

IEEE

# Queensland Section

NEWSLETTER

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## Message from the Chair IEEE Queensland Section

**Dr Abbas Bigdeli**

**Email: [abbas.bigdeli@ieee.org](mailto:abbas.bigdeli@ieee.org)**

This is our last edition of the newsletter for 2010. I am pleased to report to you that our Queensland Section continues to be very active. We have several more IEEE events organised between now and the end of the year. I invite you to find more details on those events in this newsletter. I would like to congratulate all Chapter Chairs for their wonderful service to IEEE. You will always find detailed information about the scheduled events in our newsletters and our brand new website ([www.ieee.org/queensland](http://www.ieee.org/queensland)).

Earlier this year, we reached the membership goal of 1000 members. Currently the section stands at close to 1100 members. So we have continued our 10% annual growth that we have had since 2005. This would not have been possible without the hard work of all the volunteers in the Section. Through various technical and social/networking events that were organised during 2010 to-date, our Section demonstrates commitment to provide value to members.

While 2009 was a year of consolidation for the Section as far as technical chapters and affinity groups were concerned, in 2010 we formed a new affinity group: Women in Engineering (WIE). Forming WIE affinity group has been on our wish list for the past several years and this year I was privileged to have the extraordinary support from our Vice Chair, Roelof and our interim WIE Chair, Sandra Mau, who championed the petition to form the new affinity group. So I must congratulate them both for successfully forming our newest affinity group. Thanks to our wonderful volunteers, this group has already been very active and have held several events in the past few months.

Over the last few weeks we completed the election process for 2011. Results will be announced during the AGM. We did not require a vote, as there was only one nomination for each position. I would like to congratulate all nominees for their willingness to serve IEEE. I would also like to thank the members of the various Nomination Committees for their support of the election process.

And finally, it's good bye for me as this year was my second and last year as Chair of the Queensland Section. It has been a great honour for me to serve the membership of Queensland. I enjoyed every day of it however challenging it was at times. I would like to thank for the support of the committee as well as your support over the last two years and I look forward to great things for Queensland Section under the leadership of incoming 2010 Chair. In the New Year, I will continue to serve the Section in my new capacity as the Immediate Past Chair.

I look forward to meeting as many of you as possible at the AGM and our Annual Dinner on November 25th.

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## Message from the Vice-Chair IEEE Queensland Section

**Mr Roelof Swanepoel**

**Email: [roelofs@ieee.org](mailto:roelofs@ieee.org)**

2010 is almost at an end, and with it, my tenure as Queensland Section Vice-chair. It has been a fun, engaging, and at times stressful 2 years, but absolutely worth it. Queensland has a very dynamic group of IEEE volunteers and members, and I have to echo Abbas in saying that very little would be possible without them. To see out the year, we have a number of annual events coming up (so keep on reading). Good luck and all the best to the incoming vice-chair and other committee members!

The Student Thesis Prize is currently in its final stages of evaluating the entries. The winners will be announced by 19 November, and will also attend the Section Annual Dinner. Thank you to all participants!

The Queensland Section AGM and Dinner Lecture will be held on 25 November at UQ Club. Celebrating our 25th anniversary, this year promises to be an excellent event. The State Minister for Public Works, Information and Communication Technology will be attending, and we have an excellent keynote speaker (Alina Dini), who is the EV (Electrical Vehicle) Policy Manager from the Office of Climate Change, Department of Environment and Resource Management. For more information on the event, please see elsewhere in this newsletter, or contact me at the address below. We hope to see you there!

Planning is already under way for section activities for 2011, with initiatives to streamline and improve benefits for our members. Do keep an eye out for event notifications, and do not hesitate to contact us with queries, comments or ideas.

## Notification of the 2010 Annual General Meeting and Dinner Lecture

IEEE Queensland Section's Annual General Meeting and Dinner will be held on the evening of Thursday 25 November 2010. The dinner this year also serves as a formal celebration of the section's 25th anniversary, as well as breaking through 1000 members. The Section Committee cordially invites you to join us for this event.

The dinner and lecture will again be held at the University of Queensland Club, located on Staff House road, University of Queensland, St. Lucia (information available at <http://www.uq.edu.au/uqclub/>).

