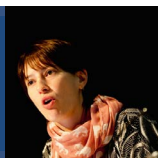


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Professor Ljiljana Trajkovic, President of IEEE SMC Society at SMC Celebration Lecture Series – page 13



Dr Jenny Riesz on renewable energy – page 3

Editorial

Welcome to the July issue of IEEE CIRCUIT!

This is the biggest issue so far and contains a wide range of news and views.

Nominations

The nomination form for Section officers is on Page 30. If you haven't considered nominating before, perhaps now is the time to do so. The positions and current officers are listed on Page 31.

AGM

The AGM will be held at the Sydney Hilton Hotel on 21 November 2014. The Section dinner will follow at the Athenian Restaurant, Barrack Street Sydney.



Editor

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IEEE New South Wales Section

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100% Renewables for Australia?

Challenges and Opportunities



Dr Jenny Riesz from the Centre for Energy and Environmental Markets at the University of NSW.

Dr Riesz gave a lecture on the above topic on 26 June 2014. The lecture, part of the Joint Electrical Institutions lecture series and held at Chatswood, was attended by 88 people and prompted some lively discussion during questions at the end of the lecture.

Dr Riesz addressed four main questions in her presentation, with my summary in brackets:

- Is 100% renewables worth thinking about? (Yes)
- Is it technically feasible? (Yes)
- Would it be cost-effective? (More cost-effective than what you might think)
- What would 100% renewables mean for the function of the electricity market? (Open question)

Non-renewable energy sources, by definition, are finite and eventually will be depleted. So, even if you discount climate change issues, eventually we will have to transition completely to renewables.

Some sources of renewables, such as solar thermal, are very similar to existing thermal generation plant and thus using these, if cost were ignored, would not present any novel challenges for the power system. A number of studies have indicated that the percentage of conventional (dispatchable, rotating) plant required on the system is only of the order of 15%.

The cost of transitioning to 100% renewables is obviously an issue and is estimated to be of the order of \$200-300 billion. However, the costs of renewables are now often cheaper than new conventional plant. Additionally, aged conventional plant will need to be replaced and substantial sums will need to be spent in any case. Some modelling indicates that the least cost generation mix would have significant levels of renewables.

On the question of market function and design in the case of very high levels of renewables, there are a number of issues and this is an area that will need much more consideration.

Ray Brown, PES Chapter Chair

Student Paper Contest 2014

Closing dates: 30 Nov 2014 for UG and 30 Jan 2015 for PG

The IEEE Australia Council sponsored Student Paper Contest for postgraduate and undergraduate students is now open. The IEEE Australia Council Student Paper Contest for postgraduate and undergraduate students offers the IEEE Student members an opportunity to exercise and improve both written and verbal communication skills. Throughout an engineer's career, the graduates are constantly called upon to communicate ideas to others. Researching, writing, and presenting a paper provides a student with invaluable early experience in expressing ideas related to their professional field.

Since the paper contest's primary function is to improve the engineering student's communicative skills all IEEE student member in Australia are encouraged to participate in this contest. The contest will be conducted for two separate categories: one for undergraduate students and one for postgraduate students. For the promotion of engineering profession among female students, the contest also offers prizes in both categories to the members of IEEE Women in Engineering Affinity Group.

IEEE NSW AP/MTT Chapter News

In a recent series of events, the AP/MTT Chapter jointly with Macquarie University Student Branch organized a full-day workshop on Antenna and Electromagnetic Engineering. The event was held on in March and we hosted two distinguished lecturers and one past distinguished lecturer. Along with all these speeches, the Chapter and NSW Section Vice Chair Professor Karu Esselle also delivered a lecture in the workshop. The workshop was a great success and well attended by the student, IEEE and non-IEEE members. The event is well supported by IEEE Student branch and MTT Student Branch Chapter at Macquarie University. We organized these events to provide new learning opportunities in areas of antenna and propagation and microwave theory and techniques. This and all other chapter events are free of charge and open all on a first come first serve basis, for future information please contact us.

“One can’t do it; several may do it together: Multiplicity and Periodicity in Antenna and Propagation Engineering”, the first lecture, was delivered by **Professor Karu Esselle** who is a

Professor in Engineering, Macquarie University, Sydney, and the Immediate Past Associate Dean – Higher Degree Research of the Division of Information and Communication Sciences. He has also served as a member of the Division Executive from 2003 to 2008 and as the Head of the Department several times. In his lecture he explained several selected practical applications of periodicity and multiplicity including EBG-resonator antennas (aka Fabry-Perot cavity antennas), leaky-wave antennas, band-reject filters, reconfigurable circuits, absorb or transmit frequency selective surfaces, dual-band artificial magnetic conductor surfaces, ultra-wideband planar proximity reflectors for bi-directional ultra-wideband antennas and frequency selective surfaces on energy-saving and float glass.



The second lecture was delivered by IEEE MTT-Society Distinguished Lecturer **Professor Goutam Chattopadhyay**, a Senior Member of



the Engineering Staff at the NASA's Jet Propulsion Laboratory, California Institute of Technology, and Visiting Professor at the Division of Physics, Mathematics, and Astronomy at the California Institute of Technology, Pasadena, USA.

His lecture entitled ***“Terahertz Radar for Stand-Off Through-Clothes Imaging”*** covered the use of terahertz waves in commercial applications such as high speed communications, security imaging, autonomous landing and refuelling of airplanes, and medicines. He presented an overview of the state of the terahertz technology. The challenges of the future generation instruments and detectors at these frequencies in addressing the needs for critical scientific and commercial applications were also discussed.

IEEE AP-Society Distinguished Lecturer **Professor Joshua Le-Wei Li**, Monash

University, Malaysia, gave the third lecture. Prof Li is with School of Electronic Engineering at University of Electronic Science and Technology of China, Chengdu, China where he is a QRJH Chair (or National) Professor and a founding Director of Institute of Electromagnetics.



His lecture entitled ***“Wideband and Low-Loss Metamaterials for Microwave and RF: Fast Algorithm and Applications”*** was in two major parts: the first looked into the EM wave properties in metamaterials and to develop efficient solvers for their designs; and the second is to try to design the metamaterials for antenna applications.

AP/MTT Chapter News ... continued from p4

A former IEEE AP-Society Distinguished Lecturer Professor John Volakis, who is currently the Chope Chair Professor at The Ohio State University, Electrical and Computer Engineering Department, gave the fourth and final lecture in this workshop.

He also serves as the Director of the ElectroScience Laboratory with \$12.5M in external research funding in 2011. He was on the faculty of the University of Michigan-Ann Arbor from 1984 to 2003, and served as the Director of the Radiation Laboratory from 1998-2000.



Interaction time at the workshop

He delivered a lecture on “**Wearable Flexible Antennas and Electronics**”. His lecture covered the aspects of Wearable Antennas and Sensors that are being developed with conductive textiles to monitor Health (blood pressure, fluid levels etc.), Position Detection and Decrease Weight and Complexity of Existing Wireless Devices. He explained several fabrication process and Engineered Substrates for Miniaturization, Multifunctionality & Greater Bandwidth.



Yogesh Ranga

Chair, IEEE NSW
AP/MTT Joint Chapter
Yogeshwar.ranga@csiro.au

Communications, Signal Processing and Oceanic Engineering

Interested members can participate in activity at various levels:

- As a committee member - committee positions open are Chairman, Vice Chair, Treasurer, Secretary, Industry Liaison, Academic Liaison, Events Liaison. Please nominate by sending an email to Dr Philip Ogunbuna (pogna@ieee.org).
- As a speaker sharing your knowledge, experience or success with fellow members or on the bigger stage at the joint institution lecture programs.
- As a host - we would like to involve young engineers or potential engineers from schools technology programs by being invited to visit your "factory" or "Office" or "Project operations" to get them to understand first hand what it takes to be in a responsible engineering role.

