

IEEE

Queensland Section

NEWSLETTER

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Messages from the Chair IEEE Queensland Section

Mr Roelof Swanepoel
Chair, Queensland Section 2011

Email: roelofs@ieee.org

It goes without saying that 2011 has been a year of disruptions for Australia, and specifically Queensland, both Southeast and Northern areas. Most everyone, IEEE Queensland members and otherwise, were either impacted directly, or know people close to them who have been impacted by the floods and cyclone Yasi. Our thoughts are still with those struggling to recover after these events, sometimes suffering substantial personal losses.

However, we have pulled through this, and, along with recovery, 2011 is turning into a year of change and, with that, opportunity.

Changes in the Queensland Section Committees

It is unfortunate that we have had a few changes to our committee this year.

Our elected section Vice Chair, Jasmine Banks, resigned during the first half of the year, and her replacement for 2011, as elected by the committee, is Sandra Mau. We want to thank Jasmine for years of selfless service to the section, and hope that she can rejoin the committee some time in the future with her wealth of skills. Sandra has been doing an exceptional job as our Women In Engineering Chair, and I am convinced that she will be bringing her enthusiasm to the Vice Chair role as well.

In our Computer Chapter, Philip Machanick accepted a position in his native South Africa, and has unfortunately had to resign as chapter Chair. The Vice Chair for the chapter, Jianming Yong, has been elected as the new Chair, and Mike Robinson (chapter Secretary) as Vice Chair. Our thanks to Philip Machanick for his excellent service as Chair for the chapter, and also for his help in the organisation of section events including providing introductions to several of our annual dinner keynote speakers. Congratulations also to Jianming and Mike - they already have items lined up for the year, and we look forward to Computer Chapter activities for 2011.

The section's Educational Activities Chair, Jan McSweeney, has also unfortunately had to resign after accepting a position in Canberra. Provisionally, the newly elected vice chair for Educational Activities, Mark Griffin, will be taking over her duties. Thank you Jan for donating your time to section activities. Mark was previously our Student Activities Chair, and is no stranger to the section. We are sure his enthusiasm will soon be felt in educational activities.

Queensland Section Representation at international IEEE Meetings

The section has been fortunate enough to send a number of committee and section members to interstate and international IEEE congresses and meetings. Our Past Chair, Abbas Bigdeli, and I attended the Region 10 Meeting in Yogyakarta, Indonesia in March this year. As part of this meeting, Abbas also attended the annual face to face meeting of the IEEE Australia Council. As always, these meetings are a focal point for discussion of new IEEE initiatives, as well as items specifically impacting Region 10. Discussion topics and action items from this meeting has already started flowing into section activities.

Our Women In Engineering chair, Sandra Mau, attended a congress in Perth, geared towards initiatives for women in technology and engineering. Please see elsewhere in this newsletter for more information on this. An offshoot of this meeting was also a visit to the section by Ramalata Marimuthu, the current MGA WIE Chair.

In July, three of our students attended the Region 10 Student/GOLD/WIE Congress in Auckland, New Zealand. The Section believes in promoting young leadership, and this congress provided a valuable training and networking experience for Alex Price, Nikki Holmes and Mai Nguyen. All three these students are already actively involved in section activities, and we look forward to output from this congress flowing into their relevant chapters and affinity groups. Please see elsewhere in this newsletter for more feedback from this congress.

I am writing this editorial from San Francisco in the US, where the triannual 2011 IEEE Sections Congress has just concluded. I attended in my capacity as Section Chair, as well as GOLD Chair for the MGA GOLD meeting and summit. There is an absolute wealth of information that was exchanged in the last 5 days, and section members will be seeing a lot of this flowing through the section committee, chapters and affinity groups, all with the aim of better serving our membership.

2010 Annual General Meeting and Dinner

25 November saw the IEEE Queensland Section's annual general meeting and dinner held at the University of Queensland Staff Club. In keeping with our approach of making the evening's events more accessible to both full members and student members, we again had an increase in attendance from 2009, with approximately 50 attendees to both the AGM and dinner. We also had a number of special guests from our friends at the Engineers Australia Electrical Branch and Information, Telecommunications & Electronic Engineering (ITEE) Branch, as well as winners of the draw at the previous evening's GOLD Student Transition and Elevation event.

The guest speaker for the evening was Alina Dini, from the Department of Environment and Resource Management (DERM), giving a presentation on electrical vehicle initiatives in Queensland. Ms Dini presented both a technical and non-technical angle on the topic, coming from a background at Tesla Motors, California. A highlight of the evening for a few lucky attendees was a ride in the Queensland Government's electrical vehicle currently being used for research purposes. Those willing to wait a turn (for what turned out to be a very popular activity), were even given an opportunity to be drivers instead of passengers!

A number of awards was presented during the evening. These are listed in more detail in the next section of this newsletter, but I would like to congratulate each and every one of the recipients of the awards, and thank them for their tireless contributions to IEEE Queensland Section.

The planning for this year's AGM and Dinner is already under-way, and the details for this event is available elsewhere in this newsletter. I encourage all members and student members to try and use the opportunity to meet your fellow section members!

Upcoming Section, Chapter and Affinity Group Nominations

With the end of the year peeking over the horizon, it is also time to start nominating for new section, chapter and affinity group positions. E-mails with more detailed information on this will soon start circulating, and I invite all our members to seriously consider joining a very vibrant and active section committee. For any queries regarding section positions, please contact me on roelofs@ieee.org, and for any queries regarding the nominations and appointments process, please contact our N&A Chair, Prof Neil Bergmann on bergmann@itee.uq.edu.au.

