



The Institute of Electrical and Electronics Engineers, Inc.

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. IEEE NEW SOUTH WALES SECTION ARBN 078 576 495 ABN 34 078 576 495 Editor: Antony Zaglas e-mail: antonyz@ieee.org

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#### Editorial

Our CIRCUIT Editor Dr Prasant Misra has been successful in obtaining a Research Position in Stockholm and I have volunteered to serve as interim Editor until a replacement is appointed. I would like to thank Dr Misra for his contributions to the NSW Section and wish him all the best in his new job and for the future.

As always contributions to CIRCUIT by Members are welcome. If you have any interesting news to report, events that would be of interest or developments in research please do not hesitate to contact me.

I would like to inform you that our NSW Section web site has been updated with a Conferences TAB showing links to symposia and conferences Section is sponsoring or has involvement. I wish to thank Fuat Acar, our standin Webmaster, for his efforts and assistance. Please visit http://ewh.ieee.org/r10/nsw/ and select the Conferences TAB.

Should anyone be interested in the position of CIRCUIT Editor or Webmaster please contact our Nominations Chair John Robinson or myself.



Antony Zaglas antonyz@ieee.org **Editor, Circuit Newsletter, NSW Section** 

### 1. Message from the Chair

I am honoured to work with a committee of dedicated professional volunteers during my 2-year term as the Chair of NSW Section.

This year, we initiated the Section Committee Evoting program. We have deployed the program for the NSW Section Committee 2013 election. To make it a success, we need your full participation to place your vote. The final result will be announced in the Section AGM & Dinner to be held at the Radisson Hotel on Friday 23 November 2012. Please remember to send in your RSVP for the AGM & Dinner as soon as possible as places are limited.

We celebrated our 40th Anniversary on 16 August 2012. Fellow Members, the Region 10 Director and Australia Council Members were invited to join us to celebrate this special occasion. We received feedback that members had enjoyed the celebration very much.

An exciting event taking place on 17-19 April 2013 is the Region 10 TENCON Spring Conference with "Personal Communication in a mobile world" and "Advanced Technologies & Economics of Energy Systems" being the themes. This will be a great opportunity for NSW members to submit technical papers to be selected for presentation and publication at this Conference. Please also see item 2.7 below and last page with Call for Papers.

We have also committed to sponsor the ICIEA 2013 Melbourne and the ICC 2014 Sydney Conferences. This is an exciting time ahead for all of us to be involved in the upcoming events. Please consider being actively involved in supporting your Section, Chapter and Society.

Once again, I look forward to meeting you on 23 November 2012 at the AGM.

May I also take this opportunity to wish you a Merry Christmas and a Happy New Year.

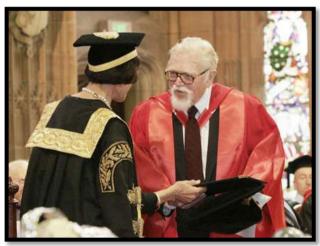
God bless you and your family.



Eddie Fong eddiefong@ieee.org
Chair, NSW Section 2011-2012

#### 2. News in Brief

# 2.1 Vale Neville Thiele - A Lifetime in Sound



Receiving the DSc(Arch) in 2008

Dr Albert Neville Thiele OAM, DSc(Arch)(hc), BE, FAES, FIEAust, MSMPTE, who died on 1 October 2012 at the age of 91, was a very distinguished Australian engineer. He is survived by his wife Lexie (née Anderson), who he married in 1953, and children Laurie and Miranda and their families.

As well as his family, he also loved classical music, theatre, red wine, the Goons, bushwalking and Australian fauna and flora (he was on the board of Wirrimbirra Sanctuary for many years). He lived life to the full.

He is best known for his work in electroacoustics, which continued throughout his career. His interest in sound evolved from his early experience as a boy soprano performing in the ABC Radio Studios with his brother Leonard and accompanied by his father, and later when writing skits for university revues. He also had lead acting roles with the Schavian Playhouse.

After early education in Brisbane, he spent most of the war years in the army in New Guinea. Subsequently he studied engineering at the University of Sydney, graduating with a BE (Mechanical and Electrical) in 1952, where he learnt about steam engines, which no doubt helped with the mechanical aspects of speaker design.

He then worked for EMI (Australia) Ltd for ten years on the design of consumer audio, radio and video equipment. He was responsible for applying advanced technology to EMI Australia's radio and television receivers and electronic test equipment. When television started in Australia, and after a stint in 1955 in the overseas laboratories of EMI, he lead the design team that developed the first HMV/EMI Australian television receiver. To test its packaging, he sent the first prototype tumbling down a flight of steps.

While at EMI in 1961 he published a pair of papers on 'Loudspeakers in Vented Boxes' in the Proceedings of the Institution of Radio Engineers Australia (later IREE Australia), building on earlier analysis work by Novak and others. For a long time these papers were little known outside Australia, but they received international recognition when republished in the Journal of the Audio Engineering Society (AES) in 1971. They are now considered to be landmark papers in the field.

Essentially, they disclosed for the first time how the speaker enclosures could be systematically designed to give desired frequency responses in the bass region. He found that only a small number of parameters needed were characterize the essential features loudspeaker driver at low frequencies, and the box design could then follow, without having to actually build it. The required parameters (the driver's free air resonance, electrical and mechanical Qs. DC resistance, piston area, etc.) could easily be measured, and the entire electromechanical system could be represented and analysed as a simple electrical equivalent circuit.

These papers were extended in the 1970s by Richard Small, then at Sydney University, in a very influential series of papers published by the AES, and also by J.E. (Ernie) Benson, at that time in AWA. The expanded set of driver parameters became known as the Thiele-Small parameters, and are now almost universally specified by serious driver manufacturers.

Neville moved to the ABC in 1962, where he stayed until his retirement at age 65 in 1985 (though he never really retired). His work there was initially designing and assessing equipment systems for sound and television broadcasting. He ultimately became Director, Engineering Development and New Systems Applications, responsible for the ABC's engineering research and development. As a fan of public transport, while at the ABC he travelled by train to work with his portable office in a big bag, working away and never wasting a moment. While

at the ABC he made many novel contributions to TV and audio testing, filter design (including early active filters), cable equalization and broadcast standards. Among other things he designed the Telephone Recorder Connector that delayed telephone conversations so that the operator could kill unwanted speech, and also designed variable video delay lines for colour TV.

Following his retirement, he was made an Honorary Visiting Fellow of the University of New South Wales (1991 - 93) and an Honorary Professional Associate of the University of Sydney (1994 - 2012), where he continued to research and lecture on loudspeakers and filter design in the faculty of Architecture until quite recently.

His output of original papers actually increased after his retirement; e.g. 21 papers were published by the AES alone in this period, mostly on loudspeakers, filters and crossover networks. His original work throughout his career was always characterized by deep insight and an elegant marriage of theory with practice.

