1. Message from the Chair

IEEE ISCAS to meet in Melbourne

Melbourne has won its bid to host the International Symposium on Circuits and Systems (IEEE ISCAS) in 2014. The conference is expected to attract 1,000 delegates, injecting more than $4 million into the local economy. The Symposium will be held at the Melbourne Convention and Exhibition Centre.

Request from the Consulate General of the Russian Federation

We have received a request from the Consulate General of the Russian Federation in Sydney. The city of Vladivostok is looking for expertise from Australian companies in the areas of city planning and water treatment. Please let us know if you or your company is interested.

Undergraduate Scholarships

A total of 30 undergraduate scholarships in the area of Computer Science are being offered by IBM and several government agencies to first and second year undergraduate students. The value of each scholarship is $30,000, which includes cash payment, on job training and 12 months work experience. Please contact the Chair of Graduate Placement, IEEE NSW, Errol Chopping (echopping@csu.edu.au) for details.

Call for Interest

IEEE NSW has received an invitation to send delegates to the following events:

(1) IEEE Region 8 Section Chairs Meeting, which will be held in Prague, Czech Republic between October 8 and 10, 2010.

(2) IEEE Sections Congress 2011 will be held 19-22 August 2011, in San Francisco, California, USA.
IEEE Data Mining Competition on City Traffic

ENBIS members are invited to join the data mining competition affiliated with IEEE International Conference on Data Mining 2010 (ICDM), Sydney, Australia, December 14-17. The task is to predict city traffic based on simulated historical measurements or real-time stream of notifications sent by individual drivers from their GPS navigators. Prizes worth $5,000 will be awarded to the winners. Please consult the competition website [http://tunedit.org/challenge/IEEE-ICDM-2010](http://tunedit.org/challenge/IEEE-ICDM-2010) for submission and deadline details (submitted by Alessandro Di Bucchianico).

First Russia and Pacific Conference on Computer Technology and Applications:

IEEE NSW and IEEE Russia Siberian Section will jointly host a conference in September 2010 in Vladivostok. Details can be found at: [http://www.academicinternational.org/aaic/index.html](http://www.academicinternational.org/aaic/index.html)

Dr Kim Chin is currently working for Vsigma Capital Ltd conducting research. She has 15 years research and academic experience (UNSW, UTS and The Australian Catholic University).

2. News in Brief

2.1 GOLD

On 22 April 2010 IEEE NSW GOLD member Dr Kim Chin gave an excellent presentation to the Joint Institutions on Multicast Networking, at the Engineers Australia auditorium in Chatswood. The meeting was chaired by Amal Hanna (FIEAust CPENG) and was well attended.

The lecture explained the limitations of current predominantly unicasting Internet Technology for emerging applications such as Internet TV, Video Conferencing and the issues preventing the widespread use of Multicasting in the current environment. A thorough history of unicasting and multicasting was presented as well as the various models and technologies being developed.

2.2 NSW IEEE AGM and Dinner

While a venue is still being settled, the date has now been locked in – 26 November 2010. Further details will follow, but be sure to save the date. We look forward to seeing you there.

2.3 Life Members

We didn’t have a very strong response to our suggestion to organise a subsidised special luncheon at a City venue for all life members and their partners mid July or August. This was disappointing but we need to have at least 2 meetings a year to continue with the development of the IEEE New South Wales Life Members Affinity Group. We have recently been advised by George F McClure, Chair of the IEEE Ltd Members Committee, our Group of 54 Life Members has been included on the 2009 list of Outstanding LMA. It is hoped this recognition will lead to an increase in the following areas:

- Satisfaction of IEEE Life Members with their involvement
- Recognition of the contributions of Life Members to IEEE activities
- Number of Life Members Affinity Groups
- Life Members engagement in IEEE activities
- Donations to the Life Members Fund

Please let me know if any Life member is planning to change their address before the end of the year. Toni Karbowiak and his wife Grace have sold their house in Artarmon and moved to St Lukes Retirement Village, Little Bay. They will now be closer to their daughter who lives in Hurstville. As of 20 June we have 53 Life Members resident in NSW.
I look forward to receiving your comments and suggestions by email to jl.robinson@ieee.org. I will be returning from an overseas trip to the USA early August and hope by then to have lots of Life Member emails in my pigeon hole.

John L Robinson jl.robinson@ieee.org
Chair, Life Members Affinity Group

2.4 Engineering Colloquia Update

Macquarie Engineering Colloquia (MQEC), sponsored by IEEE NSW, is aimed at attracting speakers and participants from diverse fields in engineering and research. It was initiated in 2010 with the first colloquia held in February.