Following from 2009, we are working to make the format of the function more engaging for our members. Highlights of this year's function will include:

- The VIP guest is the Honourable Robert Swarten MP, Minister for Public Works, Information and Communication Technology
- A ride in the Queensland Government's electrical vehicle up for grabs on the evening
- Networking opportunities with other invited engineering groups

Our guest speaker for the evening is Alina Dini, the EV (Electrical Vehicle) Policy Manager from the Office of Climate Change, Department of Environment and Resource Management.

Alina has broad experience working on EVs in Australia and in the U.S, and has worked for government and industry alike. As Public Policy Manager at Tesla Motors, the Silicon Valley-based electric car company that manufactures the Tesla Roadster, Alina led the company's state-wide policy initiatives toward promoting use of EVs. In her current role, Alina is overseeing the implementation of the Queensland EV roadmap.

As part of the guest lecture, there will be a business card draw, with first and second prizes being a ride in the Queensland Government EV with Alina.

The dress for the evening is business casual. The AGM starts at 17.30 (AGM venue will be advised). Pre-dinner drinks start at 18.30, and dinner formalities at 19.00.

Pricing is as follows (includes drinks and a three course meal):

- IEEE members and members of participating engineering groups: \$40
- Partners of members: \$70
- Non-members: \$90

Payment can be made by cheque, payable to IEEE Queensland Section and mailed to:

C/O Jasmine Banks Treasurer IEEE Qld Section  
School of Engineering Systems  
Queensland University of Technology  
GPO Box 2434  
Brisbane Qld 4001

or direct deposit, to the following account:

Account name: IEEE Qld Section A/C  
Account number: 08300761  
BSB number: 803140

Please contact Roelof Swanepoel ([roelofs@ieee.org](mailto:roelofs@ieee.org)) or Mandar Gujrathi ([gmandu@itee.uq.edu.au](mailto:gmandu@itee.uq.edu.au)) from IEEE Queensland for any queries.

For catering purposes, we kindly request an RSVP by 19 November 2010, and remember to indicate any dietary or other requirements.

## Invitation to all Graduating and Graduate Student Members

The Queensland Section GOLD Affinity Group is hosting a function for Graduating and Graduate IEEE student members on 24 November 2010, 17.30 for 18.00.

If you fall into either of these groups, we cordially invite you to join us for a free evening of networking and light refreshments at the UQ Club, located on Staff House road, University of Queensland, St. Lucia (information available at <http://www.uq.edu.au/uqclub/>).

The GOLD Student Transition and Elevation Partnership (STEP) Event is aimed at bridging the gap between student members and full IEEE members, by highlighting what the IEEE has on offer for recent graduates.

The guest speaker for the evening is Professor Brian Lovell from the School of Information Technology and Electrical Engineering, University of Queensland. In addition to his teaching duties, he is also a project leader at NICTA, and President of the International Association for Pattern Recognition.

There will also be a live address by the current IEEE GOLD committee chair, William Sommerville (from Detroit, Michigan).

Other highlights of the evening will include quizzes, give-aways and networking opportunities with other IEEE members.

**Cost:** FREE

**When:** 24 November, 17.30 for 18.00

**Where:** UQ Club, Staff House road, University of Queensland, St. Lucia

**Dress:** Business casual

Please RSVP by 17 November 2010 with Roelof Swanepoel ([roelofs@ieee.org](mailto:roelofs@ieee.org)) or Rob Ellen ([rellen@ieee.org](mailto:rellen@ieee.org)) for catering purposes.

## Educational Activities Update

Jan McSweeney  
Chair, Educational Activities

Email: [mcs.jan@gmail.com](mailto:mcs.jan@gmail.com)

### Membership Drive at CQ University (CQU) Gold Coast campus, Southport.

Approximately 40 students and staff from CQU's IT faculty attended an IEEE membership drive on Wednesday 29 September. The lunchtime event held in the CQU auditorium was creatively promoted by Ms Kerri Viragh, Associate Director of Student Services. Posters declared 'Come and meet Jan of the IEEE at a pizza lunchtime event'. Despite it being an exam period, many students took up the invitation.

Students and staff were taken on a walk-through of key areas of relevance within the IEEE web site including 'Benefits of IEEE Membership', 'Join the IEEE Computer Society' and the 'IEEE JobSite'. The audience also benefited from an address by Dr Brian Hinton of CQU's IT faculty and IEEE member. Dr Hinton advocated membership of IEEE's global community and referred to networking, education and job opportunities and the prestige of being associated with the world's largest professional organisation.

