Chairman’s Column

IEEE Region 10

TheIEEE R10 Meetinghas been postponed to 10-11 Oct 2003. The venue, Penang, is unchanged.

Expressions ofinterest tohost the2004 R10 meetinghave been soughtby the R10 Director, Dr. Jung-Uck Seo, Korea.

After consultationwith the IEEE Australia Council, IEEE SA has expressed interest, with strong support from IEEE VIC, who recently secured the 2005 TENCON. The R10 meeting is usually held in April.

Prof. Takeo YOSHINO, member of the IEEE EMC/S Board of Directors, recently enquired about formation of an EMC/S Chapter in Australia. SA has only 4 active EMC/S members but there are over 200 around Australia, with a concentration in Victoria.

IEEE Australia Council (IEEE AC)

The IEAust Electrical College Board will meet in Adelaide 20 Nov 03 and IEEE SA will represent IEEE AC at this meeting. A visit by the Electrical College Board is a rare event and discussions are being held with IEE about a possible "tripartite meeting" to be held at that time.

Considerable correspondence regarding IEEE DLs has occurred in recent months. One area of IEEE weakness in SA is the lack of a PES Chapter. Other Sections appear to cover this area of engineering better than IEEE SA, although there is no shortage of power engineers in SA! The net result is that there is no easy mechanism for bringing IEEE DLs in this area to SA.

South Australia

I attended a breakfast on behalf of IEEE SA at the invitation of Dr Peter Greenwood, National President IEAust. IEAust SA Division has appointed an Electrical Branch Chair, Andrew Reiter, and a IT&E Branch Chair, Peter Tromans, who will participate in the Electrical JTPC. IEAust is due to Chair the 2004 program, IEEE to provide the Secretary (Andrew Udina) and IEE to provide the Treasurer. The first meeting of the 2004 Electrical JTPC (18 Aug) will have occurred by the time this newsletter is published.

Educational Activities

After some discussion, Prof Harry Green, has agreed to investigate some aspects of this portfolio. It is a traditional IEEE portfolio and it has handled in various ways in the past. It has been agreed that the focus will be on "continuing education" activities in the sense used by IEAust when it refers to CPD or Continuing Professional Development.

In the first instance Harry will investigate the NPER (National Professional Engineers’ Register) requirements and processes, which determine the criteria, which activities must meet, in order to qualify as CPD.

Harry's initiative is most timely and I would like to welcome him to the Section Committee and think him for his contribution.

Dr Michael E. Evans
Chair, IEEE South Australia Section
August, 2003

Radar 2003

Australian International Conference on Radar
Adelaide, Australia, 3-5 September 2003
Sponsored by CSSIP and IEEE SA Section

Conference registrations have exceeded 250 and combined enrolments in the four tutorials have exceeded 100. The Buckland Park and Barossa Tours are both very popular. Overseas participation stands at about 40% of the total.

Premier Mike Rann has agreed to open the conference and we are looking forward to an outstanding international event.

Dr Don Sinnott
General Chair, RADAR 2003
Section Committee Officers for 2003

Chair: Dr Michael Evans  
michael.evans@ieee.org
Vice Chair: Dr Zia Ahmed  
zia.ahmed@ieee.org
Secretary: Dr Tim Ferris  
timferris@ieee.org
Treasurer: Dr Andrew Piotrowski  
andrew.piotrowski@ieee.org
IP Chair  
bevan.bates@ieee.org
Membership Development  
andrew.udina@dsto.defence.gov.au
Professional Activities  
Bruce Vyden  
bruce.vyden@dsto.defence.gov.au
Awards  
Dr Zia Ahmed
Educational Activities  
Prof. Harry Green (pro tem)  
harry@spri.levels.unisa.edu.au
Publications  
Dr Andrew Piotrowski
Chair SP/Comms Chapter: Dr Peter Shoubridge  
peter.shoubridge@dsto.defence.gov.au
Chair AP/MTT Chapter: Dr Hedley Hansen  
hedley.hansen@dsto.defence.gov.au
Chair C/AES Chapter: Dr Mark Pszczel  
mark.pszczel@dsto.defence.gov.au
Chair Computer Chapter: Dr Fred Brown  
fred@cs.adelaide.edu.au
Chair IT Chapter (SA/ACT)  
Dr Alex Grant  
alex.grant@unisa.edu.au
UofSA Student Branch: Nimrod Lilith  
nimrod.lilith@postgrads.unisa.edu.au
Branch Counsellor  
Dr Kutlu Dogancay  
kutluyl.dogancay@unisa.edu.au
UofAdelaide Student Branch: Leonard Hall  
lthall@eleceng.adelaide.edu.au
Branch Counsellor: Brian Ng  
bwng@eleceng.adelaide.edu.au