Another aspect of his activities over many years was his involvement with standards organisations. both national and international, starting with standards for the introduction of the colour television service for the Australian Broadcasting Control Board (1969-1974). He represented Australia on the International Radio Consultative Committee (CCIR) of the International (ITU) Telecommunications Union regarding standards for sound and television broadcasting (1980 - 1985), as well as other CCIR groups. He was chairman of the CCIR Sub Working Group CMTT-C-1 on Long Distance Transmission of Analogue Sound in 1985. He was also involved in standards relating to loudspeakers, digital audio and electroacoustics for Standards Australia, for the International Electrotechnical Commission (IEC), and for the AES.

His numerous contributions to the profession over the years have been recognized by the many awards he has received, culminating in the Medal of the Order of Australia (OAM) in 2003 'for service to audio engineering, particularly in the field of loudspeaker design and the development of audio engineering standards'. In 2008 he received the degree of Doctor of Science in Architecture (honoris causa) from the University of Sydney, a well-deserved recognition of his standing in the profession.

The IREE Neville Thiele Award is named in his honour. It is the most prestigious award given by Information, Telecommunications Electronics Engineering (ITEE) College Engineers Australia. It also recognises the IREE, which represented the profession of radio and electronic engineering in Australia for many years (till absorbed into Engineers Australia). He was president of the IREE in 1986-1988, and received its Award of Honour in 1996. He also received two Norman W.V. Hayes Medals for best paper from the IREE (1968 and 1992).

Other major awards include the Silver Medal of the **AES** 'for pioneering work in loudspeaker simulation' (1994), The Australasian Sound Recordings Association award for outstanding technical achievements (1995), the IEEE Masaru Ibuka Consumer Electronics Award 'for major contributions to the synthesis and analysis of loudspeakers' (2003, jointly with Richard Small), and the Peter Barnett Memorial Award by The Institute of Acoustics (UK) 'for technical excellence, practical advancement and education in the fields of electroacoustics and speech intelligibility'. He was Vice President, International Region, of the AES from 1991 to 1993.

Neville Thiele has left a lasting legacy, especially in the audio and broadcasting worlds, both in Australia and internationally. He never stopped working, right to the end, and was a mentor and friend to many.

Dr Harvey Holmes IEEE Life Senior Member

#### 2.2 NSW Committee Nominations

Annual Elections for 2013 Section Positions will be using the vTools electronic voting system. Postal Ballots will be sent by John Robinson to each Active member without an email address. Unfortunately Students, Associate grade members and Affiliates are not qualified to vote.

I have been unable to make contact with the following members: Almarza Farias Kensington Chi-Wah R Chow Cherrybrook G Wong St Ives Heidari Alireza Kensington Sadnam Hasan Kensington Simon J Butler North Sydney Weijie Lim Kensington Xiran Shi Kensington Can these members please contact/ring me on

The Nominations for the Executive are:

NSW Section Chair: 1st lan Boyd, 2nd Eddie

Fong

NSW Section Vice Chair: 1st Tony Zaglas, 2nd

Karu Esselle

9418 8695.

NSW Section Secretary: 1st Dushmantha

Thalakotuna, 2nd John Ypsilantis

Section Treasurer: Mark O'Mally

(unopposed 2nd year term of office)

You will receive a voting notice for the Section Election shortly and I ask all Members to please participate in the election. You will need to have an IEEE web account to vote. If you do not have an account please go to <a href="http://www.ieee.org/go/create\_web\_account">http://www.ieee.org/go/create\_web\_account</a> and create one.

I would again ask members to please consider Nominating for service on the Section Committee as well as for elected office.

Elsewhere in this edition will be information pertaining to the AGM meetings of the various Chapters and Affinity Groups. Please endeavour to attend these meetings and support the elected officers.



John Robinson <u>il.robinson@ieee.org</u> Chair Nominations, NSW Section

### 2.3 Stefan Mozar Elected Consumer Electronics Society President



On behalf of the NSW Section I would like to congratulate Tencon Spring 2013 General Chair Stefan Mozar on his election as President of the IEEE Consumer Electronics Society. Stefan has been a long time NSW Section, NSW Computer Chapter and IEEE volunteer. He is Vice President for Conferences and President Elect of The IEEE Consumer Electronics Society.

Tony Zaglas <u>antonyz@ieee.org</u> NSW Section Secretary

# 2.4 IEEE Technologies of the Future (iToF) 2012 Competition and Exhibition

The fourth annual IEEE Technologies of the Future Competition and Exhibition was organised by the IEEE UNSW Student Branch on the 22nd October 2012 at the University of New South Wales (UNSW).

This year there were 26 entries from four universities. Represented were UNSW, Sydney University, University of Newcastle and Macquarie University.

Introductions were by Dr Elias Aboutanios, UNSW Student Branch Councillor and the opening address was delivered by Prof Graham Davies, Dean, Faculty of Engineering.

Dr. Muhammad Aamir Cheema, Research Fellow,

UNSW, delivered the Keynote presentation the basis being his award winning paper on <u>"Efficiently Monitoring Top-k Pairs over Sliding Windows"</u>



Prof Graham Davies, Dean, Faculty of Engineering UNSW

Prize Winners were:

#### **Project Demo for Undergraduates**

1st: Jason King, UNSW 2nd: Thomas Cooney, UNSW

3rd: David Budden and Shannon Feng, University

of Newcastle

#### **Poster for Postgraduates**

University of Newcastle

Energy and Green Environment: Yan Xu, University of Newcastle Improving Quality of Life: Libin George, UNSW Towards Miniaturisation: Sachin Wadhikhaye,





Congratulations to the winners and thanks to all the delegates for participating and making the event a success.

Sponsors this year included The University of NSW Engineering Faculty, CSIRO, Dolby, NICTA, Element 14, IEEE NSW Section and UNSW Student Branch.

I would like to express my appreciation and on behalf of the Section extend many thanks to Dr Aboutanios, Branch Chair Ms Yogita Chapre and the UNSW IEEE Student Branch who organised the event and contributed their valuable time.

Tony Zaglas <a href="mailto:antonyz@ieee.org">antonyz@ieee.org</a> NSW Section Secretary

# 2.5 40<sup>th</sup> Anniversary/Fellows Function

The 16th of August 2012 marked the 40th anniversary of the IEEE Australia Section which was formed by petition in 1972. To celebrate the occasion the New South Wales Section held a function and dinner at the Radisson Hotel Sydney. The function was attended by over 40 members and guests. The function also doubled as a meeting for New South Wales Fellows and seven fellows with partners attended. In addition there were guests from Engineers Australia and the IET. Dr Ramutis Zakarevicius, NSW Section Historian, gave an excellent talk on the formation and history of the Australian and NSW Sections from 1972 to the present day, with details and photographs of major events, important visitors and volunteers.

