambient and Wearable Systems (http://claws.eng.ua.edu).

His research interests span wearable devices, sensor-based behavioural informatics and biomedical signal processing and pattern recognition. Devices developed in his laboratory include a wearable sensor for the objective detection and characterisation of food intake (AIM – Automatic Ingestion Monitor); a highly accurate physical activity and gait monitor integrated into a shoe insole (SmartStep); a wearable sensor system for monitoring of cigarette smoking (PACT), amongst others.

His research has been supported by the National Institutes of Health, National Science Foundation, National Academies of Science, as well as by state agencies, private industry and foundations. Dr. Sazonov serves as an Associate Editor for several journals, including IEEE, Frontiers and other publications.

The seminar was attended by 22 people and was a great success.

The report was provided by Prof. Subhas Mukhopadhyay FIEEE

Subhas.Mukhopadhyay@mq.edu.au

Awards and Recognition

In the October 2019 edition of CIRCUIT, it was announced that Prof Subhas Mukhopadhyay, FIEEE from Macquarie University was awarded the Region 10 Outstanding Volunteer award.

At the 2019 AGM Section Chair Dr Sasha Nikolic presented Prof Mukhopadhyay with a framed certificate to commemorate the occasion. The Region 10 Presentation was to take place at the Region 10 Meeting which was to take place in Vietnam on the 8th March, but didn't. See page 12,13.

The 2019 NSW Outstanding Volunteer Award was presented to Dr Sudipta Chakraborty (in absentia - Ms Khushboo Singh accepted it on her behalf).

The NSW Young Professional Outstanding Volunteer Award winner was Young Professionals Affinity Group Chair Dr Syed Abbas from Macquarie University and a commendation was presented to Dr. Budhaditya Majumdar from Robo Helix and Beckhoff Automation

The 2019 NSW WIE Outstanding Volunteer Award winner was Dr Rukmi Dutta from UNSW.

NSW Outstanding Student Volunteer winner was Khushboo Singh from Macquarie University Student Branch and a commendation was awarded to Luke Wicent Sy from UNSW Student Branch.

UNSW and Macquarie University Student Branches participated in the 2019 IEEEXtreme competition. First Place in Australia(31st in the world) was awarded to Duc Thien Bui, who participated as an undergraduate team of one, against larger teams, quite a few of whom were graduate students.

2019 R10 Research Paper Contest 1st place was awarded to Uzma Amin and 2nd Place was awarded to Ali Lalbakhsh both from Macquarie University.

2019 IEEE Women in Engineering Inspiring Student Member of the Year Award was presented to Dr. Naila Mukhtar from Macquarie University.

Luke Wicent Sy, Dr. Budhaditya Majumdar, Dr Sasha Nikolic, Dr Syed Abbas, Dr Rukmi Dutta, Khushboo Singh

Luke Wicent Sy, Dr. Budhaditya Majumdar, Duc Thien Bui, Dr Rukmi Dutta, Khushboo Singh, Dr Sasha Nikolic, Dr Naila Mukhtar, Prof Subhas Mukhopadhyay, Dr Syed Abbas, Ali Lalbakhsh

Ashib Rahman, Dr Sasha Nikolic, Obaidur Rahman, Safdar Rasool, Prof Kashem Muttaqi, Amin Jalilian, Muhamad Yousaf

More 2019 AGM photos can be found on the IEEE NSW Facebook page.

I would like to congratulate all the winners and thank them for their outstanding contributions to the IEEE NSW Section and IEEE.

I would also like to thank the Awards Committee(Prof Subhas Mukhopadhyay, A/Prof Lyria Bennet Moses, Dr Helen Lu and Manisha Arde) for their work and for an excellent evaluation.

Contributed by Tony Zaglas,
IEEE NSW Section Awards and Recognition Chair 2019
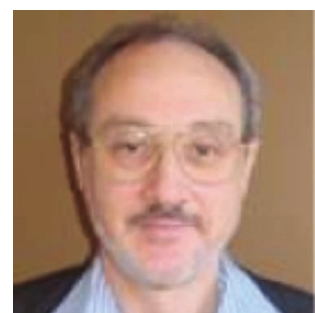
Formation of a dedicated Electron Devices Chapter in the NSW Section

At the end of last year, the IEEE gave the green light to the disassociation of the Joint Photonics / Solid-State Circuits / Circuits and Systems / Electron Devices Chapter to create a standalone EDS Chapter in New South Wales https://site.ieee.org/nsw/electron-devices-society/ to foster an IEEE community in the electronic materials and devices engineering.

