

Newsletter

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From the Editor

Welcome to the third and final IEEE Queensland Section Newsletter for 2005. The aim of this newsletter is to provide a means of keeping IEEE Members in Queensland abreast of any events in the IEEE. I hope you find them useful and informative.

If you have any comments on the content of the newsletter or suggestions for improvements, please feel free to e-mail me at: <u>j.birt@griffith.edu.au</u>.

James Birt Newsletter Editor IEEE Queensland Section

IEEE AGM-2005

Date: 21 November Monday

Time: 6 pm

Venue: Owen J Wordsworth Room, Level 12 of S-block, Queensland University of Technology (QUT), Gardens Point Campus, Brisbane City.

Dinner venue after the AGM (at your own expense): 7-30 pm, Amici's at South Bank

If you are attending the dinner please RSVP by email to Tapan Saha (<u>saha@itee.uq.edu.au</u>) or to Andrew Thomas (<u>andrew@itee.uq.edu.au</u>) by 17 November.

From the Chair - Queensland Section

Dear IEEE members

On behalf of the 2005 Queensland Section Committee I would like to welcome you to the IEEE activities for the remainder of 2005. We are having our annual general meeting (AGM) on 21 November at QUT Gardens Point Campus. A dinner (at your own expense) will follow the AGM. This will be a great opportunity for us to hear directly from you and your participation in this event will be highly appreciated. There are some vacancies in our Section committee. If you are interested to serve the IEEE Queensland Section as a volunteer, please let us know.



As you know IEEE activities are oriented with Chapters of Technical Societies and local Chapters organise technical seminars, workshops and conferences. Please keep yourself updated with your Chapter activities and your participation will help make IEEE more active. You will always find detailed information about the scheduled events in our newsletters and website (<u>http://www.ewh.ieee.org/r10/queensland/</u>).

Once again, your participation in your local chapter can make a big difference, please contact your Chapter Chair for further information. I would particularly like to encourage more volunteers from Queensland industry to take an active role within the section by organising an activity in your Chapter or by taking on a committee position.

Recently I attended the IEEE Section Congress 2005 at Tampa Florida with 306 other Section Chairs. First I am going to share some key statistics with you. Currently IEEE has over 365,000 members in over 150 countries and almost 40 percent of whom are from outside the United States. There are over 68,000 Student Members, 307 Sections, 1446 Technical Chapters, more than 1,300 Student Branches in 80 countries, over 300 Student Branch Chapters, more than 147 Affinity Groups and 39 Societies & 3 Technical Councils. IEEE organises over 300 conferences per year, in which on average 110,000 people participates. IEEE publications cover 30% of the world's information with over 1.3 million subscriptions and over 100 periodicals and 200 conference proceedings per year. IEEE also publishes 50 new IEEE books per year and IEEE standards have more than 890 currently active standards, published under the IEEE Standards Board. IEEE Standards Association has more than 8,350 individual and almost 60 corporate members. We all should be proud of this great organisation. This world congress gave me an opportunity to learn a lot from many other experienced IEEE Volunteers and IEEE Headquarters staff. Their dedication and commitments to IEEE and the IEEE Community was a great encouragement for me to continue my role with the IEEE for the coming years. Finally, I would like to reiterate that the IEEE Queensland Section is committed to promote the IEEE mission:-"The IEEE promotes the engineering process of creating, developing, integrating, sharing, & applying knowledge about electro-and information-technologies & sciences for the benefit of humanity & the profession".

Since this is our last newsletter of the year, on behalf of the IEEE Queensland Section Committee I would like to wish all IEEE members and their families a great festive season and Merry Christmas.

Professor Tapan Saha Chair IEEE Queensland Section

IEEE News

For a report on news around the IEEE, you can check out *The Institute*. The most current version can be found at <u>http://www.ieee.org/theinstitute</u>

From the Treasurer - Queensland Section

We would like to encourage IEEE QLD Section members, especially those that have been IEEE members for 10 years or more, to consider applying for IEEE Senior Membership. Each year each IEEE Section receives a rebate from IEEE HQ to run its local activities, and the rebate a section receives depends on its membership population and population make-up. A senior member grade attracts a higher rebate to the section's coffers than a member grade. Our QLD section can sponsor more professional activities or/and create more students' prizes and awards if it receives a higher revenue. So please be encouraged to apply. Further information on IEEE Senior Membership can be found at www.ieee.org. Those potential applicants that anticipate



any problem of finding the referees required in the application can consult the current Section Chair Professor Tapan Saha at <u>saha@itee.uq.edu.au</u> for an assistance.

Dr A. Gyasi-Agyei, Treasure IEEE Queensland Section

From the Chair of the Joint Microwave Theory and Techniques and Antennas and Propagation Chapter

I have now completed two years as chair of the MTT/AP chapter, and in accordance with the Queensland Section by-laws I am to now call for nominations for a new chapter chair and step aside. It has been an interesting two years learning how the IEEE organisation operates on a local level as well as internationally. The role of Chapter Chair is important as this person organises local technical events, however it really only takes a few hours per month to run and this is mainly attendance at the monthly Queensland Section meeting. Please consider nominating yourself for this position, I will still be around to help and there are already a few event ideas in the pipeline for next year.

The first call for nominations is below and we will have an election at the final event for the year at Micreo on Monday 5 December. It is interesting to note that the first event for the Queensland Chapter of MTT/AP was held at Micreo on 24 July 2002, and this started my involvement locally with the IEEE.