Please email Olly D'Souza, senior member IEEE (odsouza@ieee.org) for further information, clarification or advice.

IEEE International Conference on Communications – ICC 2014

ICC 2014, the IEEE Communications Society flagship Conference, was held in Sydney from 10 to 14 June 2014.

The Theme of ICC 2014 was ***Communications: The Centrepiece of The Digital Economy.***

Professor Farzad Safaei (University of Wollongong) was the General Chair and Professor Abbas Jamalipour, FIEEE (University of Sydney) was the Technical Program Chair.

The Hon Malcolm Turnbull MP, Federal Minister of Communications and Member for Wentworth gave the Opening Address, in the morning of the second day of the conference. The topic of his address was the ***National Broadband Network (NBN).***

Keynotes were delivered by

Prof Bijan Jabari

George Mason University, USA

Wireless Evolution: From Connecting People to Connecting Machines

Emeritus Laureate Prof Rod Tucker

University of Melbourne

Australia's National Broadband Network: Politics Confronts Technology

Prof Rahim Tafazolli

The University of Surrey, UK

5G New Infrastructure for Digital Economy and Connected Society

Dr Chih-Lin I

China Mobile Research Institute, China

Vision 2020: Perspectives of Mobile Operators, 5G Data rate and More

Prof Theodore S Rappaport

New York University, USA

Millimetre Wave Wireless Communications: The Renaissance of Computing and Communications.

The Conference attendees were officially welcomed on evening of the first day with an Aboriginal Welcome to Country Ceremony.

The IEEE Communications Society sponsors the conference and this year's event's patrons included:

- New South Wales Department of Trade & Investment (Major Sponsor)
- University of Wollongong (Gold Sponsor)
- The University of Sydney
- University of Technology, Sydney
- CSIRO Australia
- iSee
- Wiley.

Supporters included The Australian Computer Society (ACS), Business Events Sydney and Engineers Australia.

IEEE NSW Section participated as Financial Sponsors and also had a Membership Desk at the Conference. Many thanks to John Robinson, Bruce Poon and Mahmoud Elkhodr for helping with manning the Membership Desk.

IEEE President Prof J Roberto de Marca, FIEEE, attended the Conference and met IEEE NSW Section, Engineers Australia and IET Volunteers. ComSoc President Prof Sergio Benedetto, FIEEE, attended and addressed the Conference.

IEEE Executive Board Member Mary Ward-Callan was also attending ICC 2014 and Officers of IEEE NSW Section, Engineers Australia and The IET took the opportunity to have an extensive meeting with her.

Mary Ward-Callan is the IEEE Managing Director Technical Activities and is responsible for a staff of more than 300 supporting IEEE Technical Activities including Meetings and Conferences. The meeting was hosted by Business Events Sydney and was organised by Darwin Ow, Senior National Business Development Manager. Representatives from each organisation gave a short presentation about their Organisation and a discussion followed about matters of common interest such as Conferences, Standards, Technical Publications, Co-Operation and possible ways of improving collaboration on a wide range of areas.

IEEE International Conference on Communications – ICC 2014 ... continued

Other IEEE and ComSoc Senior Officers were also present at the Conference and at the various Committee and Board Meetings.

In addition to the around 1000 paper presentations in 180 technical sessions at the main conference, there were 20 Tutorials, 13 Workshops, and 7 Industry Panels during the Conference. There also were awards for best papers accepted to the conference.

The Conference Banquet was held at the Hilton Grand Ballroom with all places filled and the entertainment included from the Opera by Disguise.

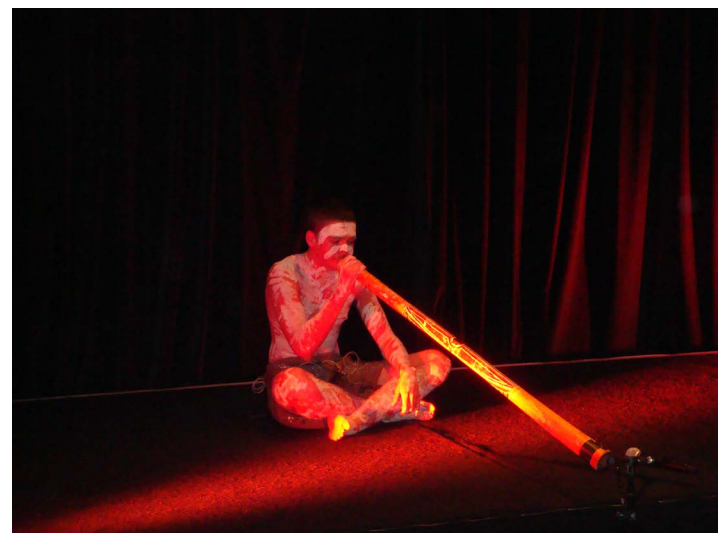
The next ICC Conference will be held in London 8-12 June 2015 <http://icc2015.ieee-icc.org/>.

More news and photos can be found at <https://www.facebook.com/IEEEICC>, <https://www.facebook.com/IEEEComSoc?sk=wall>, <http://www.comsoc.org/blog/> and <http://instagram.com/ieeecomsoc>

On behalf of the IEEE NSW Section I would like to thank Prof Farzad Safaei ICC 2014 General Chair, Prof Abas Jamalipour TPC Chair, Dr Daniel Franklin Local Arrangements Chair, the ComSoc Staff and Volunteers as well as All the Sponsors and Supporters. Finally many thanks to around seventy Student Volunteers from NSW and Victoria for helping with Registrations and directing delegates. It was a great Conference.



Tony Zaglas
IEEE NSW Section
Awards and
Recognition Chair





Power & Energy Society NSW Chapter Update



PES WA Chapter Chair, Dr Sara Deilami learning some finer points of Malaysian dance



Region 10 PES Chapter Chairs meeting in progress



Chapter Representative for Australia and NZ, Dean Sharafi, valiantly trying to explain the organisational structure of the IEEE

Region 10 PES Chapter Chairs Meeting

The Region 10 (Asia and Pacific) PES Chapter Chairs Meeting was held in Kuala Lumpur on 19 May 2014. The purpose of the meeting was to bring Chapter Chairs up to speed on IEEE PES processes and latest developments and to meet other PES volunteers.

The meeting was attended by representatives from Bangladesh, India, Pakistan, Sri Lanka, Macau, Taiwan, Malaysia, Thailand and New Zealand. From Australia, representatives from NSW, Northern Australia, Queensland, South Australia and Western Australia were able to attend.

The meeting was organised by Prof. Lalit Goel, Region 10 PES Representative and the Malaysian PES Chapter. Attendees included Meliha Selak, former PES Vice President for Chapters.

This was a great way to meet other chapter chairs and to discuss issues. Thanks go to the PES Malaysia Chapter for hosting the meeting and their wonderful hospitality.

Report on ISGT Asia 2014 in Kuala Lumpur

The Innovative Smart Grid Technologies Conference Asia (ISGT Asia 2014) was held in Kuala Lumpur from 20-23 May 2014 at the Berjaya Times Square Hotel.

The conference started with two tutorials on the first day, on the "Modelling of Solar Energy Using Artificial Intelligence Techniques" and "Integration of Demand Response with Renewable Energy for Efficient Power System Operation".

The conference proper featured 157 papers given across 27 sessions, 3 keynote speakers and a number of panel sessions.



Power & Energy Society NSW Chapter Update ...

Call for Outstanding Engineer Award Nominations

The IEEE Power & Energy Society New South Wales Chapter Outstanding Engineer Award (OEA) will be presented annually to a PES NSW Chapter member judged to have made a significant contribution to the engineering profession.