The official Inauguration of the Chapter will take place on the 5th June, in conjunction with the first mini-colloquium, at the Aerial Function Centre of the University of Technology Sydney.

It will be a full-day workshop featuring several Electron Devices Society Distinguished Lecturers (including the current and past EDS Presidents), as well as highly influential speakers in the Electron Device area from the NSW region.

The workshop will be followed by the EDS mid-year Board of Governors meeting, over the 6th-7th June at the Mercure Hotel, Central Sydney.

The founder and Chair of the new Chapter is Prof. Francesca Iacopi FIEAust, SMIEE, from the University of Technology, Sydney. The Vice-Chair is Prof. Alison Lennon from the University of New South Wales, the Treasurer is Dr.Yang Yang from UTS, and Secretary is Associate Prof Tara Hamilton, recently moved from Macquarie University to the University of Technology Sydney.

Francesca has had an international career in the miniaturisation of semiconductor technologies, across industry and academia, covering electronic devices, interconnects and packaging. Her seminal work on low-k dielectrics for on-chip interconnects over the 1999-2009 decade together with Intel, AMD and other partners at IMEC (Belgium), has guided the industrial uptake of porous dielectrics into modern semiconductor microprocessors. More recently, in Australia, she has pioneered a wafer-scale platform for epitaxial graphene on silicon carbide on silicon, which may well enable a seamless integration of graphene electronic and photonic devices with silicon technologies.

She serves in the EDS Electronic Materials Committee, and the International Roadmap for Devices and Systems (IEEE IRDS). Recipient of a Global Innovation Award (2014), she was listed amongst the most innovative engineers by Engineers Australia (2018). Francesca leads the Integrated Nanosystems Lab in the Faculty of Engineering and IT at UTS. She is an Associate Investigator of the ARC Centre of Excellence (CoE) in Low-Energy Electronics Technologies (FLEET) and a Chief Investigator of the ARC CoE in Transformative Meta-Optical Systems (TMOS).

Alison is an academic in the School of Photovoltaic and Renewable Energy Engineering at UNSW Sydney, Australia. She holds Ph.Ds in Biophysical NMR (University of Sydney, 1995) and Photovoltaic Engineering (UNSW, 2010), was awarded a University Medal (University of Sydney, 1991), an Australian Postgraduate Fellowship (1995) and an ARC Future Fellowship (2017). She has published more than 130 scientific papers and is an inventor of 29 granted US patents.

Prior to her employment at UNSW in 2010, she was employed as a research scientist at Canon Information Systems Research Australia, where she was involved in a range of research ranging from device simulations, development of materials/technology for printing, imaging, display and medical applications. She currently conducts research into silicon solar cell metallisation and interconnection, optical modelling for photovoltaics and high-rate electrochemical storage materials. She was an Area Chair at the IEEE Photovoltaics Specialist conference in 2018 and 2019, has presented at IEEE TALE conferences, contributes regularly to Women in Engineering events both at UNSW and through the IEEE NSW Education Chapter.

Tara received her BE (Electrical Engineering) Hon. 1, and BCOM (Economics and Marketing) from the University of Sydney in 2001, MSc (Biomedical Engineering) from UNSW in 2003, and PhD from the University of Sydney in 2009. She is currently an Associate Professor at the University of Technology, Sydney (UTS). Tara has held academic positions at the University of Queensland, University of New South Wales, Western Sydney University, and Macquarie University. Tara has also worked extensively within industry having held full-time positions at Cochlear Ltd. (2000 - 2004) and G2 Microsystems (2007).

Tara is the author of over 120 research papers and 3 international patents. Tara's research interests include neuromorphic systems, mixed-signal integrated circuit design, neuro-engineering and biomedical engineering.

Tara has been a member of the IEEE since 1997 and has been active in the Circuits and Systems (CAS) Sensory Systems technical committee since 2008. In her spare time she enjoys playing Lego with her twin boys (4 years old), gardening, and swimming.