Sections Congress 2011 - What does it mean for Queensland?

The triannual IEEE Sections Congress was held in San Francisco, California from 19-22 August 2011. Some 1500 attendees and numerous IEEE staff members spent three days sharing knowledge, ideas and experience, with the intent of "Empowering Members to Create the Future." Myself and the new vice chair, Sandra Mau, attended the congress on behalf of Queensland Section.



The weekend consisted of the following highlights:

- Keynote speakers, including Vint Cerf (co-designer of the TCP/IP suite) and Grant Imahara from Mythbusters;
- The prize-giving ceremony, where some of the IEEE's highest awards are made, and engineering contributions acknowledged;
- Various breakout sessions, spread across three tracks, meant to provide information on various different topics and initiatives within IEEE and MGA;
- Displays hosted by IEEE staff departments, bringing section leadership together with the departments that serve their members;
- Question and answer sessions with the current IEEE President-elect candidates, Peter Staecker and Roger Pollard;
- Formal and informal networking sessions, allowing us to learn from the experiences of other sections and their leaders, both in Region 10 and elsewhere;

Building on the approach of focussing on the member, rather than membership, MGA introduced a number of new resources aimed at improving the individual experience of members. Many of these are direct results of the recommendations made to the IEEE at the previous sections congress. Specific examples are:

- A new way of navigating IEEE member benefits, based on the stage of the member's professional life-cycle;
- The Centre for Learning Excellence, providing training for section leadership based on best practises;
- The IEEE-HKN honour society;
- Numerous humanitarian initiatives supported by IEEE;

During the next couple of weeks, we will be communicating the relevant items with chapter and affinity group leadership, as well as section members. Some items are as simple as providing links to new resources on the IEEE website, while others might require multiple officer terms to fully implement. Nonetheless, I firmly believe everything that we choose to implement at section level (given time and resource constraints) will ultimately provide immense extra value to our membership.

Our membership can assist by providing extra resources by volunteering in their chapter and affinity groups - it doesn't only have to be as leadership positions. We are already in the process of getting an Educational Activities project off the group with other sections in Australia, that will definitely require volunteer resources. Keep on eye out for e-notices and further newsletter items. We will also be updating our section website soon with more information on all the above (and links to resources where available).

Thank you to the section for providing us the opportunity to attend the congress!



The Australia and New Zealand IEEE Section Congress representatives (Mr Roelof Swanepoel, Queensland Section Chair, back row third from right)



Congress attendees during Grant Imahara's keynote address

And lastly...

I want to thank all our loyal section members, as well as new members, for their continued support of section activities. With more than 1200 members, our section continues to grow at a steady clip, and it is a pleasure and joy to work with talented section, chapter and affinity group leaders, as well as student members and volunteers and motivated section members. In spite of its rocky start, 2011 has all the potential to be another great year in section history!

Queensland Section Awards and Recognition Report

Mr Michael Lees

Immediate Past Awards & Recognition Chair

Email: Michael.Lees@ieee.org

For 2010 the committee has retained the award structure that was used for 2009. This encompasses the following three categories.

The first category is **Recognition of Service** awards. These are an official recognition of a person's contribution in a particular role and are awarded at the first AGM following the completion of a person's term in a role. They are awarded to all people in this category without requiring nomination.

The second category is **Outstanding Contribution** awards. These are awarded to people who have been identified as having made a significant contribution during their term in a role. They are awarded at the first AGM following the completion of a person's term in a role. These awards require a seconded nomination (by members of the IEEE Queensland section) along with a reason for the nomination to be submitted to the section committee.

The third category is for the IEEE Queensland Section **Volunteer of the Year**. This is awarded to the person who is regarded as having made the most substantial contribution during their time in office. Only people who have completed their term of office are eligible. A single plaque is awarded each year. Nominations (by members of the IEEE Queensland section) are submitted to the section committee.

Awards

Recognition of Service

A total of 16 *Recognition of Service* awards were awarded within the Queensland section during 2010. Most of them were presented in November at the section AGM.

Award Recipient	Contribution
Dr. Mark Griffin	Student Activities Chair Queensland Section 2009
Mr. Robert Ellen	Inaugural Chair AESS Chapter Queensland Section 2008-2009
Dr. Peter Lindsay	Inaugural Vice Chair AESS Chapter Queensland Section 2009
Mr. Simon Ellis	Chair Computer Chapter Queensland Section 2008-2009
Dr. Philip Machanick	Vice Chair Computer Chapter Queensland Section 2008-2009
Dr. Duncan Campbell	Chair Joint CSS R&A Chapter Queensland Section 2008-2009
Dr. Aleksandar Rakic	Chair MTT/AP Chapter Queensland Section 2008-2009
Dr. Karla Ziri-Castro	Vice Chair MTT/AP Chapter Queensland Section 2008-2009
Dr. Jose Lopez-Roldan	Chair PES Chapter Queensland Section 2009
Dr. Tapan Saha	Vice Chair PES Chapter Queensland Section 2009
Dr. Garry Einicke	Chair Joint SP/Comms Chapter Queensland Section 2008-2009
Dr. Dhammikan Jayalath	Vice Chair Joint SP/Comms Chapter Queensland Section 2008-2009
Mr. Robert Ellen	Chair GOLD Affinity group Queensland Section 2008-2009
Mr. Roelof Swanepoel	Vice Chair GOLD Affinity group Queensland Section 2008-2009
Mr. Peter McLarty	Membership Coordinator Queensland Section 2005-2009
Dr. Andrew Thomas	Student Counsellor UQ Queensland Section 2008-2009

Outstanding Contribution Award

Two *Outstanding Contribution* awards were awarded within the Queensland section during 2010. One of them was presented in December at the section AGM.