The Australian Section was formed by a petition instigated by the late James Vasseleu in 1972 who also was elected founding Section Chair at the first meeting on 12 September 1972 at Neutral Bay. James Vasseleu also served as Region 10 Director in 1977-1978.

In December 1985, following the creation of the IEEE Victorian Section in 1983, the Australian Section was renamed New South Wales Section and the Australia Council was formed with James Vasseleu founding Chair.



Dr Zakarevicius Presentation on the History of the Australian and NSW Sections

At the same function Dr Ramutis Zakarevicius was presented by NSW Section Chair Eddie Fong with the plaque for his 2011 Region 10 Outstanding Volunteer Award. Dr Zakarevicius has been a past Section Vice Chair, Section Chair and inaugural Communication Chapter Chair. He has been a long standing Section Committee member holding the

positions of Historian, Educational Activities Chair, Student Activities Chair and Awards and Recognition Chair.



Dr Zakarevicius Receiving the R10 OVA for 2011 from Section Chair Eddie Fong

Tony Zaglas <a href="mailto:antonyz@ieee.org">antonyz@ieee.org</a>
IEEE NSW Section Secretary

#### 2.6 AGM and Annual Dinner

The NSW Section Annual General Meeting (AGM) will be held at the Radisson Hotel, 72 Liverpool Street, Sydney on 23 November 2012.

Chapter and Affinity Group AGM's start at 6pm, followed by the Section AGM at 7pm. A delectable seafood buffet will follow after the conclusion of the NSW Section AGM at approximately 8pm. The NSW Section will again be covering the cost of the dinner. The RSVP date is 9 November 2012.

Further information (including maps and links pointing to nearby parking) can be found on the booking slip on page 16 of the newsletter.

Eddie Fong eddiefong@ieee.org Chair, NSW Section 2011-2012

# 2.7 TENCON Spring 2013 Conference

The Australian IEEE New South Wales Section will be hosting the inaugural IEEE TENCON Spring 2013 conference in Sydney, Australia from 17 to 19 April 2013. On behalf of IEEE Region 10 and the IEEE New South Wales Section, we invite you to participate in this exciting new conference. The conference will be held at a CBD hotel in Sydney, details will be posted on the Conference web site shortly. The "Spring" in Tencon refers to the Northern Hemisphere season.

TENSCON Spring is a sister conference of the well known TENCON conference. Both conferences are initiated by IEEE Region 10.

Prof Vassilios Agelidis and Prof Jinhong Yuan from the University of New South Wales are the Technical Chairs of the conference. Prof Vassilios Agelidis will lead the Electric Power Program and Prof Jinhong Yuan will lead the Electronics and Communications program. For program details and paper submission, please visit <a href="http://www.tencon2013.org.au/">http://www.tencon2013.org.au/</a>. See last page of this edition of CIRCUIT for the Call for Papers.

Tutorial proposals are to be submitted to Prof Agelidis for Power and Prof Yuan for Electronics and Communications by 30 November 2012.

The Conference will include a "doctoral workshop" open to PhD students. It will provide Doctoral students with an opportunity to learn more about how to present papers, and how to improve or expand on their research. Best paper prizes will be presented in a few categories. Best student paper awards will also be presented.

A number of very high profile keynote speakers, who have helped in changing our world, will be present, as well as many industry leaders. Please visit <a href="http://www.tencon2013.org.au/">http://www.tencon2013.org.au/</a> for more details and to keep abreast about developments.

The social program will include a Sydney harbour dinner cruise and there are many other interesting social events for spouses to visit in Sydney and its surrounds.

The Organising Committee welcomes offers of patronage from interested parties. The patronage packages listed below can help you showcase your brand's excellence to the IEEE community.

- Diamond Patron
- Platinum Patron
- Gold Patron
- Silver Patron
- Bronze Patron
- Other Patron Opportunities

If you require more information, have any questions, or would like us to customize a package just for your company, please contact Tony Zaglas Conference Sponsorship Chair antonyz@ieee.org.

The organising team looks forward to welcoming you to Sydney, Australia in April 2013

Stefan Mozar Eddie Fong General Chair General Co-Chair

# 2.8 Macquarie University IEEE Student Branch Activities

In the third quarter of 2012, IEEE Macquarie University Student Branch was mainly involved in promoting engineering activities by providing support to Robotics events conducted by first FRC

(FIRST® Robotics Competition) team in Australia and the Department of Engineering at Macquarie University.

The first major event supported by student branch volunteers was the FIRST™ Robotics Competition (FRC) event in Australia – "The Duel Down Under". Although robotic events have been held in Australia before, this was the first national-level FRC event held in Australia, a true land mark in the history of robotics.

The medium size robots built by teams of high school students had to compete against each other in a basketball game. There were six robotics teams competing in the tournament with each team having 15-20 members. Each team built one robot from the robot building kits provided by the FIRST® organizers prior to competition date. The event was held at Barker College, Sydney where it ran for full three days starting from 28th June. The first day mainly focused on practice rounds, with the tournament starting on second day. The last day was open to the public and there were over 300 visitors.

The second event was "Robotics Fun day" held as a part of Australian Engineering Week (AEW) on the 5th of August from 2-4 pm at Macquarie University. It was a fascinating two hours on a Sunday afternoon filled with keen kids of all ages engaging in robotics activities. The major objective of the event was to get children involved and build interest in engineering activities from childhood. There were activities for children of all ages ranging from lectures on robotics, displays and interactive robotic programming sessions.

The robots demonstrated during this time were mostly small size robots built from LEGO. The event was well attended event with over 400 participants. IEEE student branch volunteers supported this event through assisting children with designing and programming LEGO robots.



In addition to the robotics events, IEEE MQ branch members were involved in organizing an IEEE Distinguished Lecture Series jointly with NSW AP/MTT chapter. As part of this joint lecture series, IEEE distinguished lecturer Prof. Kwok Wa Leung has delivered a lecture on "Transparent Antennas" in June 6th at Macquarie University. The use of commercially available glasses with transparent conductive thin films to create 2D planar and 3D antennas was presented during this lecture.

In August, the members of IEEE MQ student branch have arranged their first non-technical networking activity in 2012. As a part of this activity, a guided kayaking tour was organized in the Bundeena River. It was a full day event with around 13 participants. The guided kayaking tour went for 3-4 hours including a morning tea break at the river bank. The activity concluded with a BBQ at Wattamolla lagoon in the evening at Royal national park.



Dushmantha Thalakotuna Chair, IEEE MQ student branch

# 2.9 Sydney University IEEE Student Branch Activities

## Sydney University Student Research Conference

The fourth Student Research Conference was held at the University of Sydney on Monday 24 September, 2012.

The IEEE NSW Section sponsored two prizes this year, Best Paper Presentation Electrical and Information Engineering(EIE) and Best Paper Presentation Information Technologies(IT).