Mr Hans Telford, CQU IT faculty and professional photographer, remarked it was good to see so many MIS and MIT students in attendance; and it was great to see that the IEEE was more than just the standards they are involved with. The lunchtime event was very hands-on and animated. Kerri Viragh manned the pizza table with the assistance of Ben Arnot of the English Language Centre and students had so many questions it was a wonder they had time to eat pizza but they managed to. The Pizza Capers pizza was enjoyed by all. A Student Chapter is now a conversation which with some encouragement may be realised. Kerri Viragh advised that the university was pleased their IT students, similar to their Business students who enjoyed CPA functions, were being addressed by the IEEE. Ms Viragh also advised that the CQU auditorium would be freely available for any IEEE industry event.



Jan McSweeney, centre, with Kerrie Viragh, left, and Dr Brian Hinton, right, both of CQU Gold Coast



Mr Hans Telford of CQU, left, with Jan McSweeney



Attendees of the CQU Gold Coast Campus membership drive

## UQ Student Branch Update

Prof. Vaughan Clarkson  
UQ Student Branch Counsellor

Email: [v.clarkson@uq.edu.au](mailto:v.clarkson@uq.edu.au)

### Highlights

The UQ student branch has had an active and successful year in 2010. The highlights are:

- Two pizza lunches for recruitment.
- Formation of the Power & Energy Society Student Chapter.
- Three technical seminars.
- Cooperation with the School of Information Technology & Electrical Engineering (ITEE) On Campus Alumni (OCA) group

### Power & Energy Society Student Chapter

A petition was organised by Alexandra Price for formation of a PES Student Chapter. The petition was successful and Alex was appointed as Interim Chair.

### Leadership

The student branch executive for 2010 was:

- Chair: Nicola Holmes
- Treasurer: Robert Chang

With the successful petition of the PES Student Chapter, Alex Price also joined the executive as PES Student Chapter Interim Chair.

The student branch counsellor is Vaughan Clarkson. Tapan Saha has served as adviser for the PES Student Chapter.

A call for nominations for 2011 officers was made in July. As a result, Nicola, Robert and Alex will retain their current offices in 2011, to be joined by Joanna Oon as Vice Chair.

### Activities

Two pizza lunches were held this year. The first was held on 1st April. At this event, Prof. Tapan Saha gave a brief talk on the benefits of IEEE membership. The lunch was very well attended and 64 new student members were recruited. A second pizza lunch was held on 6th August. The speaker on this occasion was Vaughan Clarkson who, like Tapan, gave a brief talk on the benefits of membership. A further 9 students were recruited.

The PES Student Chapter has also organised three seminars. The first of these was held on 16th September and given by Mr. Tim George, Executive General Manager, Planning of the Australian Energy Market Operator (AEMO). The second seminar was held on 14th October and given by Mr. Simon Bartlett, Chief Operating Officer of Powerlink. A third talk is scheduled for 28th October, to be presented by A/Prof. Keith Kikkert.

Finally, a number of meetings of the executive have been held throughout the year. In particular, two combined committee meetings have been held with the School of ITEE's On Campus Alumni group. Further collaboration between the two groups is planned.

### Membership

The membership of the student branch now stands at 110.

## GOLD Affinity Group Update

Mr Roelof Swanepoel  
Chair, GOLD Affinity Group

Email: [roelofs@ieee.org](mailto:roelofs@ieee.org)

### Upcoming GOLD Events

We're heading into the home stretch of 2010, and IEEE Queensland GOLD still has some activities up its sleeve.

On 24 November, we will be hosting a function for Graduating and Graduate Student Members at UQ Club, Staff House Rd, University of Queensland. The GOLD Student Transition and Elevation Partnership (STEP) Event is aimed at bridging the gap between student members and full IEEE members, by highlighting what the IEEE has on offer for recent graduates. Specifically, GOLD is tasked with increasing membership value for recent graduates, and we will be providing more information on this.

