



IEEE Newsletter

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IEEE Queensland Section

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From the Editor

Welcome to the Quarter 4 newsletter for 2002. Apart from the special election edition of the newsletter, this is the last newsletter for the year and is your source for information on what is happening in the IEEE over the summer!

This newsletter is a special newsletter because it contains a call for nominations for our upcoming election. Now is the time to nominate if you wish to become an IEEE office bearer in 2003. For more details, please see page 7.

As always, I welcome your comments on this newsletter. Please feel free to e-mail me at: M.Cowling@ieee.org.

Michael Cowling
Newsletter Editor, IEEE Queensland Section

IEEE QUEENSLAND SECTION E-MAIL LIST

Future IEEE Queensland Section Events will be broadcast via e-mail. Notification of the publication of this newsletter will also be done over e-mail.

All IEEE Members who have notified the IEEE of their e-mail address will be automatically added to the e-mail list. Other members may subscribe by sending e-mail to majordomo@ieee.org with the body of their message containing **subscribe qld-section**.

You may unsubscribe by sending an e-mail to majordomo@ieee.org with the body of the message containing **unsubscribe qld-section your_email_address**

Chair's Report

Welcome to the last newsletter for the year. This year has seen several well supported technical events hosted by chapters within our section. Also a new chapter, the Microwave Theory and Techniques/Antennas and Propagation chapter has been created this year and its three technical activities held so far have also been well supported. Congratulations go to all chapter chairs on what has been a successful year so far.

Next month Simon Ellis will be representing us at the IEEE sections congress to be held in Washington DC. This is an important event where all section representatives gather to discuss issues facing various sections. One of these issues is the encouragement of more secondary students to undertake electrical engineering as a career. The Queensland section is looking at several options in this area, one of them being to include links on our website to secondary and tertiary educational sites.

With the end of the year approaching the time has come to elect office bearers for 2003. A call for nominations for the positions of Chair, Vice-Chair, Secretary, and Treasurer is going out and I would encourage people to apply for these positions. These positions will be decided at the AGM.

Ed. Palmer
Chair, IEEE Queensland Section.

IEEE Queensland Section Website

<http://www.ieee.org/queensland/>

IEEE Queensland Section Student Paper Prize.

Two prizes are being offered this year to IEEE QLD section student members. These are:

Best Student Thesis Prize

The prize consists of \$500 and a certificate and any student in his/her final year who is also an IEEE member is eligible.

Best Final Year Project Presentation

This is for the best final year project presentation by a student at each of the five universities within the Queensland section. It will be judged by three IEEE members, one of which is external to your university. The prize consists of \$250 and a certificate.

Further details of the prizes may be found at <http://www.ieee.org/queensland/prizes.html>

New Neural Networks Chapter

The Neural Networks Council has now been elevated to Society status. Therefore, IEEE Neural Network Chapters can now be formed. An application is currently being prepared for the establishment of the Queensland Neural Network Chapter. Supporters are being sought to sign the application. The supporters for the formation of the chapter should contact A/Prof Joaquin Sitte j.sitte@qut.edu.au before the 15 Oct 2002.

Event Notification

Are you organising an event that is relevant to the IEEE Queensland Section? If so, e-mail the editor (M.Cowling@ieee.org) and let us know! We might be able to advertise it in the newsletter for extra exposure. Appropriate events could include (but are not limited to):

- Conference Announcements
- Call for Papers
- Chapter Announcements
- Professional Seminars
- Anything else related to the IEEE!

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

The MTT/AP Chapter is a new chapter in the Queensland Section and its formation was approved by the IEEE Headquarters on the 16th of April 2002. The chapter has had a very good start in terms of its activities, which have been very well supported by local industry and universities. The recent chapter activities concerned technical seminars as well as visits to manufacturing and testing facilities of local microwave companies, which generously hosted these events. The details of the meetings are as follows:

April 18, 2002, "Smart Antennas in Future Mobile Communications", Prof. Tapan Sarkar (AP-S Distinguished Lecturer), Department of Electrical and Computer Engineering, Syracuse University, NY, USA (given at the University of Queensland).

July 22, 2002, "RF Filter Design Techniques", A/Prof. Keith Kikkert, James Cook University of North Queensland, Townsville, QLD, Australia (given at the University of Queensland)

July 24, 2002, "Introduction to the Products and Technology of Micro Limited", Mr. Tim Shaw, Managing Director of Micro Ltd, Murrarie, Qld, Australia (given at Micro Ltd). The presentation was followed by a visit of the Micro clean room. Also on the same evening an inaugural Chapter meeting took place with the following Chapter Officers being elected:

| | |
|-------------|------------------------|
| Chair: | Prof. Marek Bialkowski |
| Vice-Chair: | Dr. Ashley Robinson |
| Treasurer: | Dr. Tee Tang |
| Secretary: | Mr. Richard Hodgson |

September 17, 2002, "Designing in the Microwave Frequency for Application in Arctic to Tropical Environments", Mr Saindhav Tamhane, Codan Group Engineering Manager, Codan Ltd, 532 Seventeen Mile Rocks Rd, Sinnamon Park, Qld, Australia (given at Codan Ltd). The presentation was followed by a visit to the production facilities of Codan.

