

WHAT'S HAPPENING IN THE IEEE



Networking the World™

THE NEWSLETTER OF
THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC
SOUTH AUSTRALIA SECTION
PO Box 53, Elizabeth, SA 5112

October 2003

ARBN 078 576 495

[http:// http://ewh.ieee.org/r10/s_australia/](http://http://ewh.ieee.org/r10/s_australia/)

Chairman's Column

Dear Colleagues

IEEE Region 10

The IEEE R10 Meeting was held 10-11 Oct 2003, in Penang, Malaysia.

Adelaide has been invited to host the 2004 R10. The R10 meeting is usually held in April, but the delay in selecting Adelaide has placed some pressure on availability of suitable venues. The R10 Director, Dr. Jung-Uck Seo, Korea, sought an Australian host Section. After consultation with the IEEE Australia Council, IEEE SA expressed interest, with strong support from IEEE VIC, who recently secured the 2005 TENCON. Andrew Piotrowski and Zia Ahmed are leading the local arrangements.

The main issue discussed at the R10 meeting was the reporting arrangements for Student Branches that currently report separately from Sections (and twice yearly). The view of the meeting was that SBs should report in the same way as Chapters and Affinity Groups.

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.

There are continuing concerns about the legal status of IEEE in Australia, and the implications for IEEE volunteers. Andrew Parfitt (NSW ... well know to many) and Erik Lensson (ACT) will make further enquiries.

South Australia

Considerable progress has been made towards the formation of a Retired Engineers Group (REG), Joint Technical Program, in the mould of the existing Electrical JTP. This is being driven by Em. Prof. Bob Bogner who established the IEE REG about 25 years ago. IEAust is represented by Kim Read AO, and the recently formed IEAust REG covers all IEAust engineering interests.

I attended an IEAust Breakfast Briefing 16 Oct 03, Hon. Trish White, Minister for Education and Children's Services "education initiatives to encourage increased student participation in engineering and science careers". The Minister (an engineer herself) is seeking involvement from professional associations for these initiatives.

IEEE-SA ANNUAL GENERAL MEETING

The South Australia Section of the IEEE will be holding their Annual General Meeting on **Tuesday, 2 December 2003**, in the new premises of the Electronics Industry Association, 7 Glen Osmond Road, Eastwood (just south of Greenhill Road)

The AGM will commence promptly at 6:00pm and will be preceded by a light meal at 5:30pm

Returning Officer:

Mark Pszczel: mark.pszczel@dsto.defence.gov.au

Electronics Industry Association (www.eiaa.asn.au)

The Electronics Industry Association (EIA) in South Australia has recently moved to new premises located at 7 Glen Osmond Road, Eastwood 5063. The new site is close to Adelaide city centre and is in an easily accessible location with excellent parking.

EIA members can use the new office boardroom facilities free of charge on a booking basis. Equipment available consists of a whiteboard, overhead projector and video and monitor on a mobile trolley. A data projector can be organised (cost involved). For more information contact Rhonda Grill rhonda.grill@eiaa.asn.au at the EIA
T 08 8272 5222, F 08 8272 5277



RADAR 2003

Conference attendance exceeded 300, combined tutorial involvement exceeded 120 (all offered tutorials were delivered). The international participation (36%) was very pleasing. The Buckland Park and Barossa Tours were both very popular. Costs were contained to budget levels. Some accounts payable and receivable remain. The conference website will be transferred to CSSIP and a detailed final report will be available there in due course. A professional audit is required under IEEE rules and remains to be done. Final winding up will occur early in 2004. An excellent result and many thanks to the committee for their work.