Award Recipient	Contribution
Dr. Garry Einicke	Chair Joint SP/Comms chapter Queensland Section 2008-2009
Mr. Robert Ellen	Inaugural Chair AESS Chapter Queensland Section 2008-2009

IEEE Queensland Section Volunteer of the Year 2010

Awarded to Mr. Robert Ellen

Thesis prize awards

There were two categories of award for undergraduate theses this year.

- **IEEE Queensland Section Student Prize for the Best Final Year Thesis in All Fields of Electrical Engineering and Information Technology** was awarded to Alexandra Clare Price from The University of Queensland for her thesis entitled 'Computational Tool for Short-Circuit Analysis of Fault Current Limiters'.
- **ICPADM¹ Mat Darveniza IEEE Queensland Section Student Prize for the Best Final Year Thesis in Power Engineering** was awarded to *John Quinn* from the Central Queensland University (CQU) for his thesis entitled 'Implementation of Closed Loop Voltage Control for Medium Voltage Distribution'.

Best Paper awards (Power & Energy Society Chapter)

The **IEEE Power & Energy Society (PES) Queensland Chapter Student Conference Travel Prize** was awarded to two recipients this year:

- *Mrs. Mai Huong Nguyen*, PhD student, First author of the paper entitled "A Comparative Study of Voltage Stability for Long Distance HVAC and HVDC Interconnection"
- *Mr. Sudarshan Dahal*, PhD student, First author of the paper entitled "Investigations of Small Signal Stability of a Renewable Energy based Electricity Distribution System"

New Awards & Recognition Chair for 2011

After having served in this role for half a decade, it is now time for me to move on. 2010 was my last year in the role of Awards & Recognition chair. I would like to thank the Section committee for its support over the last five years. It has been a pleasure to have been able to prepare and present the many section awards over this time.

I would like to take this opportunity to welcome Abbas Bigdeli as the new Awards & Recognition chair for 2011. I wish him the best of luck and I am sure that he will do very well in this role.



¹ ICPADM: The International Conference on the Properties and Applications of Dielectric Materials.

Awards & Recognition Photo Gallery: 2010 AGM

Recognition of service awards



Mr. Robert Ellen receives his Recognition of Service award at the AGM from Awards & Recognition chair, Mr. Michael Lees



Mr. Simon Ellis receives his Recognition of Service award at the AGM from Awards & Recognition chair, Mr. Michael Lees



Dr. Philip Machanick receives his Recognition of Service award at the AGM from Awards & Recognition chair, Mr. Michael Lees



Dr. Tapan Saha receives his Recognition of Service award at the AGM from Awards & Recognition chair, Mr. Michael Lees



Dr. Dhammikan Jayalath receives his Recognition of Service award at the AGM from Awards & Recognition chair, Mr. Michael Lees



Mr. Roelof Swanepoel receives his Recognition of Service award at the AGM from Awards & Recognition chair, Mr. Michael Lees

Outstanding Contribution awards



Mr. Robert Ellen receives the IEEE Queensland Section Volunteer of the Year award at the AGM from Awards & Recognition chair, Mr. Michael Lees

Best Paper awards (Power & Energy Society Chapter)

The **IEEE Power & Energy Society (PES) Queensland Chapter Student Conference Travel Prize** was awarded to two recipients this year.



Mrs. Mai Huong Nguyen receives her Best paper award at the AGM from Professor Tapan Saha



Mr. Sudarshan Dahal receives his Best paper award at the AGM from Professor Tapan Saha

Student Activities Notice

Mr Steven Lawrance
Student Activities Chair

Email: stl@ieee.org

Reminder of Student Thesis Prize

The IEEE Queensland Section administers two annual thesis prizes for undergraduate students in Queensland universities, the IEEE Student Thesis Prize and the ICPADM-Mat Darveniza IEEE Student Prize.

The recipient of each prize receives a certificate endorsed by the IEEE Queensland Section chairman, a cheque for \$500 and a ticket to the annual section dinner, where the prize will be awarded.

Entries can be submitted to Student Branch Counsellors until the 4th of November.

For further details, please see the IEEE Queensland Section website at <http://ieee.org/queensland/> or contact Steven Lawrance stl@ieee.org

2011 AGM & Dinner Lecture – December 1st

The Queensland Section's 2011 Annual General Meeting (AGM) and Dinner Lecture will be held at St Leo's, University of Queensland St Lucia Campus on the evening of Thursday the 1st of December.

The Annual General Meeting is your chance to be informed directly on the activities of the Section, Chapters and Affinity Groups for the year, be introduced to the 2012 volunteer office-bearers and congratulate our award winners. The AGM is followed by the Annual Dinner Lecture, the highlight of year at the Section level.

So please reserve the 1st of December for what is always an enjoyable evening. Details of the event and booking information will be communicated closer to the date.