GOLD is honoured to have Professor Brian Lovell as guest speaker for the event. There will also be a live address by the current MGA GOLD Committee chair, William Sommerville, from Detroit, Michigan. The evening will feature presentations, give-aways and light refreshments, as well as opportunities for networking. Attendance is free of charge, so we invite all student and graduate student members to make use of this opportunity to learn more about IEEE and GOLD. For times and contact details, please see elsewhere in this publication, or contact me on the details below. If you are a current GOLD member and you are interested in helping out at this event, please feel free to contact us as well.

We will be co-hosting an event with Queensland Section Professional Development on 12 November 2010, from 12.00 - 13.30, Room 78-420 GPS Building, University of Queensland. The topic of the talk is Ambient Intelligence: From Sensor Networks to Smart Environments and Social Networks. Professor Hamid Aghajan from the Ambient Intelligence Research Labs at Stanford University will be doing the presentation. Catering is provided, and more information is available elsewhere in this newsletter.

### Outlook for 2011

GOLD members will soon receive e-mail communication requesting feedback on events and ideas for future events for our affinity group. Ultimately, this will help us to serve our members better, and make 2011 a GOLDen year. Please do have a look at the mail, and let us know your thoughts - we will definitely appreciate it!

The GOLD committee hopes to see some of our members at the Section AGM and Dinner Lecture on 25 November at the UQ Club. It promises to be a good evening, with attendance by the State Minister for Public Works, Information and Communication Technology. The keynote speaker is Alina Dini, the EV (Electrical Vehicle) Policy Manager from the Office of Climate Change, Department of Environment and Resource Management, making for a very topical presentation.

## Aerospace and Electronic Systems Chapter Update

**Prof Peter Lindsay**

**Chair, Aerospace and Electronic Systems Chapter**

**Dr Garry Einicke**

**Vice-Chair, Aerospace and Electronic Systems Chapter**

**Dr John Davies**

**Secretary, Aerospace and Electronic Systems Chapter**

**Email: [p.lindsay@uq.edu.au](mailto:p.lindsay@uq.edu.au)**

### Recent AESS Mission Planning Event

On Monday the 25th of October the Aerospace and Electronic Systems Society hosted a brief by Mr Phil Griggs on military aircraft mission planning systems. Phil was an experienced navigator on both F-111 and P-3C aircraft as well as being a graduate from the RAF Cranwell Airwarfare Centre's Aerospace Technology Masters program.

Phil presented on many of the complex systems issues associated with military mission planning systems and the importance of providing the warfighter with reliable and effective support systems. The audience comprised many participants from the aerospace industry as well as academia.

Animated discussions were initiated on the importance of high reliability software and the certification of not just mission planning software but also mission rehearsal systems and weapon planning systems. Discussions also encompassed the use of future-proofing capabilities based on Phil's presentation of the mission planning roadmap and the incorporation of mission planning systems for in-flight operations.



*Mr Phil Griggs demonstrates the Mission Planning software used by the RAAF*

### 2010 Summary

Thanks go to the outgoing 2009 Chair and Queensland AES Section founder, Rob Ellen, for providing our initial momentum. We have had a successful year hosting numerous aerospace systems seminars at QUT, ARCAA, CSIRO and UQ.

Our seminars so far for 2010 were:

- Gianluca Falco, from the Electronics Dept. at Politecnico di Torino, Italy, who presented a talk on "Advanced techniques for GPS/INS integration" at QUT on 1 March 2010.
- H. Jin Kim and Youdan Kim, presented "UAV research activities at Seoul National University", and Min-Jea Tahk gave a seminar entitled "UAV research activities at Korea Advanced Institute of Science and Technology (KAIST)" at Australian Research Centre for Aerospace Automation (ARCAA), Brisbane Airport on 22 April 2010.
- Franco Tecchia, from Scuola Superiore Sant'Anna, Pisa, Italy, who spoke on "Virtual and Augmented Reality Research" at CSIRO on 7 July 2010.
- Mike Borgelt, from Borgelt Instruments, spoke on "History and engineering development of sailplane instruments" and GPCAPT Ross Thomasson, Directorate of Strategic Planning, RAAF, provided a seminar entitled "How technology advancements impact on operational decision making in the military" at UQ on 21st October 2010.
- Phillip Griggs presented a seminar on "Military Mission Planning Systems - Assisting the Warfighter" at UQ on 25th October 2010.
- Ms Kelly Roscoe of Applied Strapdown Analytics, will be presenting "An overview of strapdown inertial navigation analytics" at CSIRO on 5 November 2010.