So far, eleven colloquia (listed below) have been organised.

1. Promising Low Power Reusable Solutions - Application Specific Instruction-set Processors: Professor Myung Woo Sunwoo, Ajou University, Korea.
4. Applications of Wideband Semiconductors for Microwave PAs: Francesco Fornetti, Bristol University, U.K.
5. A Holistic Approach to Patent Protection: Martin Friedgut, Spruson & Ferguson
6. Cooperative and Cognitive Radio Technologies: Dr. Sithamparanathan Kandeepan, Create-Net, Italy.
7. Wireless Medical Implant Technologies: Dr. Peter Bradley, Zarlink Semiconductor, U.S.A.
9. Review of Study Leave Activities on Quantum Dots, Polymer Waveguides, Solar Cells: Professor Graham Town, Macquarie University.
10. Theoretical Considerations in the Design of Microwave Chaotic Signal Generators: Dr. Venkata Gutta, Macquarie University.

Upcoming colloquia include:

1. Phase Noise in Heterojunction Bipolar Transistors: Oya Sevemli, Macquarie University.
2. Differentially-Encoded Multilevel Block-Coded MPSK: Dr. Charles Lee
3. ESD Protection Solutions: Professor Juin J. Liou, University of Central Florida

For information on abstracts, speaker biographies, venue and schedule of future talks, please refer to www.engineering.mq.edu.au/colloquia.

Anyone interested in presenting a colloquia should contact Professor Karu Esselle (karu.esselle@mq.edu.au) or Dr. Venkata Gutta (venkata.gutta@mq.edu.au).

Karu Esselle esselle@ics.mq.edu.au

2.5 Bits and Pieces

myIEEE Adds myDesktop Personalization Options and Secure Messaging

Two new features that provide advanced customization and communication options have been added to myIEEE.

myDesktop: Allows IEEE members to organize their favorite myIEEE content how they want it, much like a personal myYahoo or iGoogle page. Options include:

- Customizable selection of all myIEEE “gadgets” (or modules related to membership, IEEE Spectrum, The Institute, conferences or IEEE Xplore® Digital Library, for example);
- Multiple layout options with drag-and-drop gadget placement;
- Choice of several technology-based backgrounds (e.g., aerospace, biomedical, communications, computing and more); and
- RSS tools to import feeds from IEEE or content sources outside of IEEE.

Members can log in to myIEEE, select the “Customize” tab and begin personalizing their myDesktop page.
2.6 Membership Development

Our free student membership offer ended on 30 June 2010. It was great to see a number of students, especially postgraduate students, took advantage of the free membership offer.

I take this opportunity to urge all members who are currently eligible for senior membership to be proactive and take steps to upgrade. Upgrading is not difficult and helps to increase the status of our Section. To upgrade to senior member you will require three referees. However, if you are being nominated by the Section, you only require two referees.

The IEEE Job Site Career Alert is now available and is being sent to members via email. The Alert is a bi-weekly report on jobs, education, management and the engineering workplace, sent from the editors of IEEE Spectrum. This report becomes an additional benefit to members for updated news which may have impact on their career, education & workplace.

Bruce Poon adsphere@optusnet.com.au
Membership Development Chairman, IEEE NSW Section

2.7 Welcome to our New and Upgraded Members

From March to June 2010, we have the following new and upgraded members:

**Life Senior Member Grade**
- P W Dulhunty

**Senior Member Grade**
- Ashok Manglick
- Steven R Meikle
- Mark D Pelusi
- Ping Yu
- Dadong Wang
- Stuart G Hay

**Member Grade**
- Nicholas D Lochrin
- Socrates Dokos
- Mary Kaikati Hakeem
- Iain F Macgill
- Philip Q Madigan
- Stephen Bignucolo
- V M Tohadze
- Teddy S Jayadiwangsa
- Sri Parameswaran
- Tirthankar Raychaudhuri
- Michal J Tordon
- Teik C Lee
- Camillo Pavan
- Edward Maitoga
- Andrew J Hunt
- David A Coward
- Raoul Golan
- C I Blake
- Barry F Finlay
- Golam M Sorwar
- Jason C Yip
- Kannan Balakrishnan
- Chee M Chong
- Fred Fetherston
- Gregg J Suaning
- Jason A Crowe
- Ahasan Shahid Anowar
- Gregor Verbic
- Jeff I Allom
- Richard Scott Morrison
- Louis Lefevre
- Simon Michael Lucey
- Greg D Strain
- Weidong Su
- Saad M Sayeef
- Bradley J Gay
- Alexander V Danilo
- Irena Koprinska
- Joseph F Winter
- Yong Dou
- Dawit Seyoum
- James M Robinson
- A Kanagasingam
- Mark V Bishop
- Peter K Thomson
- Mark T Phillips
- Phillip A Burns
- David R Mcghee