September 25, 2002, "3D EM Simulation of High Frequency Problems by Finite Integration Technique", Dr. Frank Demming-Janssen, Computer Simulation Technology GmbH, Branch Office North Germany/Benelux, Kiebitzheide 123, D-48329 Havixbeck, Germany (given at the University of Queensland). The seminar was followed by demonstration of the software package CST Microwave Studio.

Details concerning the MTT/AP Queensland Chapter Officers, Past and Future Meetings and Other Useful Links can be found at the following website:

<http://www.itee.uq.edu.au/~zagr/>

Note: Office bearers for the year 2003 plan to be elected at a meeting to be held at the end of 2002.

Prof. Marek E Bialkowski
Chair, Joint Chapter Microwave Theory and Techniques / Antennas and Propagation

From the Chair of the Power Engineering Chapter

Since the publication of the last newsletter, the Power Chapter has held two well attended seminars.

Joint IEEE/IEAust Seminar

The first was the joint IEEE/IEAust Electrical Branch presentation held on the 28th of August in the Hawken Auditorium at Engineering House. Dr Andrew Dicks, a former member of the UK Government Fuel Cell Advisory panel now continuing his research at the University of Queensland, delivered a presentation on "The Current Status of Fuel Cells Worldwide". This excellent presentation was enjoyed by approximately 20 attendees and special thanks must go to Andrew Simpson from the University of Queensland who stepped in to chair this seminar at short notice. Thanks should also go to the IEAust representatives for their valuable assistance in organising this event.

Deregulation of Electricity: Promises and Challenges

The Power Chapter was also fortunate to have a recent visit from Professor Nurul Chowdhury of the University of Saskatchewan in Canada. Professor Chowdhury delivered a seminar at the University of Queensland on the 20th of September entitled "Deregulation of Electricity: Promises and Challenges". Although this seminar was held at fairly short notice, it was still well attended with over 30 people listening to Professor Chowdhury's account of the effectiveness of electricity restructuring in North America. Many of the issues raised were also relevant to the Australian electricity market, ensuring a lively discussion continued after the seminar.

Future Events

We still hope to organise at least one more event before the AGM in December. Given the interest generated by Professor Chowdhury's presentation we will attempt to secure a speaker from the Australian National Electricity Market Management Company (NEMMCO) to outline the current status of the Australian electricity market.

Please check the webpage at:

http://www.eese.bee.qut.edu.au/people/palmere/eee_pes/index.html

for details as soon as they are finalised.

John McDonald
Chair of Power Engineering Society Chapter Queensland Section

IEEE Power Engineering Chapter Membership

Interested in joining this chapter? If so, e-mail John McDonald (mcdonajd@csee.uq.edu.au) for details!

From the Chair of the Computer Chapter

Upcoming Technical Activities

Seminar/Lecture

“Reconfigurable Electronic Devices”

Professor Dr. Ulrich Rückert

Date: Wednesday 16 October 2002

Time: 6:00 – 8:00 PM

Venue: QUT, Gardens Point Block S, 5th floor,
Room S-5.24

Pizza, wine and cheese will be served

For catering purposes, please book your attendance to r.sitte@mailbox.gu.edu.au by Tuesday 15 Oct 02. Please also indicate special requirements (eg. vegetarian) if applicable.

About the speaker: Professor Dr. Ulrich Rückert is Professor for Systems and Circuit Technology at the University of Paderborn. He is Chairman of the Heinz Nixdorf Institute and Associate Dean of Electrical Engineering.

Seminar/Lecture

“Quantum computing: why the fuss?”

Dr. Howard Wiseman

Quantum computers have been predicted to take over from conventional (“classical”) computers within 20 years. Using the simplest possible example (a single quantum bit), I will show how quantum computers are more powerful. I will then review the motivation for, and progress in the effort to build a real quantum computer.

Date: Wednesday 20 November 2002

Time: 6:00 – 8:00 PM

Venue: QUT, Gardens Point Block S, 3rd floor,
room S301

Pizza, wine and cheese will be served

For catering purposes, please book your attendance to r.sitte@mailbox.gu.edu.au by Tuesday 19 Nov 02. Please also indicate special requirements (eg. vegetarian) if applicable.

About the speaker:

Dr. Howard Wiseman is a QEII research fellow and senior lecturer in the School of Science at Griffith University. His background is in quantum optics, the quantum theory of light and its interactions. More recently he has been exploring areas in quantum information, including small quantum computers (theory and experiment), and quantum entanglement of identical particles.

Defered - Workshop on Evolutionary Computing.

