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IEEE NEW SOUTH WALES SECTION  
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**Volume 28 Issue 2****July 2005****CONTENTS**

Item		Page
1.	<i>Messages From The Committee</i>	1
2.	<i>News In Brief</i>	2
3.	<i>Chapters' Chair Messages</i>	3
4.	<i>Technical Meetings &amp; Conferences</i>	4
5.	<i>Continue to Receive CIRCUIT by Post</i>	6
6.	<i>NSW Section Committee Nomination Form</i>	6

**1. MESSAGES FROM THE COMMITTEE****Graeme Gwilliam** [gb.gwilliam@ieee.org](mailto:gb.gwilliam@ieee.org).**Chair  
NSW Section**

Why is membership of the IEEE considered to be so useful and valuable?

For those of you who discuss your IEEE membership with work and business associates this is a question that you have no doubt had put to you by potential members.

Most members would mention its:

- Quality and range of publications
- Opportunity to establish worldwide networking with other members of similar professional and commercial interests
- 36 different technical societies encompassing the various technical electrical / electronic / computing disciplines within our profession.

But how many of you would say the IEEE Distinguished Lecturer (DL) programme?

Within each IEEE Society, there is a panel of technical experts who make themselves available to travel to various parts of the world presenting tutorial sessions on the subject area(s) of their expertise. These tutorials are usually at little or no charge to the IEEE member attendees, as the costs of their travel and accommodation are normally met within the IEEE Society and Section finances.

As an example, about 2 years ago, Dr. Mohindar S. Sachdev visited Sydney from Canada to speak as a DL on the equipment "Microprocessor Based Protection Equipment" as used in power transmission systems for a day. His talk was attended by about 50 people, who paid \$10 to cover the cost of printing. Recently, I received a commercial flyer stating that there is a speaker from overseas to speak for 2 days on the same subject. They charged for a normal commercial fee for such presentations. Thus, IEEE DL provides commercial high value information and it's one of the benefits for IEEE members.

There is an urgent need for volunteers to come forward to keep the **Circuits and Systems and Solid-state Circuits Chapter** functioning, due to the unexpected resignations/retirements of the few active Chapter committee members. Those who are registered with these Societies will soon be contacted and invited to make a contribution of time and effort to keep this Chapter operating. We are always willing to consider those who do not need to be asked. Contact me! [gb.gwilliam@ieee.org](mailto:gb.gwilliam@ieee.org).

At the recent Region 10 Meeting, there was advice that the IEEE is giving consideration to making changes to membership grades within the Institute. These will affect (beneficially) Student and Associate grades, and ease their path to achieving "Member" grade.

There is also an on-going campaign to have all those eligible within Member grade to achieve Senior Member grade. Please give it your most serious consideration.



**Eddie Fong** [eddiefong@ieee.org](mailto:eddiefong@ieee.org)

**Circuit Editor  
NSW Section**

Here comes the middle of 2005 and it is time for the NSW Section Committee Members 2006 nomination. For those interested members who are willing to dedicate their support and time to the Section, please fill up the form at the back of this Circuit and post it back to us no later than 23 September 2005 to be considered in the next Annual General Meeting to be held in 25 November 2005.

If you have tried to learn the names of the journals you subscribe to or needed to submit a change of address, you've probably been frustrated by the number of IEEE sites you had to visit before you found what you want.

Not anymore! **The Member Portal** is now bringing together the information about all the features and benefits of membership in one location link. Find out more at <http://www.ieee.org/myieee>

**2. NEWS IN BRIEF**

**JOINT INSTITUTIONS COMMITTEE**

**Peter Hitchiner  
Insight Telecommunications  
Consulting**

Jim Logothetis has resigned from the Joint Institutions Committee (JIC). Jim Logothetis has been a long serving member of the JIC and such an announcement should not go without recognition. The JIC wish Jim all the best as well as conveying its gratitude for his work for the Committee.

**2005 IEEE ANNUAL ELECTION**

The 2005 IEEE Annual Election process is underway - candidates' names have been announced and statements of candidacy and election websites will soon be available. For all the eligible voting members, your participation in the annual election is extremely important to the IEEE.

