



The Institute of Electrical and Electronics Engineers, Inc.

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IEEE NEW SOUTH WALES SECTION
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Editorial

As always, I'm interested in receiving member stories and articles of interest (in the electrical and electronic fields) for publishing in Circuit. If you would like to share a story with our members please e-mail your article to markomally@ieee.org.

Did you know that our newsletter reaches over 2000 members across New South Wales? If you are interested in advertising in Circuit, please e-mail me. Current rates are \$300 for a half page advertisement and \$500 for a full page advertisement.



Mark O'Mally markomally@ieee.org
Editor, Circuit Newsletter, NSW Section

1. Message from the Chair

It's hard to believe that we're already a quarter of the way through 2010! I thought I might take this opportunity to outline some significant achievements and events since last year's AGM and also some upcoming initiatives.

Achievement and congratulations:

Congratulations to Dr Walter Lachs who was awarded the Outstanding Volunteer Award for R10 for 2009.

Walter has been a valued member of the IEEE NSW Section for nearly 30 years. In that time Walter has served on the Section Committee in various capacities:

- Joined the Section Committee in 1981
- Section Chair 1988 – 1990, 1995
- Section Vice Chair 1998
- Section Secretary 1996 – 1997
- Inaugural Chair PES Chapter 1991
- Australia Council Chairman 1993 - 1994
- Fellow Search Chair 2005 – present

Walter has also assisted with the running of various IEEE conferences, in particular Globecom 98 and PICA 2001, both of which were held in Sydney.



Dr Walter Lachs (middle) is presented the Outstanding Volunteer Award from David Tien (right) and R Zakarevicius (left)

IEEE Region 10 Annual Meeting

During the 2010 IEEE Region 10 annual meeting, volunteers from Australia and New Zealand got

together to discuss ways to strengthen communications between members.

A number of presentations were made by Region 10 committee members and they can be found at: <http://ewh.ieee.org/reg/10/Reports/meetrep/ExcomReportForR10Meet2010.html>



Group shot of attendees – David Tien (second from right) and Eddie Fong (far right)

Student Service - Graduate Placement

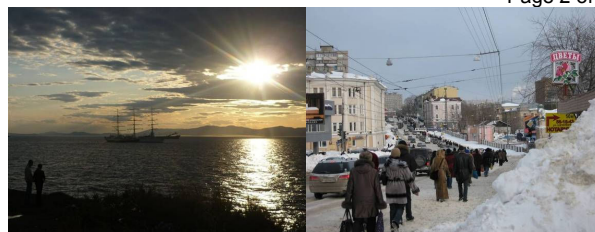
IEEE NSW Section has received many requests from industry and government agencies for assistance in recruiting new graduates to fill newly created positions. Currently the IEEE NSW Section is setting up a database to match the need of industry with our graduates in engineering and computer science. If you are interested¹ in being placed on our database, please send your CV to Errol Chopping, Chair of Graduate Placement IEEE NSW, at the following address: echopping@csu.edu.au.

Undergraduate Scholarships

A total of 30 undergraduate scholarships in the area of Computer Sciences are being offered by IBM and several government agencies to first and second year undergraduate students. Each of the scholarships is valued at \$30,000, which includes cash payment, on the job training and a 12 month work experience position. Again, you can contact the Chair of Graduate Placement, Errol Chopping, for further details².

First Russia and Pacific Conference on Computer Technology and Applications

Have you been to Russia Far East? Do you know that Vladivostok is one of three branches of the Russian Academy of Sciences producing world class research and development? If the answer to these questions is “no” and you are interested meeting up with top scientists in Russia, then you should read on!



Contrasting scenes – autumn (September) and winter in Vladivostok

While many researchers have had the opportunity to present conference papers all over the world, few have visited our immediate European neighbour in Vladivostok. Vladivostok is located in the same time zone as NSW and hosts some of the most advanced research institutions and universities in the world.

Further to the recent signing of the MOU between the IEEE NSW Section and the IEEE Russia Siberian Section, a joint conference has been organized (together with The Russian Academic of Sciences and the Russian Far East National University) for September 2010 in Vladivostok. Details can be found at the following web address:

<http://www.academicinternational.org/aaic/index.html>



David Tien dtien@csu.edu.au
Chair, NSW Section

2. News in Brief

2.1 Membership Development

As of 1 Jan 2010, IEEE NSW Section have a total of 2,549 active members. This is 50 more active members than as at the same time last year (i.e. an increase of 2%).