Reports from the 2011 Region 10 Student / GOLD / WIE Congress



IEEE Region 10 Student/Gold/WIE Congress 2011 delegates

Miss Alexandra Price – GOLD Representative

The IEEE R10 Student Congress in Auckland was a fantastic opportunity to learn from other chapters in region 10 and about current IEEE initiatives. I also enjoyed catching up with student volunteers I had met last year at IEEE ANZSCON and making new friends.

Although I am yet to graduate, during the congress I acted as a GOLD representative for the Queensland Section. I found a session called “Engaging GOLD with Industry” very informative and gained many ideas about holding STEP events and strategies to use when connecting with industry members. There were also many short technical presentations which provided listeners with information on a wide range of topics from biomedical engineering to electric vehicles.

I would like to thank the IEEE Queensland Section for giving me the opportunity to attend.



Alexandra Price (back row, second from left) with other Australian delegates to the 2011 R10 Student/GOLD/WIE Congress

Mai Nguyen – WIE Representative

The 2011 IEEE Region 10 Student/Gold/WIE Congress was hosted in Auckland, New Zealand from the 7th to 10th of July. I was fortunate sponsored by IEEE Queensland chapters to represent for Queensland WIE Affinity Group attending the Congress. There were 19 WIE representatives from 8 countries attending the Congress. It was impressive that a good attendance of more than 30% of the Congress delegates is female, including 16 female speakers out of 67 speakers giving seminars and workshops in the Congress. It showed a good sign of fast growing in female leadership in engineering, especially in Asian countries.

The WIE Affinity Group discussion and workshop was started with a forum on the second day of the conference. The forum was focused on how to actively promote the participation of both male and female members in WIE activities and membership. It was a



WIE forum on the second day of the conference

great discussion where delegates shared their difficulties and experiences of their respective affinity groups, not only amongst young peers but also from the advisory committee. Australian WIE groups were advanced in collaboration with industries and other women groups. However, there were many interesting activities have been organised by groups outside Australia that we can bring to our members, such as:

- career development workshops
- CV/Resume writing
- interview practice
- creating awareness of postgraduate study opportunities to undergraduate students
- skill development workshops (e.g. leadership, negotiation),
- membership drives (such as giving talks at various high schools to encourage female student participate in engineering fields)

Another panel session on overcoming obstacles in career development was held on the third day of the Congress. In this session, several speakers shared their experiences in working both in academic and in industry environment. All the speakers agreed that the working conditions and environments for women in engineering were improved significantly in recent years. However, the promotion opportunity for women still limited to some extent, especially in Asian countries.

Along with special Student/GOLD seminars, three main seminars were given for WIE groups. The first seminar was "Addressing the gender imbalance" conducted by Professor Susmita Sur-Kolay from India. The second one was given by Imee Tribo, who shared her challenges and experiences in promoting engineering to female student and supporting members in her WIE group within the Faculty of Engineering at the University of Auckland, New Zealand. The last seminar was "Empowering females within our cultures" from Mehvish Zahoor. That was really an inspiring talk from a young female student from Pakistan, a male-dominated country. I was also impressed by the strength, enthusiasm and confidence from all members of IEEE Pakistan Section, especially from their IEEE WIE delegates.

It was a great and busy experience for me to meet so many IEEE volunteers (both novice and veteran) from across Region 10; to discuss and to learn from other's experiences. The plenary sessions on IEEE topics gave me more detailed ideas on updated IEEE technical activities, IEEE membership retention and IEEE engaging with industry. I had also an opportunity to attend many interesting seminars not only on up-to-date technical issues but also on skill development such as harnessing project management, emerging technologies on power and energy, using innovative technology to solve sustainability issues and develop new future directions in technology.

I would like to give thanks to the IEEE Auckland Section for the time and effort put into organising the wonderful Congress. Last but not least, I would like to give my special thanks to Queensland IEEE Section who strongly supported our attendance at the Congress.