The conference this year included 13 presentations and 27 posters from current senior postgraduate engineering and information technology students within the faculty.



Ms Mahboobeh Moghaddam winner of the Best Student Paper Presentation for IT



NSW Section Secretary Tony Zaglas presenting Mr Yan Shvartzshnaider with Invitation to the AGM for Best Student Paper Presentation for EIE

Congratulations to this year's prize winners, Mr. Yan Shvartzshnaider for EIE and Ms Mahboobeh Moghaddam for IT.

The winners were presented with invitations by Antony Zaglas, NSW Section Secretary, to the NSW Section AGM and Annual Dinner for the official presentation of the prizes.

There was also a Poster Competition and the Sydney University IEEE Student Branch Vice Chair, Andrew Clayphan won first prize for his Poster titled "Design for Negotiated Scripted Tabletop Collaboration". The prize was presented by Prof David Dagan Feng IEEE Fellow.

#### **Other Student Branch Activities**

On 10 October the Student Branch organized a lecture by Prof Iain Collings(Research Director, CSIRO ICT Centre) on Generating Impact from Research in Wireless Technologies. The lecture was well attended.



Prof Iain Collings Lecture at Sydney University

The Sydney University Student Branch also organised a lecture on 8 August 2012 to promote Australian Engineering Week. The lecture was on The Secrets of the Innovative Mind by Dr Ehssan Sakhaee(See item 2.10 below).

A site visit has been organised for Tuesday 6 November 2012 of the TransGrid Sydney West 330/132kV Substation, Eastern Creek. For an event flyer and registration please see: http://www.ee.usyd.edu.au/ieee/UserFiles/File/IEE ETransgridTour.pdf

More information can be obtained from David Browne

david.browne@sydney.edu.au.

You can keep up to date with past and future Student Branch events at:

http://www.ee.usyd.edu.au/ieee/events

### Sydney University Research Conversazione 2012

On 2 November 2012 I attended Sydney University Conversazione, an event highlighting student research in Engineering, Project Management and IT. I visited the Electrical Engineering and IT poster sessions and associated prize presentations.

There were some 175 entries in total and a large number of prizes covering all categories. The Event principal sponsor was Transgrid. Other prize sponsors included ABB, Alstom, Ampcontrol, Cochlear, Dulhunty Power, Freelancer, Lenovo, NHP, NICTA, ResMed, Telstra, Tyree Industries, Amadeus and Smart Services CRC.

I will try and provide a more comprehensive article in the next CIRCUIT.



IEEE Student Branch Vice Chair Andrew Clayphan standing next to his entry Designing A Negotiated System for Scripting Brainstorming at a



Prof Branca Vucetic presenting Smitha Shivshankar with a Lenovo Laptop for her paper "content-based routing using multicasting in vehicular networks"

Tony Zaglas <a href="mailto:antonyz@ieee.org">antonyz@ieee.org</a> NSW Section Secretary

### 2.10 Australian Engineering Week

Australian Engineering Week was held between 6 and 12 August 2012 with events and site visits throughout Sydney and regional New South Wales.

The Harrick's address attendance was significantly higher than 2011 and the interview of Frank Sartor was well received by those present.

Attendance throughout the 2012 AEW was on a par with 2011 with some events scoring an increase and some having reduced participation.

I attended the ABC site tour on Friday 10 August. There were almost 30 visitors that attended the tour hosted by ABC stuff. The tour included the Control Room, the 7:30 Report and Media Watch Studios, Studio 22, makeup and prop rooms as well as back stage areas. We also viewed the Regional Radio studios during actual broadcasting. Studio 24 unfortunately was not accessible due to refurbishment work.



ABC 7:30 Studios

The Macquarie University IEEE Student Branch was involved in the Robotics Fun Day held on 5 August and there were about 400 in attendance.

Sydney University IEEE Student Branch organised a lecture on The Secrets of the Innovative Mind by Dr Ehssan Sakhaee with over 50 in attendance.



Lecture by Dr Ehssan Sakhaee at Sydney University

Sponsors of AEW included APEASMA, IET, Macquarie University, Aurecon, UNSW Engineering, NSW Transport, EEA, Hyder, Consult Australia and the IEEE NSW Section.

I would like to thank the AEW Organising committee, the sponsors, student branch volunteers and Councillors for their efforts and hard work.

Tony Zaglas <a href="mailto:antonyz@ieee.org">antonyz@ieee.org</a> IEEE NSW Section Secretary

# 2.11 National Electrical Building Services and Industrial Installations Conference and Exhibition

#### **Call for Abstracts**

The Engineers Australia Electrical College Board is hosting the inaugural National Electrical Building Services and Industrial Installations Conference and Exhibition 16-18 April 2013 at Docklands Sydney. This conference is recognising a need to provide the members with a relevant continual professional development program in the area of electrical building services and industrial installations. Attendance will be credited towards Members CPD.

We expect a large number of younger professionals, new to the industry attending the conference which provides the opportunity for exhibitors to get to know them as future customers.

The theme of the conference and exhibition is "21st Century Building Services and Industrial Installations – opportunities and challenges". Critical Power Supply Technology, Safety in Design, Renewable Energy and Integrated Design are examples of topics that will be covered by industry experts. Panel discussion on the role of electrical building services engineers and architects in Smart Buildings will benefit not only the designers but also the operators / developers who invest in smart technologies to have a sustainable building that attract quality clients and reduce maintenance costs.

### Call for Abstracts closes on 19 November, 2012

The link below provides some further information or call Mai Yeung on 0414 24 072 directly. https://www.engineersaustralia.org.au/nebsii

NEBSII CON 2013 Organising Committee Chair Electrical College Board Mai Yeung Mai.yeung@aecom.com

#### 2.12 IEEE Web Account and Email

I would like to advise all members who have created a web account and have not updated their details to do so at their earliest convenience. You may do so at: http://www.ieee.org/membership\_services/member

ship/my ieee.html?WT.mc id=tu myieee and clicking Access mylEEE. A Sign in window will request your login information. Alternatively you can visit <a href="http://www.ieee.org/go/my\_account">http://www.ieee.org/go/my\_account</a>. If you have forgotten your user name and password you can click Forgot username or password and you will be guided through the recovery procedure.

If you do not have a web account I would encourage you to create one to take advantage of additional IEEE services including an IEEE email alias. You can create a web account by visiting <a href="http://www.ieee.org/go/create\_web\_account">http://www.ieee.org/go/create\_web\_account</a>

Members requiring additional assistance can reach the IEEE Support Centre at <a href="http://www.ieee.org/about/contact\_center/index.html">http://www.ieee.org/about/contact\_center/index.html</a> then clicking "Visit Support Centre".