Call for Nominations for MTT/AP Chapter Chair

Nominations are sought for the Chapter Chair of the MTT/AP Chapter. Please e-mail any nominations to <u>ieee@micreo.com</u> by Friday 25 November.

Seminar & Site Visit Announcement

Broadband Microwave Photonic Links

Presented by Ashley Robinson and Micreo Limited

6:30pm Monday 5 December 7 Hi-Tech Court Eight Mile Plains 4113

Abstract

Broadband microwave photonic links find application in communications, radar, electronic defense, and radio astronomy with instantaneous bandwidth of 30kHz to 40GHz. The combination of wide bandwidth, mix of technologies and operating environment poses an engineering challenge. This seminar will present some of the component and system developments undertaken by Micreo over the last few years including

- broadband optical modulators for commercial and airborne defense applications
- integration of MMIC amplifiers with optical components
- development of the pigtailing setup for MZMs and photodetectors
- high performance optical fibre links

The seminar will be followed by a viewing of the Micreo pigtailing setup. Elections for the Chapter Chair for the Queensland Chapter of MTT/AP will also take place during this event.

RSVP

For catering purposes please send RSVP to ieee@micreo.com by Wednesday 30 November. Further details on the MTT/AP Chapter Chair election will also be sent following receipt of nominations.

Ashley Robinson Chair of MTT/AP Queensland Section

From the Secretary – Queensland Section

Dear IEEE members,

My name is Andrew Thomas and I have recently volunteered for the role of secretary in the Queensland section of IEEE. I graduated from the Queensland University of Technology in late 2002 with a Bachelor of Electrical and Computer Engineering and I am now undertaking my PhD at the University of Queensland. Between these two activities, I spent one year in industry at the Connell Wagner power systems group. The reason I chose to volunteer for an active position in the IEEE is quite simple, I wanted to be involved in a large, wide reaching and influential organisation and to learn about the working and operations of such a complex system.



When I decided to volunteer, I also found out about an affinity group within IEEE labelled Graduates of the Last Decade, or in short, GOLD. If you are an IEEE member and have graduated within the last decade, you are automatically a part of this affinity group. The purpose of the GOLD affinity group is to allow connections to be made between young engineers, who are in the early years of their engineering career. In this way, social and professional relationships can be formed, experiences shared and lessons learned, which will make that transition from a graduate engineer to a 'professional' engineer all the easier.

While other states in Australia have already formed GOLD affinity groups, no such active group exists in Queensland. I, for one, am keen to rectify this, so that young and emerging electrical, electronic and computer system engineers in Queensland have an opportunity to interact, socialise and be involved in general developmental activities. If you are interested in developing such a group within Queensland, please don't hesitate to e-mail me at <u>andrew@itee.uq.edu.au</u>, and let's see if we can get the ball rolling.

Andrew Thomas Secretary IEEE Queensland Section

Visit the section website

http://www.ieee.org/queensland

From the Chair of the Computational Intelligence Chapter

Dear Section Members,

In its first year of existence the Queensland Chapter of the IEEE Computational Intelligence Society conducted a series of meetings under the heading "What is Happening in Computational Intelligence in Queensland" aimed at acquainting Chapter members with each other's work. The last meeting in this series will be on Thursday 1 December 2005. Again it will be an Access Grid teleconference meeting. The speakers will be Dr. Michael Blumenstein, Griffith University Gold Coast and I.

The meeting will start at 17:00, all IEEE members are welcome (as well as non-members). AccessGrid locations are as follows:

QUT Seminar room V713 Library building, Gardens Point Campus Griffith University Gold Coast: G10_3.29 - Library Meeting Room UQ Room 621, General Purpose South Building (Building #78) CQU Rockhampton Campus, Building 19, Room G.14

Please note that the Access Grid room at Griffith University Nathan (N06_2.05 - Access Grid Room) will no be booked unless at least 3 persons wish to attend at the Nathan Campus. I you wish to attend at Nathan please send me an email before 28 November.

Please visit the Chapter's web page on the Queensland Section site for up to date information of upcoming and past events.

The new CI chapter activities received great support from its members and I wish to send a big "thank you" to all who participated

A/Prof. Joaquin Sitte Chair Computational Intelligence Chapter

Event Notification

Are you organising an event that is relevant to the IEEE Queensland Section? If so, e-mail the editor (*i.birt@griffith.edu.au*) and let us know! We might be able to advertise it in the newsletter for extra exposure.

From the Chair of the Power Engineering Society Chapter

The Power Engineering Society Chapter has successfully organised two seminars at the University of Queensland for 2005. The seminars were presented by leading researchers in power engineering for power system stability, control and computational methods. These seminars were well attended by academics and industrial professionals. The topics of the seminars are:

Robust Power System Transient Stability Enhancement: - A Global Control Approach Professor Y. Wang

Enhanced Evolutionary Programming For Optimal Reactive Power Flow Problem Professor Kit Po Wong

The power engineering society chapter is looking forward to organising another one or two IEEE power engineering society seminars in Dec 2005 by visiting researchers from overseas being top experts in power engineering.

The power engineering society chapter is also planning for an IEEE Distinguished Lecturer – Dr P Kundur's visit during 9-12 February 2006. Dr Kundur is a fellow of IEEE and a leading researcher in power system stability and control areas. Dr Kundur is the director of Powertech Labs, a global provider of power system stability analysis tools.

Dr Zhao Yang Dong Chair of Power Engineering Society Chapter Queensland Section



Queensland Section – Office Bearers 2005

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