Yang Yang (S'11–M'14-SM'17) was born in Bayan Nur, Inner Mongolia, China and received his PhD degree from Monash University, Melbourne, Australia, in 2013.

He has 3 years industry experience at Rain Bird Australia serving as an Asia Pacific GSP Engineer, 2012 - 2015. He has received the corporate 2014 Global GSP Success Award.

In April 2015, he returned to academia, working in the field of microwave and antenna technologies, with Centre for Collaboration in Electromagnetic and Antenna Engineering at Macquarie University.

In April 2016, he was appointed as a Research Fellow with State Key Laboratory of Terahertz and Millimeter Waves, City University of Hong Kong.

Since December 2016, Dr. Yang has been on the staff of the University of Technology Sydney, Australia. He is currently a Senior Lecturer and a team leader of Millimetre-Wave Integrated Circuits and Antennas.

Dr. Yang has over 150 international peer reviewed publications in microwave and millimetre-wave circuits and antennas. He is a current Associate Editor of IEEE ACCESS, and an Area Editor of Microwave and Optical Technology Letters.

Dr Yang is a recipient of the CST University Publication Award 2018, by CST, Dassault Systèmes.

Submitted by Francesca Iacopi, chair of the of the new Electron Devices Chapter

Editor's note: This is impressive stuff. It's the quality rather than the quantity of the papers the you publish and the patents you get that matters, but you only get repeat business if the product is good.

IEEE R10 Annual General Meeting

Due to the coronavirus outbreak the planned meeting at Ho Chi Minh City was cancelled and a Webex meeting was organised in its place.

The Agenda of IEEE R10 – AGM on Saturday 7 March 2020
The times are JST (Japan Standard Time)
The Agenda below was created from the pdf at
https://www.ieeer10.org/wp-content/uploads/2020/03/2020-R10-Virtual-AGM-Agenda-WebEx_v7-Updated-as-of-5-March.pdf.

The Agenda can also be found at https://www.ieeer10.org/2020-r10-annual-meet/ this agenda has hyperlinks to various documents and posters. (Some of the hyperlinks are on the next page.)

Time	Duration	Type	Agenda Items	Leads
9:30	30	Registration	Join WebEx Meeting	Takako Hashimoto
10:00	2	Procedural	Call to Order by R10 Director	Akinori Nishihara
10:02	18	Procedural	Roll Call	Takako Hashimoto
10:20	3	Motion	Review and Approval of Agenda	Akinori Nishihara
10:23	10	Procedural	Welcome Address by Region 10 Director	Akinori Nishihara
10:33	15	Procedural	Address by IEEE President	Toshio Fukuda
10:48	15	Procedural	Address by IEEE Executive Director	Stephen Welby
11:03	10	Procedural	Address by IEEE Vice President, MGA	Kukjin Chun
11:13	10	Procedural	Current MD Status (tentative)	Cecelia Jankowski
11:23	20	Discussion	Section Incentives & Region Re-Alignment	Akinori Nishihara
11:43	5	Report	Report on the Region 10 EXCOM Meeting	Takako Hashimoto
11:48	5	Motion	Approval of Minutes of the Previous R10 Meeting	Takako Hashimoto
11:53	10	Motion	R10 e-Notice Policy	Takako Hashimoto
12:03	20	Discussion	Addresses by President-Elect Candidates 2021 with Q & A	Ramakrishna Kappagantu Dr. K. J. Ray Liu Dr. Sundaram K. Ramesh
12:23	37		Break	
13:00	25	Discussion	Presentation by Membership Activities Committee	Zia Ahmed
13:25	20	Discussion	Presentation by Technical Activities Committee	Sri Niwas Singh
13:45	20	Discussion	Presentation by Professional Activities Committee	Takao Onoye
14:05	15	Report	2019 Finance Report by R10 Treasurer	Seishi Takamura
		Report	Audit Report for 2019 Finance	Takao Onoye
14:20	15	Info	Presentation of 2020 Budget by R10 Treasurer	Seishi Takamura
14:35	5	Info	Presentation by Nominations & Advisory Committee	Kukjin Chun
14:40	10	Report	Sections Congress 2020	Byung-Gook Park
14:50	10	Report	Report on TENCON 2019	Kerala Section
15:00	10	Report	Report on TENSYMP 2019	Kolkata Section
15:10	10	Report	Report on R10-HTC 2019	Indonesia Section
15:20	15		Break	
15:35	10	Info	Presentation on TENCON 2020	Japan Council
15:45	10	Info	Presentation on TENSYMP 2020	Bangladesh Section
15:55	10	Info	Presentation on R10-HTC 2020	Malaysia Section
16:05	10	Info	Presentation on R10-SYWL Congress 2020	Thailand Section
16:15	10	Info	Presentation on TENCON 2021	New Zealand North Section
16:25	10	Info	Presentation on TENSYMP 2021	Seoul Section
16:35	10	Info	Presentation on R10-HTC 2021	Bangalore Section
16:45	10	Motion	New Business/ Other Matters	Takako Hashimoto
16:55	3	Motion	Adjournment of R10 Annual Meeting	Akinori Nishihara