**Member Grade Cont.**
- Jony Kwa
- Vellimalai Karuppanan
- Andrew J Fleming
- Steven Tu
- Adriel P Kind
- L Vaidyanathasamy
- Antonypillai J Francis
- Rakesh K Agrawal
- Serdar Erozan
- Barrie J Hall
- Terry J Dawson
- Lawrence Lee Chong Ong
- Jones Olatunji
- Satyanaranayan Barik
- Michael J Stuckings
- Heidi B Stratti
- Irosh Fernando
- Scott N Reeves
- Robert J Weir
- Shiping Chen
- Fosso Wamba Samuel
- Wen Zhang
- Costanzo M Costa
- Peng Gong
- Kuan Yen Tan
- Abu R Ullah
- John Chun Chan
- nagesh subramaniam iyer
- Alejandro Ruiz Rivera
- John Yi-Chen Li
- Carlo Nico Romero Arceo
- Angus Murdoch Ferguson
- James Jackson
- Hirantha Amal Perera
- Jason Caruana
- Yuen Kuan Wong
- Yiwei Liu
- Gabriel Aguirre-Ollinger
- Yong Zhu
- yongchang zhang
- Oliver Ridler
- Chris J Nicol
- David Kierans
- Jin Xu
- Gengfa FANG
- David Anthony McCarron
- Peter McLean
2.9 Welcome to our New and Upgraded Members (cont.)

**Member Grade Cont.**
Joseph Bernard
Jerry Sawick
William Simonsen
Colin George Kennedy
Michael Paul Gerber
Mohammad Ali Noori
Herbert F Jelinek
Adrian George Wills
Kishor Chintamani Kelkar
Camille Lambert
Janet Aisbett
Robin Harper
Saso Ristevski
Gayathri Vijayakumar
Nicolas Grange
Susan Graham
Norazlin Yusop
Jay Rao

**Grad. Stud Member Cont.**
Prajoyt Vishnuadas Naik
Bachar Adba
Judith Evangelista
Arati Amaty
Xiang Li
Winsky P S Dissanayake
Mohan Kumar Upadhyaya
Vaibhav Samadiya
Yiwei Yu
Dushmantha Thalakotuna
Sayed Albaharni
Kewei Clare Guo
Tao Huang
Quang Huy Pham
Hai Ngoc Nguyen
Pega Zarjam
Tanbir Rahman
Jawad Khattak
Thinh Thanh Doan
Christopher Le Brese
ZELIN LI
Xiaocen Guo
A Alam
Anh Huy Phan
Ying Yi Liu
Malcolm Egan
Shashika LBlyanwilage
Ujjwal Singh
Lil You
Zheng Li
Muhammad Haris Ghaus
Sareh Mozafari
Aresh Daruwalla
Zhe Wang
Christian Sutanto
Siwei Bai
AZLAN ISMAIL
Alejandro Barriga Rivera
Ruoyu Li
Deric Dominic
Madhuka Jayawardhana
Geoff Bull
Khaled Alyoubi
Syamantak Saha
Van Thanh Huynh
Jinguang Han
Victor Kuo
Jing Liu

**Grad Stud Member Cont.**
Carl Eric Svensson
Chris Townsend
Yashodhan Moghe
Abdulaziz M Aldukhayyil
Raed Manna
Akram AlSukker
Umar Rashid

**Student Member**
Joshua P Toomey
Andy Cheng
Mohammad Choucair
Huiyuan Zheng
A Thevamalayam
Mas Sahidayana Mohktar
Sachin Tundukar
PRAJWAL SUBEDI
Chupendra Pun
Prashant Giri
Myat Kyaw Lin
Julius Alfa Aseli
Kaushal Rimal
Prakash Pandey
Rakesh Suwal
Ram Kumar Bista
Sunil Bhujel
Govinda Gautam
Dona Anne Dilini Abeyakoon
Roumel Anorico
Jin Lai
SHIV BHATTARAI
Badri Shrestha
Ramtin Kazemi
Fei CHEN
Andrew Roy Figgett
Wessam Baghdadi
Nikhil Mathew Mathew
Joanne Fu
Victor Lee Kai Shen
Si Ruo Yu
Jianliang SHEN
Yang Li
Daniel Ho
Saroj Pandeya
Anurag Bhatnagar
A H M Ribat Uz Zaman