In mid-August, all list members will receive a reminder to vote with a short message from each

of the candidates as well as the link to their personal candidate information website if one is available. Information about the candidates will soon be available on the IEEE Annual Election web page at <http://www.ieee.org/elections>.

Your vote helps select tomorrow's leaders of the IEEE.

**2006 IEEE MEDAL AND AWARD  
NOMINATIONS**

Do you know someone whose work qualifies him or her for an IEEE medal, honorary membership, service award, or prize for a paper? If so, you have until 1 July to make your nominations for an award.

For nomination contact IEEE Awards Activities at [awards@ieee.org](mailto:awards@ieee.org).

**IEEE PERSONALISES MEMBERSHIP  
WEB SITE**

Finding out what the IEEE offers members just got easier. A new Website, called the Member Portal, brings the benefits of membership together into one place for all to see. The portal also includes a new area called myIEEE, where members can find everything they want to know about their membership data and affiliations. MyIEEE will display personal information such as membership grade, subscriptions, and section and society.

**REGION 10 TOPS IN MEMBERSHIP**

While the IEEE ended 2004 with a 1.2 percent membership increase to 365,483 members, perhaps the more interesting news is that the IEEE region with the most members is no longer in the United States. Last year saw Region 10 (Asia and Pacific) become the largest region, with 63,548 members, beating out Region 6 (Western United States), which ended the year with 61,540 members.

**FREE STUDENT MEMBERSHIP**

Every year, IEEE NSW Section sponsors new student memberships annually. The sponsored membership application window is during February / March, please refer to the website for more details under "Student Resources".

This year, we had over 220 students who availed themselves for this great benefit and have made 2005 the most successful student membership campaign! Interestingly, the IEEE NSW Student Membership initiative is approximately 10% of the whole IEEE Region 10 student membership growth target.

## WANTED HISTORICAL ITEMS

As part of the IEEE NSW Historical sub-committee, we are seeking ANY old photos, newsletters, anecdotes, certificates, membership cards and memorabilia relating to:

- IEEE (or their predecessors AIEE / IRE) here in Australia;
- Electrical, Electronics and Radio related information from yesteryear; and
- Adding/correcting to the existing Historical documentation at our IEEE NSW website.

Any material ideally must be original works or with sufficient information to request permission for re-use. We are only looking at capturing images / captions and stories and adding to the history section of our website. If you are clearing out your old boxes, please keep us in mind first.

Please contact: David Burger at +61(0) 414 328877 or [k3hz@ieee.org](mailto:k3hz@ieee.org)

## 3. CHAPTERS' CHAIR MESSAGES

### Graham Town [gtown@ics.mq.edu.au](mailto:gtown@ics.mq.edu.au) Chair MTT/APS Chapter

The year has started well with two technical meetings with presentations by two IEEE distinguished lecturers. Prof Maria Stuchly's presentation on antenna - human body interaction in wireless communication was very well

attended, and Prof Zoltan Cendes' presentation on trends in high-performance computer aided design gave useful insights into advances in algorithms and software used in simulating electromagnetic systems.

Three more meetings are currently scheduled for the year, on 16th June Prof Les Barclay will be reviewing possible health effects of RF emissions. On 14th July, Dr Trevor Bird will speak on Terahertz imaging, and on 8th September Dr Iain

Collings will speak on multiple antenna wireless communications.

Dr. Ananda Mohan Sanagavarapu will represent the chapter at the upcoming IEEE Antennas and Propagation Society International Symposium in Washington in July, and Mr Peter Blockley will represent the chapter at the upcoming IMS/2005 Chapter Chairs meeting.

### Stephanie Boyd [stef@isb.net.au](mailto:stef@isb.net.au) Chair Computer Chapter

On 30 May 2005, Computer chapter held a lecture by Dr Nick Hauser of the Bragg Institute. Dr Hauser discussed Open Source & Instrument Control for OPAL's Neutron Beam Instruments. It was a fantastic lecture enjoyed by all who attended.