## Computational Intelligence Society Chapter Update

Dr Marcus Gallagher

Chair, Computational Intelligence Chapter

Email: [marcusg@itee.uq.edu.au](mailto:marcusg@itee.uq.edu.au)

The IEEE Queensland section CIS chapter held a technical meeting on the 26th August, 2010. The speaker was Dr Wei Luo, a post-doctoral researcher from the Complex and Intelligent Systems Research Group, School of ITEE, University of Queensland. The title of the presentation was "Fast and Parameter-Free Search of Time-Series Discords".

The CIS chapter expects to have 1 or 2 more technical events in 2010, to be advertised via email.

### Upcoming Event - WCCI 2012

In 2012 Brisbane will host the IEEE World Congress on Computational Intelligence, the largest technical event in the field of computational intelligence. Several local CIS chapter members are involved in the organisation of this event. More information is available from the congress website:

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

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## Computer Society Chapter Update

Dr Philip Machanick

Chair, Computer Chapter

Email: [philip.machanick@gmail.com](mailto:philip.machanick@gmail.com)

The Queensland IEEE Computer Society chapter had a reasonably active year, with 3 technical meetings, a committee meeting and a meeting with IEEE chair of the Geographic Unit Operations Committee (GUOC) and IEEE Computer Society member, Pieter Botman, who was in Brisbane in September, to attend a meeting. Pieter Botman introduced committee members to IEEE Computer Society President, Jim Isaak, who was in Brisbane for the same event..

Our three technical meetings were:

- Leading edge design solutions used to create the first arc fault contained solid dielectric 38kV pole mounted switchgear, presented by David Dart, NOJA Power at the University of Queensland, 27 July 2010
- Embedded Linux on Programmable FPGAs for Fun and Profit, presented by Dr John Williams, Petalogix at the Engineers Australia Hawken Auditorium in the city, 09 September 2010
- Global Software Engineering Research in a Small Country, presented by Prof Kevin Ryan from the University of Limerick, Ireland, at state government offices in the city on 7 October 2010



*From left: IEEE-CS Queensland Chapter Secretary Mike Robinsom, Computer Society President Jim Isaak and IEEE-CS Queensland Chapter Vice-Chair Jainming Yong meet in Brisbane*

We gradually built up the audience over the year, with 17 people attending Prof Ryan's presentation. We have attempted to build linkages with NICTA, Software Queensland, Engineers Australia and the Australian Computer Society. Building these linkages will take time, and will remain an ongoing project.

Our strategy for next year is to build on the start we have this year, to offer more value to members both by a wider range of technical activities and by creating more networking opportunities involving other organisations.

## Engineering in Medicine and Biology Society Chapter Update

Dr Mohan Karunanithi  
Chair, EMBS Chapter

Email: [Mohan.Karunanithi@CSIRO.AU](mailto:Mohan.Karunanithi@CSIRO.AU)

### Career Opportunities in Biomedical Engineering Event

The IEEE QLD Engineering Medicine Biology Chapter had its 3rd and final event for 2010, which targeted the final graduate Biomedical Engineering students in Queensland. The event was "Career Opportunities in Biomedical Engineering" and was sponsored by the IEEE QLD Section and Australian eHealth Research Centre (AeHRC), CSIRO.

The objective of the event was to set direction, and bring awareness to students seeking biomedical engineering jobs in Australia and Queensland. This was mainly due to the lack of promotion in Biomedical engineering jobs despite it being a rapidly growing industry. A number of speakers gave presentations around the topic of careers in Biomed Engineering:

- Dr. Amol Wagholiker, outlined some approaches career approaches in Biomedical Engineering eg. Industry, research, etc.
- Mr. Nicolas Grandjean-Thomsen, a Graduate Biomedical Engineer at ResMed Pty. Ltd related the graduate biomedical engineering program introduced recently by ResMed
- Dr. Phil Gurney, CEO of AeHRC, outlined the various ICT health related projects and the different CSIRO recruitment programs (PhD and Vacation students, student scholarships, post-doctoral fellowships, and research scientist positions) that are available throughout the year.
- Prof Stephen Wilson, from UQ, presented on the different higher degree and the various research opportunities in biomedical engineering available in universities
- Mr. Rick Lawrence outlined his experience as a new graduate in biomedical engineering at the Mater hospital, Brisbane
- Ms Elsa Garcia, highlighted her experience through the CSIRO vacation student program and the opportunities beyond.