Nominations will be judged on the following criteria:

- Outstanding technical contributions to the power engineering profession.
- Significant contributions to the local community representing the power engineering profession.
- Outstanding contributions in the area of power engineering education.
- Outstanding professional and leadership contributions to the power engineering profession.
- Service to the Power & Energy Society and/or IEEE, particularly to the PES NSW Chapter.

Nominations should be sent to nsw.pes@ieee.org and received by 31 August 2014.

Nominations for Office Bearers

Nominations are sought for positions in the NSW PES Chapter: Chair, Vice-chair, Treasurer and General Committee (four positions). Nominations should be sent to nsw.pes@ieee.org and received by 31 August 2014.

FREE Student Membership of IEEE PES

IEEE Student Members who have not previously been Power & Energy Society members can join for free for the first year. This offer is open until 15 August 2014.

More details are available at <http://www.ieee-pes.org/pes-communities/membership->

CIGRE Technical Brochures Issued

The following technical brochures have recently been issued by CIGRE:

- *TB 564 Review of Transmission Planning Access Requirements*
- *TB 565 Regulatory Incentives for Capital Investments in Electricity Systems*
- *TB 566 Modelling and Aggregation of Loads in Flexible Power Networks*
- *TB 567 SF6 Analysis for AIS, GIS and MTS Condition Assessment*
- *TB 568 Transformer Energisation in Power Systems: A Study Guide*
- *TB 569 Resonance and Ferroresonance in Power Networks*
- *TB 570 Switching Phenomena for EHV and UHV Equipment*
- *TB 571 Optimised Gas-Insulated Systems by Advanced Insulation Techniques*
- *TB572 Tools for Economically Optimal Transmission Development Plans*
- *TB 573 Guide for Minimizing the Damage from Stator Winding Ground Faults on Hydrogenerators*
- *TB 574 Guide for Consideration of Duty of Windings of Generators*
- *TB 575 Benchmark Systems for Network Integration of Renewable and Distributed Energy Resources*
- *TB 576 IT Strategies for Asset Management of Substations - General Principles*
- *TB 577A & 577B Electrical Transient Interaction between Transformers and the Power System*
- *TB 578 Lightning Protection of Wind Turbine Blades*
- *TB 579 Greenfield Network, Designing Future Networks Ignoring Existing Constraints*
- *TB 580 Generator Market Power Mitigation Measures in Electricity Markets*

CIGRE Publications are available at <http://www.e-cigre.org>



Power & Energy Society NSW Chapter Update ...

Challenges of a Growing Photovoltaic Industry

Ted Spooner, Senior Visiting Fellow at the University of NSW and chair of Australian Standards Committee EL42 "Renewable Energy Systems", gave a presentation on the challenges facing the PV industry. The presentation on 13 March 2014 was part of the Joint Electrical Institutions (IEEE, EA and IET) lecture series. The level of interest in the topic can be gauged by the attendance of 106 participants.

The main focus of the talk was on standards development, both in Australia and internationally, and where further work is required.

There is presently 2.7 GW of PV connected to the Australian south-eastern network, a figure that is increasing at the rate of 10-20 MW per week.

Senior Membership

IEEE Senior Membership is open to members who have been in professional practice for at least 10 years, with at least 5 years of significant performance. There is no requirement to have been involved in academic research or to have published papers or the like. There is no cost or any additional on-going fees.

Application for Senior Membership is via an on-line process and there is a requirement for three references from IEEE Senior Members. This can be a problem for some potential applicants. If this is the case, please contact the PES NSW Chapter at nsw.pes@ieee.org, preferably attaching a copy of your resume. We can arrange for references from PES Senior Members and also for nomination by the IEEE NSW Section.

All eligible members are encouraged to apply.

APPEEC 2014

The 6th IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC 2014) will be held in Hong Kong from 8-11 December 2014.

New Journal

The IEEE Power and Energy Technology Systems Journal is a new journal launched by the IEEE PES. It will be an open access journal, with authors paying to have articles published and the papers then being freely available. The content is targeted to practicing engineers with articles primarily written by them.

The PETS journal is intended to be a technical journal containing practice-oriented articles focusing on the development, planning, design, construction, maintenance, installation and operation of equipment, structures, materials and power systems for the safe, sustainable, economic and reliable conversion, generation, transmission, distribution, storage and usage of electric energy, including its measurement and control. It covers the full field of interest of the Power & Energy Society.

The journal submission website is open and the first issue is expected in the second half of 2014.

PowerCon 2014, Chengdu, China

The 2014 International Conference on Power System Technology (PowerCon 2014) will be held from 20-22 October 2014 in Chengdu, China.

This conference, sponsored by the IEEE PES and the Chinese Society for Electrical Engineering (CSEE), is held every two years. This will be the ninth conference, the previous one being held in Auckland. Early bird registration closes on 30 September 2014.

Down to Earth Conference 2014

The third Australian Down to Earth Conference (DTEC) will be held in Perth from 5-6 November 2014. This conference is aimed at all those involved in earthing but is geared more to providing information to those working in industry rather than to straight academic research.



Power & Energy Society NSW Chapter Update ...

AUPEC 2014

The Australasian University Power Engineering Conference (AUPEC 2014) will be held at Curtin University in Perth from 28 September to 1 October 2014. This long-running conference is technically co-sponsored by the IEEE PES and a number of members of the PES WA Chapter are on the organising committee. Early bird registration closes on 1 September 2014.

PECON 2014

The IEEE International Conference on Power and Energy (PECON 2014) will be held in Kuching, Malaysia from 1-3 December 2014. The conference is jointly sponsored by the Malaysian chapters of the Power & Energy Society and the Power Electronics Society (PELS).

ISGT Asia 2015

The IEEE Innovative Smart Grid Technologies Asia Conference (ISGT Asia 2015) will be hosted by the Thailand PES Chapter in Bangkok from 3-6 November 2015.



Ray Brown

IEEE NSW
Power & Energy Society
Chapter Chair

PES Executive Director Patrick Ryan at ISGT Asia



IEEE WIE-NSW Affinity Group

In December 2013, IEEE Distinguished Lecturer **Professor Dominique Schreurs**, from KU Leuven Belgium, has visited the School of Electrical Engineering at the UNSW, as a part of the WIE NSW program. Professor Schreurs who also represented the MTT society, participated in a meeting with the female students and staff. Professor Schreurs delivered a technical presentation on her research topics: on how microwave measurements impact smart phone design and how a biomedical system can detect and monitor the falls of elderly patients. Professor Schreurs engaged in discussions with a large numbers of postgraduate students.

In April 2014, several UNSW electrical engineering female students and staff attended a get-together celebrating the start of Session 1.

In May 2014, senior Australian Professors **R. Ramer, F. Separovic, T. Robertson, A.M. Grisogono, J. Armstrong** held a series of meetings and discussions on research and the role of women in engineering.

Australia Council Student Paper Contest



Mitra Mirhosseini from the University of New South Wales won the Women in Engineering Student Paper Prize for 2013.

Mitra Mirhosseini was born in Kerman, Iran. She received her B.Sc and M.Sc degree in

Power System and Control Systems Engineering from Shahid Bahonar University of Kerman in 2007 and 2010, respectively. She is now pursuing her PhD degree in the school of Electrical Engineering and Telecommunication, University of New South Wales, Sydney, Australia and her field of study is Large-scale Grid-connected Photovoltaic systems with their integration into the Electrical Grid.



Dr Li Qiao getting ready for guests at the IEEE WIE booth held at the ICC Sydney June 2014.

