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Institute of Electrical and Electronics Engineers
Queensland Section (ABN 67 431 648 974)
ieee-qld.org

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Section Chair's Report



GARRY EINICKE
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Welcome to IEEE Queensland's second Newsletter for 2016.

Our world seems to be in a constant state of change. The technology mix that we relied on last year will be subtly different next year. Major changes have recently occurred in our national energy markets. For example, in South Australia they have a high per-capita installation of wind turbines and solar panels. The consequent reduced demand for coal-generated electricity has resulted in the Leigh Creek Coal Mine and the Port Augusta Power Station being shut down. Now South Australia purchases its baseload electricity demand from Victorian (coal-fired) power stations. In Queensland, some of the less productive coal mines are in the process of being sold. These changes have negatively impacted on traditional engineering job markets. On the up side, there is a rapid take-up of

solar PV and there is a high appetite for energy storage R&D.

Agility is everything. Keep abreast of recent developments and don't get left behind. Our teams typically organise over 60 conferences, workshops and seminars each year to help you keep up to date.

The pages that follow describe our most recent events. For instance, Dr Robert Kennedy is organising a workshop on HF Over-the-Horizon Radar which will be held at the Brisbane Convention and Exhibition Centre on 22 July 2016.

We are calling for volunteers to nominate for 2017 Chapter and Affinity Group positions. Please contact a member of our team if you have capacity to organise events of interest to our members.

Treasurer's Report



MIKE ROBINSON

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There has been an improvement in the section's finances since my last report in the April 2016 newsletter. This has been brought about partly by better control over expenditure and partly by an increase in the value of funds on deposit.

At the time of writing, the bank balance is approximately \$8,000. A cheque for \$US8,398.75 (the annual IEEE rebate) is due and should be in the bank by the time you read this report. The rebate income will bring the bank balance to approximately \$19,500.

Funds on deposit now total \$111,976.59, the highest it has ever been, and 26.5% higher than in June 2015. The increase is due to receipts from two conferences that were held in 2015.

Combining the term deposits and the current account balance gives the section a net worth of \$131,476, the highest ever recorded. This augers well for the section's future, but does not mean we should relax our spending controls.

The section has a fixed annual income, which consists of the section's IEEE rebate, sundry other IEEE rebates earned by high-performing chapters, and interest earned on investments. The latter is a paltry amount.

The highest interest rate available to the section currently is 3.05% but the majority of our investments earn around 2.75%. If the entire \$111,976 earned 3.05% per annum it would return \$3,415. In contrast, the section's annual student grants total \$3,750.

The annual IEEE rebate varies with the value of the Australian dollar, and with the number of members registered at the start of each year. Currently the exchange rate favours the section but this could change in the future as it has in the past.

Only three chapters out of eight are high-performing chapters. Total chapter rebates earn the section approximately \$2,000 per annum. Together the three sources of income bring in approximately \$17,000. In contrast, the section spent approximately \$28,000 in 2015, but revenue was slightly higher than normal in that year.

That is why it is important to regulate expenditure so that it corresponds to our income. New expenditure guidelines have been posted on the section website [here](#). Forms are also available on the website for requesting financial support for chapter and student activities. Please familiarise yourself with the forms and use them when it is appropriate.

Newsletter Editor's Report



DAVID RUSSELL
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This is the second addition of the IEEE Queensland Section Newsletter for 2016. Thank you to our members who have contributed to this edition. This issue highlights many of the activities our chapters and affinity groups have undertaken in the last few months and details some of the upcoming events. I hope you find this information interesting and informative.

If you judge a newsletter by the numbers of pages it contains, this issue passes the weight test. Please note the final section contains a number of pages that call for nominations of the 2017 committee, chapters and affinity groups. If you have some time available and would like to join the committee, please refer to these pages.

I was pleased to join a number of other IEEE members at the annual "Electrical Fraternity Chair Dinner and Awards Presentation" during June.



Venue for the "Electrical Fraternity Dinner"

The dinner is jointly hosted by EA, IEEE, EESA, IET

and ITEE. It was a wonderful evening and a great opportunity to network with members of the electrical fraternity.



Some of our IEEE members at the Dinner

Newsletters from prior years are stored in the section's website [archives](#) and are accessible to all members.

If you have any comments or changes you would like to see in the newsletter, please let me know. I welcome your feedback.

Mike Robinson has written some [guidelines](#) to follow when making submissions to the newsletter which appear on the section's website. I strongly encourage you to follow these guidelines when submitting your report.

Finally, please feel free to circulate this newsletter to colleagues and friends who may be interested in the activities of IEEE. I have included a link below for anyone interested in joining IEEE.



Aerospace and Electronic Systems Society



ROBERT KENNEDY
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Committee:

Chair: Robert Kennedy, Boeing Defence Australia

Vice-Chair: Ken Morris, Air Services Australia

So far this year we have held one lecture and we have a one day workshop with IEEE Fellow Dr Joe Fabrizio coming up in July.

5 May 2016

Gordon Young from Air Services Australia presented a lecture based around GLS (GPS based Instrument Landing System (ILS)). GLS is installed in Sydney. Our Vice-Chair Ken Morris provided support.

ILS systems have been around for a long time, with basic ILS installed from World War II. ILS unfortunately does not allow for multiple approaches and requires an ILS kit (glide path and localiser) at every runway end. GLS solves this limitation.



On 22 July 2016

A one day workshop on HF Over-the-Horizon Radar (OTHR) by IEEE Fellow Dr Joe Fabrizio of the Australian Defence Science and Technology Group (DSTG) will be held.

The workshop introduces the fundamentals of OTHR design and operation. This includes HF passive radar, multipath driven geolocation, adaptive processing

techniques and signal separation. Dr Fabrizio is a Distinguished Lecturer for the AESS.