Below are a selection of presentations that may interest Members.

Presentation – IEEE President's Message
https://www.ieeer10.org/wp-content/uploads/2020/03/Toshio-Fukuda-Address-by-IEEE-President.pdf

Presentation – Executive Director
https://www.ieeer10.org/wp-content/uploads/2020/03/Steve-Welby-Address-by-IEEE-ED-1.pdf

Presentation – Member and Geographic Activity
https://www.ieeer10.org/wp-content/uploads/2020/03/Kukjin-Chun-Address-by-VP-MGA.pdf

Presentation - What's new for You from MGA
https://www.ieeer10.org/wp-content/uploads/2020/03/Cecelia-Jankowski-MGA.pdf

Presentation – R10 – Membership Activities Committee
https://www.ieeer10.org/wp-content/uploads/2020/03/Takao-Onoye-2020-R10-VC-PA-07Mar2020.pdf

Presentation – R10 - Technical Activities Committee
https://www.ieeer10.org/wp-content/uploads/2020/03/SNSingh-VC-of-Technical-Activities.pdf

Presentation – R10 – Professional Activities Committee
https://www.ieeer10.org/wp-content/uploads/2020/03/Takao-Onoye-2020-R10-VC-PA-07Mar2020.pdf

Presentation – R10 - 2019 Finance Report
https://www.ieeer10.org/wp-content/uploads/2020/03/Seishi-Takamura-2019_Finance_Report_Treasurer-v3.pdf

Presentation – R10 – 2020 Budget
https://www.ieeer10.org/wp-content/uploads/2020/03/Seishi-Takamura-2020_Budget_Treasurer-v3.pdf

Region 10 co-sponsors a number of international conferences, these include (Details for 2020):-

TENCON
Nov 16 -19 - Osaka Japan
https://www.ieeer10.org/wp-content/uploads/2020/03/Japan-Council-2020-TENCON-07Mar2020.pdf

TENSYMP
Jun 5-7 - Dhaka Bangladesh https://www.ieeer10.org/wp-content/uploads/2020/03/Bangladesh-Section-2020-TENSYMP-Updated.pdf

HTC (Humanitarian Technology)
Dec 1-3 - Kuching, Sarawak, Malaysia
https://www.ieeer10.org/wp-content/uploads/2020/02/Malaysia-Section-2020-R10-HTC.pdf

SYWL Congress (Student, Young Professionals, Women In Engineering and Life Members)
Sept 24 -27 - Bangkok Thailand https://www.ieeer10.org/wp-content/uploads/2020/03/Thailand-Section-2020-R10SYWL-070320.pdf

IEEE NSW Joint Chapter Industry Applications/Industrial Electronics/Power Electronics

The Joint Chapter had a good year in 2019 with two inspiring technical seminars given by Prof Ron Hui from The University of Hong Kong, who discussed the topic of "History and development of wireless power transfer", and Prof K. Gopakumar from India Institute of Science on "Multilevel Converters and Modulation Techniques for AC Motor Drives Applications".

We also had a fun end-of-year gathering with academics and postgraduate students where we played some mass games and got to know each other better. The attendees provided some valuable suggestions and ideas for moving the chapter forward.