In June 2014, Sydney hosted one of the most prestigious conference, IEEE International Conference on Communications, ICC 2014. The ICC is a flagship conference of the IEEE Communications Society; it represents one of the largest gatherings of researchers and industry professionals in the field of communications. This year's conference brought together more than a thousand delegates from around the globe to discuss the latest advances in this constantly evolving field. Along with the diverse range of topics from fifth generation (5G) technology, millimetre wave communications, MIMO, energy efficiency and green communication systems featured in the conference, an IEEE WIE booth hosted the promotion of women in engineering. A booth located in the Ballroom Lobby, level 3, Hilton Hotel was directed by Prof. R. Ramer and Dr L Qian with the support from B. Hagelstein, the Exhibition Chair, IEEE ICC 2014. Nearly one hundred guests visited the WIE booth.



Rodica Ramer
Professor of
Microelectronics
UNSW
Chair IEEE NSW WIE

IEEE SMC Celebration Lecture Series

Over 100 people attended the IEEE Systems, Man and Cybernetics (SMC) Celebration Lecture Series 2014 at Sydney University on 17 April 2014.

The main presentation was started by Dr Andrew Black from Sydney University, followed by other IEEE Distinguished Lecturers and Executive Committee members of IEEE SMC Society including:

Professor Loi Lei Lai

Director, Research and Development Centre of State Grid Energy Research Institute, China

Professor Hong Yan

City University of Hong Kong, Hong Kong, China

Professor Daniel Yeung

South China University of Technology, China

Professor Lawrence Hall

University of South Florida, USA

Professor William Gruver

Simon Fraser University, Canada

Professor Ljiljana Trajkovic

Simon Fraser University, Canada

President of IEEE SMC Society

Attendees gained valuable experiences and knowledge from the above experts.

At the end the workshop, 18 non-IEEE student members showed their interest on taking the Free Student Membership offer to join IEEE.



Bruce Poon
Membership Development Chair,
NSW Section

IEEE SMC Celebration Lecture Series

The IEEE SMC NSW Chapter and Sydney University (USYD) have jointly organised and supported this event.

The one-day workshop was co-hosted by Prof. Archie Johnston, Dean of Faculty of Engineering and IT of USYD, and Prof. Ljiljana Trajkovic, President of IEEE SMC Society. At the opening ceremony, Prof. Jill Trehwella (the Deputy Vice-Chancellor of Sydney University) and Prof. Ljiljana Trajkovic gave a brilliant welcome speech and emphasised that the goal of CLS is to provide expert insight, advice and professional training, as well as an academic forum and networking opportunity to PhD students and early career researchers in their future academic career. Prof. Dagan David Fagan from USYD and Prof. Loi-Lei Lai from Centre of State Grid Energy Research Institute, China also attended the opening ceremony and delivered wonderful speeches with great passion. Afterwards, six distinguished international scholars delivered seminars to audiences in different aspects.

More than 100 research students, young faculty from USYD as well as other universities in Sydney enjoyed the high quality workshop, and benefited a lot from the world's leading scholars. As Prof. Daniel Yeung from South China University of Technology mentioned in the concluding remarks, the greatest achievement is only deserved for the most hard-working researchers.



Dr. Andrew Black, The University of Sydney

PREPARING A SUCCESSFUL RESEARCH GRANT PROPOSAL

Andrew Black is Director of Research Development and Collaboration at The University of Sydney. Dr Black showed various examples to young researchers about how to prepare a successful research grant proposal. The content and quality of the proposal you submit will determine whether or not you are successful. Therefore it is vital that you have a full understanding of what is required, as well as knowing the various stages of the application process.

Prof. Hong Yan, City University of Hong Kong

THE QUEST FOR CREATIVE RESEARCH

In science and engineering, more and more research disciplines are emerging. However, solutions to many difficult research problems often require knowledge in several disciplines and collaboration of researchers in different fields. Prof. Yan showed several examples of interdisciplinary research that led to major creative work, discovery of new scientific theories, innovation in technology and development of novel products.



IEEE SMC Celebration Lecture Series



Prof. Daniel Yeung, South China University of Technology

THE PREPARATION OF A MANUSCRIPT

Prof. Yeung examined the essential elements in the preparation of a manuscript. These include preparation and construction of the manuscript, language issues, and technical details. By showing examples, attendees learn lots of valuable tips for preparation of a manuscript. Special attention must be paid to revision and responses to reviewers, and ethical issues. Finally, Prof Yeung gave some suggestions to student and young researchers for conferences/journals submission.

Prof. Lawrence Hall, University of South Florida

EFFECTIVE RESEARCH PRESENTATION

This talk showed several approaches to effectively get your technical message to the audience members. How do you engage an audience? Are questions good, bad or indifferent? Should my talk have every detail? Prof. Hall showed the way to present data, results, theorems, proofs and algorithms to different types of audience, and provided a new way to think about presenting work, so that the audience understands and appreciates it.



Prof. William Gruver, Simon Fraser University, Canada

BUILDING & MAINTAINING A STRONG, PROFESSIONAL NETWORK

Prof. Gruver described how to effectively use professional networking for career advancement. Topics included: what are the goals of networking, how to set expectations, how to reach out to someone new, how to build professional relationships, how to network online, and how to get started. He gave an overview of the major social media sites, including recently funded initiative to establish an IEEE social media presence.

Prof. Ljiljana Trajkovic, Simon Fraser University, Canada

EXCELLENCE AND INNOVATION IN TEACHING

Teaching new generations of students is a challenging task that calls for new approaches and methodologies. Recent theories of education emphasize learning through “reflection on doing”. Adopting these new approaches is an important step of teaching in science, technology, engineering, and mathematics. Prof. Trajkovic uses examples from teaching university courses in communication networks to illustrate experiential teaching and learning approaches in engineering.



This report was prepared by

Dacheng Tao

PhD Student Changxing Ding
Centre for Quantum Computation and Intelligent Systems
Faculty of Engineering and Information Technology
University of Technology, Sydney

Coming Events

Date	Event	Details	Venue
14 August	Cardiovascular modelling & arterial BP <i>Prof Albert Avolio MqU</i>	http://www.engineersaustralia.org.au/events	EA Auditorium
28 August	Ethics in Engineering Practice <i>David Stuart-Watt, Parsons Brinckerhoff</i>	http://www.engineersaustralia.org.au/events	EA Auditorium
7 – 10 September	17th International Symposium on Wireless Personal Multimedia Communications	http://www.wpmc2014.org/	Sydney
11 September	Application of Heuristics in Engineering <i>Dr John Ypsilantis, Heuristics Australia Pty Ltd</i>	http://www.engineersaustralia.org.au/events	EA Auditorium
28 September – 1 October	Australian University Power Engineering Conference AUPEC 2014	http://aupec2014.com.au	Curtin University
9 October	Power Transformer Design <i>Rob Milledge, ABB</i>	http://www.engineersaustralia.org.au/events	EA Auditorium
5 – 6 November	Down to Earth 2014 Conference	http://dtec.org.au	Crown Perth
12 - 13 November	EECON 2014 <i>Energy networks – evolutionary transformation or death spiral?</i>	meetings@tmm.com.au	Eveleigh
13 November	Underwater communications <i>Dr Gunilla Burrowes</i>	http://www.engineersaustralia.org.au/events	EA Auditorium

Only events within Australia are listed in CIRCUIT. For further information please see the web site, chapter news and the society web sites.

Please check the IEEE NSW web site – sites.ieee.org/nsw for up to date information.