Active student members increase from 252 to 300 for the same period, which equates to an increase of 19%, while active society member decrease from 1,667 to 1,648 (down 1.73%).

In 2010 we are looking to increase the number of student members. To achieve this, we are continuing our Free Student Membership program for 3rd, 4th & post-graduate students. For further details, please contact Dr Ali Hellany (a.hellany@uws.edu.au).

¹ You must be an Australian Citizen, a Permanent Resident of Australia or have a valid working visa.

² To qualify, you must be an Australian Citizen or a Permanent Resident of Australia
2230300_1 (GHMatters)

Apart from our usual professional activities like technical meetings, site visits, talks from Distinguished Lecturers, etc., we continue to explore new services in order to benefit our members.



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

2.2 History and Heritage

Just a quick reminder to all members to be on the lookout for any historical documents that pertain to IEEE, either in NSW, Australia or globally. There is now a groundswell of this type of information - as well as more general history on people, technologies and first hand experiences that are already available on the IEEE GHN (Global History Network). The historic material can be documents, images, sound (cassette, tape, etc.) and even video. If you are a Life Member, seriously consider doing an "ORAL HISTORY", where you can document your own career and experiences with technology for both posterity and for the benefit of others following in your footsteps.

Please get in touch with me and let's see what we can do.



David Burger k3hz@ieee.org
Immediate Past Chair, NSW Section Historian

2.3 NSW Professional Activities/Joint Institutions Committee

Since 2009, I have been the Chair for the NSW Professional Activities and Joint Institutions (Engineer Australia Electrical Group, IET and IEEE NSW) Activities Committee. In my role as Chair, I have been meeting many professional industry and academic speakers to be involved in professional lectures, seminars and site visits to allow the members of IEEE NSW, IET and Engineer Australia to learn and update their knowledge. These activities will be in addition to those that you are already involved with in your

individual IEEE Chapters.

If you have an area of interest or topic you would like to speak and share with your fellow professional colleagues, please contact me to firm up the speaking arrangements. If you are working on an interesting technology and are able to arrange a site visit/tour, it would be a wonderful opportunity to showcase your technology.

Most of the lectures are held at the Engineer Australia Auditorium at Chatswood on the 2nd and 4th Thursday of the month, from 7 to 8:30pm.

Currently, I am actively looking for speakers for lectures on 28 October and 9 December 2010 (and for the 2011 calendar).



Eddie Fong eddiefong@ieee.org
**Vice Chair, IEEE NSW Section
 Chair, IEEE NSW Professional Activities
 Chair, Joint Institutions Activities Committee**

2.4 Life Members

We have not yet finalised all our activities planned for this year. We are considering a subsidised special luncheon at a City venue for all life members and their partners mid July or August. All members interested in this type of event please contact me at jl.robinson@ieee.org or by phone on 94188695 anytime. This will enable to assess if such an event is viable.



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

2.5 Free Student Membership

If you are a 3rd or 4th year student, or post-grad student in 2010, the IEEE NSW Section will sponsor your student membership fee! See the flyer on the last page of this newsletter for more details.

Dr Ali Hellany a.hellany@uws.edu.au
Chair, Student Activities

2.6 Oceans 2010 Conference

At the Local Organising Committee monthly meeting on 24th February we were joined by Diane DiMassa who works at the Massachusetts Maritime Academy and is the Oceanic Engineering Society (OES) Treasurer. She is currently working at James Cook University in Townsville. We had good news for her as we have easily passed the breakeven point, with well over 300 top quality papers accepted. For those members who will be mainly from the Oceanic, Signal Processing and Communications Societies attending the Conference, we are predicting this will be the most successful IEEE OES Conference held outside North America. For those members intending to attend the Conference please note the closing date for Early bird registration is now 31 March. We are planning for 800 persons will register.

John L Robinson jl.robinson@ieee.org

2.7 IEEE Sponsored Macquarie University Engineering Colloquia

The inaugural Macquarie University Engineering Colloquium (MQEC) was held on February 19th, under the sponsorship of the IEEE NSW Section.

Professor Myung H. Sunwoo, a distinguished lecturer of IEEE Circuits and Systems Society, and Dr Stevan Berber, an invited speaker from the University of Auckland, made excellent presentations on current topics.