IEEE Queensland Section
Aerospace and Electronic Systems Chapter

One Day Workshop
Introduction to HF Over-the-Horizon Radar (OTHR)

The IEEE Queensland Section and AES Chapter invites you to attend a unique one day workshop by IEEE Distinguished Lecturer Dr Joe Fabrizio - Defence Science and Technology Group

About the workshop:
The workshop introduces the fundamental principles of OTHR design and operation in the challenging HF environment to motivate and explain the architecture and capabilities of modern OTHR systems. It describes conventional and adaptive processing techniques for clutter and interference mitigation as well as emerging applications, including HF passive radar, blind signal separation and multipath-driven geolocation. A highlight of the workshop is the prolific inclusion of experimental results to illustrate the practical application of advanced signal processing to real-world OTHR systems. The workshop is expected to benefit students, researchers, engineers and practitioners working in the RADAR field.

About the presenter:
Dr Giuseppe (Joe) Fabrizio has been with the Australian Defence Science and Technology Group since 1984 and currently leads the EW and signal processing section of the HF radar branch. He is a Fellow of the IEEE and has authored over 50 peer-reviewed journal and conference publications. He is a co-recipient of the prestigious M. Barry Carlton Award for the best paper published in the IEEE Transactions on Aerospace and Electronic Systems (TAES) in 2003 and 2004. In 2007, he received the DSTO Science and Engineering Excellence Award for developing robust adaptive beamforming techniques used in the Jinkins Operations Radar Network (JORN). In 2011, he was granted the IEEE Fred Nathanson Memorial Radar Award for contributions to OTHR and radar signal processing. Dr Fabrizio is a member of the IEEE-AESS International Radar Systems Panel (RSP) and currently serves as Vice President of Education on the AES Board. He has presented OTHR tutorials at six IEEE radar conferences and is the author of a recently published text on OTHR, McGraw-Hill, NY, 2013.

Participants receive the text book "High Frequency Over-the-Horizon Radar", McGraw-Hill, NY, 2013

Time: 9:00 am - 5:00 pm

Date: Friday 22 July 2016

Venue: Brisbane Convention and Exhibition Center, Merivale St & Glenelg Street, South Brisbane, QLD

Registration: Remove the slip below, complete and return to the contacts from the AES Chapter, IEEE Qld Section.

For more information and to register, please download the registration form which is found on the IEEE Qld AESS site [here](#).

Radar 2018

We have formed the organising committee for the AESS Radar Conference that is coming back to Australia in 2018. The conference will host a number of industry & universities delegates from all over the world.

Please keep an eye out for emails and check our [website](#) for any updates and [vTools](#) for meetings.

Computational Intelligence Society

**AMIN GHARIPOUR**a.gharipour@griffith.edu.au**Committee:**

Chair: Amin Gharipour, Griffith University

Vice-chair: Andrew Lewis, Griffith University

Secretary: Zahra Jadidi, Griffith University

Treasurer: Alan Liew, Griffith University

Computational Intelligence Society Chapter has organized the following seminars this year:

DICTA 2016 conference**30 November - 2 December 2016**

Computational Intelligence Society Chapter will be providing technical sponsorship of DICTA 2016 (Digital Image Computing: Techniques and Applications) conference that will be held on the Gold Coast.

July 2016**Title:** 'Some Progress in Robotic Vision'**Speaker:** Professor Peter Corke, Professor of Robotic Vision at QUT, and Director of the ARC Centre of Excellence for Robotic Vision.**Abstract:** This talk will define and motivate the problem of robotic vision and discuss some recent progress at the Australian Centre for Robotic Vision. This includes component technologies such as deep learning for computer vision and motion, middleware, and end-to-end systems for applications such as agriculture, environmental remediation and asset inspection.**Jun 2016****Title:** 'On Cyber Conflict, Industrial Control System Security, and Feature Selection'**Speaker:** Dr. Ernest Foo, an active researcher in the area of information and network security. He has been responsible for the design and development of the QUT SCADA security research laboratory.**Abstract:** Industrial control systems have been moving from isolated communications networks to IT networks

connected to corporate networks, making it probable that these devices are being exposed to the Internet. Many industrial control systems have been designed with poor or little security features, making them vulnerable to potential attack. This talk discussed recent incidents of successful cyber attacks against critical infrastructure that are changing the landscape of modern conflict. In addition, the talk discussed recent research that identifies and analyses several feature sets that have been used in studies related to industrial control system communication protocols in order to propose a well-defined initial feature set.

May 2016**Title:** 'Emerging Technologies for Smart Cities'**Speaker:** Professor Simon Kaplan, CEO of [ui!] Australia, a German-based smart city company that has recently set up in Australia.**Abstract:** Increasing urbanisation is resulting in cities struggling to meet the needs of their rapidly-growing populations. At the same time there is increasing pressure to reduce the carbon footprint and energy use of cities, for both economic and climate-change reasons, and a need to do 'more with less' in economically difficult times. Unsurprisingly, many cities are turning to technology to solve this hydra-headed problem. Smart City technologies broadly have 3 parts: 1) Sensors, to gather more data at finer granularity more frequently; 2) Analytics, to use the data from the sensors, fused with existing data stores within the city, to manage resources better, reduce resource load, and improve services; and 3) Access, to allow residents of the city to track and participate.

Title: ‘AI: The Future of Travel’

Speaker: Dr Kelvin Ross, the a founder of K. J. Ross & Associates, currently employing over 100 specialist software testing consultants, and a NATA accredited testing laboratory.