Additionally you can contact IEEE at: <a href="mailto:contactcenter@ieee.org">contactcenter@ieee.org</a>
445 Hoes Lane

Piscataway, NJ USA 08854

Telephone Worldwide: +1 732 981 0060

#### 2.13 Senior Member Update

For members who are qualified to be senior members, I would like to urge you to upgrade to senior membership in order to boost 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.

More information and application form can be found at <a href="http://www.ieee.org/membership\_services/membership/senior/app\_quide.html">http://www.ieee.org/membership\_services/membership/senior/app\_quide.html</a>

If you would like to discuss upgrading your membership, or any other membership related matters, please contact me with your details, I would be very happy to assist you.

I would also like to inform those members that are nearing Life Member status the IEEE will contact you when you are eligible so please make sure your contact details in the database are current.



Bruce Poon <u>bruce.poon@ieee.org</u>

Membership Development Chairman, IEEE

NSW Section

#### 2.14 Welcome to our New and Upgraded Members

#### **Senior Member Grade**

Charles M Bachmann Holly Tootell Irina R Rabeja Ramtin Shams Shui Yu Wanqing Li Xuemin Lin

#### Member Grade

Adam James White
Aftab Hussain
Ahsan A Chaudhry
Aimee Louise McNamara
Alam MD Zahangir
Alan Kurusingal
Alan T Murray

Alanna Heather Therese Vial Alex Probst J Probst Aliakbar Samirad Almarza Farias Amgad George Habib Andrew Mc Laren Andrew James Cook Andrew Ming See Andrew P Bradshaw Anthony Knittel Arcot Sowmya Arun Babu Thangaraiu

Arun Babu Thangar Bappi Barua

Barathkumar Vellingiri Benjamin Charles Roesler Bhranayan Siyanandan

Bill Sami Bin Duo Bo Yang Cathy Liu Chaojie Zheng Cheng-Chung Lin

Cher Hau Seng Christopher Gerard Byrne Clinton Goodwin

Craig Matthew Brown
Cristhian Javier Zipaquira Ortiz
Dae-Yeon Won

Darren John Woodhouse
David SilveraTawil
David C Snowdon
David Sean Henry
Eugene Doma
Evan Morrison
Ezra Beeman
Filippo Galgani
Gautam Manoharan
Georgios Angelis

Georgios Konstantinou

#### Member Grade Cont.

Gitanjali Pradhananga Greg Bell Gregory Mar Gregory R Maslen Hamid Alinejad-Rokny

Hao Ni Hao Su

Haydn Keir Mearns

He Wang Heidari Alireza Heidi B Stratti

Herman Halomoan Sinaga

Hooman Mardokhi Hu Zhe

Hu Zhe
Hyuntae Choi
lan B Farquhar
Jacob John Foley
James G Petersen
James M Robinson
Javad Dodangeh
Jean-Pierre Harvey
Jeffrey W Moscrop
Jinman Kim
Joanne Fu
Joao Paulo Prata
John Garland
John A M Brady
Jonathan Sharp

Joseph Terrence Radford

Joshua Spence Josiah Poon Julia May Gibney Karen Lu

Kathirgamanathan Sabesan

Ke Xiao Keith Grochow

Kendal Raymond William Smith

Kurt Forrester

Lakshminarayanan Vaidyanathasamy

Lei Shang Leon K Macdonald Louis H Jung Ludovico de Souza Luping Zhou Mao Shan

Marc Garry Carmichael Marcel Julliard Mark Platt Mark Ronald Tainsh Mark T Phillips Mark V Bishop Matt Hurd

Matthew Majewski
Matthew Marlon Williams
Md Tanvir Yeasin

#### 2.14 Welcome to our New and Upgraded Members

#### Member Grade Cont.

Mena Farag Michael Thomas Leung Mingzhi Zhang M Kzaman Chowdhury Mohammad Mazher-ul Alam

Choudhury Mojtaba Golzan Muralee Krishnan M Nagendar Reddy Elimineti

Nejla Ghaboosi

Nicholas John Anderson Nikhil Mathew Mathew Nishad Rasanjana Mendis Omar Adolfo Palacio Perez

Paul D Metcalf Paul L Bannerman

Peerapat Vithayasrichareon

Pega Zarjam
Peter Tsang
Peter J Hanselmann
Peter W Davidoff
Philip Fyvie
Phyu Phyu Khing
Qim Yi Lee
Qimin You
Rainer Wasinger
Ramzi Kutteh

Robert Edward Douglas Webster Robert Mark Jazwinski

Rohit Moza
Rony Novianto
Russell Glen Hayter

Ruth Scheib S M Golam Sorwar Sadnam Hasan Saeed Afshar

Saeid Sadeghi Lakelayeh

Sam Lee

Samaneh Movassaghi Seynthan Thanapalan

Shan Chen Shane Feeney Shervin Moradpour Shuang Tian Simon Francis Heslop

Siwei Bai Spyridon Revithis Stephen Cossell Susan Bruck Taghi Davatgar

Terence R Lee Thirumalainambi Murugesh

Thomas Guenther
Thomas Owen Glanville

Timothy Ruckley
Tom Molomby

#### **Member Grade Cont.**

Tuan Hue Thi Vanush Vaswani Wei Li

Wei Zhao

Weidong Su Weihong Wang Weijie Lim William Song

William Hector Robertson

Xi Chen
Xiaoke Yi
Xinwang Liu
Xiran Shi
Yan Cai
Ying Wang
Yingyi Liu
Yingying Chen
Yonathan Hendrawan
YongKhing Tan
Zelin Li
Zhiheng Wang

Zelin Li Zhiheng Wang Zhitao Shen Zijie Zhang Zoltan Kocsi

#### **Graduate Student Members**

Abdallah AL Sabbagh Adrian Dennis Lee Ali A Juzer Ali Reza Heidari

Amila Suranga Wickramasinghe

Andrew Clarke
Anthony Espinoza
Anthony Fowler
Anup Kale
Aroba Khan
Astrid Zeman
Ayobami Babatunde Iji

Azadeh Safari Bahareh Nazari

Beeshanga Abewardana J Behnam Mahamedi Billy Promsong Waters Chao Wu

Daniel Ninio Roxby

Dao Vu

David Antony Matthew McKenzie

Dennis H Garnsey Ewald Enzinger Farzad Noorian Fatima Furqan Gilse George Olickal

Gnanakumar Thedchanamoorthy

Graeme W Lowe Greg Campbell

#### 2.14 Welcome to our New and Upgraded Members

#### Graduate Student Members Cont.

Guilherme Jorge Maeda Gurvinder Pal Singh haibin zhang Haiming Wang Hamed Monkaresi Hesamoddin Marzooghi

Hunter Ho Ibrahim Hamed Radwan

Isaac E Palacios Janet Xue Jason John Sawras Jebrin Al-Sharawneh

Jiefeng Hu Jing Yue John Smolders Jose Alejandro Monroy

Juan Ostos Ke Xu Lingkan Gong

Lionel Ott Liwei Li

Mahdi Fahmideh Gholami Mahyar Shirvanimoghaddam Marco Antonio Carniel Furlanetto

Martin Bajalan Mashud Rana Matthew Imhoff Md A Abdullah Md Tanvir Rahman Michael Hoy