**Student Member Cont.**
Gehendra Acharya
Adrian Bradd
Kundan Pandey
Lei Wang
Anton Marinov
Sanjay B Kanwar
Yan Di
Richard Stuart
Emad Nour
Greg Campbell
Martin Thompson
Jeeva Bharathi
Clinton Peate Allison
Tania McGregor
Gareth Samuel
Tien Huy Hoang

**Associate Member**
Bruce S Poon
Narinder Chhabra
Dinesh K Yadav
Perter J Briede
Paul Evan Lillington
Asrul Izam Azmi

**Grad. Student Member**
Faizan Javed
Liam Widdowson
Quang L Thai
Qestra Mulqueen
Dody Ismoyo
Xiaoming Chen
Lester Chong
Fan Bai
Feng Li
Qim Yi Lee
Yin Kia Chiam
Bappi Barua
Joe Zou
Libin George
Werauyt Saesue
Nishad R Mendis
Guanfeng Liu
Yang Du
Mohammad S Haque
Lin Wang

**Affiliate**
Micky K Tong
T R Bossoamaier
Alan Mcnamara
Pinaki Basu
Shirley C Bate
Aji Setia Gerdiman
Donald Shearman
Daniel Shearman
Mark England
James Kelly
Cameron Martin
Michael Anthony Kelly
Ryan Lagerstrom
2.10 IET News

The IET Chairman, Mr Graham Lee, represented all the members of the IET-NSW committee in thanking and presenting to Mr John Englefield a framed certificate and an IET weather station, which was in recognition of his many years of service to the IET (formally the IEE) NSW committee.

John’s dedication and enthusiasm was and is much appreciated. He was one of the prime organisers of our contribution to the Joint Committee Lectures. John’s hosting of and repartee at the after Lecture dinners made them so much more interesting. John’s work in encouraging our younger members and developing the future generation engineers is acknowledged and very much appreciated. John also served for three years as Chairman of the committee, which is greatly appreciated. Thank you John and have a very happy (we know it will be busy) retirement.

3. Chapter News

3.1 Joint OCEANS/Signal Processing and Communications Chapter

IEEE Oceanic Engineering Society: Oceans’10 Conference 24-27 May 2010

The Oceans’ 10 conference was successfully held at the Darling Harbour Bayside Convention Centre. The conference Welcome & Plenary Sessions commenced on the Tuesday morning. The Welcome started with a local aboriginal elder conducting a Smoking ceremony, which aims to cleanse the areas in which the conference took place.

The Smoking ceremony was followed by a well executed didgeridoo solo.

Dr Brian Ferguson, Conference General Chair, introduced Prof Mary O’Kane, NSW Chief Scientist & Scientific Engineer, who gave the Welcome address. The first Plenary Talk followed which was titled, Meeting Social Challenges Using Marine Technology and given by Craig Mclean, from the National Oceanic & Atmospheric Administration USA. For the second talk Royal Australian Commodore Bruce Kafer, AM, CSC spoke about Understanding the Oceans – a Navy Perspective. The third talk Why Ocean Science Matters for Australia, was addressed by Dr Neville Smith, Deputy Director (Research & Systems) Bureau of Meteorology, completed the session.

The Exhibition was opened after morning tea with 30 Exhibitors in 36 Booths together with 22 Student Posters.

There were 530 full registrations, 14 one day registrations and 134 registrations for the exhibition only and three Life Members. On the Monday 188 registered for the tutorials from a total of 8 tutorials. Of this group approximately 75% were from Australia and New Zealand and 25% from overseas. 20 students from a total of 67 were given support after a gruelling student paper competition earlier in the year, the standard of all papers was exceptional. The winner was Ariole Friedman, an Australian from the University of Sydney. The runners-up were François Socheleau from France and Anuj Sehgal from Germany. These students received their prizes at the Gala Function held at Luna Park on the Wednesday evening. The prizes were funded by the US Office of Naval Research, Science & Technology and presented by Dr Stefan Williams, University of Sydney Mechatronics Engineering.

The next Oceans conference will be held in Seattle, Washington USA sponsored by The Marine Technology Society USA and the IEEE Oceanic Engineering Society. Put the Conference date 20-23 September 2010 in your diary.

3.2 Antenna & Propagation/ Microwave Theory & Techniques Chapter

On 10 June 2010, Dr Ozgur Isik from Argus Technologies (Australia) delivered a public lecture entitled “Metamaterials in Electromagnetic and Microwave Engineering”. The lecture was held at Engineers Australia (EA) Auditorium and was jointly organized by IEEE, IET and EA.