We recently advertised for UNSW, a lecture by Gordon Bell. Many of our members attended this lecture and from the feedback I received it was a very memorable event."

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## 4. TECHNICAL MEETINGS & CONFERENCES

All members are cordially invited to attend these joint meetings with the Engineers Australia (EA), IEEE, ITEES and IEE. These joint meetings are held at 6.00 pm (with light refreshments at 5:30pm) at the Engineers Australia, Lecture Theatre, Eagle House, 118 Alfred St, MILSONS POINT, NSW unless otherwise stated.

Please check the IEEE NSW News bulletins which is regularly updated at <http://www.ewh.ieee.org/r10/nsw/subpages/news/news.htm> and also the Engineers Australia at <http://sydney.ieaust.org.au/weekevents.html>

Date	Topic	Speaker	Sponsor (Contact) / Venue
23 June 05	QUANTuM COMPUTING	Cathy Foley / David Tilbrook	IEE (Mark Edmunds) / 118 Alfred, Milsons Point
4 July 05	Joint IEEE/IEE/IEAust Lecture Program meeting		Joint (Allan Sangster) / (6:00~7:00pm) Venue TBC
4 July 05	IEEE NSW SECTION - Meeting 194		IEEE (David Tien) / Sentosa Restaurant, 48 Willoughby Road, Crows Nest 7:00pm~9:00pm
4 to 9 July 05	Bragg Gratings, Poling & Photosensitivity / 30th Australian Conference on Optical Fibre Technology Conference 2005 <a href="http://www.bgppacoft2005.com/">http://www.bgppacoft2005.com/</a>		EA ( <a href="mailto:bgppacoft2005@tourhosts.com">bgppacoft2005@tourhosts.com</a> ) / Star City, Darling Harbour
4 to 7 July 05	Information Technology & Applications Conference (ICITA05) <a href="http://attend.it.uts.edu.au/icita05/">http://attend.it.uts.edu.au/icita05/</a>		IEEE (Dr. Sean He <a href="mailto:icita05@it.uts.edu.au">icita05@it.uts.edu.au</a> ) / Mecure Hotel Sydney, Sydney CBD
7 July 05	EA Electrical Branch - Sydney Meeting		EA (Mark Edmunds) / 118 Alfred, Milsons Point
11 to 12 July 05	mBusiness Conference 2005 <a href="http://www.mbusiness2005.org/index.html">http://www.mbusiness2005.org/index.html</a>		IEEE (Dr Elaine Lawrence, UTS) / Crowne Plaza Darling Harbour Hotel
14 July 05	Terahertz Imaging	Dr Trevor Bird, Chief Scientist, CSIRO ICT Centre	IEEE / MTT-APS (Dr Trevor Bird) / 118 Alfred, Milsons Point
28 July 05	Solar Energy	Mr Wes Stein, CSIRO Energy Technology	IEE (Mark Edmunds) / 118 Alfred, Milsons Point
1 Aug 05	Joint IEEE/IEE/IEAust Lecture Program meeting		Joint (Allan Sangster) / North Sydney TAFE - AG20 (6:00~7:00pm)
1 Aug 05	IEEE NSW SECTION - Meeting		IEEE (David Tien) / North Sydney TAFE - AG20 (7:00~9:00pm)
4 Aug 05	EA Electrical Branch - Sydney Meeting		EA (Mark Edmunds) / 118 Alfred, Milsons Point
13 Aug 05	Wattle Rail Festival - Engineering week. <a href="http://www.engineeringweek.org.au">www.engineeringweek.org.au</a>		Joint / A week of activities in Cootamundra celebrating their famous wattle and rail centre, including a rail trip to the "spiral" and a railwayman's lunch. Location: Cootamundra Railway Station.
14 Aug 05	ENGINEERING WEEK Events ( <a href="mailto:richard.barnes@hyder.com.au">richard.barnes@hyder.com.au</a> ) <a href="http://www.ieaust.org.au/events/eng_week.html">http://www.ieaust.org.au/events/eng_week.html</a>		Joint (Michelle Crowshaw 02 98237118) / 8am SPLASH City to Surf fun run - free Eng Week Shirt and free laughs. City to Surf entry fee Adult \$30, Child \$20. 10am Ziz Zag Railway Lithgow Heritage Walking Tour
15 Aug 05	Harricks Address - Inventions and Patents.	Anthony Cowle, Patent Attorney, Electrical Engineer	Joint (Michelle Crowshaw 02 98237118) / 118 Alfred, Milsons Point
15 Aug 05	Austool Technology Centre, Schneider Electric - llevo 200 Mbps Powerline Communications Technology, Channel 9, REA Showcase Site, Energy Australia – Metro Cable Tunnel Project. <a href="http://www.engineeringweek.org.au">www.engineeringweek.org.au</a>		<a href="http://www.engineeringweek.org.au">www.engineeringweek.org.au</a>
16 Aug 05	Power Line "BPL" Communications Site Visit		EA (Amal Hanna) / Castle Hill. Limited numbers.
17 Aug 05	UTS Mechatronics Lab, Penrith Lakes and White Water Centre, Sydney Harbour Bridge Walk, Forum - Keeping Sydney's water flowing. <a href="http://www.engineeringweek.org.au">www.engineeringweek.org.au</a>		Joint (Michelle Crowshaw 02 98237118) / Morning
18 Aug 05	Great Engineering Challenge (am) + Chartered Engineers Function (pm). IAG Technical Research Centre (formerly NRMA Crash Test Laboratory) Artarmon. <a href="http://www.engineeringweek.org.au">www.engineeringweek.org.au</a>		Joint (Michelle Crowshaw 02 98237118) / Faculty of Engineering, UNSW. Dinner at the Epping Club. 6:30pm.