2014 IEEE International Conference on Data Science and Advanced Analytics

30 October - 1 November, 2014, Shanghai, China

Website: <http://datamining.it.uts.edu.au/conferences/dsaa14/>

Data driven scientific discovery approach has already been agreed to be an important emerging paradigm for computing in areas including social, service, Internet of Things (or sensor networks), and cloud. Under this paradigm, Big Data is the core that drives new researches in many areas, from environmental to social. There are many new scientific challenges when facing this big data phenomenon, ranging from capture, creation, storage, search, sharing, analysis, and visualization. The complication here is not just the storage, I/O, query, and performance, but also the integration across heterogeneous, interdependent complex data resources for real-time decision-making, collaboration, and ultimately value co-creation. Data sciences encompass the larger areas of data analytics, machine learning and managing big data. Data analytics has become essential to glean some understanding from large data sets and convert data into actionable intelligence. With the rapid growth in the volumes of data available to enterprises, Government and on the web, automated techniques for analyzing the data have become essential.

Social Implications of Technology

David Vaile (Cyberspace Law and Policy Community, UNSW) gave an excellent presentation on 22 May 2014 on the topic “**Big Data: The Challenge to Privacy and Informed Consent**”, with short commentary by **Holly Raiche** (ACCAN, ISOC-AU) and **Lyria Bennett Moses** (UNSW Law, Cyberspace Law and Policy Community), and engaged questions and comments from the audience.

For those who missed it, some relevant material (including slides, references and resources) are available at

<http://cyberlawcentre.org/2014/IEEE/>.

We hope to make a video of the talk available (at that same location) in the near future.

SSIT continues to support The Social Interface blog (<http://www.thesocialinterface.com>) and we are always keen for contributions. So if you are involved in developing (or thinking about!) a new technology with important social implications, please contact the editors at editors@thesocialinterface.com.

In the meantime, check out the blog for a recent posts on Big Data and Captain America, Internet memes and Sir Tim Berners-Lee's proposed online “Magna Carta”.



Lyria Bennett Moses
NSW Co-ordinator, IEEE
SSIT Chapter

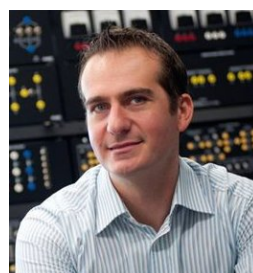
Education Chapter

Teaching is like no other job. Teaching involves changing the lives of others by providing the gift of knowledge. Immense satisfaction is obtained when you see the reaction on a student's face say, “I get that!”

My name is Sasha Nikolic and I have been involved in engineering education since late 2006. During that time I have heard many conversations about the conflicting nature between publishing papers in journals and teaching. In the argument surrounding conflicting time constraints one area that many academics forget is educational research. With careful planning the time and effort you put into the classroom to provide that exceptional engineering education experience can be transformed into world class research of benefit to many. Alternatively the research of others can help transform your teaching with less effort, with many proven ideas ready for you to take advantage of.

In NSW only a small number of IEEE members belong to the IEEE Education Society. This means that a large number of IEEE members in academia are missing out on a great resource. Every academic is passionate about teaching so it's important that you join the society that helps promote best practice!

I have just become chair of the NSW Education Chapter and I am looking to rebuild. I am looking for individuals that have the passion and drive to help expose the importance of engineering education across the state. I am looking for volunteers (Vice Chair, Secretary, and Treasurer) to join the committee and help raise the education profile. To express your interest please email me at sasha@uow.edu.au.



Sasha Nikolic
NSW Education Chapter
Chair



17th International Symposium on Wireless Personal Multimedia Communications (WPMC2014)

The 17th International Symposium on Wireless Personal Multimedia Communications (WPMC'2014) will be held in Sydney, Australia under the technical sponsorship of the IEEE Communications Society.

The WPMC symposia series were inaugurated in 1998, as a global platform which aims at enabling collaboration in the field of wireless multimedia communications.

The theme of this year's conference is *Orchestrating Wireless Personal Multimedia Communications*. In addition to high-quality technical sessions, the symposium will feature workshops and tutorials. It will also offer an exciting social program.

7-10 September 2014, Sydney, Australia

For more details see <http://www.wpmc2014.org/>

Upgrading Membership

Members are encouraged to pursue the highest grade of membership to which they may be entitled. The requirements for each grade of Senior Member and Fellow are available at the IEEE membership website.

For Senior grade of membership, application may be made on line at any time of the year. It is recommended that you arrange all your referees and supporters before you lodge an application as this will save considerable time.

For Fellow grade, applications must be lodged in February each year. The preparation of these nominations/applications can take considerable time and it is recommended that at least 6 months lead time be allowed in the preparation of all the necessary support documentation. Last minute panics are not recommended.



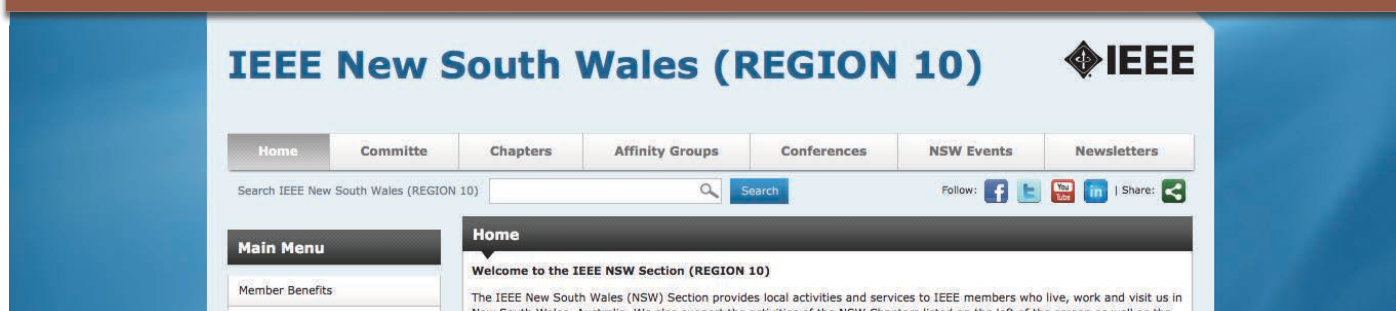
Contact

Bruce Poon

bruce.poon@ieee.org

Membership Development Chair, NSW Section

New web site address: <http://sites.ieee.org/nsw/>





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- Sign in to or create your IEEE Web Account. <link to <http://www.ieee.org/membership-application/public/addservice.html?products=MEMPE031>>
- IEEE Power & Energy Society Membership will appear in the mini-cart after sign in.
- Click "Proceed to Checkout"
- At the Shopping Cart, enter **PES14STUAD** in the promotion code box in the Cart and click "Apply."
(Note: This code is effective 15 September 2013 - 15 August 2014)

Not an IEEE Student Member yet?

Here's how to get Free PES Membership when you join IEEE as a Student Member today!

- Create your IEEE Web Account<link to <http://www.ieee.org/membership-application/public/join.html?products=MEMIEEE500,MEMPE031&grade=Student>>
- IEEE and IEEE Power & Energy Society Memberships will appear in the mini-cart after you create an IEEE Account
- Complete the membership application and click "View Cart/Proceed to Checkout"
- At the Shopping Cart, enter **PES14STUNW** in the promotion code box in the Cart and click "Apply."
(Note: This code is effective 1 September 2013 - 15 August 2014)

New and Upgraded Members

Fellow

Dagan Feng

Senior Member

Bhaskar Mukherjee
Hendra Ishwara Nurdin
John J Aitken
John Ypsilantis
Lavy Libman
Lei Wang
Longbing Cao
Luping Zhou
M Aamir Jelani
Mihai Ciobotaru
Raymond Chiong
Ren Ping Liu
Sanjay K Jha
Sonlam Phung
Trevor R Blackburn
Zhouyu Fu

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Abhaya Parthy
Abhish Saha
Abhivarmmen Yoheswaran
Abinesh Ilangovan
Adrian Bradd
Ahmad Moh'd Qasem
Ahmad Shabir Shabir
Ahmadyar
Alaleh Rabie