The presentations were followed by a tour of project demonstrations through the AeHRC. The entire event was one of the most successful events for the EMBS chapter, bringing up to 40 people in the audience, and was well received with some good questions throughout the presentations. In general, comments from students indicated that there was some clarity in direction and opportunities they could pursue following this event.



## Microwave Theory & Techniques / Antennas & Propagation Chapter Update

Dr. Karla Ziri-Castro  
Chair, Microwave Theory & Techniques / Antennas & Propagation Chapter

Email: [karla.ziricastro@qut.edu.au](mailto:karla.ziricastro@qut.edu.au)

### Seminars and Distinguished Lecture Series

The MTT/A&P chapter is organising technical seminars and distinguished lectures for the coming months. The date and time for the next seminars in the series will be announced by e-notices.

On the first of September this year we held a distinguished lecture with Dr. Richard Taylor titled *Microwave products using High Temperature Superconductors and new ceramics*

Dr. Richard Taylor is Founder and a former Director and Chief Technical Officer of Microwave and Materials Designs Pty Ltd, now Mesaplexx Pty Ltd. The company was formed in 2002 to exploit the unique properties of High Temperature Superconductors (HTS) and other metamaterials to develop microwave products for mobile wireless systems. Since HTS operates at temperatures below 90K, products incorporating HTS must include a cryogenic cooling system.

Dr. Richard Taylor has been involved in the design of communications products since the mid 1980s and in superconductor technology for the past 10 years. He brings a wealth of theoretical and practical experience, plus a broad technological understanding of the process of R&D and commercialisation.



Dr Richard Taylor

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*...MTT/A&P Update Continued*

During the discussion Dr. Taylor shared experiences on the growth of a multi-disciplinary team in the company and the background to the development of its unique microwave filters for mobile wireless telecommunications. He presented his views of in-house RF Design and mathematical modelling combined with experience in Material Sciences that allowed him to introduce a range of innovative RF systems.

It was a very interesting session with participation of around 50 attendees, including several attendees from industry.

Please stay tuned to your email for information on future events.

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## Power and Energy Society Chapter Update

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

Email: [m.eghbal@uq.edu.au](mailto:m.eghbal@uq.edu.au)

### Announcement of the PES Outstanding Engineering Award 2010

The IEEE PES Queensland Chapter is very pleased to announce the inaugural **Outstanding Engineer Award** which is aimed to recognize outstanding technical, professional and society contribution within the power and energy profession. This award will be given each year starting from 2010. An IEEE Power & Energy Society of Queensland Outstanding Engineer Award plaque will be presented to the recipient by the chair of the IEEE PES chapter.

Call for nomination starts 1st of November and will be publicised through IEEE website, newsletter, e-notices and direct email to industry contacts. Nominations for the 2010 Outstanding Engineer Award will be accepted from IEEE Queensland Section engineers who contributed to the power engineering profession. Nomination form must be submitted electronically to the PES Chapter Chair (Email: [saha@itee.uq.edu.au](mailto:saha@itee.uq.edu.au)) not later than 12 December 2010. A form can be downloaded from link below:

<http://tinyurl.com/pesqldaward2010>

#### Eligibility Criteria:

- Outstanding technical contributions to the power engineering profession.
- Outstanding professional and leadership contributions to the power engineering profession
- Significant contributions to the local community representing the power engineering profession.
- Outstanding contributions in the area of power engineering education.
- Service to the Power Engineering Society and/or IEEE.
- PES and/or IEEE membership.

#### Selection Process

The award winner will be selected by the award committee, which is headed by the Chair of the PES Chapter and comprising:

- (a) Chair of the IEEE Queensland Section PES Chapter
- (b) Vice Chair of the IEEE Queensland Section PES Chapter
- (c) Secretary of the IEEE Queensland Section PES Chapter

In case of any vacancy in these positions, IEEE QLD Section Chair will nominate a replacement.

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## Previous PES Events

The IEEE Queensland PES Chapter has successfully organised three technical events jointly with the UQ PES chapter Student Branch since the last newsletter.