Michael van Leeuwen Mischa Reznik

Mitesh Patel Mohammad Norouzi Mohammad Ariful Hug

Mollah Rezaul Alam Muhammad Ali Masood Cheema

Nawid Jamali Ni Ding

Paul Chun Hymn Wong

Peng Lu Perzila Arab Peter Allen Johnson Phyo Phyo San Raian Davio Reza Farid Rhys Preston Roman Marchant Ruixin BAI

Sasareka Malithi Gunawardana

Shoneet P Singh Sk Razibul Islam Weisi Chen Yi Cao Yi Lu Yik Ren Teo Yingjie Tan

#### **Associate Member**

Adrian Bradd Balavelan Thanigaivelan Changliang Zheng Clinton Stewart Dharmesh Mulia Julie Kowald Lai Zhang Michael Weaver Mochammad Rusli Saeed Al-Shahrani Shah Md Eahteshamul Hogue Stewart Robert Tait Susanna Guatelli Timothy Ian Muscat Utsho Rov Yasmitha Medhavi Fernando

#### Affiliate

Guillaume Smith Kathryn Kennedy Levy Zapanta Luke Brindlev Stuart Driver

**Student Member** Alastair James Quadros Blayne Massey Chao Wang Christopher Matthew Sharples Dillon MacEwan Ian Shephard James Daniel Foster Jason Traish Kewei Clare Guo Massood Keshavarz Siahpoosh Matthew Dabin Nathan Penzer

Neil Atish Shankar Patrick Daly Robert Adams Rohan Brooker

Salman Faizal Shahabudeen

Sean Moloney Shilp Kumar Steven Johns Steven Zhu Su Myat Khine Win Suhaib Islam Thomas Andrew Fisk vic cinc

Xingbing He Yufeng Lai

### 3. Chapter News

### 3.1 Joint OCEANS/Signal Processing and Communications Chapter

#### **IEEE Oceanic Engineering Society**

#### Report on Acoustic Systems Engineering **Technical Meetings 2012.**

The IEEE NSW Section's Joint Chapter of the Communications/Signal Processing/Oceanic Engineering Societies organized two Technical Meetings in 2012 on Acoustic Systems Engineering. The first meeting on Thursday 23rd August marked the second anniversary of the IEEE Oceanic Engineering Society's prestigious OCEANS '10 IEEE Sydney Conference and Exhibition 24-27 May 2010. This meeting was scheduled as part of Engineers Australia (Sydney Division) Joint Electrical Engineering Institutions' Program 2012 and held in the Engineers Australia Harricks Auditorium in Chatswood. A total of 67 people registered for the meeting. An Administrative Meeting of the Joint Chapter was held after the Technical Meeting. The technical presentation on "Passive Sonar Signal Processing for Underwater Vehicles: Autonomous Undersea Gliders to Submarines" was presented by Dr Brian Ferguson, DSTO.



Dr Brian Ferguson DSTO

The second meeting scheduled for Wednesday 14th November at Engineers Australia in Newcastle is in response to an invitation from the Newcastle Division's Electrical Branch. The topic for presentation is "Acoustic Systems Research and Development for Defense Applications" and will be delivered by Dr Brian Ferguson. It will feature the inner workings of acoustic detection, classification, localisation and tracking systems designed for sources of military interest, which range from snipers to jet aircraft. The results of processing real data collected at Australian Army and Air Force bases in the Newcastle region will be demonstrated.

John Robinson, **Technical Meeting Coordinator** 

#### IEEE PIMRC 2012 Conference

The 23rd annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'12) was held in Sydney, Australia, from 9 - 12 September 2012. PIMRC'12 featured guest keynotes from Ericsson Australia and New Zealand CEO Dr Håkan Eriksson, NBN Co CTO Gary McLaren, and Optus Networks MD Günther Ottendorfer. For the first time in its 23 years history PIMRC was held in the Southern Hemisphere. The host city Sydney was evaluated as a perfect location for PIMRC'12 in its best weather season. CSIRO and the University of Sydney were the hosts of the PIMRC'12.

In continuation of IEEE PIMRC legacy that have always provided high quality technical programs, we welcomed over 600 researchers from Australia and overseas to the IEEE PIMRC'12 in Sydney. A very rich program with around 450 papers accepted in technical sessions and workshops in the timeliest topics of research in the field of mobile communications was presented to the attendees. All accepted papers have gone through a very rigorous peer review process with a minimum of three independent expert reviews. The technical sessions and the workshops provided the conference attendees with the latest technological developments in the field as well as some emerging technologies for future network developments. The conference also included a very strong program for the three workshops in the most recent emerging technologies and eight tutorials covering some highly interesting topics. The organizing and program committees consisted of some well-known researchers from across the globe. Attendees left Sydney with a memorable story of their experiences.







Ian Oppermann, IEEE PIMRC'12 General Chair Abbas Jamalipour, IEEE PIMRC'12 Program Chair

#### 3.2 Power and Energy Chapter (PES)

#### **Down to Earth Conference**

The "Down to Earth Conference 2012" (DTEC12) was held at the Crowne Plaza Hotel in the Hunter Valley on October 9-11. The conference was run by Engineers Australia and the NSW Section of IEEE, through the NSW PES Chapter was a technical sponsor of the event.



Down to Earth 2012 Conference

As the name implies the conference was devoted to electrical earthing in all of its practical applications. The aim of the conference organisers was to provide a conference for the benefit of actual practitioners in the field rather than for presentations of more academic papers. The justification of this approach was quite successful and apparent in that the conference attendance exceeded expectations with some 190 attendees at the three day event. Despite the attractions of having an on-site golf course as part of the hotel amenities, every presentation session was so well attended that standing room was the only option for late arrivals.

The conference had the first day devoted to six earthing tutorial sessions, with the topics covering earthing fundamentals, earthing design procedures, lightning and communications system earthing, mining system earthing, testing of earthing systems and management of earthing in large interconnected power systems.

There were about 60 presentations given in the main sessions and also a panel session that include discussion of the current and impending changes to the current high voltage substation

standard AS/NZS 2067, the implications of the recent ENA earthing guide and the changes that are being presaged by modern approaches to electrical safety and electric shock and the way in which these can be integrated better into earth potential rise determinations, and in step and touch voltage issues.



More photos at http://www.dtec.org.au/

Overall the conference was an outstanding success and showed that earthing is a vibrant area of electrical engineering and an area where there are considerable changes occurring in the ways in which earthing is designed and applied, particularly in mining and industrial systems. The next DTEC will be held in Perth in 2014.