R10 WIE advisory committee in the WIE forum



WIE: Addressing the gender imbalance seminar

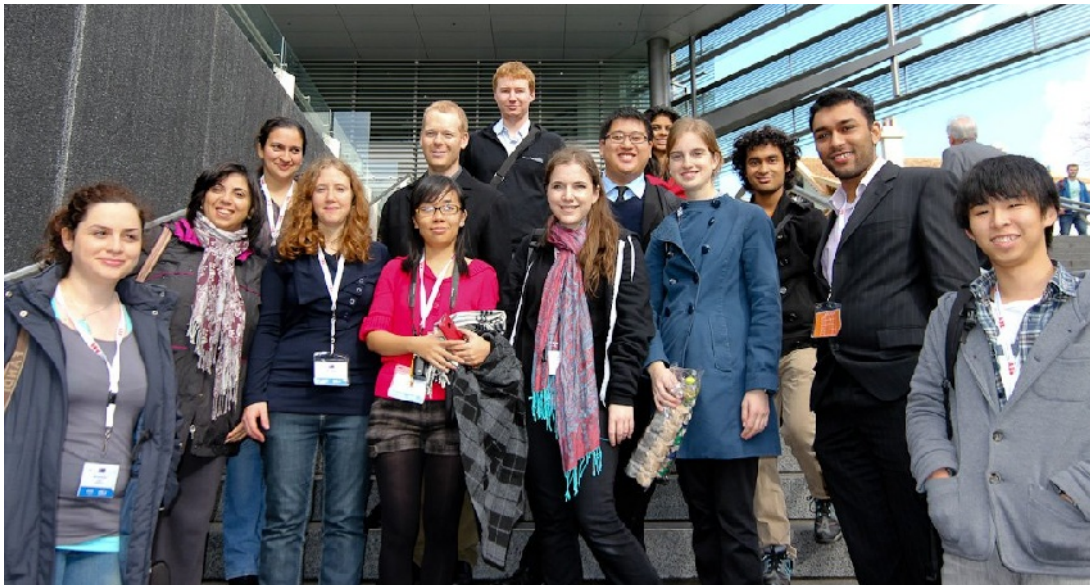
Nicola Holmes – Student Representative

The IEEE QLD Section was recently represented at the IEEE R10 Student Congress by three members of the executive team from the UQ IEEE Student Branch; Power & Energy Society Chairperson Alexandra Price, Women in Engineering Vice-Chairperson Mai Nguyen and myself, Student Branch Chairperson Nicola Holmes. The Student Congress was held in the Engineering building at the University of Auckland from the 7th to the 10th of July. Though Auckland presented us with chilly damp weather, the long weekend of networking, socialising, attending talks and discussing issues relevant to the region was a great experience.

After registration on the Thursday, we attended the opening addresses and some Professional skills workshops followed by an evening icebreaking BBQ catered by the hardworking University of Auckland Student Branch. We were sorted randomly into Quiz teams, and posed a series of questions. At this point I would love to say that my team did well, and I can say that we knew several of the more obscure answers about the IEEE, but that in regards to general knowledge questions about modern culture we fell into the lower scoring proportion of teams.



WIE members attending the Congress



Australian and New Zealand IEEE Student/Gold/WIE delegates

The Congress started in earnest the next morning with a series of briefings from the region coordinators. Following morning tea, and a brief stroll for our student branch down the road to source more coffee, we were broken up into geographic groups. Alex represented us within the GOLD forums, Mai within the WIE forums and I met with Student Branch chairs from all over Australia to swap knowledge and seek advice on issues that faced our branches. Discussing the issues we face at UQ as a student group with representatives from branches such as UNSW, ANU & Monash allowed me to seek advice from my peers to help ensure the continued success of our student branch. I was also able to share the knowledge I have gained over the last few years with other student branch executives. The day wrapped up with the congress dinner, at which awards for student branches all over R10 were presented and accepted by their delegates.

On the Saturday morning the congress continued with seminars and panels that focused on the roles of the IEEE in the region, career development, and the humanitarian and sustainability considerations of emerging technologies. The afternoon brought one of the more interesting sections of the congress, the delegates' forum. The presentations in this forum, by fellow students from all over region 10, covered pertinent issues such as Bilingual education, the challenges of sustainable development and female empowerment within the different cultures of our region. That evening, the Cultural night was held. This evening allowed each

nation to display national dress, share cultural traditions and exchange souvenirs from their countries. There were also performances from many of the countries, including Australia. As we are such a multicultural mix, we decided the best representation of our national culture would be to belt out 'Waltzing Matilda' at the top of our lungs, football match style. Some of our delegates used lyrics on their phones or laptops, but everyone joined in on the chorus. I don't think we have a career in music ahead of us, but we believe we appropriately (and loudly) represented Australia.

Wrapping up on Sunday morning, we attended the last of the talks and final addresses. With collection of our certificates, congress shirts and some last photos we headed back home to Australia. Student Congresses such as this one are important, both for the Branches and the Executives, as it allows us to share our experiences with our peers, learn about opportunities for our fellow students and re-motivate ourselves in our education and careers as Engineers and as Student leaders within the IEEE.



Australian table in cultural night

News from the UQ Student Branch

A/Prof. Vaughan Clarkson
UQ Student Branch Counsellor

Officers for 2011

The officers of the UQ Student Branch in 2011 are:

- Nicola Holmes, Chair
- Joanna Oon, Vice Chair
- Robert Chang, Treasurer
- Alexandra Price, Power & Energy Chapter Chair

Nominations were recently called for 2011 committee, and closed on Friday, 19th August. The incoming committee for 2012 is:

- Ismail Mohamed, Chair
- Lavish Lalwani, Vice Chair

Congratulations on the election of the new officers for 2012. I look forward to assisting them in the service of UQ student members.

Activities

Since my last update, in the November 2010 issue, the Student Branch has been very active. The branch has organised a number of activities throughout the year to date.

- A presence was maintained with active recruitment through UQ O Week (22nd–25th February).
- A pizza lunch and recruitment drive was held on 9th March (with 49 recruits!).
- A technical seminar entitled 'GroundProbe—Global commercialisation of Radar Technology to the Mining Industry' by Dr. David Noon, Chief Commercial Officer of GroundProbe, was given on 17th March, in cooperation with the ITEE On Campus Alumni.
- A pizza lunch and recruitment seminar featuring FairPlay Sports Analysis Systems on 18th May.
- In partnership with the Electrically Based Engineering Student Society (UQ EBESS), a BBQ was held for students enrolled in ENGG2800/METR2800 Team Project I on 21st May.

Participation in National and International Meetings

The PES Chapter Chair, Alex Price, represented the Student Branch at the inaugural Australia & New Zealand Student Congress in Melbourne on 24th–26th November last year. The Student Branch Chair, Nikky Holmes, and Alex Price attended the IEEE Region 10 (Asia-Pacific Region) Student Congress in Auckland, New Zealand, on 7th-10th July. Alex's and Nikky's attendance was co-funded by IEEE Queensland Section and the UQ Advantage programme. Please see their reports in the previous article of this issue.