Technical Seminar 1: **Challenges of transmission planning in the Australian National Electricity Market** 16 September 2010  
 Speaker: Mr. Tim George, Executive General Manager, Planning - Australian Energy Market Operator (AEMO)  
 48 IEEE members and 43 guests attended the meeting.

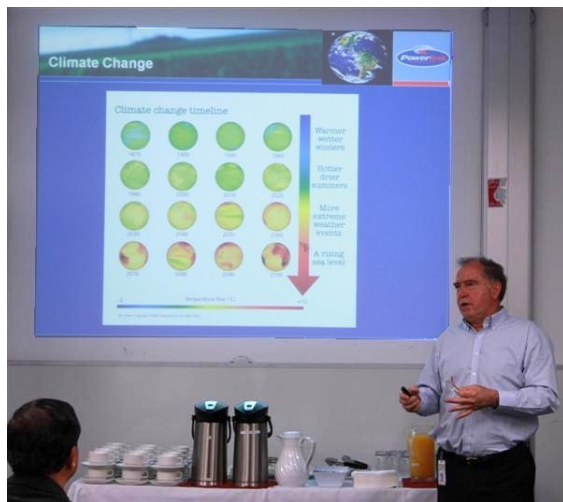


Mr Tim George presenting Challenges of transmission planning in the Australian National Electricity Market



Attendees of the Challenges of transmission planning in the Australian National Electricity Market seminar

Technical Seminar 2: **Climate Change and The Power Industry: A Queensland Perspective** 14 October 2010  
 Speaker: Mr. Simon Bartlett, Chief Operating Officer - Powerlink Queensland  
 32 IEEE members and 21 guests attended the meeting.



Mr Simon Bartlett presenting Climate Change and the Power Industry



Ms Alex Price, UQ PES Student Chapter Chair, right, thanks Simon Bartlett

Continues on next page...

...PES Update Continued



Attendees of the Climate Change and the Power Industry seminar

Technical Seminar 3: **Computer Simulation of Analogue Electronics and Communication Systems**, 28 October 2010  
Speaker: Dr. Keith Kikkert, Adjunct Associated Professor James Cook University  
20 IEEE members and guests attended the meeting.



Dr. Keith Kikkert presents *Computer Simulation of Analogue Electronics and Communication Systems*

## Signal Processing / Communications Joint Chapter Update

Dr Dhammika Jayalath

Chair, Signal Processing / Communications Chapter

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We have had a quite year in 2010. However we had two very successful events thus far and expected host a distinguished lecturer visit before the end of the year. One of the distinguished lecturer visit organised by our chapter has been postponed to next year due to the unavailability of the speaker during 2010.

Two functions are as follows.

Date: 12-May-2010

Location: Queensland University of Technology, Brisbane, Queensland

Title: **Allegro Networks: An Australian WiMax experience**

Invited talk by Mr David Waldie, Managing Director of Allegro Networks.

This was presented jointly by The Signal Processing and Communications Chapter and Microwave Theory and Techniques/Antennas and Propagation Chapter of IEEE Queensland Section together with Queensland University of Technology. This was attended by 21 guest including 12 IEEE members.

In this talk David presented how they've managed to implement Queensland only Wimax network, challenges faced in the process and opportunities presented. WiMAX is the technology of the future when it comes to lightening fast wireless access to broadband services is concerned. Allegro is Australia's first WiMAX network operator. Allegro has an exclusive license to use WiMAX spectrum covering 16% of the Australian population. To make best use of this they have designed and built a world class WiMAX based network infrastructure to match.

Date: 21-September-2010

Location: Queensland University of Technology, Brisbane, Queensland

Title: **Robotics, Control, Image Processing and Machine Vision with Engineering Applications.**

Technical Talk by Visiting Prof. Shiyin Qin, from School of Automation Science and Electrical Engineering, Beijing University of Aeronautics and Astronautic Beijing, China. This was attended by 29 guest including 11 IEEE members.

In this talk, Prof. Qin gave a brief introduction into the research activities at the Lab of Pattern Recognition and Intelligent Systems (LPRIS), Beijing University of Aeronautics and Astronautics ([www.buaa.edu.cn](http://www.buaa.edu.cn)), Beijing, China. The topics covered include robotics, formation flight control, image processing, and machine vision.