Member

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Ali A Juzer
Alison Lennon
Aman Kewal Dhareula
Anabell St Vincent
Anastasia Cammaroto
Anastasios Viglas
Andrew Ariel Konigsberg
Andrew John Kennedy
Andrew Matthew Brodie
Andrew Mc Laren
Anil Joy Panikulam
Anna Ceguerra
Anne Hitomi Yonamine
Aram Azad Mustafa
Archie Carl Chapman
Arcot Sowmya
Arik Friedman
Arya B Reais-Parsi
Ashkan Lohrasby
Atif Iqbal
Atul Thapar
Balavelan Thanigaivelan
Basit Ali Zeb
Bhranavan Sivanandan
Bill Fulton
Bradley J Gay
Bruce A Campbell
Carl Eric Svensson
Cheemun Chong
Cheng-Chung Lin
Cherry Ballangan
Ching-Yi Lai
Christopher O'neil
Col Roberts
Colin Robert Tyrrell
Damien Geoffrey Gardner
Damien Nanquette
Daniel Jorge Biondi

Member

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Darren L Maybour
Daven Dharmalingam
David Antony Matthew Mckenzie
David Bruncker
David C Snowden
David Field
David Howell
David K Triggs
Dean A Cooper
Diego Carrasco
Dinuka Abeywardena
Djurica S Karan
Donald G Dansereau
Dubravko Bartolec
Edmundo Sacro Ganaban
Eduardo Antonio Vergara
Elly Greene
Errol H Pollnow
Fang Chen
Fenghui Ren
Francis Mcswiggan
Franck D Cassez
Fred Fetherston
Gang Lei
Gautam A Tendulkar
Gengfa Fang
Geoffrey S Letts
George C Venetsanos
Georgios Angelis
Gil Kirkpatrick
Ginu Rajan
Gordon Joseph Malouf
Harley Frankfurt
Harry Aghayan
Haydn Keir Mearns
Hiroko Kato
Hon Wah Cheng

New and Upgraded Members

Member

Hong Chinh Doan
Hsing-Chung Chang
Huaifeng Qin
Ian J Renwood
Ian M Palmisano
Indika Damayanthi
Ilukkumbure
Ingo Marc Weber
Irosh Fernando
James C Herbert
Jason Amatoury
Jason Caruana
Jay Johansen Lim
Jeffrey Chu
Jianwen Chen
Jingsong Xu
Joao Carlos Aydos
Jochen Schroeder
Joe Mok
John C Wooden
John E Gillam
John Francis Stephen Vial
John Giles
John Graham
John J Zic
John Wade Kearney
Jon E Davis
Jose Emilio Guivant
Josef Schneider
Ju J Zou
Julian B Corben
Jun Tong
Junbin Gao
Justin Andrew Lewer
Justin Mathew Mclean
Kannan Balakrishnan
Katherine E Cassidy
Kenneth Patrick Ayers
Keov Kolyan Teav
Lawrence Gatt
Lei Shi

Member

Lei Yuan
Leo Carr
Li Qiao
Lingkan Gong
Luqman Ahmad
Ly Ung
M. R. Alam
Maneesh Mathai
Marcel Julliard
Marcelo Alejandro Maidana
Mark B Freeman
Massood Keshavarz Siahpoosh
Matt Hurd
Matthew Chung Kang Chuo
Max Glukhovtsev
Md Khaled Abu Mahmoud
Md Rabiul Islam
Md Shahidul Islam
Mehnaz Zerin
Melissa L. Knothe Tate
Michael C Pitt
Michael Chan Kai Leung
Michael Hession
Michael J Stuckings
Michael L Smith
Michael R Willison
Mira Park
Moshiur Rahman Bhuiyan
Mubeen A Sirhindi
Muhammad Awais Javed
Muhammad Wasim Nawaz
Nabil M Mirza
Nalin C Pahalawaththa
Napoleon N Quisumbing
Nathalie Nakhle
Nikhil Mathew Mathew
Nishad Rasanjana Mendis
Nishat Shah
Nuwan Shanuk Fernando
Oscar R Pizarro
Owen David Palmer

Member

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Pedram Pourashraf
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Rob Manson
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Robert Karimagako
Robert Shuhdi Salama
Roger Hayward Philp
Rohnil Chand
Ronelle Geldenhuys
Rowena Jane Clark
Sakula Nanayakkara
Salem M Alshibani
Salvatore Mattera
Sanjay Boppini
Sazal Kumar Kundu
Shah Zeb Imran
Shanta P Jayawardana
Rulsheen Sam
Shuang Tian
Simit Raval
Simon Webb
Siwei Bai
Siyan Chen

New and Upgraded Members

Member

Smit Bhatt
 Smitha Shivshankar
 Srinath Kannan
 Stephen J Fry
 Stephen James Hardy
 Sumbla Ambreen
 That Dinh Nguyen
 Thomas Michael King
 Timothy Campbell
 Tissa Abayaratna
 Tom Molomby
 Tuo Li
 Vaenthan Thiruvarudchelvan
 Vahid Behbood
 Veerendra Kata
 Vhukile Kushata
 Vicky Tauro
 Vitor Campanholo Guizilini
 Warren Don
 Wei Bian
 Weihong Wang
 Weiren Yu
 Wenjing Jia
 Winston (Wei) Yan
 Xinzhong Yan
 Yi Cao
 Yi Lu
 Yi Yang
 Yin Song
 Ying Zhouyousif Abdullah Al-
 Juaib
 Yuk Y Chung
 Yuri Salazar Flores
 Zhaonan Zhang
 Zhe Wang
 Zheng Li
 Zhiyuan Tan

Graduate Student

4 Atkins
 Aaron Thomas Pereira
 Adam Mcneilly
 Adrian Keith Ball
 Ahsan Saadat
 Alam Md Zahangir
 Alireza Rahimi Khorzoughi
 Andres Guillermo Moreno-
 Rojas
 Andri Mahendra
 Angela Gormley
 Ankur Sinha
 Anuj Mehta
 Asheerwadam Jannu
 Ashkbiz Danehkar
 Ayub Bokani
 Azade Fotouhi
 Azadeh Safari
 Badari Narayana
 Nagarajasharman
 Thyamagondlu
 Bandar Saied Alqahtani
 Ben Perdriau
 Bertrand Henri Masson
 Bing Xu
 Binqi Zhang
 Calvin Drummond Eiber
 Chalakorn Karupongsiri
 Chanaka Keerthisinghe
 Changhong Wang
 Chathurika Prasadini
 Mediwaththe
 Chenxiao Wang
 Chetan Singh Thakur
 Chitra Javali
 Christophe Del Popolo
 Chunming Liu
 Cokorda Rai Adi Pramatha

Graduate Student

Craig Stephen Cooper
 Daniel Aaron Moses
 Darshana Nayanajith
 Jayasinghe
 Debabrata Kumar Karmokar
 Dianshuang Wu
 Doan Trang Nguyen
 Dongyi Zhou
 Dothinka Saranath Ranamuka
 Rallage
 Ehsan Saeedi
 Elizabeth Tomc
 Evgeny Kuxa
 Fei Wang
 Gerrit Gmel
 Gihan Thilanka Samarasinghe
 Girish Shivalingappa
 Revadigar
 Guangqing Liu
 Guopeng Zhang
 Haibin Wu
 Hamdan Awan
 Hamed Monkaresi
 Handy Wicaksono
 Henry Candra
 Hongshu Chen
 Huy Hoang Nguyen
 Isaac E Palacios
 Jae Woong Shim
 Jason Laurie Sultana
 Jayeta Biswas
 Jia Wu
 Jiajia Guo
 Jialin Han
 Jing Jiang
 Jing Qiu
 Jingjing Wang
 Jithendra Uma Shanker Babu