IEEE Student Enterprise Award

I'm delighted to report that the UQ Student Branch is the winner of a 2010-2011 IEEE Student Enterprise Award for a proposal entitled 'Engineering Young Australians'. The award comes with a cheque for USD1500 and is intended to fund proposed outreach activities. Specifically, the funds will be used to run hands-on activities for Grade 5 students in lower socio-economic areas in which the students will build an electric motor from a paper cup. In this way, it is hoped that a seed of inspiration will be planted that might one day grow into a desire to study engineering. Thanks must go the primary author of the proposal, Alex Price, for her efforts in compiling and submitting the proposal on behalf of the Student Branch.

News from the Computational Intelligence Society Chapter

Newly appointed IEEE QLD CIS committee officers serving for 2011

Chair: **Dr. Michael Blumenstein** (Associate Professor, Griffith University)
 Vice-Chair: **Dr. Ross Hayward** (Senior Lecturer, Queensland University of Technology)
 Secretary: **Mr. Hong Lee** (PhD Candidate, CQUniversity)

World Congress on Computational Intelligence, 2012

The Computational Intelligence Society's 2012 World Congress on Computational Intelligence will be held in Brisbane on June 10 – 15 2012. It will host three conferences: the 2012 International Joint Conference on Neural Networks (IJCNN 2012), the 2012 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2012), and the 2012 IEEE Congress on Evolutionary Computation (IEEE CEC 2012). The congress will provide a stimulating forum for scientists, engineers, educators, and students from all over the world to discuss and present their research findings on computational intelligence.

For information may be found on the Congress website:

<http://www.ieee-wcci2012.org>

Previous CIS Chapter Seminars for 2011

The Queensland CIS Chapter regularly holds seminars to provide opportunities for members to engage in active research community. Our first event for the year was on 5 May 2011 4pm - 5:30pm, when **Professor Graham Leedham** from University of New England visited Griffith university Gold Coast campus and presented his research about **'Image of hands or biometric screening.'** As a means of automated personal identification the human hand offers opportunities for socially acceptable, high selectivity and high accuracy practical implementation using physiological and behavioural biometric measurements. These biometrics can include hand shape, fingerprints, palm prints, handwriting and handwritten signature verification as visual physiological and behavioural biometrics.

In his presentation, he envisioned the opportunities and capabilities of hand imaging as a means of personal identification as well as various aspects of hand biometrics. He emphasised the imaging of vein patterns in the hand and their pattern matching to enhance the external visual biometrics of the hand. The presentation was delivered in video conference using Access-Grid technology.



Prof. Leedham (left), Associate Prof. Blumenstein (centre) and Mr. Vu Nguyen using Access-Grid during Prof. Leedham's talk

The participants and audience attended the presentation at Access-Grid nodes from QUT, CQUniversity, UQ and Griffith.

Proposal of IEEE CIS Summer School to be held in Queensland 2011

During the aforementioned event, Dr. Jun Jo presented his vision to propose IEEE CIS Summer School to be held in Queensland this year. IEEE CIS encourages and supports international and local attendance by allocating travel scholarships to attend those activities. During the event, teaching awards can be given to speakers. IEEE CIS also dedicates part of the budget to support the institution that holds the school while helping to provide funding for inviting Distinguished Lecturers through the CIS DL Program. The proposal was discussed with current IEEE QLD CIS members from QUT, UQ, CQUniversity and Griffith through AccessGrid virtual meeting technology.

News from the Power & Energy Society Chapter

Professor Tapan Saha
Chair, Power & Energy Society Chapter
Dr Mehdi Eghbal
Secretary, Power & Energy Society Chapter

Email: m.eghbal@uq.edu.au

Queensland PES Chapter recognised

The Queensland chapter of the Power & Energy Society has been recognised for its performance in 2010 with two awards.

High Performing Chapter Program Award

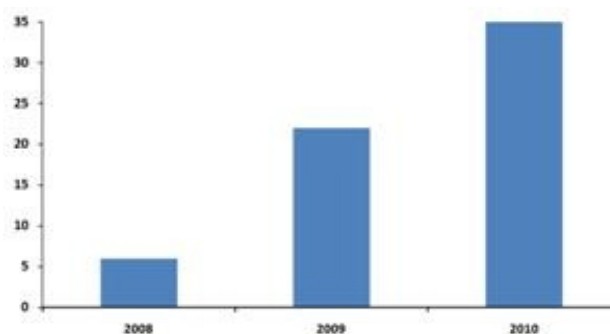
We are pleased to announce that the chapter has been recognised as one of the High Performing Chapters under the PES High Performing Chapters Program in 2010. The award included \$870 from the Power & Energy Society which will go towards funding future activities. The Queensland PES chapter was the only successful Australian chapter in 2010. We are delighted to have this recognition.

Outstanding Large Chapter Award 2010

After recent membership growth, the Queensland PES chapter is now considered as large chapter and was a Runners-Up in the award for PES Outstanding Large Chapter in 2010.