19 Aug 05	RedR Social Lawn Bowls Fundraiser Evening. www.engineeringweek.org.au		Joint (Michelle Crowshaw 02 98237118) / \$25 per person
21 Aug 05	End of ENGINEERING WEEK http://www.ieaust.org.au/events/eng_week.html		Joint (Michelle Crowshaw 02 98237118) / www.engineeringweek.org.au
25 Aug 05	Bio-Engineering materials	Dr Philip Martin, CSIRO	IEE / 118 Alfred, Milsons Point
31 Aug to 1 Sept 05	ICT Outlook Forum 2005 www.ictoutlookforum.com.au		NICTA, CSIRO and DSTO / Sydney Powerhouse Museum, 8:30am to 5:30pm daily.
1 Sept 05	EA Electrical Branch - Sydney Meeting		EA (Mark Edmunds) / 118 Alfred, Milsons Point
5 Sept 05	Joint IEEE/IEE/IEAust Lecture Program meeting		Joint (Allan Sangster) / North Sydney TAFE - AG20 (6:00~7:00pm)
5 Sept 05	IEEE NSW SECTION - Meeting		IEEE (David Tien) / North Sydney TAFE - AG20 (7:00~9:00pm)
8 Sept 05	Multiple Antenna Wireless Communications: Exploiting the Spatial Domain	Dr Iain Collings	IEEE / MTT-APS / 118 Alfred, Milsons Point
22 Sept 05	Efficiency improvement modifications to four, 500MW steam turbines.	Mr Colin Duck, Mr Kenji Watanabe & Mr Nigel Atkins	EA (E C "George" Fox 9449 8536) / 118 Alfred, Milsons Point 5:00pm for 5:30pm start
30 Sept 05	Engineering Awards Dinner (Black tie - \$150 per head)		EA (Robyn Worthing 02 89237112) / The Grand Ballroom (B2), Westin Hotel, 1 Martin Place, Sydney.
26 to 30 Sept 05	4th ASEE/AaeE Global Colloquium of Engineering Education, hosted by American Society for Engineering Education (ASEE) and Australasian Association for Engineering Education. www.gcee2005.com		EA ( <a href="http://www.gcee2005.com">www.gcee2005.com</a> ) / Star City, Darling Harbour
6 Oct 05	EA Electrical Branch - Sydney Meeting		EA (Mark Edmunds) / 118 Alfred, Milsons Point
10 Oct 05	Joint IEEE/IEE/IEAust Lecture Program meeting		Joint (Allan Sangster) / North Sydney TAFE - AG20 (6:00~7:00pm)
10 Oct 05	IEEE NSW SECTION - Meeting		IEEE (David Tien) / North Sydney TAFE - AG20 (7:00~9:00pm)
13 Oct 05	Opportunities in High Precision Fabrication	The Bandwidth Foundry, Dr Ian Mann	EA (Peter Hitchiner) / 118 Alfred, Milsons Point
22 to 28 Oct 05	The IEEE Laser & Electro-Optics Society-Conference & 18th Annual Meeting "LEOS 2005"		IEEE & LEOS ( <a href="mailto:leosconferences@ieee.org">leosconferences@ieee.org</a> ) / Hilton Hotel Sydney, 488 George St, SYDNEY
27 Oct 05	Nikola Tesla	Paul Pokorny, Tesla Forum of WA	EA (Peter Hitchiner) / 118 Alfred, Milsons Point
28 Oct 05	Electrical & Information Engineering Foundation – Conversazione www.ee.usyd.edu.au/foundation		USYD / See website, 1:00pm to 4:00pm.
3 Nov 05	EA Electrical Branch - Sydney Meeting		EA (Mark Edmunds) / 118 Alfred, Milsons Point
7 Nov 05	Joint IEEE/IEE/IEAust Lecture Program meeting		Joint (Allan Sangster) / North Sydney TAFE - AG20 (6:00~7:00pm)
7 Nov 05	IEEE NSW SECTION - Meeting		IEEE (David Tien) / North Sydney TAFE - AG20 (7:00~9:00pm)
10 Nov 05	Distributed Energy: Micro-Turbines	Dr Adam Batten, CSIRO TIP	IEE / 118 Alfred, Milsons Point
24 Nov 05	Broadband and Local Access in Regional Australia (EA AGM)		EA (Allan Sangster / Robert Brand) / 118 Alfred, Milsons Point
25 Nov 05	<b>IEEE NSW SECTION - AGM</b>		<b>IEEE (David Tien) / TBA 6:00~10:00pm</b>