Dr Don Sinnott, 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 Dr Bevan Bates
bevan.bates@ieee.org
Membership Development Andrew Udina
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
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
kutluyil.dogancay@unisa.edu.au
UofAdelaide Student Branch: Leonard Hall
lthall@eleceng.adelaide.edu.au
Branch Cousellor: Brian Ng
bwng@eleceng.adelaide.edu.au
Flinders U. Student Branch: Sherry Randhawa
sharmil.randhawa@flinders.edu.au

2003 IEEE Distinguished Lecture

Mr Ric Smith AO, Secretary of Defence, will deliver the 2003 IEEE South Australia Section Distinguished Lecture, Friday, 21 Nov 03, 7:00 for 7:30pm, *Lyrics Room*, Festival Centre.

Under the title *Defence Challenges for the Future*, 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.

Seating is limited, and you are advised to book early using the Registration form enclosed.

Dr Michael E. Evans

Membership

	30 Aug 02	30 Aug 03
Members	296	307
Senior Members	29	30
Fellows	1	2
Affiliates/Others	53	37
Students	59	67
TOTAL	438	443

Congratulations to Salim Bouzerdoum (now Assoc.Prof. at ECU, WA) who was elevated to SMIEEE this month. Many will remember Salim from when he was an active Section Committee member.

Have you ever wondered just how many members there are world wide in the IEEE? As of August 2003 membership totalled 340,338, a 5.2% decline since the same time last year. SA Membership, (which includes Members, Senior Members and Fellows), has grown nearly 4% since August last year. Worldwide, student membership has dropped by 10.4% (and in R10 student membership has dropped by 22%) whereas our section has been able to realise a 13.5% rise in student membership. As SA section's total membership numbers have increased we are doing well in comparison to the global trend.

Membership breakdown by IEEE Society

Soc.	#	Soc.	#	Soc.	#
AES	29	EMB	13	NPS	1
AP	22	EMC	2	OE	9
BT	2	GRS	11	PC	2
C	220	IA	11	PE	16
CAS	27	IE	2	PEL	3
CE	2	IM	10	RA	7
COM	90	EM	14	RL	1
CS	27	EMB	13	SIT	3
DEI	2	IT	18	SSC	14
E	3	LEO	14	SMC	8
ED	2	MAG	2	SP	75
EM	14	MTT	23	VT	8

Above is a breakdown of the active membership by IEEE society. Those IEEE societies for which SA has chapters are highlighted.

Andrew Udina
 Membership Development

2002 IEEE Student Awards

The IEEE Student Awards were established in 1992 to recognise and encourage excellence in the study of electrical and electronic engineering. They are awarded annually at each of the universities in South Australia to a second year student enrolled in courses with an electrical and electronics emphasis.

In selecting the recipient of the IEEE Student Award each of the three universities has chosen a different approach, but in each case the practical and professional side of electrical/electronic engineering is emphasised.

The 2002 IEEE Student Award recipients are:

1. Ms. Jennifer McIntosh (Department of Electrical and Electronic Engineering, The University of Adelaide) for her work in the degree course, Practical Electronic Design 2;
2. Mr Andrew Lammas (School of Informatics and Engineering, The Flinders University) who distinguished himself in the overall experimental engineering components of the topics: 'Electrical Networks', 'Signals and Linear Systems', 'Analogue Signal Processing', 'Electronic Circuits', and 'Digital Circuits and Microprocessors';
3. Mr Scott Richard Carr (Faculty of Engineering, The University of South Australia) for his work in the subject 'Signals and Systems'.

The 2002 IEEE Student Award certificates and cheques were presented during the annual "Student Paper Night" held in Engineers House, Bagot Street, on Tuesday 28 October 2003. The meeting was part of the Joint Technical Program in Electrical/Electronic Engineering arranged by a committee of the IEEE, IEE, TSA, and IEAust.