PES chapter activities leading to these awards in 2010 include:

- **Technical programs:** 6 technical events were organised where more than 350 member and non-members attended.
- **Educational programs:** half-day seminar by IEEE distinguished lecturer
- **Public Affairs Programs:** Active website management, briefing PES chapter activities during Queensland section AGM, ½ day seminar on Smart Grids and Demand Side Management
- **Student Activities:** Established one student travel award for student members to attend and present a paper at the IEEE PES General Meeting conference. In 2010, PES chapter award committee decided to share the prize equally between two winners; Miss Mai Nguyen and Mr.Sudarshan Dahal. The winners received \$1000 check each during the IEEE seminar on 5th of July. In 2010, PES student branch chapter at the University of Queensland was also established.
- **Membership Development:** Membership development program at Powerlink (Transmission Network Service Provider in Queensland)
- Chapter Chair provided liaison between the PES Chapter and Local Electrical Branch of the Engineers Australia (as a vice chair of the later)
- Established the Outstanding Power Engineer Award in 2010 and awarded Dr Jose Lopez Roldan as the 2010 outstanding power engineer.
- During recent years, number of new members joining the PES chapter has increased significantly from 6 members in 2008 to 35 members in 2010. Figure below shows the trend of number of new members joining each year during 2008-2010. As of December 2010, PES chapter has 124 members. This makes the PES chapter as one of the large chapters in region 10.



Number of members joining PES chapter during 2008-2010

2011 activities

Outstanding Power Engineer Award 2010

In 2010 the Chapter initiated the Outstanding Power Engineer of the Year Award. The first recipient of this award is Dr Jose Lopez Roldan

Student Travel Award

A \$2000 student travel award was established in 2010 for student members to attend and present their papers at IEEE PES General Meeting conference. In 2011, 7 applications were received. After reviewing the applications, the review committee decided to share the award to two recipients. Mr. Ruifeng (Richard) Yan and Mr. Muhammad Bachtiar Nappu were awarded \$1000 and attended the conference.



Prof Saha, PES Chapter Chair (left), presents Dr Jose Lopez Roldan with his award for Outstanding Power Engineer of the Year, 2010



PES Secretary (Dr.Eghbal), Mr. Ruifeng (Richard) Yan (Awarded student), PES chapter chair (Prof.Saha)



From left: PES Secretary (Dr.Eghbal), Mr. Muhammad Bachtiar Nappu (Awarded student), PES chapter chair (Prof.Saha)

Previous Events for 2011

Seminar: **European Experience with Intermittent Renewable Generation and the Implications for Australia**
(Jointly hosted with Engineers Australia ITEE College)
Speaker: **Mr. Jonathan Dennis** Powerlink Queensland
Date & venue: 26 May 2011, Hawken Auditorium-Engineers Australia, 447 Upper Edward St, Spring Hill, Qld

Seminar: **Queensland natural disasters 2011-their impacts to electricity supply**
Speakers: **Mr. Simon Bartlett**, Chief Operating Officer, Powerlink Queensland, and
Mr. Chris Arnold, Executive General Manager Network Performance, Energex
Date & time: 08 July 2011, 2pm
Venue: The University of Queensland, Hawken Engineering Building (#50), Room Number: 50-N201



Mr. Jonathan Dennis presenting European experience with Intermittent Renewable generation



From left: Dr. Mehdi Eghbal (PES Secretary), Mr. Chris Arnold (Energex), Prof. Tapan Saha (PES Chapter Chair), Mr. Simon Bartlett (Powerlink)

Workshop: **Planning and Operation of Electricity Markets Considering Renewable Energies and Carbon Price**
Speakers: **Professor Ross Baldick**, Dept. of Electrical and Computer Engineering, University of Texas Austin,
Mr. Magnus Hindsberger Senior Manager Market Modelling at the Australian Energy Market Operator (AEMO) and
Mr. Frank Montiel Manager Planning Coordination at AEMO
Date & time: 11th of August 2011, 2pm-6pm
Venue: College Playhouse, The Women's College, College Road, St. Lucia QLD



Professor Ross Baldick presenting screening curve approach for generation planning with high penetration of wind energy



Mr Frank Montiel and Mr Magnus Hindsberger presenting AEMO's transmission planning approach

Seminar: **Present challenges and future of Geothermal Energy in Australia** (Jointly hosted with Engineers Australia ITEE College)
 Speakers: **Professor Hal Gurgenci** Director of Queensland Geothermal Energy Centre of Excellence, The University of Queensland
 Date & time: 25 August 2011, 4pm
 Venue: Hawken Auditorium-Engineers Australia, 447 Upper Edward St, Spring Hill, Qld



Prof Hal Gurgenci (middle) with PES Chapter Chair Prof Saha (left) and ITEE Chair Mr Brian O'Neill (right) after Prof Gurgenci's geothermal energy seminar

Upcoming PES Chapter Events

The following seminars are scheduled and PES chapter is planning a few more technical seminars in November. Detailed and updated information on PES seminars can be found from PES' website at:

<http://ewh.ieee.org/r10/queensland/v2/doku.php/chapters:pes:start>

Seminar: **The Challenge of Battery Manufacture for Distribution Network Storage**
 Speaker: **Mr. Steven Hickey**
 Date & time: 14 September 2011, 5:30pm-7pm
 Venue: Hawken Auditorium-Engineers Australia, 447 Upper Edward St, Spring Hill, Qld

Seminar: **Power System Stability Enhancement Using AI Control**
 Speaker: **Professor Om Malik**, University of Calgary, Canada
 Date & time: 29 September 2011, 3:00pm-5pm
 Venue: Room 50-N202, Hawken Engineering Building(#50), The University of Queensland, St Lucia 4072