- Tenth IEEE Symposium on Computers and Communications, 27 to 30 June 2005, Cartagena, Spain: <<http://www.comsoc.org/iscc/2005>>
- 2005 IEEE International Symposium on Microwave, Antenna, Propagation and EMC Technologies for Wireless Communications, 8 to 12 August 2005, Beijing, China: <<http://www.cie-china.org/MAPE2005/>>
- **IEEE Tencon'05**, to be held in Melbourne, Australia from 21 - 24 November 2005. Please see [http://www.tencon2005.org/authors\\_centre/](http://www.tencon2005.org/authors_centre/)

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**6. NEW SOUTH WALES SECTION COMMITTEE NOMINATION FOR 2006**

The Nominations Committee invites members to submit nominations for appointment for the 2006 NSW Section Committee with the form below not later than **23 September 2005**. All nominations for NSW Section Committee members will be considered at the Annual General Meeting, to be held on 25 November 2005, at which all the 2006 Office holders and Committee Members will be confirmed.

As of todate, the following NSW Section Committee nominations have been received for:  
T Bird, I Boyd, S Boyd, D Burger, K Esselle, E Fong, G Gwilliam, W Lachs, B Poon, S Reisenfeld, F Rahman, J Robinson, D Tien, J Vasseleu, R Zakarevicius, G Town, S Windsor, R Menegon, L Narasimhan, P Ogunbona

Please Detach-----

**2006 Committee Member Nomination Form**

Name:..... Signature:.....

Member No:..... Member Grade:.....

Address:..... Postcode:.....

Tel:  
(H).....(W).....(M).....FAX.....

Email: .....

**Kindly Post to:**  
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