Zia Ahmed
Vice-Chair, IEEE South Australia Section
Convenor, IEEE Awards Committee

Chapter News

IEEE GOLD - Young Professionals

The GOLD petition has been processed and accepted and the GOLD affinity group will be chartered later in the year. Andrew Piotrowski is Interim Chair until the Inaugural AGM is held. Congratulations to Andrew and his team on their success (Editor's note)

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, Andrew.Piotrowski@ieee.org or
Sebastien, Sebastien.Wong@dsto.defence.gov.au
GOLD Steering Group

Antenna Propagation Microwave Theory & Techniques Chapter

The free one day course on modelling and simulation of HF radar systems delivered by Professor Levent Sevgi from T.C. Dogus University, Istanbul, Turkey, at the University of Adelaide was a great success - I've had several people contact me by email, including RAAF and DSTO people, saying how much they benefitted from attending. We had 25 people attend.

Dr Stuart Anderson
for AP/MTT Chapter

Control, Aerospace and Electronic Systems Chapter

Prof. Bob Bitmead, (IEEE CSS DL) "*Model Predictive Control, State Estimation and Coordinated Vehicles*" is scheduled for 29 Oct 03, 5:30 for 6:00pm, S112, Engineering South Building, University of Adelaide.

The invited lecture *T-Wing UAV Project* (a tailsitter) (Dr Hugh Stone) has been deferred to next year.

Dr Mark Pszczel
Chair, C/AES Chapter

Communications and Signal Processing Chapter

We are holding a seminar at DSTO, 24 October 2003 titled "Australian Defence Satellite Communications Capability." Contact the Chair for details.

Dr Peter Shoubridge
Chair, C/SP Chapter

Information Theory Chapter

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

NEWS

AGM Nominations: Section for 2004

The following Section office positions are open for election. All positions (Chair, Vice Chair, Secretary, Treasurer) are for a one-year term.

Nominations for these positions should be forwarded to:

Returning Officer:

Dr Mark Pszczel, mark.pszczel@dsto.defence.gov.au

30 August - 2 September, 2004, Sydney
<http://www.isssta2004.org/>

Those members who need to CHANGE CONTACT INFO on file with the IEEE, including email addresses, should do so at: <http://www.ieee.org/membership/coa.xml>

Those members who need to UPDATE THEIR IEEE EMAIL ALIAS, may do so by going to: <http://elecomm.ieee.org/>



5th Biennial Asian Control Conference
 Melbourne, 20-23 July 2004
 Sponsored by IEEE (SA, NSW, QLD), IEAust,
 U. of Melbourne
<http://ascc2004.ee.mu.oz.au>

Eighth IEEE International Symposium on Spread Spectrum Techniques and Applications

JOINT TECHNICAL PROGRAM 2003 - *Electrical and Electronic Engineering*

28th October
 Host IEE 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.

18th November
 Host TSA TIME TBA VISIT: HOLDEN LIMITED, ELIZABETH
 Take a look around the plant that produces the new Monaro! Numbers will be limited so please register early by emailing marek.kwiatkowski@dsto.defence.gov.au. 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

Date	Conference	City	Website
3-5 September, 2003	Australian International Conference on Radar (RADAR 2003)	Adelaide	http://www.plevin.com.au/radar
20-23 July, 2004	5th Biennial Asian Control Conference	Melbourne	http://ascc2004.ee.mu.oz.au/
30 August - 2 September, 2004	8th IEEE International Symposium on Spread Spectrum Techniques, Applications (ISSSTA)	Sydney	http://www.isssta2004.org/
4-9 September, 2005	IEEE International Symposium on Information Theory (ISIT)	Adelaide	http://www.informationtheory.net/conference



IEEE Australia Council Members, R10 Meeting, Penang, 9-10 October, 2003

Clockwise from Left

- Harry McDonald, WA, Imm. Past AC Chair, R10 Newsletter Editor
- Douglas Chai, WA Chair
- Peter Wills, AC Sec/Treas, VIC Chair
- Andrew Parfitt, NSW Chair
- Erik Lensson, ACT Chair
- Michael Evans, AC V-Chair, SA Chair
- Mal Heron, NQ Chair
- John Robinson, NSW, AC Chair
- Renatte Sitte, QLD V-Chair.