Abstract: Recently, Barry Diller (chairman and senior executive of Expedia) forecasted that AI will be travel’s next big thing. Technology disruption from data science and machine learning will likely have an impact on many different industries and roles. As foretold by Diller, an area that is likely to change dramatically is the role of the travel agent. As more and more consumers book their travel online, how may online travel agencies evolve to utilize data science and machine learning to provide greater support to the traveler? Dr Kelvin Ross is founder of SkiDreamz.com, a tech startup that is investigating AI and machine learning to provide travel planning support normally provided by a travel agent. In this presentation, Kelvin explained the activities of a traveller, and at what stages data can be used to optimize the experience. He discussed a number of considerations:

- Why would AI be a benefit to the traveller and the travel agent?
- How machine learning algorithms can be applied to these activities?
- What access to data would further optimize the experience?
- What human interaction is involved to enhance the customer experience?

Title: ‘Big Data Fusion for Mining e-Health Data’

Speaker: A/Prof Xue Li, DKE Division, School of Information Technology & Electrical Engineering, UQ

Abstract: In medical research and healthcare, there are many large data sets which are related to each other in terms of the clinical trials, medical research publications, Electronic Health Records (EHR), annual health check-up records, and patient bed-side monitoring data. In this talk, he discussed case studies and experiments on how they could connect the relevant medical and health data sets together to rank the most influential treatments for diseases, to predict the health states for ageing individuals, or to predict the mortality of hospital patients. A graph-based data fusion approach

was introduced to represent the different types of relationships among data items and learn from data for predictions.

March 2016**Title:** ‘Social Media & Social Network Data Analytics’

Speaker: A/Prof Xue Li, DKE Division, School of Information Technology & Electrical Engineering, UQ

Abstract: Social media and networks are a popular place for people to express their opinions about consumer products, to organize or initiate social events, or to spread news. Some questions would be asked in order to understand the social media and social networks: how can we detect and predict the emerging sensitive events? How can we predict the propagation patterns of online micro-blogs? How can we understand peoples opinions about a current issue, a new product, or an important event? This talk was to report recent research work on the social media and social networks data mining. A few application systems were reported to answer the above questions.

February 2016**Title:** ‘Big Data Analytics’

Speaker: A/Prof Xue Li, DKE Division, School of Information Technology & Electrical Engineering, UQ

Abstract: A stunning story on a successful prediction of 2012 USA Presidential Election with 100% accuracy by Mr Nate Silver has shown that the challenges are not just to invent new algorithms to deal with large, noisy, and uncertain data, but to link the multiple relevant data sources, structured or unstructured, together to make effective recommendations. Information is now available everywhere from the Web, sensor networks, social networks, or the proprietary databases. Consequently, making effective and efficient recommendations based on Big Data is becoming a significant and urgent challenge because of complex, fast changing relationships between data objects. Therefore, the question is: how can we make effective recommendations based on the relevant information collected from high-speed, time-variant, high-dimensional, and distributed data sources in the current changing and interconnected world? This talk introduced current research activities in the big data analytics and research group led by Dr Xue Li and provided insight into the issues in the current research.

Control Systems/Robotics and Automation Societies



DR. LUIS MEJIAS
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Committee:

Chair: Dr. Luis Mejias (Queensland University of Technology)

Vice-chair: Navinda Kottege (CSIRO)

The IEEE QLD chapter on Control Systems/Robotics and Automation (CS/RAS) held a meeting on Friday 15 April at QUT Gardens Point Campus. During this meeting Professor Paul Newman gave a talk on *Mobile Autonomy and Self-Driving Cars*. Professor Newman is the BP Professor of Information Engineering at the University of Oxford and an EPSRC Leadership Fellow. He heads the Mobile Robotics Group within the Department of Engineering Science, which enjoys a world-leading reputation in mobile autonomy devel-

oping machines, robots and cars which map, navigate through and understand their environments.

In this talk, Professor Newman explained some of the competencies needed to build “intelligent” self-driving vehicles, explaining what makes it hard, what makes it exciting and how it all comes together in a glorious bit of robotics science. Click [here](#) for more information on Professor Newman.

Microwave Theory and Techniques/Antennas and Propagation Societies



KONSTANTY BIALKOWSKI
konstanty@ieee.org

Committee:

Chair: Konstanty Bialkowski, University of Queensland

Vice-chair: Antony Lui, The University of Queensland

Vice-chair: Morteza Shahpari, Griffith University

Secretary: Mostafa Shabani

The MTT/AP Queensland Chapter has a number of upcoming seminars for the second half of 2016. The first of these is Dr Andrew Horsley from University Basel in Switzerland. His seminar will be on 'Widefield Microwave Imaging using Atoms and Diamond NV Centres' and will be at the University of Queensland, in the Advanced Engineering Building. This work is able to provide 2D images at a rate of 10Hz with a resolution of up to 60 micro-metres in a 6 mm square area.

The next scheduled seminar for our MTT/AP chapter is from Dr Rowan Gilmore on 25 August 2016. EM Solutions is a company head-quartered in Brisbane which works on microwave and communication systems which range in applications from satellite and terrestrial to defence. Rowan is an excellent speaker and the presentation should be suitable for both

academic and industry members alike.

Later in the year (October), we have Professor Ari Sihvola from Aalto University in Finland. He is an AP society distinguished lecturer and will be doing a tour of Australia between 23 and 30 October. His seminar in Brisbane will be on the 24 October. Professor Sihvola is an expert in the areas of metamaterials, materials and electromagnetics.

We also have a number of other events planned for this year. Therefore, the best place to check up on upcoming seminars is our website.

For full details on these seminars and other upcoming events please visit our [chapter](#) page on the new IEEE-Queensland website or IEEE [vTools](#).

Power and Energy & Dielectric and Electrical Insulation Societies



DR. NILESH MODI
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Committee: Chair: Dr Nilesh Modi, AEMO
 Vice-chair: Rahul Sharma, University of Queensland
 Secretary: David Batterham



Professor Janaka Ekanayake delivering the Distinguished Lecture on ‘Wind Generation and Grid Connection’

PES/DEIS chapter had another busy quarter. The activities and achievements are briefly outlined below.