Prof Trevor Blackburn <u>t.blackburn@unsw.edu.au</u> Chair, IEEE NSW PES Chapter

#### Lecture by Prof Ryuichi Yokoyama at UNSW

On 3<sup>rd</sup> October IEEE Fellow Prof Ryuichi Yokayama of Waseda University Japan gave an excellent lecture at the University of NSW on Resilient and Expandable Electrical Distribution Networks for Smart Communities and for Disaster Recovery.



Prof Ryuichi Yokoyama

The lecture covered topics such as recent

distribution network outages (US, Canada, Italy, India and Japan), sources of power and statistics, types of distribution networks,  $\mathrm{CO}_2$  emissions by country, smart grid development distributed generation and the consequences and after-effects of the Japanese earthquake/tsunami and subsequent nuclear disaster. The lecture was attended by almost thirty members and guests including students.

Tony Zaglas <u>antonyz@ieee.org</u> NSW Section Secretary

#### The Western NSW Solar PV Project

There will be a Lecture at Engineers Australia on Monday 26 November 2012 on the Western NSW Solar PV Project(Total 300MW). The presenter will be Doug Landfear of AGL Energy and there is a \$10 charge for non EA or SSEE members. For more details and registration please see <a href="http://www.engineersaustralia.org.au/events/western-nsw-solar-pv-project">http://www.engineersaustralia.org.au/events/western-nsw-solar-pv-project</a> and <a href="http://www.engineersaustralia.org.au/sites/default/files/sseeevent">http://www.engineersaustralia.org.au/sites/default/files/sseeevent</a> nsw solarproject.pdf

Tony Zaglas <a href="mailto:antonyz@ieee.org">antonyz@ieee.org</a> NSW Section Secretary

#### 3.3 IAS/IE/PEL Joint Chapter

On 18 September 2012 Prof Xinghuo Yu, IEEE Fellow and IES Distinguished Lecturer, of RMIT gave an excellent lecture on Information and Control in Smart Grids. The lecture at UTS was attended by almost 40 members and guests and included students. The lecture covered the basics of Smart Grids and recent developments as well as recent research projects.

Prof Yu gave an introduction regarding the formation and history of the Industrial Electronics Society. Topics covered included smart energy, smart grids and their control, communications and generating sources. The related issues of energy efficiency, losses, embedded generation and demand management were discussed. There followed an extended question and answer session with numerous questions and detailed answers by Prof Yu.

Tony Zaglas <u>antonyz@ieee.org</u> NSW Section Secretary

# 3.4 IEEE Photonics/SSC/CAS/EDS Joint Chapter

Three Chapter technical meetings are being held this year, which I hope will be of interest to members. Please note that all three meetings will be co-located with the Joint Electrical Institutions lecture series, held 5:30/6 - 7pm on 2nd and 4th

Thursdays of the month at Engineers Australia, 8 Thomas St Chatswood. Abbreviated details of the upcoming technical meetings follow;

November 8th: Peter Ferris (NBN Co), "NBN Network Design"

December 6th: Vassilios Agelidis (UNSW), "The Australian Energy Research Institute"

December 13th: Andrew Ellis (Aston University & IEEE Photonics Society Distinguished Lecturer), "Ultra High Capacity Optical Transmission Systems" (Note: Prof Ellis is also an invited speaker at ACOFT, the Australian Conference on Optical Fibre Technology, Sydney 9-13 December).

Additionally, the Joint Chapter AGM will be held 6-7pm on 23rd November, immediately before the NSW Section AGM and dinner - further details re the AGM may be found elsewhere in this newsletter. Please consider nominating for the position of Chairperson of the Joint Chapter and email nominations to the Chairperson before the AGM (self nominations are acceptable) at graham.town@mg.edu.au

Professor Graham Town, Chairperson IEEE NSW Joint Chapter of Photonics, Circuits and Systems, Solid State Circuits, Electron Devices.

# 3.5 SSIT (Society on Social Implications of Technology) Chapter

The Social Interface blog (co-sponsored by the IEEE Society for Social Implications of Technology) would like to invite all IEEE NSW members to consider writing a short blog post and sending it to <a href="mailto:editors@thesocialinterface.com">editors@thesocialinterface.com</a>. We are looking for posts of about 800 words that engage with the broader public on questions concerning any aspect of the technology/society/law/policy interface.

Lyria Bennett Moses NSW Co-ordinator, IEEE SSIT Chapter

# 3.6 Consumer Electronics Society Chapter

# Formation of NSW Consumer Electronics Society Chapter

If you are interested in regular Consumer Electronics activities in NSW, please support the formation of a NSW Consumer Electronics Chapter. We have more than enough CE Society members in NSW to form a Chapter. To help with the Chapter formation, please contact Charlotte Kobert (IEEE CE Society Admin Manager) and provide your name, contact details (e-mail, phone number), and your IEEE Member number. Charlotte can be contacted at

"ckobert@zbzoom.net"; she is based in the USA.
We need 12 CE Society members to sign a petition for

the Chapter formation. So please state in your e-mail that you support the NSW CE Chapter formation. If you are interested in helping on the CE Society committee, please indicate this in your e-mail.

Activities are planned include Distinguished Lecturer talks, conferences, workshops and other activities. If you have any questions about the NSW CE Society chapter formation, please contact myself, or direct your questions to Charlotte Kobert, CE Society Admin Manager.



Stefan Mozar <u>s.mozar@ieee.org</u> President Elect - IEEE CE Society

### 4. Technical Meetings & Conferences

All members are cordially invited to attend joint lectures with the Engineers Australia (EA), IEEE and IET. The 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 <a href="http://www.engineersaustralia.org.au/sydney-division/events">http://www.engineersaustralia.org.au/sydney-division/events</a> to prevent any potential disappointment due to last minute changes.

Date	Event/Meeting/Conference	Speaker	Host	Contact	Venue
8 Nov	NBN Network Design	Peter Ferris	IEEE	Graham Town	EA Auditorium
22 Nov	Renewable/Embedded Generation	Dr Robert Barr	EA	Mai Yeung	EA Auditorium
26 Nov	Floquet modal based Analysis of Finite and Infinite Phased Array Antennas	Dr. Arun K. Bhattacharyya	MU/IEEE	Karu Esselle	Macquarie University Room E6A 102 Theatre
6 Dec	Aust Research Institute	Prof Vassilios Agelidis	IEEE	Graham Town	EA Auditorium
9-13 Dec	ACOFT 2012(Conference)	http://www.aip2012.org.au/	IEEE	Graham Town	UNSW
13 Dec	Ultra High Capacity Optical Transmission Systems	Dr Andrew Ellis (Aston University & IEEE Photonics Society DL)	IEEE	Graham Town	EA Auditorium
14 Feb 2013	EMC Issues with VSDs	Eduardo Gie	IET	Upali Mahaliyana	EA Auditorium
28 Feb 2013	TBC	Samsung Aust	EA	Gohulan Markandoo	EA Auditorium
16-18 Apr 2013	NEBSII CON 2013(Conference)	https://www.engineersaustralia.org.au/nebsii	EA	Mai Yeung	Dockside, Darling Harbour
17-19 Apr 2013	TENCON Spring 2013(Conference)	http://www.tencon2013.org.au/	IEEE	Stefan Mozar	Sydney CBD, TBA

### 5. Continue to Receive Printed Circuit

*Circuit* is currently provided electronically from the IEEE NSW Section web site <a href="http://ewh.ieee.org/r10/nsw">http://ewh.ieee.org/r10/nsw</a>. Members will be notified by email when a new issue is posted on the Website. Future copies of *Circuit* will only be sent by paper mail on request.