Thirty five people (including 21 IEEE members) from organizations such as Vodafone, Avaya, RailCorp, University of New South Wales and Macquarie University attended the MQEC event on February 19th. The event was also sponsored by IEEE Macquarie Student Branch, IEEE NSW Circuits and Systems Chapter, IEEE NSW Joint Communications & Signal Processing Chapter and Macquarie University. Several postdoctoral staff members of Macquarie University and members of the IEEE@MQ Student Branch helped in the organization of the Colloquia. Professor Graham Town and Associate Professor Sam Reinsfeld hosted the two invited lectures. The next external lecture is tentatively scheduled for Friday, 19th March 2010.

The MQEC is a regular event, free and open to general public. All IEEE and Engineers Australia members are invited to attend. Upcoming MQEC events are advertised regularly at www.engineering.mq.edu.au/colloquia.

All MQEC speakers are graduates, holding at least one degree in Engineering or a related discipline. Some are candidates of postgraduate degrees such as PhD. Invited guests from industry and external institutions give lectures regularly. The abstracts of the lectures and the speaker biographies are published regularly on the

website. All abstracts are reviewed by academics and they will be published once every six months in Proceedings of MQEC – an online depository with an ISSN. Nominations for invited speakers are welcome. Please direct speaker nominations and any queries to Dr Venkata Gutta (vgutta@ieee.org) or myself (karu@ieee.org). No prior registration is not required to attend MQEC events.



Karu Esselle esselle@ics.mq.edu.au
Editor, MQEC and Counselor, IEEE@MQ

2.8 Welcome to our New and Upgraded Members

From October 2009 to March 2010, we have the following new and upgraded members:

Life Senior

William J Edwards

Life Member

John Kaunitz
Geoffrey W Trott
Peter C Coogan
Victor J Gosbell
Clive H Potter
Richard C Clarke
William J Edwards

Fellow Member

Benjamin J Eggleton

Senior Member Grade

Jennifer R Seberry
Reuben Shar
Mehmet R Yuce
Yan Wang

2.9 Welcome to our New and Upgraded Members (cont.)

Member Grade

Parui S Chandra
 Gary Shipton
 Nihar T Trivedi
 Douglas B Hayman
 Giuseppe Venuti
 Michael R Willison
 Sudhir Ispahani
 B B Jones
 N Rajaratnam
 Daven Dharmalingam
 L Enjeti
 Dubravko Palecek
 John A M Brady
 Jovan Gligic
 Brendan Hanna
 Dale Harrison
 Joseph E Habib
 Gene Van Grecken
 Sourendra N Sinha
 John I Jones
 Branko Kovac
 Linlin Ge
 Victor Tam
 Paul D Metcalf
 Jonathan Yu
 Raji Ambikarajah
 Allen Chuang
 Dadong Wang
 T Tharmachandirar
 Ghaffer I Kiani
 Sukkim Chin
 Dean A Safadi
 Ian B Farquhar
 Vincent Yue-Sek Chan
 Robert M Leidl
 Jun Ma
 Richard Alexander Harley
 Mark Holden
 Sarah Sharp
 yanguang yu
 Jun Li
 Raul Antonio Flores Veloz
 Andrew Datsenko
 Bo Yan
 Louie Bounassif
 C P Mudannayake
 Aleksandar Ignjatovic
 Adam Kristian Jackson
 gerald jensen
 Steve Webster
 Craig Bennett
 Stephen James Farrell
 Andrei Lachsyz
 Thomas C McLaughlan
 Yang-Wai Chow

Thomas Benke
 Brendon Rae
 Anthony Robert James
 David Boyce
 Mukesh Arjan Tejwani
 Mark Calleija
 Herbert Francis Mailey
 Ying Zhang
 Harold Andrew Burchey
 Michael Stanton
 Ludovico de Souza
 John Michael Gardner
 Damien Geoffrey Gardner
 xun yang
 Mike Brooks
 Haiping Du
 Stuart David Anstee
 Jignesh Kakkad
 Andrew John Horrocks

Associated Grade

Leopold List
 Md Tanvir Rahman
 Steve Abbott
 Anthony George Waller

Affiliate Grade

Anthony Mak
 Paul L Bannerman
 Juan I Nieto
 Katherine Camilleri
 Decler Mendez Hague
 Enver Vasfi
 Yannick Townsend
 Chris Francuz
 Bharathi Chandrasekaran
 Colin John Adams

Grad. Student Member

Md Abu S Miah
 Kam H Fung
 Chi Yan Wong
 Manal E Helal
 Darryn W Lowe
 Timothy T Loy
 Raymond K Sheh
 Yit Ping Kok
 Dale A Prokopovich
 sarath pathuri
 Jianjun Liu
 Iyad Yousef Alsmairat
 Shan Siddiqi
 George C Dungan
 Hao Li
 Tuo Li
 Peerapat Vithayasrichareon

Grad Student Cont.