New and Upgraded Members

Graduate Student

Joe Zou
Jonathan Vitale
Josiah Robert Walker
Jun Young Kim
Kai Li
Kanchana Amarasekara
Kasra Khosoussi
Kazi Ahsanullah
Kejia Wang
Khalid Imtiaz Saad
Lachlan Toohey
Lei Bi
Lei Li
Lei Zhang
Lie Qu
Liyan Zhang
Long Liu
Loris Marini
Lu Yang
Luis Carlos Aliaga Arias
Luke Peter Simmons
Manjula Pilaka
Mansour Abdullah
Marc Patrick Hans Zapf
Marcin Lubonski
Martin Diaz
Maryam Ghahramani
Matt Kokshoorn
Md Delwar Hossain
Md Habibullah
Md Tanvir Rahman
Mengyu Huang
Michael John Horton
Michael Nguyen
Miftadi Sudjai
Mischa Reznik
Mitul Bhupendrabhai Sheth
Mohamed Abdalla Mabrok
Mohammad Nazmul Haque

Graduate Student

Mohammad Sadegh Mohammadi
Mohammad Taghi Zareifard
Mousa Jaber Mousa Abu Kashef
Muhammad Ali Masood Cheema
Muhammad Uzaif
Muttaz Khaled Mohammed Mohammed
Nabil M Giweli
Nadi Sadr
Nalika Navin Ulapane
Nathan Marks
Navid Haghdadi
Nesae Mouzehkesh
Nipa Chowdhury
Niras C V
Nitish Gupta
Nusrat Ahmedsurobhi
Paul Rimba
Pierce Rixon
Pradeeba Sridar
Qasim Hasan Alshebani
Rabia Chaudry
Rahul Prasath Palani Durai
Richard Clements
Robert Jandausch
Rui Ma
Sajad Ghatrehsamani
Sangzhi Zhu
Santanu Metia
Sara Khalifa
Sara Shirowzhan
Sayed Amir Hoseini
Seth Daniel Oduro
Shahazad Abraham
Shamim Ahmed
Shaon Barua

Graduate Student

Shashika Lakmali Biyanwilage
Sleiman Nassif Mhanna
Sreenesh Shashidharan
Sudipta Chakraborty
Sujuan Hou
Syed Muzahir Abbas
Tahmina Khanam
That Dinh Nguyen
Thein Moe Win
Thushanthan Mohanarajah
Tomonori Hu
Upuli Priyadarshani Jayatunga
Victor Adolfo Romero-Cano
Wael Yousef Alghamdi
Warunika Sithumini Ekanayake
Xiangkai Gu
Xuan Cheng
Yang Xie
Yee Mon Aung
Yesheng Cui
Yifei Huang
Yin Hui Chye
Ying Wang
Yingjie Tan
Yiying Wei
Yogita Gunwant Chapre
Yooun Heo
Youtian Liu
Yu Wang
Yuanze Zhang
Yuguang Wang Yunqi Wang
Zachary Jeremy Taylor
Zahra Kouchaki
Zahra Malekjamshidi
Zainab Abaid
Zhangbo Han
Zhemin Zhu
Zhiheng Zhao

New and Upgraded Members

Graduate Student

Zhuoyang Wang
Zinat Mahol Sathi

Associate Member

Andre Russell
Clive Brooks
Manuel Blanco Abello
Michael Slavin
Michelle Simmons

Affiliate

Aaron Julian Saikovski
Alla Asheralieva
Boualem Benatallah
Chinh Duc Nguyen
Colin John Adams
Hasalaka Waravita
Kevin G Suffern
Md Mashud Hyder
Michael Makaroff
Mike McGuire
Mohamed Dali Kaafar
Rylie A. Green
Yogesh L Deshpande

Student

Amin Birjandi
Andrew Agnew
Andrew Donald Kirkby
Arpan Adhikari
Arthur Ken Aramaki Mota
Bao Cao Quang Truong
Beau Giles
Cameron Brown
Chris Brown
Davina King
Delwin Rodrigues
Dillon Macewan
Emma Cunningham
George Bou-Rizk
Henry Lau
Henry Welch
Ian Chun Hei Tam
Ian Yao-Hsiang Chuang
James Andrew Dickinson
Janie Geldenhuys
Jesse Lawrence Newman
Joe Messiter
Johannes Hendrik Theodorus Schreuder
Khalid Alonazi
Matthew James Tague
Natalie Wong
Quang Tran
Robert William Makepeace
Sai Aung Lwin Tun
Sumit Bhujel
Tien-Chun Wu
Tinashe Paul
Tobin Charles Harding
Truong Xuan Nguyen
Will Rouesnel
William Andrew
William Johnson
Xiaolong Shi
Yiran Guo
Zachary David Ward

Participate!

Nominations

The nomination form for Section officers is on Page 30.

If you haven't considered nominating before, perhaps now is the time to do so.

The positions and current officers are listed on Page 31.

AGM

The AGM will be held at the Sydney Hilton Hotel on 21 November 2014.

The Section dinner will follow at the Athenian Restaurant, Barrack Street Sydney.

POCO 2014 or Conferences - Have We Got it Right After 130 Years?

The first conference by an IEEE-predecessor organisation was held almost 130 years ago, in October 1884. In 2013, the IEEE sponsored 1489 conferences, 768 involving financial sponsorship in full or in part and 721 involving technical sponsorship. The majority of IEEE conferences are now held outside North America, with 92% of technically co-sponsored conferences being held outside the USA.

To assist organisers of such conferences, the IEEE holds the IEEE Panel of Conference Organisers (POCO) meeting annually. This year's event was held in Singapore from 17 to 19 July 2014. POCO aims to provide organisers of IEEE conferences with information they will need in organising a conference and on IEEE procedures. It also provides an opportunity for delegates to talk with other IEEE participants and with IEEE staff and officials.

The 2014 event attracted 176 people from 29 countries, including 60 from Singapore. For 57% of attendees it was their first time at a POCO conference. The conference included sessions on sponsorship and MOUs, technical program, publications, finances, new style events, hotel accommodation arrangements, venue locations and much more.

One of the themes that stood out during the conferences was the need to maintain the quality of the papers that were published by the conference and different mechanisms for doing this.

Continued overleaf ...



Marie Hunter of IEEE MCE chairs a panel session with Bill Moses (Chair IEEE Conferences Committee), Howard Michel (IEEE President-elect), Peter Staeker (IEEE Past President) and Jim Prendergast (IEEE Executive Director)



Alan Harvey of Australia makes a point during a "fishbowl" session

POCO 2014 or Conferences - Have We Got it Right After 130 Years?

A second theme was the possibility of new style events, or incorporating new features into an existing conference. One example given of this was the IEEE's participation in the SXSW (South by Southwest) 2014 music, film and interactive conference held in Austin, Texas. This event attracts approximately 30,000 attendees and is geared towards a young, tech-savvy audience. IEEE arranged for a number of presentations at the event, including one by Adam Savage of "Mythbusters" (apparently he is very supportive of the IEEE) and others on body computing, technology in Africa, surgical robots and cloud robotics.

Attendees included Howard Michel (IEEE President-elect), Peter Staeker (IEEE Past President), Jim Prendergast (IEEE Executive Director), Mary Ward-Callan (Managing Director, Technical Activities), Bill Moses (Chair IEEE Conferences Committee) and Marie Hunter (Senior Director, Meetings, Conferences & Events).

There were at least five attendees from Australia, including 2013-14 IEEE Australia Council Chair Lance Fung and IEEE Consumer Electronics Society President (and NSW Section committee member) Stefan Mozar.



POCO 2015 will be held in Glasgow in July 2015.