Please Detach	 	 	

If you require Circuit to be mailed to you in 2013, please complete the form below:

Yes, I want to continue receiving future editions of <i>Circuit</i> by post				
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Address:		Postcode:		
Tel: (H)(W)	(M)	FAX		
Email:				
Post to: Circuit Editor, C/O Australian Professional Centre, PO Box 576. CROWS NEST NSW 1585 Or Fax: 61 2 94318677				

### 6. IEEE NSW Section 2012 AGM and Dinner-RSVP Form

Date: Friday, 23 November 2012

**Time:** 6pm to 7pm Chapter and Affinity Group AGMs

7pm to 8pm NSW Section AGM

8pm to 11pm NSW Section Dinner (Seafood buffet or Vegetarian)

8:15 to 9:45pm Grace Ensemble (musical)

www.nhmentertainment.com.au/artists/grace-ensemble

Venue: Radisson Hotel & Suites,

72 Liverpool Street, Sydney, Australia

www.radisson.com/sydney-hotel-ns-2000/ausydney

phone: 8268 8887

Parking: For Car Parking please see:

http://www.wilsonparking.com.au/go/regions/sydney-city-south

http://www.cityofsydney.nsw.gov.au/AboutSydney/ParkingAndTransport/CityParking/CarParks.asp

RSVP: Friday 9 November 2012

Please E-mail the completed RSVP form to Eddie Fong: eddiefong@ieee.org or

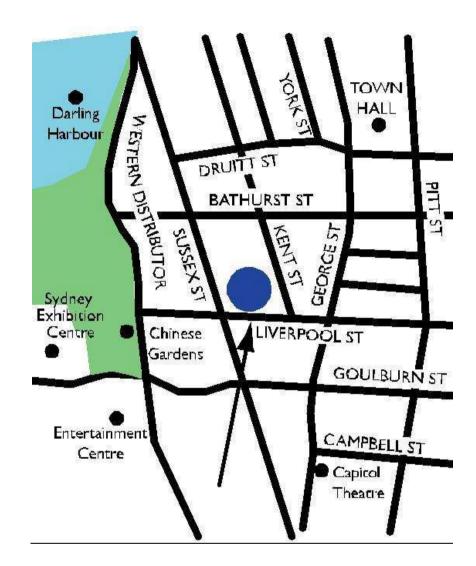
phone: 0413 777 511

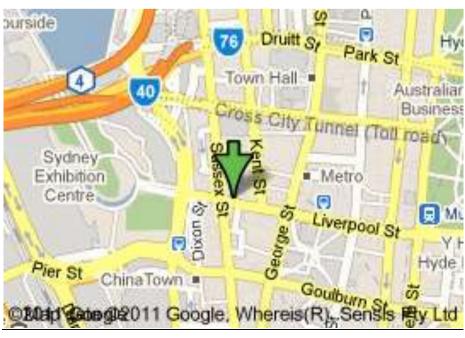
IEEE NSW Section will cover the cost of your dinner (partner included) for all registrations received before the RSVP date above. However, for those no show at the event, then \$80 per person will be charged to your credit card.

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Please Detach	

Reservation Form for IEEE NSW Section AGM & Dinner 2012
Name:
Attending: AGM Dinner (Yes/No as applicable)
Vegetarian: (Yes/No as applicable)
Tel:
Membership No.:
Partner Attending: (Yes/No as applicable)
Partner's Name:
Attending: AGM Dinner (Yes/No as applicable)
Vegetarian: (Yes/No as applicable)
Credit Card No.:

### Map: Radisson Hotel & Suites, 72 Liverpool Street, Sydney





# Advertising :- CIRCUIT Reaches over 2700 IEEE Members in NSW (please contact Tony Zaglas <a href="mailto:antonyz@ieee.org">antonyz@ieee.org</a> for advertising enquiries)



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# IEEE 2013 TENCON – SPRING

IEEE NSW Section, Sydney, Australia

**An IEEE Region Ten Conference** 

#### Date: 17-19 April 2013

#### Organizing Committee

Stefan Mozar General Chair Eddie Fong Co-General Chair Mark O'Mally Treasurer Jinhong Yuan Technical Chair -Communications Vassilios Agelidis Technical Chair- Power Karu Esselle, Trevor Blackburn Associate Technical Chairs Olly De Souza, Bruce Poon Webmasters Antony Zaglas Sponsorship Chair Bruce Poon Membership Chair Eddie Fong Social Events Chair Olly D'Souza Publicity Yogeshwar Ranga **GOLD Chair** John Robinson, Ian Boyd Committee Members

For details, please visit: <a href="http://www.tencon2013.org.au/">http://www.tencon2013.org.au/</a>

Charlotte Kobert

**EDAS Support** 

#### **Call for Papers**

The first TENCON – Spring conference will be held in Sydney, Australia. It is a sister conference to the well known TENCON conference. It will bring together top technical professionals from the Electronics and Electrical Engineering community to exchange information and results of recent in the areas of electronics, communications and power engineering.

Papers presented in conference will be submitted to IEEEXplore Digital Library and indexed by El Compendex.

Prospective authors are invited to submit an extended abstract of up to two pages including figures. The abstract for review must clearly state: the purpose of the work; the manner and degree to which it advances the art; and specific new results that have been obtained and their significance. Abstracts are to be submitted to: http://edas.info/N13595

# Theme1: Advanced Technologies & Economics of Energy Systems

- Power Electronics & Energy Conversion
- Renewable Energy & Sustainable Development
- Power Systems
- Electric and plug-in hybrid electric vehicles
- Electrical Machines & Drives
- Electricity Markets and Electrical Power Economics
- Emerging Applications & others

#### Theme 2: Personal Communication in a mobile world

- Signal Processing and Applications
- Communications and Networks
- Circuits and Systems
- Antennae and Propagation
- Biomedical Engineering and Others

#### **Important Dates**

Close Call for Papers: 26 November 2012
Notification of authors: 1 February 2013
Final Paper Upload to EDAS: 25 February 2013
Tutorial Proposals: 30 November 2012