Several people suggested we should have more and more varied meetings including lab/site visits, workshops and more interactions with student chapters. These suggestions will be gradually implemented in 2020 and beyond.

Before the 2019 AGM in Ridges Hotel, seven members took part in the EoY Joint Chapter meeting. We have evaluated the activities and shared more ideas. At the meeting, the following people were elected for year 2020:

Associate Prof. Dylan Lu (UTS) as Chair

Mr Hamzeh Aljarajreh (UTS) as Secretary

Mr Nabil Mohammed (MQU) as Treasurer

We look forward to meeting the members at the gatherings and advancing the technologies as a community.

Submitted by Associate Prof. Dylan Lu, chair of the joint chapter.

New and upgraded Members of the NSW branch of the IEEE

For the period from the 1st October 2019 to the 29th February 2020.

New Fellow

We seem to have one new fellow, Hussein Abbass and he's got a page all to himself.

Life Fellow

Stefan	G	Mozar

has graduated from Fellow to Life Fellow. He's very active here and elsewhere too, though less so recently since his health scare.

Life Senior Members

We have three new life senior members

Bhaskar		Mukherjee	Reuben	Shar
Antony	C	Zaglas		

Tony Zaglas is well known to readers of Circuit, and is one of the few people who can be relied on to read it, and tell me what needs correction.

Life Members

We have fifteen teen new life members

Flemming		Andersen	Paul		Axon
Alex		Cheung	Cotter	A	Erickson
Luke	J	Freeman	Steven	M	Garnham
Ken	Y	Goh	Fuk	Hoi	Ho
Ronald	F	Jackson	Yusheng		Liu
Cornelis	A	Nieuwendyk	James	S	Norris
William		Rannard	Rein	A	Vesilo
John	C	Young			

Senior Members

We have seventeen new Senior Members

Omid		Amerisianaki	Mohamed	Mahmoud	Awadallah
Andrew	J	Belford	Karen	L	Blackmore
Kate	K	Carruthers	Zhonghao		Hu
Kourosh		Kalantar-Zadeh	Debabrata	Kumar	Karmokar
Zhixiong	Peter	Li	Wei		Lin
Priyadarsi		Nanda	Stephen	J	Phillips
Kumbesan		Sandrasegaran	Mahyar		Shirvanimoghaddam
Dushmantha Nuwan Prasanna		Thalakotuna	Yan		Wang
Greg	D	Watkins			

Dr. Dushmanha Thalakotuna is currently our Section Secretary.

Members

We have rather more new Members - 55 of them.

Noman		Akbar	Kamini	Simi	Bajaj
Lucas		Barcelos	Phillip	A	Burns
Katherine		Camilleri	Enzo		Cocotti
Kakoli		Das	Zheyuan		Du
Benedict		Dupree	Jeremy	John	Dusing
Greg		Falzon	Jonathan		Gan
Gaetano		Gargiulo	Apurav		Gupta
John	Damir	Halar	Chris		Halliday
Roger		Hatem	Warwick		Hehir
Md	Shahidul	Islam	Tony		Jan
Beeshanga	Abewardana	Jayawickrama	Jinman		Kim
Renato		Knox	Felix	Honglim	Kong
Dinuka	Udesh	Kudavithana	Kenny		Leung
Natalie	Anne	Lloyd	Simon		Macarthur
Amir		Mansouri	Sukriti		Mantri
Kevin		McAndrew	David	J	McKenzie
Paul	J	McMahon	Sajib	Kumar	Mistry
Jonathan	Robert	Mitchell	Duy	Trong	Ngo
Jones		Olatunji	Bruce	F	Orr
Paul	P	Parnell	Akhtar	A	Pirwani
David		Pybus	Frank		Ross
Alejandro	Javier	Schwoykoski	Garry	James	Shannon
Fabio		Souto	Navod		Suraweera
Felix		Theska	Robin		Vujanic
Nuala	C	Ward	Shaoqing		Zeng
Rui		Zhang	Shuai		Zhang
Tao		Zhang	Qiaoxi		Zhu
Xi		Zhu			

Graduate Student Members

We have 78 new or upgraded graduate student members.