Membership

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<tr>
<th></th>
<th>31 June 02</th>
<th>31 June 03</th>
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<tbody>
<tr>
<td>Members</td>
<td>277</td>
<td>280</td>
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<tr>
<td>Senior Members</td>
<td>29</td>
<td>30</td>
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<tr>
<td>Fellows</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Affiliates/Others</td>
<td>49</td>
<td>37</td>
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<tr>
<td>Students</td>
<td>58</td>
<td>84</td>
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<td>TOTAL</td>
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Section Count Hits All Time High

For the first time, the IEEE has more than 300 Sections -- 301 to be exact -- thanks to three recently formed in Taiwan and Russia. Find out more at <http://www.theinstitute.ieee.org/inst_art.jsp?isno=07031&arnumber=07031_7w.newssections&section=41>

2003 IEEE Distinguished Lecture

Mr Ric Smith, Secretary of Defence, will deliver the 2003 IEEE South Australia Section Distinguished Lecture. The lecture and dinner is scheduled for, Friday, 21 Nov 03.

A formal title is yet to be agreed but Secretary Smith has been invited to address his "impressions of [his] new post, in relation to what the future holds for Defence, and in particular [his] vision of the role of DSTO within this future," with "special reference ... to the DSTO South Australia context: electronics/IT, DSTO, defence industry "

It will be apt timing after nearly 12 months in the position for the Secretary to reflect on this subject, and we look forward to his address.

Dr Michael E. Evans

Chapter News

Antenna Propagation

Microwave Theory & Techniques Chapter

The Section Committee has agreed to provide additional support for a one-day HF Radar course HF Surface Wave Radar: Modelling and Simulation by Prof Levent Sevgi, T.C.Dogus University, Istanbul, Turkey, to be delivered 9 Sep 03, adjacent to the RADAR 2003 conference.

The course is open (at no charge) to all interested professionals and will be held in the Willoughby Room, Department of Electrical and Electronics Engineering, at the University of Adelaide.

Dr Hedley Hansen, Chair, AP/MTT Chapter

Control, Aerospace and Electronic Systems Chapter

Peter Nikoloff, Nova Aerospace, and Dr Takeshi Ohnuki, NAL, Japan, delivered "NEXST1 - Launch Incident Investigation", on 30 June.

Dr Franklin Chang-Diaz, (NASA scientist), "Plasma Thrusters, a NASA ANU Collaboration" is scheduled for 21 Aug 03 (DSTO).

Dr Randii Wessen, (AIAA DL), will deliver "Future of US Planetary Exploration" 4 Sep 03.
Prof. Bob Bitmead, (IEEE CSS DL) "Model Predictive Control, State Estimation and Coordinated Vehicles" is scheduled for 29 Oct 03.

Dr Hugh Stone has been invited to deliver a lecture on his T-Wing UAV Project (a tailsitter) towards the end of September. The date is yet to be agreed.

Dr Mark Psczel, Chair, CAES Chapter

Information Theory Chapter
IT Society DL Prof. Ezio Biglieri from Politecnico di Torino presented the lecture “Multiple antenna transmission and reception: Capacity considerations, signal processing, and space-time code design” in Adelaide, Melbourne, and Canberra, attended by about 50 in each location. This was co-advertised with the Communications and Signal Processing Chapters in each state.

Dr Alex Grant, Chair, IT Chapter
http://www.informationtheory.net

Computer Society Chapter
The CS chapter had its first technical meeting of the year on the 22nd of July. Dr Alex Farkas presented a seminar entitled: "High Confidence Security Engineering".

Dr Fred Brown, Chair, CS Chapter

U. of South Australia Student Branch
- Our annual general meeting will be on 29th August at 10am, with a BBQ following at 12pm aimed at getting undergraduate exposure.
- Nimrod Lilith will be presenting a seminar on C programming for Matlab in late September/early October.

Our website is currently undergoing maintenance and will be up and running again week ending Friday 22nd August.

Nimrod Lilith, Chair U. of SA Student Branch

IEEE GOLD - Young Professionals
IEEE SA GOLD Affinity Group at DSTO is organizing a talk by Gordon Frazer from ISR Division. The topic of the talk will be "How to successfully manage your career" on 10 November 2003 at 12.00. The talk is open to everyone and is followed by pizza lunch.

If you are an IEEE member who graduated with your first professional degree within the last ten years, you are automatically part of IEEE GOLD!

IEEE recognizes that you are a key to the future of the technical profession. IEEE GOLD can empower you to make the most of your developing career and to help you find your place in the world of technology. Make a connection with your peers and colleagues - a GOLDen opportunity awaits you!