- The chapter combined with CIGRE NGN to organise an IEEE Distinguished Lecture event on ‘Wind Generation and their Grid Connection’. The lecture was given by Professor Janaka Ekanayake, Head of Department and Professor of Electrical and Electronic Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka. Professor Ekanayake is an expert on wind power generation, their connection and modern power systems. He is a Senior Member of IEEE (USA), a Fellow of IET (UK), and Member of the Institution of Engineers (Sri Lanka).

The lecture covered topics including wind turbine basics, operation and control of gener-

ators, wind farm collector network; and grid code requirements and how they are achieved in modern wind farms. The types of generators covered were fixed speed and doubly fed induction generators, full power converter wind turbines and an introduction to the superconductive type (mainly used offshore). The grid code requirements covered power curtailments, reactive power support, fault ride through, inertia response and harmonics.

- The chapter organised a seminar on “Grid Integration of Intermittent Renewable Energy Sources with Intelligent Loads”. The seminar was presented by Professor Prabir Barooah, from the University of Florida on 26 April 2016.

- Our chapter was runner-up in IEEE PES Outstanding Chapter Awards for large sections. This is the sixth consecutive year our chapter has been runner-up.

- The chapter called for applications for 2016 IEEE Power & Energy Society (PES) Queensland Chapter Conference Travel Prize to attend IEEE PES General Meeting 2016 in Boston, USA. Congratulations to the following two students who won the prize:

[a] Amit Dhoke from the University of Queensland for a paper titled ‘Condition Monitoring of a Large-scale PV Power Plant in Australia.’

[b] Juliana Barbosa Nunes from the University of Queensland for a paper titled ‘Stochastic Generation and Transmission Planning Considering Future Renewable and Gas Opportunities in Queensland, Australia.’

- AUPEC2016: The chapter is technically co-sponsoring the AUPEC2016 conference to be held in Brisbane, Australia during 25-28 September 2016. The theme of the conference is ‘Increasing Renewable Generation and Battery Storage in Power Systems’. PES/DEIS members are encouraged to participate in the conference. More information about the conference is available [here](#).

Women in Engineering



MARIE-LUISE WILLE
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Committee:

Chair: Marie-Luise Wille

Vice-chair: Negareh Ghasemi

Secretary: Alexandra Posoldova

The WIE committee is pleased to announce their next big event:

CSIRO Queensland Centre for Advance Technologies Facility Tour

9 September 2016 @ 4 PM

This event aims to encourage female engineering graduate students to visit and interact with Australia's largest research and development institution CSIRO.

Queensland Centre for Advanced Technologies (QCAT) is an integrated research and development precinct for the resources and advanced technology industries. Graduate (female) Queensland University students are, however, often not able to visit industrial research facilities outside of their common environment

(i.e. universities). Also, most of the female students don't have a clear vision about their future as female engineers. We would like to give the opportunity to graduate students to engage with industry and visit the CSIRO facilities for potential engineering career options and to find out more about the roles of female engineers in industry sectors (especially in CSIRO).

Registration is limited to 30 (female) participants, so hurry up and register via vTools: <https://meetings.vtools.ieee.org/m/40269>.

Further details will be distributed via email and our [Facebook page](#); so stay tuned!

To stay up to date, don't forget to like the IEEE Women in Engineering Queensland [Facebook page](#)!

Young Professionals Program



ALEXANDRA POSOLDOVA
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Committee:

Chair: Alexandra Posoldova

Vice-chair: Reuben Peterkin

Secretary: Rob Makaremi

Treasurer: Hamid Moghadam

We started this year with seminar called **“Leadership for Engineers”** by **Phoebe Tee**, a project manager at Queensland Government Public Safety Business Agency. Her talk covered how engineers become great leaders in the industry, with a particular focus on “leading by example”. She described the key traits of successful leaders as being engaged and involved, valuing people, being consistent with integrity, and thinking positively. She later spoke of the challenges she faced while transitioning from a design engineer to a manager, as well as being a female leader in a male dominated industry. Following the Q&A, the event was concluded with a networking session.

The following **“Big Data”** seminar was presented by **Professor Xue Li** from University of Queensland. Professor Li is honoured as one of the most powerful people in Australia on Big Data by the Financial Review 2015. He started his talk with his personal experience on his journey towards Big Data. Then he explained how the information which is extracted from a large amount of data can be utilized in our advantage. As an example, he demonstrated his work on extracting information from social media and utilizing it on enhancing the public transport time table at UQ. Finally, he explained how machine learning can be used to improve our lifestyle in the era of tablets and computers. A networking session followed the Q&A.

Our next event will be a seminar on **Power Engineering**, planned for the 2nd half of August. This

event will be held at the University of Queensland and our guest speaker is **Dr. Daniel Eghbal**, where he will speak about impacts of new technologies on distribution networks, and the opportunities this brings for future power system engineers. Daniel is a Future Network Strategy Engineer at Energex and an adjunct research fellow at the University of Queensland. Daniel also serves as the vice chair of the IEEE Queensland Section. More details about this event including the date will be published soon.

We are excited to announce the dates for the **Startup Bootcamp** will be **10 & 11 September in Brisbane**. People who would like to kick off their startup, as well as those who just want to know more, are very welcome to attend. Firstly, the event will walk attendees through different topics related to starting a business from legal to business, finance and marketing. Those who would like to kick off their idea, can find their perfect team in the afternoon networking session. During the second day, teams will learn how to pitch their idea to potential sponsors and work throughout the day on their marketing strategies and presentations with help from mentors. Finally, teams will pitch their ideas to judges with the opportunity to win a prize.

Connect with us on [Facebook](#) as well as IEEE's integrated on-line community [Collabratec](#).

We look forward to seeing you at our events.