Christopher J Hunter
 Joao Carlos Aydos
 Joshua Ross Wall
 Zhen W Chen
 Farid M Ahmad
 Lee D Walsh
 Tarek Taha
 V Pasupathinathan
 Alan T Murray
 Akila J Seneviratne
 Sridhar Reddy Pulikanti
 Pranam S Janney
 Thomas Xian Hua Huang
 Rachel L Mackie
 Wilson Pok
 Liang Tang
 Kai Xian Lai
 Junghum Yu
 Dale R Bates
 Louis H Jung
 Jay R Carniel
 Vidhyasaharan Sethu
 Bernard Blackham
 Zhong Zhuang
 Ante Prodan
 James A Howarth
 Mohammad A Al-Rabayah
 Andrew P Bradshaw
 Joo Lim
 Farshad Javadi
 Nai Shyan Lai
 Weisheng Si
 Jun Yang
 Kui Zhang
 Yee Jern Chong
 Haris Javaid
 Wee Han Lim
 Kun Pang
 Ahmed Fawzi Otoom
 Adizul Ahmad
 Prasanna R K Herath
 Anas M Aloudat
 Shukor Sanim Mohd Fauzi
 jhaman Advani
 Joop van de Ven
 Nawid Jamali
 Fawad Nazir
 Thomas Guenther
 Herman Wahid
 jaebok lee
 Long Shi
 Shiela May Servida
 Goran Marjanovic
 Michael Hoy
 Iman Sadinezhad

Grad Student Cont.

Dengji Zhao
 Ryan Toohey
 Jurjen Lippold van Geenen
 Tao Tommy Wu
 Steven Wong
 Heba Khamis
 Alan Chiang
 Leon Chun Yin Lo
 Andre Kyme
 zijie zhang
 Mojtaba Golzan
 Hu Zhe
 Muhammad Aamir Cheema
 Stephen Alexander Barkby
 Jhoanna R Ibabao Pedrasa
 Huda Adibah Mohd Ramli
 Brett Hagelstein
 Haydn Keir Mearns
 Md Anisul Karim
 Robert Christopher Fearn
 Essam A M Rahali

Student Grade

Muralee Krishnan M
 Sabbir Hasan Khan
 Timothy Ian Muscat
 Patrick Tong
 Lewis Keith Garland
 Phillip David Allen
 Michael Craig Burton
 Ming-Chak Lee
 Michael Wood
 Jeffrey ONEill
 Carlo Magno
 Adam McNeilly
 Pouyan Kazemian
 Drew Nicholas Sturgiss
 Abu Ahmad Abdal Rai
 Jeffry Susanto
 Jensyn Luc
 Manvinder Singh Mann
 Mitesh Patel
 Edmund Li
 Tim Ma
 Peter Goreta
 Rowan Humphreys
 HAICHUAN SHANG
 Eric Leonard Ferguson
 Michael Thomas Leung
 Asheerwadam Jannu
 Muralee Krishnan M
 Sabbir Hasan Khan
 Timothy Ian Muscat

3. Chapter News

3.1 Photonics/SSC/CAS Chapter

Dear Members: In the absence of others coming forward I have agreed to continue in the role of Chairperson for our Joint Chapter. In 2009 we held three technical meetings, all CAS Distinguished Lecturers, and already in 2010 we have held two Distinguished Lecturer meetings. I encourage members to propose local speakers and venues for technical meetings which the Joint Chapter may sponsor - please feel free to contact me about this at gtown@elec.mq.edu.au.

I look forward to meeting you at one of our technical meetings during the year.



Graham Town gtown@elec.mq.edu.au
Chair, Photonics/SSC/CAS Chapter

3.2 Power & Energy Chapter

On 25 February, as part of the 2010 Joint Institutions Lecture Program, a visit was organized at the recently completed state-of-the-art Power Engineering Facility at the University of Sydney.

The Facility incorporates the Sir William Tyree Laboratory in Power Engineering, the ABB Technology Centre, TECHLAND™ studios and research facilities.



PhD Student Georgios Konstantinou explains the capabilities of their Power Systems Simulator

This modern facility integrates, in a unique and seamless way, many professional functions to facilitate learning, industry training and continuous interaction between students, industry colleagues and academia to address the current skills shortage in power engineering in Australia.