Dr Isik reviewed the history and several selected topics associated with the metamaterials. The focus was on the interaction of electromagnetic waves with these artificially structured materials. He described how this interaction could lead to interesting and unusual characteristics which are not observed in conventional
media. Potential applications of metamaterials such as the "perfect lens", which could resolve objects smaller than the wavelength of light, and the "invisibility cloak" were presented and discussed in addition to several microwave circuit applications. The meeting was well attended by the members of IEEE, IET and EA.

The next joint IEEE/IET/EA lecture will be given by Ms Oya Sevimli of Macquarie University on 9 September 2010 from 6pm in the EA Auditorium at 8, Thomas Street, Chatswood.

Karu Esselle esselle@ics.mq.edu.au
Chair, AP-MTT Chapter
4. Technical Meetings & Conferences

All members are cordially invited to attend these joint lectures with the Engineers Australia (EA), IEEE and IET. These joint lectures will be held at 6.00 pm (with light refreshments from 5:30pm) at the EA, 8 Thomas Street, Chatswood, NSW, unless otherwise stated.

All members should check the latest updates of the Meetings & Conferences a couple of days prior to the actual date at the IEEE NSW News bulletins at: http://www.google.com/calendar/embed?src=k3hz%40ieee.org&ctz=Australia/Sydney and also the EA at http://www.engineersaustralia.org.au/events/events_home.cfm to prevent any potential disappointment due to last minute changes.

<table>
<thead>
<tr>
<th>Date (2010)</th>
<th>Event/Medical Conference</th>
<th>Speaker</th>
<th>Host</th>
<th>Contact</th>
<th>Venue</th>
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</thead>
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<tr>
<td>12 Aug</td>
<td>Railway Earthing</td>
<td>David Stuart Smith (ARUP)</td>
<td>EA</td>
<td>Raymond Pau</td>
<td>EA Auditorium</td>
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<tr>
<td>26 Aug</td>
<td>Car Electric Systems</td>
<td>TBA</td>
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<tr>
<td>9 Sept</td>
<td>IF Noise Quality - Wireless Comms</td>
<td>Oya Sevimli</td>
<td>IEEE</td>
<td>John Robinson</td>
<td>EA Auditorium</td>
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<td>23 Sept</td>
<td>Building Automation</td>
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<td>IET</td>
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<tr>
<td>14 Oct</td>
<td>Google Engineering Tools</td>
<td>Ken Robinson</td>
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<td>EA Auditorium</td>
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<tr>
<td>28 Oct</td>
<td>Medical implant technology</td>
<td>Peter Bradley</td>
<td>IEEE</td>
<td>Eddie Fong</td>
<td>EA Auditorium</td>
</tr>
</tbody>
</table>

*Circuit* reaches over 2400 IEEE members in NSW.

*For advertising in Circuit*

*Please contact:*

Mark O’Mally +61 4 110 26960 or mark.omally@ieee.org
5. New South Wales Section Committee Nomination for 2011

The Nominations Committee invites members to submit nominations for appointments for the 2011 NSW Section Committee. Please complete and return the detachable form below by 30 August 2010. The appointments for the NSW Section Executive Committee will be decided at the Annual General Meeting, to be held on 26 November 2009. The remaining Committee Members appointments will be decided in the first 2011 IEEE NSW Section Meeting on 7th February.

The available appointments within the IEEE NSW Section are:

<table>
<thead>
<tr>
<th>NSW Section Executive Committee</th>
<th>GOLD Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair, Vice Chair, Treasurer, Secretary</td>
<td>Awards and Recognition Chair</td>
</tr>
<tr>
<td>Newsletter Circuit Editor</td>
<td>Life Member Affinity Chair</td>
</tr>
<tr>
<td>Fellow Search Chair</td>
<td>Nomination Chair</td>
</tr>
<tr>
<td>Membership Development Chair</td>
<td>Historian Chair</td>
</tr>
<tr>
<td>Professional Activities Chair</td>
<td>Webmaster</td>
</tr>
<tr>
<td>Educational Activities Chair</td>
<td>Conference Co-ordinator Chair</td>
</tr>
<tr>
<td>Student Activities Chair</td>
<td>Committee members</td>
</tr>
</tbody>
</table>

Please detach__________________________________________________________________________________________________________

2011 Committee Member Nomination Form (Complete and return by 30/8/09)

Your Nomination (Name and appointment): ………………………………………………………………………………………………………

Your Name:.................................................................................................................................Signature:…………………………………………………………

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

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

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

Email: .................................................................................................................................

Kindly Post to: IEEE Committee, C/O AUSTRALIAN PROFESSIONAL CENTRE, PO Box 576. CROWS NEST NSW 1585
Or Fax: +61 2 94318677
Or E-mail: gb.gwilliam@ieee.org (please send scanned copy of completed form)