Initially scheduled for towards the end of the year has to be postponed for next year. Dr. David Fogel will come under the IEEE Distinguished Lecturer Program. Dr. David Fogel is a leading international authority on Evolutionary Computing (EC). He is CEO of Natural Selection, Inc., La Jolla, CA, in the USA (www.natural-selection.com), a company that thrives by applying EC methods to the solution of industrial problems. Dr. Fogel will be presenting a workshop on Evolutionary Computing aimed at those who are not (and might never have the need for) using these techniques, but for the sake of curiosity do want to know what it is, how it works, etc, in particular people from Industry. For those of you who are acquainted or literate with EC, I am sure, there is ample opportunity to learn more.

Please Contact the Computer Chapter (r.sitte@mailbox.gu.edu.au) if you ...

- have an interesting topic that you wish to share with the IEEE Computer community by presenting a seminar or a workshop (e.g. your most recent international conference paper)
- wish to contribute to the Computer Chapter’s technical activities in any other way (e.g. organizing a conference or workshop and need support)
- have any question or issue that you would like to discuss with a panel of experts

**Dr. Renate Sitte
Chair of Computer Society Chapter
Queensland Section**

IEEE Computer Chapter Membership

Interested in joining this chapter? If so, e-mail
Dr. Renate Sitte (r.sitte@mailbox.gu.edu.au)
for details!

Activities of the Griffith University Gold Coast Campus IEEE Student Branch

August saw another successful membership drive for the Gold Coast Student Chapter. Whilst some concern was voiced about the cost of student membership, which has almost doubled since this time last year, the Chapter still gained some new members.

Some Computer Society scholarships are available to student members and are closing soon. They are the Lance Stafford Larson Best Paper Contest and the Upsilon Pi Upsilon Award for Academic Excellence. Both awards close on the 31st October and more details are available on:

<http://www.computer.org/students/schlrshp.htm>

Stuart Bain
Chair, GUGC IEEE Student Branch.

Call for Papers

**International Conference on Information
Technology: Coding and Computing**

April 28-30, 2003

Submission Deadline NOVEMBER 29, 2002

[http://www.cs.clemson.edu/~srimani/itcc2003/
cfp.html](http://www.cs.clemson.edu/~srimani/itcc2003/cfp.html)

Convenience For Conference Searchers

A new Conference Search function has been launched that enables a visitor to go right to the appropriate "shop" page if he wants to purchase a publication associated with his conference (if a publication exists).

Start your search at

<http://www.ieee.org/conferencesearch/>.

The easiest way to find a conference is to select a "Year" and a "Sponsor," then click on "Submit." Select the conference from the search results, and then scroll down to the "Proceedings/Publications" cell. If there is a publication for that conference, you will see a number. Click on it, and you will be directed to the "shop" page. For further information, contact Patricia Thompson, IEEE Technical Activities, telephone +1 732 562 3872; p.thompson@ieee.org.

2001 IEEE Annual Report

The 2001 IEEE Annual Report is now available. To conserve costs and achieve a broad, global distribution, the report will be primarily accessible online from the IEEE home page, <http://www.ieee.org>. Print copies will be mailed to the IEEE Board of Directors, major boards and committees, as well as about 4,000 corporate, government and academic leaders around the world. Delegates to the 2002 Sections Congress will receive both a print copy and a CD-ROM.

For more information, contact Helen Horwitz, IEEE Corporate Strategy and Communications, at h.horwitz@ieee.org or +1 732 562 6821.

IEEE Queensland Section

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Position Open

Educational Activities

Position Open

Student Activities

Position Open

Awards

Position Open

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Call for Nominations

Nominations are now being called for the positions of Chair, Vice Chair, Treasurer and Secretary. A person can nominate for more than one position (eg. for both Treasurer and Secretary). Another person may nominate a member or self-nominations are accepted. In either case, both, the nominee and the nominating person must be IEEE members, eligible to vote.

Who is eligible to nominate/vote?

Any IEEE Queensland section member who falls into one of the following categories is eligible to vote at the AGM or nominate an office bearer for 2003:

- ◆ Member/Life Member
- ◆ Senior Member/Life Senior Member
- ◆ Fellow/Life Fellow
- ◆ Associate Member (eligible to nominate and vote but not hold office)

The nomination must reach the Returning Officer by COB 25 October 2002. Please use the attached form for nominations and either e-mail it to j.sitte@qut.edu.au or post it to the following address:

A/Prof. Joaquin Sitte
Queensland University of Technology
Faculty of Information Technology
G.P.O Box 2434
Brisbane 4001

More information about the election process and subsequent Annual General Meeting will be made available in a special newsletter at the beginning of November.

Nomination Form

I, being a member of the IEEE QLD section eligible to vote in the 2003 election, nominate

Full name (block letters): _____

IEEE Member no: _____

Address: _____

E-mail Address: _____

Phone: _____

for the position of CHAIR in the 2003 election for the IEEE QLD section.
 VICE CHAIR
 TREASURER
 SECRETARY

PERSON MAKING NOMINATION

Full name in block letters: _____

IEEE Member no: _____

Date: _____