Ray Brown

IEEE NSW
Power & Energy Society
Chapter Chair



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Macquarie University Student Branch/IEEE MTT-S Student Chapter

IEEE Macquarie University Student Branch held the department welcome on 18th March to welcome all the first year undergraduate students to department of Engineering. The main aim of the event was to provide an introduction to the department and engineering degrees while welcoming the undergraduates to the department. IEEE student branch took the initiative to distribute informative leaflets on joining IEEE and membership benefits among undergraduates as a part of IEEE promotional activity.

Branch Counselor Professor Karu Esselle started the session by introducing IEEE and IEEE student branch members. Undergraduates were officially welcome by Professor Candace Lang on behalf of the department. Professor Lang further gave a brief overview about the department with a description of degrees offered by the department. Professor Esselle provided the audience with an introduction to IEEE. The value of being an IEEE student member in terms of networking opportunities and future prospects are few other aspects he unfolded during his speech to undergraduates. Professor Karu Esselle, the branch counselor, concluded the session officially thanking the audience for participation.

Following the speeches, attendees joined some social networking games arranged by IEEE student branch and prizes were distributed among the winners. The gathering concluded with the pizza lunch party where they had the opportunity to interact with the department staff and IEEE members. Altogether over 250 attended the welcome party.

As part of its social activities IEEE student branch also arranged a cricket match in which branch members participated and have shown their sports skills. More images on the events can be found on <http://engineering.mq.edu.au/~ieeesb/>





Photos of IEEE student branch technical activities organized by the MQ student branch covering lectures delivered by IEEE MTT-Society distinguish lecturer Professor Goutam Chattopadhyay, former IEEE AP-Society distinguish lecturer Professor John L. Volakis Professor, Professor Dr.-Ing. Dirk Manteuffel, IEEE AP-Society distinguish lecturer Professor Per-Simon Kildal, IEEE AP-Society distinguish lecturer Professor Joshua Le-Wei Li and Professor Karu Esselle.



Photonics, Circuits and Systems, Solid-State Circuits & Electron Devices

Chair changeover

Members of our joint chapter will have been aware by now that Professor Graham Town will be stepping down as Chair from July 2014 during his sabbatical. As the incoming Chair, I'd like to take this opportunity to thank Professor Town on behalf of our members for his outstanding service and contribution made to this Joint Chapter in the past 7 years. Graham will remain as Vice Chair during this transition period and I'll certainly be drawing upon Graham's past experience in the successful running of our Joint Chapter.

For those who are interested in my brief resume, I have an optical physics and electronics engineering background. Qualification-wise, I graduated with a BTech degree and a MSc degree from the University of Auckland and a PhD in physics from the University of Sydney. Professionally I am a patent attorney working with universities and industries with a focus in areas including optics and photonics, mobile and wireless communications, and analogue and digital signal processing.

Going forward

Technical meetings and activities represent the core of IEEE technical chapters. These meetings and activities will continue to be run as a formal forum for members to exchange ideas and present new and exciting research. The added challenge of being a joint chapter is to cater for the different professionals in overlapping fields. I intend to achieve a balance between constituent chapters to thereby promote cross-discipline synergy and discussion. To this end, I am pleased to report that joint chapter members Dr Saul Carroll and Dr Ediz Cetin will both be involved in the running of the committee.

Newly suggested for the coming year is an emphasis on the social or networking aspect of our meetings which will allow members to interact informally. I intend to continue to hold meetings at convenient and relaxing venues such that most can attend and therefore benefit from these social meetings.

New committee members

We welcome on board two of our members, Dr Saul Carroll and Dr Ediz Cetin, to join our

committee. Both Saul and Ediz were heavily involved in equivalent technical societies in the UK. Their prior experience will no doubt assist in the running of our joint chapter. Ediz is a member of the Circuits & Systems (CAS) Society. Saul is a member of the Photonics Society.

Our website

We've recently updated the website for our (what I really mean is your) IEEE joint chapter. Going forward, we aim to regularly update the website with up-to-date information about upcoming and past events. Click here to check out the website, including a few snapshots of last Friday's event (11 July) at the University of Sydney.
<http://sites.ieee.org/nsw/pho-cas-ssc-and-ed-joint-chapter/>

ACOFT/OECC 2014

This IEEE-Photonics-Society-sponsored conference was held in Melbourne (6-10 July 2014). I attended parts of this conference and was lucky enough to be chairing a session featuring an invited talk by Corning Research Fellow Ming-Jun Li, holding a highly regarded role within Corning Incorporated. Plenary talks were delivered by high profile speakers including the Chairman of Huawei Australia as well as prominent researchers in the field. Official attendance was at a very respectful 500+ attendees.

IEEE Distinguished Lecturer visit

As mentioned above, Winthrop Professor David Sampson, an IEEE Distinguished Lecturer, from the University of Western Australia presented at the University of Sydney on 11 July 2014. This IEEE event was co-hosted by Australian Microscopy & Microanalysis Research Facility which has provided liaison including venue and advertisement. We had more than 40 attendees including IEEE members as well as visitors.

Joint Chapter update by



Joe Mok

IEEE NSW Photonics, Circuits and Systems, Solid-State Circuits & Electron Devices
Joint Chapter Chair

Nomination Form for one position in the IEEE NSW SECTION

Executive Officers to be elected by electronic vote; Elected positions by Chapter Chairs, Officers, Affinity Groups; Non-elected positions by some Others.

Closing date Sunday 31 August 2014 midnight

Before completing the form, review the following guidelines for nominating a volunteer Candidate:

- (a) Nominators must contact their nominee before submitting the form and confirm their acceptance of the time & other commitments required for the position.
- (b) Nominees must have had at least 2 years on the Committee to nominate for the key positions of Chair, Vice Chair, Treasurer and Secretary.
- (c) Self nominations require the submission of additional information e.g. CV or SMIEEE referee
- (d) If you are nominating for more than one position, separate forms should be submitted.
- (e) Please note the closing date, completed forms to be emailed to jl.robinson@ieee.org or snail mailed to PO Box 95, Lane Cove NSW 1595

Nominee Contact Information

First Name:	<input type="text"/>
Surname:	<input type="text"/>
IEEE Email or other address	<input type="text"/>
Address Line 1:	<input type="text"/>
Address Line 2:	<input type="text"/>
Address Line 3	<input type="text"/>
IEEE Member No	<input type="text"/>

POSITION/S REQUESTED

Nominator

First Name:	<input type="text"/>
Surname:	<input type="text"/>
IEEE Email or other address	<input type="text"/>
Address Line 1:	<input type="text"/>
Address Line 2:	<input type="text"/>
Address Line 3:	<input type="text"/>
IEEE Member No	<input type="text"/>

Current IEEE NSW Section Officers

Elected Executive Officers

CHAIR

Dapeng (David) Tien: Email dtien@postoffice.csu.edu.au

VICE CHAIR

Karu P Esselle: Email karu.esselle@mq.edu.au

SECRETARY

John Ypsilantis: Email john.ypsilantis@heuristics.com.au

TREASURER

Bill Sloman: Email bill.sloman@ieee.org

PAST CHAIR

Eddie Kui Pun Fong: Email: fong-eddie@yahoo.com.au

Committee non-elected:

NOMINATIONS & APPOINTMENTS CHAIR

John L Robinson: Email jl.robinson@ieee.org

AWARDS & RECOGNITION CHAIR

Antony C Zaglas: Email antony@ieee.org

EDUCATIONAL ACTIVITIES

Graeme B Gwilliam: Email gb.gwilliam@ieee.org

MEMBERSHIP DEVELOPMENT

Bruce S Poon: Email adsphere@optusnet.com.au

NEWSLETTER CIRCUIT EDITOR

John J Aitken: Email john@jja.com.au

PROFESSIONAL ACTIVITIES

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