Part of the audience being addressed by Lecturer Dr Dylan D.C. Lu prior to entry into the working part of the new laboratory

The facility has been made possible through the generosity of philanthropy and industry. The University has developed strong partnerships with various organisations including Tyree Industries, ABB and Energy Australia to address common challenges. All the instruments were normal production as used in the industry and of particular interest was the Power System Control Centre Simulator.

The event was heavily oversubscribed as the numbers were limited to 40 members from IEEE, IET and Engineers Australia.



John L. Robinson jl.robinson@ieee.org
Past Immediate Chair, Power & Energy 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.

Date (2010)	Event/Meeting/Conference	Speaker	Host	Contact	Venue
30 March	90 Years of Dutch Aeronautics	Fred Abbink	EA	PeterHitchiner	EA Auditorium
22 April	Multicast Networking – Video on Internet	Dr Kim Chin AC University	IEEE	Eddie Fong	EA Auditorium
13 May	Voltage Flashover	Reg Caldwell	IET	Deon/Upali	EA Auditorium
27 May	Smart Grid - \$100M demonstration	David Edwards	EA	Yi Li	EA Auditorium
10 June	Metamaterials in Electromagnetic and Microwave Engineering	Dr Ozgur Isik	IEEE	Eddie Fong	EA Auditorium
24 June	Climate change IPCC	Steve Sherwood	IET	Upali	EA Auditorium
8 July	Climate change - Sceptic	Professor Ian Plimmer	IEEE	George Fox	EA Auditorium
22 July	Free Flow Marine Vortex Turbine - Elemental energy Technology Ltd	Michael Urch	IEEE	Eddie Fong	EA Auditorium
July/August	Safety regime for domestic electric appliances + foil insulation?				

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Mark O'Mally +614 11026960 or markomally@ieee.org

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Note: If you have previously returned this form, there is no need to send it again.

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IEEE Limited Offer*

If you are a 3rd, 4th or a post-grad student in 2010**

The IEEE NSW Section will sponsor your student membership fee !

Instructions:

1. Go to www.ieee.org/join and register as Student Member
2. Type in all your details, on the check-out process, press 'Print & Mail/Fax order' instead of 'Proceed to checkout' And then from your browser menu print to PDF.

Ensure your postal address and contact details will be valid for the next 12 months or more. Instead of sending the form to IEEE HQ USA, Please forward a PDF copy of this application and a copy of your current student card to:

Dr Ali Hellany —IEEE NSW Student Activities Chair
University of Western Sydney, School of Engineering
Locked Bag, 1797 Penrith South DC
NSW 1797, Australia
e-mail: a.hellany@uws.edu.au

* This offer excludes membership to individual IEEE societies. You may purchase these separately. This offer is valid and available only to students located in New South Wales. It is limited to a maximum of 200, on a first in basis. This sponsorship is for the first year of membership only, current IEEE student members are not eligible. Deadline for submission is 4:00pm on the 31st of March 2010.

** Please attach a copy of your current student card.

OCEANS'10 IEEE Sydney

24-27 May 2010 Sydney, Australia

Showcasing advances in marine science and engineering

SPECIAL ANNOUNCEMENT - EARLY BIRD EXTENDED TO 31 MARCH

The early bird deadline for registrations is fast approaching. There will be no further extension of the Early Bird deadline. Register today online.

See: <http://www.oceans10ieeesydney.org/main.cfm/CID/6/Registration/> for details.

Significant Savings

- Non IEEE member delegates can save AUD\$395 before 31 March
- IEEE member delegates can save AUD\$260 before 31 March
- Student IEEE member delegates can save AUD\$110 before 31 March
- Student non IEEE member delegates can save AUD\$90 before 31 March

See the list of accepted abstracts: www.oceans10ieeesydney.org/main.cfm/EID/50/Accepted-Abstracts

Top 5 Reasons to attend OCEANS '10 IEEE Sydney

- The OCEANS '10 Conference and Exhibition are both full 3 day events, plus the Monday for tutorial presentations and the Ice Breaker Reception.
- Top international and local presenters will lead the tutorials at OCEANS '10
- The OCEANS '10 Technical Program covers a broad range of topics with at least 6 concurrent technical sessions planned on each day
- PhD and other students have been selected to present in the highly competitive Student Poster Competition.
- The OCEANS '10 Trade Exhibition is integrated in with the Poster displays. It is also where registrants will be provided with morning/afternoon tea and lunch. There will be the Exhibition Reception on Tuesday evening.

And you get SYDNEY thrown in for free!

General Enquiries

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