If you want to take part in this GOLDen action contact: Andrew on Andrew.Piotrowski@ieee.org or Sebastien on Sebastien.Wong@dsto.defence.gov.au

NEWS

UNIVERSITY OF SOUTH AUSTRALIA
POSTGRADUATE RESEARCH SCHOLARSHIPS
TELECOMMUNICATIONS RESEARCH
http://www.itr.unisa.edu.au/

THE CUTTING EDGE OF COMMUNICATIONS RESEARCH

The Institute for Telecommunications Research (ITR) is one of Australia's foremost research organisations specialising in technology for digital wireless communications, both fixed and mobile satellite and terrestrial radio services. ITR is a core partner in the CRC for Satellite Systems, and leads the Satellite Communications Research Program in that CRC. The Institute has a reputation for finding elegant solutions to complex telecommunications problems.

We invite applications for postgraduate scholarships, leading to the MEng or PhD, from highly motivated students who expect to obtain a 1st Class Honours degree in 2003, or who have previously completed an honours degree and have some work experience.

ITR has an excellent research environment, extensive commercial linkages, international exchange programs, scholarships and top-ups and offers an opportunity to be part of an organisation supporting development of Australia's telecommunications future.

Women are encouraged to apply.

Information: Sonia Watts: Student Support Officer, tel: +61 8 8302 3890, fax: +61 8 8302 3873, email: sonia.watts@unisa.edu.au

Closing date: Applications for Australian students will be received up to 31st October 2003

IEEE Region 10

Region 10 publishes a newsletter, which may be found in electronic form on the IEEE Region 10 home page, http://www.ewh.ieee.org/reg/10/. There are a number of student and other awards that are available through Region 10 so the website is well worth a look.
The 5th ASCC will build on the success of previous conferences in Tokyo, Seoul, Shangai, and Singapore.

Topics of interest are in the broad area of control and automation ranging from industry applications to theoretical advances and include:

- System Theory
- PID Control
- Nonlinear Control
- Adaptive Control and Tuning
- Multivariable Control
- Predictive Control
- Fuzzy, Neural Systems
- Hybrid, Supervisory Systems
- Mechatronics
- Guidance and Navigation
- Process Control Systems
- Measurement and Sensing
- Aerospace
- Automotive Control
- Linear Control
- Robust Control
- Optimal Control
- Intelligent/Learning Control
- Fault Detection
- Discrete Event Systems
- Simulation and Control CAD
- Signal Processing
- Robotics and Motion Control
- Manufacturing Systems

**Conference Committee:**

Co Chair Prof. Iven Mareels FIEEE, U. Melbourne
Prof. Rob Evans FIEEE, U. Melbourne

Program Co Chair
Prof Rick Middleton FIEEE, U. Newcastle
Dr Dragan Nesic SMIEEE, U. Melbourne

Finance Chair, Dr Michael Evans SMIEEE, DSTO
Publications Chair
Dr Michael Cantoni MIEEE, U. Melbourne

Industry Liaison Chair, Dr Sam Crisafulli, FIEAust
Tutorials Chair, Prof Vikram Krishnamurthy SMIEEE, U. Melbourne

Local Arrangements Chair
Dr Francesco Crusca, MIEEE, Monash U.

Education Workshop Chair
Assoc.Prof. Ljubo Vlacic SMIEEE, Griffith U.


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**JOINT TECHNICAL PROGRAM 2003 - Electrical and Electronic Engineering**

**16th September**

**WIND GENERATION IN SOUTH AUSTRALIA**
Mr Paul Driver, Customer Development Manager, and Mr Mark Denton, Project Manager Starfish Hill Project, ETSA Utilities. A look at the new Starfish Hill wind generation plant on the Fleurieu Peninsula and associated connection to the SA electricity system.

**21st October**

**5:30 PM VISIT: P3C ORION FLIGHT SIMULATOR**
FltLt Doug Hogg, Operational Mission Simulator, and SQNLDR Colin Smith, Advanced Flight Simulator, RAAF. The P3C Orion has undergone a mid-life refit, with the upgrading of the avionics, navigation, and radar systems. Watch the simulator go through its paces on an "operational mission". To register, please RSVP to sa@ieaust.org.au.

**28th October**

**STUDENT PAPERS NIGHT**
Students from our three universities present their final year projects whilst competing in the IEE Australasian Student Prize Competition. IEEE Student Subject prizes will also be presented at this meeting.

Chapman Hall, Engineering House, 11 Bagot Street, North Adelaide, Light tea commences at 5:30 pm and the meeting at 6:15 pm.

**Conference Schedule**

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<th>Date</th>
<th>Conference</th>
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<td><strong>WIND GENERATION IN SOUTH AUSTRALIA</strong></td>
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<tr>
<td>4-9 September, 2005</td>
<td>IEEE International Symposium on Information Theory (ISIT)</td>
<td>Adelaide</td>
<td><a href="http://www.informationtheory.net/conference">http://www.informationtheory.net/conference</a></td>
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