News from the Graduates of the Last Decade (GOLD) Affinity Group

Mr Roelof Swanepoel
Chair, GOLD Affinity Group

A GOLDen 'hello' from San Francisco, California! I am writing this report from San Francisco, where I attended the MGA GOLD Committee meeting, as well as the GOLD Summit on behalf of the Queensland GOLD AG. A number of new and revamped initiatives are being developed by the GOLD Committee with the help of MGA staff at IEEE, and a few of these should be making their way into our AG before long. As always, student branch and chapter as well as professional development) cooperation are high priorities, but there is also a definite focus on providing more targeted career guidance, and focus on membership needs. Specifically for the latter, we will soon be soliciting feedback from the numerous GOLD members in the section, to improve member engagement in activities.

Queensland GOLD has had a reasonably quiet year, but we have a number of events planned for the remainder of this year. In the pipeline are the following:

- A field trip to a biofuel manufacturing facility
- Student Transition and Elevation Partnership (STEP) events

Please add us on Facebook and LinkedIn to see updates on these events, and keep an eye on your mailbox. Should you have any queries or suggestions (or are interested in helping out with any events), please contact me on roelofs@ieee.org.



Group photo of the attendees at the UC Berkeley STEP function coinciding with the GOLD Summit

Our full committee details are available online at www.ieee.org/queensland, so please don't hesitate to contact us.

News from the Women In Engineering (WIE) Affinity Group

Ms Sandra Mau
Chair, WIE Affinity Group

Email: sandra.mau@ieee.org

Previous 2011 Event: Project Management

In March 2011, WIE QLD had the pleasure of inviting Associate Professor Andrew P. Bradley to give a seminar on Project Management entitled, **Project Management: the easy, the hard, the good, the bad**, as part of the WIE Skills Development Series.

Associate Professor Bradley is in Biomedical Engineering at The University of Queensland (UQ) and is also a Chartered Electrical Engineer and a Senior Member of IEEE. His expertise is in Biomedical signal acquisition, processing and analysis and a PhD in Machine Learning for Medical Diagnosis from the UQ (1996). Currently, he is also the Chief Technology Officer of Ausonex Pty Ltd, a company specialising in the design and development of hearing test instrumentation based on his work at UQ. Throughout his career he has been named as inventor on over 14 patents granted in the USA, Australia, Japan, Canada and Europe and is the inventor of the Ausonex intellectual property.

Over 20 aspiring young leaders came to hear our guest speaker talk about project management followed by networking over pizza and drinks.

Additionally, this event brought together members from various women in engineering/ICT groups from around QLD including QUT GEMS and Geek Girls Coffee. This outreach continues to build on the WIE QLD goal of bringing the tech women in our community together across all the different groups. In accordance with this, WIE QLD has also started a regular newsletter to promote local QLD events held by us as well as other women's groups including WIT, ACS-W, etc.

For those interested, please subscribe to the WIE-QLD list:

<https://listserv.ieee.org/cgi-bin/wa?SUBED1=BLUE-QLD&A=1> or email sandra.mau@ieee.org



Associate Professor Andrew P. Bradley's seminar on Project Management as part of the WIE Skills Development Series

2011 IEEE International Conference on Women in Science and Engineering

In March, IEEE WIE QLD was represented at the 2011 IEEE International Conference on Women in Science and Engineering which was held in Perth, Australia. This IEEE sponsored conference highlights the important role women play in the ever-expanding fields of science and engineering.

Women from diverse areas, including resources, logistics and supply chain, technology, web 3.0, science, engineering, skills-shortages, women and the law, environment and sustainability, as well as health and leadership, will discuss their fields of expertise and share their experience and achievements to inspire all women to achieve their full potential.

Keynote and plenary speakers included:

- Professor Wendy Hall, President of ACM Group,
- Professor Margaret Sheil, CEO Australian Research Council,
- the Hon. Kate Doust, Shadow Minister for Science, Innovation and Energy,
- Professor Robyn Owens, DVC Research UWA,
- Sue Murphy, CEO Water Corporation,
- Professor Ramalatha Marimuthu, IEEE WISE International Chair,
- Professor Rosemary Lyster, Director Australian Centre for Climate and Environmental Law of Sydney University,
- Dr Josephine Cheng, IBM Vice President,
- Jane Taupin, Operational Forensic Scientist for Federal Police,
- Dr Sally Cockburn of Dr Feelgood Channel 7,
- Professor Jeanette Hackett, Curtin Vice-Chancellor,
- the Hon. Robyn McSweeney, Minister for Women's Interests.

Professor Linda Kristjanson, Deputy Vice-Chancellor Research at Curtin University, said she was proud to have a role in coordinating the event and emphasised the importance of guidance, support and mentorship for all women making their mark in industry, government and community based science and engineering roles.

"Women make an important contribution to these fields and it is essential that we encourage and support each other in our work in order to share our experiences and provide opportunities to learn from one another," Professor Kristjanson said.**

IEEE WIE QLD has established some strong relationships including strengthening the bond with WiT (Women in Technology) QLD and contacts with inspirational women from both locally and abroad. We expect to have more joint events and visiting talks in QLD from some of these women in the near future so stay tuned.

**reference: <http://news.curtin.edu.au/uncategorized/advancing-women-in-science-engineering-and-social-contribution/>