Griffith University Gold Coast Student Report



REZA AKBARZADEH
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Committee:

Chair: Reza Akbarzadeh
 Vice-chair: Matthew Jay
 Secretary: Tim Alroy
 Treasurer: Elise Jenkins

The Griffith University Gold Coast Student Branch has held three events during Quarter 2 2016.

Networking Event “Know Your Industry”

Date: Tuesday 5th April 2016

Presenters: Dr Daniel Eghbal (Energex), Anthony Aucone (Ledtek Global), Peter Bull (Noja Power), Jonathan Shepherd (Queensland Academy of Sport)

It is well known that in recent years the collaboration between industry and academia has slowly declined. As engineering students, we find it particularly helpful to gain the real world perspectives of engineering professionals due to their exposure to the different challenges faced in industry. In a bid to help bridge this gap, the branch hosted an evening that included presentations from industry representatives, dinner and networking.



Anthony Aucone presentation at “Know Your Industry”

The event was attended by over 30 students from the Electrical, Electronic, Biomedical and Mechatronic cohort, Griffith academics and a number of industry representatives, four of which delivered presentations over the course of the evening. Feedback from the event was very encouraging with many students enjoying the different perspectives the presenters had to offer. The branch would sincerely like to thank Dr Daniel Eghbal

and the other industry representatives who gave their time to travel to the Gold Coast and share their experiences with the students.

Seminar “Electro-Optic Systems Engineering”

Date: Tuesday 3rd May 2016

Presenter: Mic Walsh, Chief Engineer, Laserdyne Technologies



Mic Walsh at “Electro-Optic Systems Engineering”

The Griffith University IEEE Student Branch was fortunate to host a seminar delivered by Mr Mic Walsh of Laserdyne Technologies. With over 20 years experience with electronics engineering design, Mic is an expert in all aspects of analogue and digital electronics.

The duration of the seminar was two hours. During this time Mic spoke about the systems engineering approach as well as PCB design from a real world perspective. The students in attendance found the seminar particularly insightful and were inspired by Mic’s technical skill, knowledge and accomplishments as an electronics engineer. The branch is looking to host Mic again in the coming months for a series of workshops on PCB design using Altium.

Seminar “**Advanced Power Electronic Applications**”

Date: Thursday 2nd June 2016

Presenter: Olivier Trescases, Associate Professor, University of Toronto

Power electronics is certainly one of the fast growing industries. The aim of this area is the design, control, computation and integration of nonlinear, time-varying energy-processing electronic systems with fast dynamics.

Wide-bandgap power semiconductors, combined with new control techniques and power topologies offer tremendous opportunities for renewable energy and transportation applications. This talk provided an overview of the research activities of Professor Trescases in the area of power electronics at the University of Toronto, focusing on five recent projects:

- 1) Ultracapacitor/Battery Hybrid Energy Storage System with Real-Time Power-Mix Control; Validated Experimentally in a Custom Electric Vehicle
- 2) A Dual-Mode Driver IC with Monolithic Negative Gate Voltage Capability and Digital Current-Mode Controller for GaN Power Devices
- 3) A Cell-Level Differential Power Processing IC for Concentrating PV Systems
- 4) Lightweight Silicon Carbide Power Converter for an all Electric Aircraft
- 5) Burst-Mode Resonant LLC Resonant Converter for an LED Luminaire With Integrated Visible Light Communication for Smart Buildings



Professor Trescases at “Advanced Power Electronic Applications”

Professor Olivier Trescases received his PhD from the University of Toronto in 2007. From 2007 to 2008, he worked as a concept engineer and mixed-signal IC designer at Infineon Technologies in Völlach, Austria. While at Infineon, he designed application-specific ICs in BCD technologies for safety-critical automotive applications, such as electronic control units for airbag modules. Dr. Trescases joined the Department of Electrical and Computer Engineering at the University of Toronto as an Assistant Professor in 2009 and was promoted to Associate Professor in 2014. While on sabbatical in 2016, Dr. Trescases worked at the Texas Instruments Kilby Labs in Santa Clara, USA. He conducts research on advanced power electronics for automotive, industrial, aerospace and renewable energy applications. He is the co-inventor for six patents and has published over 65 papers in IEEE conferences and journals. He received four best-paper awards, one IEEE Vehicular Technology award as well as the 2010 Green Innovation Award from the City of Toronto. He is the Vice Chair of IEEE Toronto Section with over 5000 members and has served on the technical committee of various IEEE conferences, including the Applied Power Electronics Conference (APEC), the International Symposium on Power Semiconductor Devices and ICS (ISPSD), the Custom Integrated Circuits Conference (CICC) and the Vehicle Power and Propulsion Conference (VPPC). Since 2015, he is an Associate Editor of the IEEE Transactions on Power Electronics and currently is the vice chair of IEEE Toronto section.

This event attracted almost 20 students, academics and industry members. The attendees found this talk very informative and requested we organise more of such topics for future events.

Contact us on [Facebook](#) or Email at (gugcieee@gmail.com) or visit our [website](#).

Griffith University Nathan Student Report



MOJTABA MOGHIMI
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Committee:

Chair: Mojtaba Moghimi
 Vice-chair: Nazanin Nadian
 Secretary: Arslan Akram Nizami
 Treasurer: Domagoj Leskarac

Griffith University IEEE Student Branch (Nathan Campus) started its activities with a new committee in February 2016. Our main purpose is to provide the opportunity for students to get familiar with different activities and various sections of IEEE. In order to achieve this goal, we held two events in first semester of 2016, a student recruiting event in conjunction with an Electric Bike presentation and an Advanced Power Electronics seminar later in the semester. Our plan for second half of 2016 is looking fantastic with at least two IEEE Student Branch events. One proposed event will relate to Smart Buildings, with a presentation surrounding the Sir Samuel Griffiths Centre (N78) located at Griffith University, and another event on advancements in power electronics with invited Professor Petar Grbovic from Huawei Germany.