Hasini	Viranga	Abeywickrama	Saeed		Afshar
Syed Muhammad Nawazish		Ali	Mithra	Balu	Kavitha
Reza		Barzegar	Mahmuda		Begum
Bahareh	Berenjforoush	Azar	Sivasankari		Bhagavathiperumal
Huaming		Chen	A. H. T.	Eranga	De Silva
Ziqiang		Deng	Prerna		Dhull
Stuart		Eiffert	Mohsen		Fadaee Nejad
Majid		Farhangi	Long		Fu
Yunhao		Fu	Mina		Ghaffari
Ramtin		Gharleghi	Chrispin	Alfred	Gray
Yang		Guo	Noman		Haider
Brendan		Halloran	Mehedi		Hassan
Fengxiang		He	Sheng		Huang
Chenhao		Huang	Muzaffar		Hussain
Ibrahim	Anwar	Ibrahim	Usama Bin		Irshad

Atiqul		Islam	Md.	Mainul	Islam
Asanga	Priyankara	Jayawardana	Vijina		K
Samuel		Karumba	Shakil	Ahamed	Khan
Alva		Kosasih	Prahalad		Kuthethoor
Huy	Quoc	Le	Sining		Liu
Jiyu		Liu	Feng		Liu
Jiaoyang		Ma	Nafisa		Matin
Jakov		Mihaljevic	Isura		Nirmal
Azadeh		Noori Hoshyar	Hamed		Nosrati
Logan	Dominic	Peters	Joseph	Barry Yoo Sik	Prinable
Guntur	Dharma	Putra	Feng		Qiao
Naufan		Raharya	Md.	Ashib	Rahman
Subhash		Sagar	Ayoob		Salari
Abubakar	Sadiq	Sani	Jackson	Harvey	Shields
Ram	Kuber	Singh	Wafa	Ali	Soomro
Pathum	Maduranga	Sudasinghe	Zihao		Tang
Sanket		Totewar	Md.	Amanath	Ullah
Muhammad		Uzair	Yunqi		Wang
Weihong		Wu	Lan		Wu
Jiatian		Xu	Yizhen		Xu
Qi		Yao	Emily	Wern Jien	Yap
Fangfei		Zhang	Zixu		Zhang
Bowen		Zhang	Yanhao		Zhang
Ian		Zhou	Hongdian		Zhu

Associate Members

We have five new associate members.

Behnam		Fahimnia	Shenghong	Li
Erica		Southgate	Hoe	Kin	Wong
Alex		Zyner		

Affiliate Members

We have two new affiliate members

Doan	B	Hoang	Kayleen	Manwaring

Student Members

We have 36 new student members

Basit		Ali	Tabitha	Renee Bilaniwskyj-Zarins
Owen		Chandler	Elizabeth	Daniels
Ewan		Dwyer	Georgia	Fardell
Mark		Fletcher	Zishan	Gao
Will		Gilbert	Shashank	Kumar	Gupta
Jonathon	Andrew	Harding	Gab	He
Dehan		Hu	Nathanael	Hutchison
Andrew		Jack	Aryamaan	Jena
Ratiranjan		Jena	Yubai	Jiang
Giles	Pembroke	Lodge	Sarhan	Khan	Missalot
Faisal		Nadeem	Aditya	Prakash	Narvekar

Long	Duc	Ngo	Alan	Zehong	Ngo
Yuxin		Pan	Paul		Phillpott
Hualin		Ren	Samira		Shaikh
Pratiksha	Ajit	Sharma	Jivitesh		Sharma
Hoang		Than	Chris		Tiqui
Dominic		Wong	MD.	Tanvir	Yeasin
Hantao		Zeng	Jingwen		Zhang

Submitted by Dr. Bruce Poon – e-mail adsphere@optusnet.com.au

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Arslan Kiyani ------ IEEE NSW Student Activities Chair
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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 : Vivek Sharma (vivek.sharma@students.mq.edu.au)
2. University of New South Wales SB Chair : Logan Peters (peters_l@hotmail.com)
3. University of Sydney SB Chair : Mir Nahidul Ambia (mir.ambia@sydney.edu.au)
4. University of Western Sydney SB Chair : Ms Manisha Arde (19643120@student.westernsydney.edu.au)
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