Electric Bike Presentation and Recruiting Event: April 2016

Our first event as Griffith University IEEE Student Branch Nathan was a presentation on the advancements in Electric Bicycles. Our guest speaker for the evening was Nick Willis, from Electric Bikes Brisbane. Students and IEEE members had the opportunity to not only learn about motor, power electronic and battery designs, but how they are utilised and implemented as well. Nick brought some of the top models in electric bikes to the presentation and gave the opportunity to test and ride the bikes. The event was held on 19 April 2016 from 16:30 to 17:30 at Griffith University - Nathan campus. The seminar was followed by a BBQ for IEEE members. We achieved a total number of 35 attendees with members of public, new and existing

IEEE members. Eleven new IEEE students signing up was the considerable outcome of recruitment event as well as the discussions on Electric Bikes.



Mr Nick Willis from Electric Bikes Brisbane

Advanced Power Electronics for Renewable Energy Applications: June 2016

The second event of Griffith University IEEE Student Branch (Nathan) was a seminar presented by Associate Professor Olivier Trescases from University of Toronto. Professor Trescases discussed five recent research projects of his power electronics group:

- 1) Ultracapacitor/Battery Hybrid Energy Storage System with Real-Time Power-Mix Control Validated Experimentally in a Custom Electric Vehicle.
- 2) A Dual-Mode Driver IC with Monolithic Negative Gate Voltage Capability and Digital Current-Mode Controller for GaN Power Devices.
- 3) A Cell-Level Differential Power Processing IC for

Concentrating-PV Systems.

4) Lightweight Silicon Carbide Power Converter for an Electric Aircraft.

5) Burst-Mode Resonant LLC Resonant Converter for an LED Luminaire with Integrated Visible Light Communication for Smart Buildings.

Professor Olivier Trescases presented these advancements in research with an overview and in-depth discussion with the 21 attendees of mostly IEEE members on the day. He conducts research on advanced power electronics for automotive, industrial, aerospace and renewable energy applications. He is the Vice Chair of IEEE Toronto Section with over 5000

members and has served on the technical committee of various IEEE conferences. Since 2015 he is an Associate Editor of the IEEE Transactions on Power Electronics.

The event was held on 9 June at Griffith University Nathan Campus and a pizza lunch was provided for IEEE members after the seminar.

In order to get information about our future events and activities, you can contact us through Email at (IEEENathan@griffith.edu.au) or via our [Facebook](#) page.



Professor Lu introducing Professor Trescases

Queensland Section Office Holders

Office	Office holder	Contact
Section Officers		
Chair	Garry Einicke	Garry.Einicke@csiro.au
Vice-chair	Daniel Eghbal	m.eghbal@ieee.org
Secretary	Ghavam Nourbakhsh	g.nourbakhsh@qut.edu.au
Treasurer	Mike Robinson	blackmagic@computer.org
Immediate Past Chair	Tapan Saha	saha@itee.uq.edu.au
Newsletter Editor	David Russell	davidrussell62@gmail.com
Webmaster	Mike Robinson	blackmagic@computer.org
Professional Activities	Dian Tjondronegoro	dian@qut.edu.au
Membership Development	Yateendra Mishra	yateendra.mishra@qut.edu.au
Awards and Recognition	Preethi Preethichandra	d.preethichandra@cqu.edu.au
Student Activities	Jaroslav Krata	j.krata@uq.edu.au
Educational Activities	Kalum Udagepola	kalum_udage@yahoo.com
Engineers Australia Liaison	Tapan Saha	saha@itee.uq.edu.au
Teacher-in-Service Program	Mike Robinson	blackmagic@computer.org
Chapter Officers		
Aerospace and Electronic Systems Society		
Chair	Robert Kennedy	kennedyrobotics@bigpond.com
Vice-chair	Ken Morris	ken.morris.au@ieee.org
Secretary	Vacant	
Australian Oceanic Engineering Society		
IEEE Queensland Section Representative	Navinda Kottege	Navinda.Kottege@csiro.au
Computational Intelligence Society		
Chair	Amin Gharipour	a.gharipour@griffith.edu.au
Vice-chair	Andrew Lewis	a.lewis@griffith.edu.au
Secretary	Zahra Jadidi	zahra.jadidi@griffithuni.edu.au
Treasurer	Alan Liew	a.liew@griffith.edu.au
Computer Society		
Secretary	Jingxin Xu	j15.xu@qut.edu.au
Treasurer	Mike Robinson	blackmagic@computer.org
Control Systems Society		
Robotics and Automation Society		
Joint Chapter		
Chair	Luis Mejias	luis.mejias@qut.edu.au
Vice-chair	Navinda Kottege	Navinda.Kottege@csiro.au
Secretary	Vacant	

Office	Office holder	Contact
Engineering in Medicine and Biology Society		
Chair	Mohan Karunanithi	Mohan.Karunanithi@csiro.au
Vice-chair	Qing Zhang	qing.zhang@csiro.au
Secretary	Yan Li	liyan@usq.edu.au
Microwave Theory & Techniques Society		
Antennas & Propagation Society		
Joint Chapter		
Chair	Konstanty Bialkowski	konstanty@ieee.org
Vice-chair	Antony Lui	h.lui@uq.edu.au
Vice-chair	Morteza Shahpari	m.shahpari@griffith.edu.au
Secretary	Mostafa Shabani	m.shabani.au@ieee.org
Power & Energy Society		
Dielectrics and Electrical Insulation Society		
Joint Chapter		
Chair	Nilesh Modi	nilesh.modi@aemo.com.au
Vice-chair	Rahul Sharma	rahul.sharma@uq.edu.au
Secretary	David Batterham	batterhamd@gmail.com
Signal Processing Society		
Communications Society		
Joint Chapter		
Chair	Andrew Bradley	bradley@itee.uq.edu.au
Vice-chair	Vaughan Clarkson	v.clarkson@uq.edu.au
Secretary	Vacant	
Society on Social Implications of Technology		
IEEE Queensland Section representative	Samuli Haataja	s.haataja@griffith.edu.au
Women in Engineering		
Chair	Marie Luise Wille	m.wille@qut.edu.au
Vice-chair	Negareh Ghasemi	n.ghasemi@qut.edu.au
Secretary	Alexandra Posoldova	alexandra.posoldova@griffithuni.edu.au
Young Professionals Program		
Chair	Alexandra Posoldova	alexandra.posoldova@griffithuni.edu.au
Vice-chair	Reuben Peterkin	reuben.peterkin.au@ieee.org
Secretary	Rob Makaremi	sohrab.makaremi@gmail.com
Treasurer	Hamid Moghadam	hamid.aminimoghadam@griffithuni.edu.au

Office	Office holder	Contact
Student Counsellors		
Central Queensland University - Brisbane	Sangeetha Kutty	s.kutty@cqu.edu.au
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Griffith University - Nathan	Sascha Stegen	s.stegen@griffith.edu.au
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The University of Queensland (PES)	Tapan Saha	saha@itee.uq.edu.au
University of Southern Queensland	Vacant	
Student Branches		
Griffith University		
(Gold Coast Campus)		
Chair	Reza Akbarzadeh	reza.akbarzadeh.au@ieee.org
Vice-chair	Matthew Jay	matthew.jay@griffithuni.edu.au
Secretary	Tim Alroy	timothy.alroy@griffithuni.edu.au
Treasurer	Elise Jenkins	elise.jenkins2@griffithuni.edu.au
Griffith University		
(Nathan Campus)		
Chair	Mojtaba Moghimi	mojtaba.moghimi@griffithuni.edu.au
Vice-chair	Nazanin Nadian	nazanin.nadianghomsheh@griffithuni.edu.au
Secretary	Arslan Akram Nizami	arslanakram.nizami@griffithuni.edu.au
Treasurer	Domagoj Leskarac	D.Leskarac@Griffith.edu.au
The University of Queensland		
(ITEE)		
Chair	Jeremy Taylor	jeremy.taylor2@uq.net.au
The University of Queensland		
(Power & Energy Society)		
Chair	Hanxiao Zhang	hanxiao.zhang@uq.net.au
Vice-chair	Lakshitha Naranpanawe	uqwnaran@uq.edu.au
Secretary	Xinren Marcus Jiang	xinren.jiang@uqconnect.edu.au
Treasurer	Vacant	

2017 Call for Nominations for IEEE Queensland Section Office Holder Positions

All positions within the Queensland Section and its Chapters and Affinity Groups will be vacant in 2017. The term will be from 1 January to 31 December 2017.

Names of past and current section office holders can be found on Queensland section's [website](#).

Nominations for the section, chapters and affinity groups should be emailed to the Chair of the relevant nominating committee by COB 30 September 2016.

The following pages include 'call for nomination' letters for the 2017 IEEE Queensland Section elections. Please read the letters and consider nominating for any positions for which you are eligible.

Call for Nominations: Officers & Members for the 2017 Executive Committee of the IEEE Queensland Section

The IEEE Queensland Section was established in 1985 and currently has 1000+ members (Worldwide, the IEEE has over 429,000 members in more than 160 countries). The Queensland Section has a proud tradition of volunteer service to the community of technology professionals. Queensland Section is now calling for nominations for officers and members of the IEEE Queensland Section executive committee in 2017. A full list of current and previous committee members is available on the section's [website](#).

According to the IEEE MGA manual, that governs our Section, all elected offices and other positions on the executive committee will become vacant on 31 December each year. Therefore, Queensland section is calling for nominations for the elected offices of:

- Chair
- Vice-Chair
- Treasurer
- Secretary
- Webmaster
- Newsletter Editor

- Chairs of the following Standing Committees:
 - Membership Development Activities Committee
 - Professional/Career Activities Committee
 - Student Activities Committee
 - Educational Activities Committee
 - Awards & Recognition Committee

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the committee. However, the nominee should have reasonable experience to conduct the expected duties. (e.g. the Webmaster role requires experience in web design and maintenance, and a knowledge of responsive web design principles; the Treasurer role requires basic knowledge of accounting principles and some exposure to accounting software, specifically NetSuite; the Newsletter Editor role requires a good command of English and experience with document preparation software, specifically LaTeX).

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers can be downloaded from the resources section of the website under [officer guides](#).

Nominations should be emailed to the Chair of the Section Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by Section members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Sections Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee Aerospace and Electronic Systems Chapter

The Queensland Aerospace and Electronic Systems Chapter prides itself on its efforts to sustain and grow our technical community through the organisation of seminars and activities that inform our members of latest developments as well as promote collegiality and networking. All elected offices and other positions on the chapter committee will become vacant on 31 December 2017. The Chapter Nominating Committee is therefore seeking nominations of volunteers for offices in the new Chapter committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Aerospace and Electronic Systems Chapter member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee Computational Intelligence Society Chapter

The Queensland Computational Intelligence Society Chapter prides itself on its efforts to sustain and grow our technical community through the organisation of seminars and activities that inform our members of latest developments as well as promote collegiality and networking. All elected offices and other positions on the chapter committee will become vacant on 31 December 2017. The Chapter Nominating Committee is therefore seeking nominations of volunteers for offices in the new Chapter committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Computational Intelligence Society Chapter member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee Computer Society Chapter

The Queensland Computer Society Chapter prides itself on its efforts to sustain and grow our technical community through the organisation of seminars and activities that inform our members of latest developments as well as promote collegiality and networking. All elected offices and other positions on the chapter committee will become vacant on 31 December 2017. The Chapter Nominating Committee is therefore seeking nominations of volunteers for offices in the new Chapter committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Computer Society Chapter member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee Control Systems/Robotics & Automation Societies Chapter

The Queensland Control Systems/Robotics & Automation Societies Chapter prides itself on its efforts to sustain and grow our technical community through the organisation of seminars and activities that inform our members of latest developments as well as promote collegiality and networking. All elected offices and other positions on the chapter committee will become vacant on 31 December 2017. The Chapter Nominating Committee is therefore seeking nominations of volunteers for offices in the new Chapter committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Control Systems/Robotics & Automation Societies Chapter member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee **Engineering in Medicine & Biology Society Chapter**

The Queensland Engineering in Medicine & Biology Society Chapter prides itself on its efforts to sustain and grow our technical community through the organisation of seminars and activities that inform our members of latest developments as well as promote collegiality and networking. All elected offices and other positions on the chapter committee will become vacant on 31 December 2017. The Chapter Nominating Committee is therefore seeking nominations of volunteers for offices in the new Chapter committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Engineering in Medicine & Biology Society Chapter member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee

Microwave Theory & Techniques/Antennas & Propagation Chapter

The Queensland Microwave Theory & Techniques/Antennas & Propagation Chapter prides itself on its efforts to sustain and grow our technical community through the organisation of seminars and activities that inform our members of latest developments as well as promote collegiality and networking. All elected offices and other positions on the chapter committee will become vacant on 31 December 2017. The Chapter Nominating Committee is therefore seeking nominations of volunteers for offices in the new Chapter committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Microwave Theory & Techniques/Antennas & Propagation Chapter member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee

Power and Energy Society & Dielectric & Electrical Insulation Joint Chapters

The Queensland Power and Energy Society & Dielectric & Electrical Insulation Joint Chapters prides itself on its efforts to sustain and grow our technical community through the organisation of seminars and activities that inform our members of latest developments as well as promote collegiality and networking. All elected offices and other positions on the chapter committee will become vacant on 31 December 2017. The Chapter Nominating Committee is therefore seeking nominations of volunteers for offices in the new Chapter committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Power and Energy Society & Dielectric & Electrical Insulation Joint Chapters member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee Signal Processing & Communications Chapter

The Queensland Signal Processing & Communications Chapter prides itself on its efforts to sustain and grow our technical community through the organisation of seminars and activities that inform our members of latest developments as well as promote collegiality and networking. All elected offices and other positions on the chapter committee will become vacant on 31 December 2017. The Chapter Nominating Committee is therefore seeking nominations of volunteers for offices in the new Chapter committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Signal Processing & Communications Chapter member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee Women in Engineering (WIE) Affinity Group

Queensland Women in Engineering affinity group is a vibrant community of engineers, scientists, and technical experts. The mission of IEEE WIE is to facilitate the global recruitment and retention of women in technical disciplines. IEEE WIE envisions a vibrant community of IEEE women and men collectively using their diverse talents to innovate for the benefit of humanity. All elected officers and other positions on the affinity group committee of WIE Queensland will become vacant on 31 December 2016. WIE Nominating Committee is therefore seeking nominations of volunteers for officers in the new executive committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Women in Engineering (WIE) Affinity Group member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.

Call for Nominations for the 2017 IEEE Queensland Section Committee Young Professionals Affinity Group

Queensland Young Professionals Program (formerly known as GOLD) affinity group is a vibrant community of engineers, scientists, and technical experts. Young Professionals Program members have a wide variety of benefits and opportunities available to them through IEEE membership. These highlighted benefits are geared towards the needs and interests of young professionals and revolve around professional growth, community, and technical development. All elected offices and other positions on the affinity group committee will become vacant on 31st of December 2016. Young Professionals Program Nominating Committee is therefore seeking nominations of volunteers for officers in the new executive committee who would be prepared to further its mission. Nominations are sought for the positions of Chair, Vice-Chair and Secretary.

Eligibility: To be eligible, a nominee must be an active IEEE Queensland Section Young Professionals Affinity Group member of the Graduate Student Member, Member, Senior Member or Fellow grade. Volunteers who have served two consecutive years in a role immediately prior to next year or six years in their membership period are NOT eligible for further service in the same role.

IEEE Queensland section always encourage and welcome members to join the chapter committees. However, the nominee should have reasonable experience to conduct the expected duties.

Term: The new committee would serve for one year from 1 January until 31 December 2017.

Duties: The duties of the officers are as follows (details are available on the [website](#)):-

1. The Chapter Chair shall serve as Chair for all meetings of the Chapter and be its representative on the Queensland Section Executive Committee (which meets once a month).
2. The Chapter Vice-Chair shall assist the Chair in the coordination of all Chapter activities. At the request of the Chapter Chair or in the absence of the Chapter Chair, the Chapter Vice-Chair shall chair meetings of the Chapter or represent the Chapter at the Section Executive Committee meetings.
3. The duties of the Chapter Secretary shall include correspondence, the keeping of the minutes of the Committee meetings, mailing notices, and submission of meeting reports to the Queensland Section Secretary or Secretary/Treasurer and to IEEE Headquarters directly at the end of each year and such other duties as are assigned to him/her by the Chair.

Nominations should be emailed to the Chair of the Chapter Nominating Committee by COB 30 September 2016. Details of the nominating committees will be available on section's website. The Nominating Committee will then prepare a list of candidates for election by the society members (if necessary) in accordance with IEEE by-laws. The election results will be announced at the Section's Annual General Meeting in late November-Early December.

IEEE greatly values the contributions of the volunteers and we hope you will consider volunteering for a chapter committee position next year.