

IEEE SOUTH AUSTRALIA SECTION

2015 ANNUAL REPORT

SUBMITTED TO REGION 10

IEEE-SA SECTION 2015 CHAIR'S REPORT

Part A Section Summary

A.1 Executive Summary

In my first annual report as Chair of IEEE South Australia Section, I would like to express my thanks to all the Excom committee members that made possible the smooth functioning of the Committee during this year. These include: Vice Chair - Pina Dall'Armi-Stoks, Treasurer - Sherry Randhawa, and Secretary – Luke Balzan.

I also would like to express my gratitude to all the Technical Chapter and Affinity Group Chairs and the members of the respective committees, as well as the leadership teams of our Student Branches.

SECTION EXECUTIVE COMMITTEE MEMBER LIST

South Australia Section	Chair	Karl Sammut
	Vice-Chair	Pina Dall'Armi-Stoks
	Treasurer	Sherry Randhawa
	Secretary	Luke Balzan
WIE Affinity Group	Chair	Pina Dall'Armi-Stoks
	Vice-Chair	Sherry Randhawa
	Treasurer	Michele Knight
	Secretary	Sherry Randhawa
Computer Society	Chair	Adam Gatt
	Vice-Chair	Andrew McDonnell
	Treasurer	Ross Smith
	Secretary	Anthony Milton
CAES	Chair	Andrew Piotrowski
	Vice-Chair	Fangpo He
	Treasurer	Michael Evans
	Secretary	Fangpo He
C&SP	Chair	Luke Balzan
	Treasurer	Brian Ng
AP/MTT	Chair	Christophe Fumeaux
	Vice-Chair	Bevan Bates
	Treasurer	Bobby Yau
	Secretary	Bobby Yau
IT Chapter	Chair	Terence Chan
	Vice-Chair	Siu Wai
	Secretary	Lawrence Ong
Young Professionals	Chair	Scott Sleep
	Vice-Chair	Avishek Chakraborty

	Treasurer	Marek Dziadosz-Findlay
	Secretary	Anthony Milton
IET Retired Engineers Group	Chair	Harry Green
	Vice-Chair	CJ Keith Kikkert
Ocean Engineering-Australia Council Joint Chapter	Vice-Chair	Karl Sammut
Power & Energy Society	Chair	Mohammed Haque
	Vice-Chair	Wai-Kin Wong
	Treasurer	Quizl Uddin
	Secretary	Christian Nolden
Conference support coordinator		Leigh Powis
Web master		Bobby Yau
Retired Engineers Liaison/Section History		Michael Evans
Student Activity coordinator		Brian Ng
University of Adelaide Student branch		Morgan Smith
University of South Australia Student Branch		Nayeema Sadeque
Flinders University Student Branch		Shela Cook

Our Section had a year full of high quality technical activities.

In support our members and the local community IEEE SA Section and chapters had 54 technical and professional activities during 2014 and held 5 Section meetings.

AP/MTT	PES	CAES	Computer	C&SP	YP	WIE	LMAG	Section JTP
9	4	5	5	3	2	3	7	9

The IEEE SA Section Committee met five times in 2015 (March, May, August, September, December). In addition to the full committee meetings, the Section Officers held additional meetings as required to discuss matters arising between the scheduled dates of the full Committee meetings. The Section Committee members also maintained ongoing contact by email to deal with issues that could be handled by electronic means.

As part of the IEEE SA Section participation in the Joint Technical Program (JTP) Electrical, the IEEE SA Section hosted 2 of the 10 JTP technical meetings.

The SA Section Chair, Karl Sammut, attended the regular meetings of the IEEE Australia Council meetings in 2015, chaired by Tapan Saha, in order to coordinate with other Australian Sections.

The SA Section Treasurer, Sherry Randhawa, attended the Region 10 Section Chairs meeting in Dhaka, Bangladesh in March 2015 to meet the Region 10 leadership team and IEEE Headquarters office bearers.

A.2 Financial Report

Our Financial Summary has been submitted via L50.
The full Financial Report was submitted via Netsuite

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

Our Membership statistics for 2015 is shown in the table below.

Section Name	IEEE Current Grade Description	Count of Members
South Australia Section	Associate Member	5
	Fellow	4
	Graduate Student Member	77
	Life Fellow	2
	Life Member	8
	Life Senior	5
	Member	398
	Senior Member	51
	Student Member	19
		569
South Australia Section Total		569

With the recent appointment of Fabrizio Giuseppe, the SA Section currently has four IEEE Fellows and two Life Fellows. A new IEEE Life Fellow application is currently in progress.

B.2 Chapter Activities

IEEE South Australia section has six active chapters: Computer, Communication/Signal Processing, Antenna Propagation/Microwave Theory & Technique, Control/Aerospace and Electronic Systems, Information Theory (SA/ACT/VIC) and Power Engineering Chapter. In addition the Australia Council has Australia wide Instrumentation & Measurements Society (IMS) chapter and the Ocean Engineering Chapter. We will start the process for initiating two new Chapters or Joint Chapters in Robotics and Biomedical Engineering in 2016.

Technical activities of each of the current chapters is shown in their respective AGM reports.

B.3 Students Activities

IEEE South Australia has three student branches at Adelaide University, University of South Australia and Flinders University. As from 1991 the IEEE South Australia Section established a Travel Fund to support students to attend national and international events relevant to IEEE activities. The scheme continues to attract strong interest. The awards for this year's applicants will be made in early 2016.

The 2015 IEEE Communications Society Student Competition awarded an honourable mention to Mr. Muhammad Yasir, from Uni SA for his project “Indoor Navigation System Using Visible Light”.

The Student Subject prize-winners for the IEEE South Australia Section 2015 Student Award for Excellence in Engineering with an electrical and/or electronics emphasis were presented to

Tenzin Crouch – (2014) Flinders University
Matthew Dawling - (2015) The University of Adelaide
Sam Gerhardy - (2015) Flinders University.

These awards were presented at the 2015 Section’s DLD.

The Student Branches at The University of Adelaide, the Flinders University and the University of South Australia continued their high levels of activity. Brian Ng continued as the Student Activities Coordinator of the SA Section in 2015.

B.4 Affinity Group Activities

South Australia Section has three Affinity Groups: Young Professionals (YP), Women In Engineering (WIE) and Life Members Affinity Group (LMAG). The reports for these Affinity Groups are included in their respective AGM reports.

B.5 Awards & Recognition Activities

Cornelis Jan (Keith) Kikkert (South Australia Section) was a recipient of the **2015 IEEE R10 Outstanding Volunteer Awards**. The R10 Outstanding Volunteer Award aims to recognize those volunteers who have made outstanding contributions to a particular Region 10 Section. A total of nine awards were made in 2015, with three awards made to members in Australian Sections.

B.6 Other Organizational Activities

The Section Committee supported Sherry Randhawa to attend 2015 IEEE R10 meeting in Dhaka, Bangladesh. The trip was subsidised by Region 10 and Australia Council.

Part C

C.1 Relationship with National Societies

The IEEE-SA Section has also a very strong collaboration with our professional colleagues in Engineers Australia, the Institution of Engineering and Technology (IET), and the Telecommunication Society of Australia (TSA) through the Joint Technical Program (JTP) and IET Retired Engineers Group. As part of the IEEE SA Section participation in the Joint Technical Program (JTP) Electrical, the IEEE SA Section hosted 3 of the 10 JTP technical meetings and presentations held in 2015.

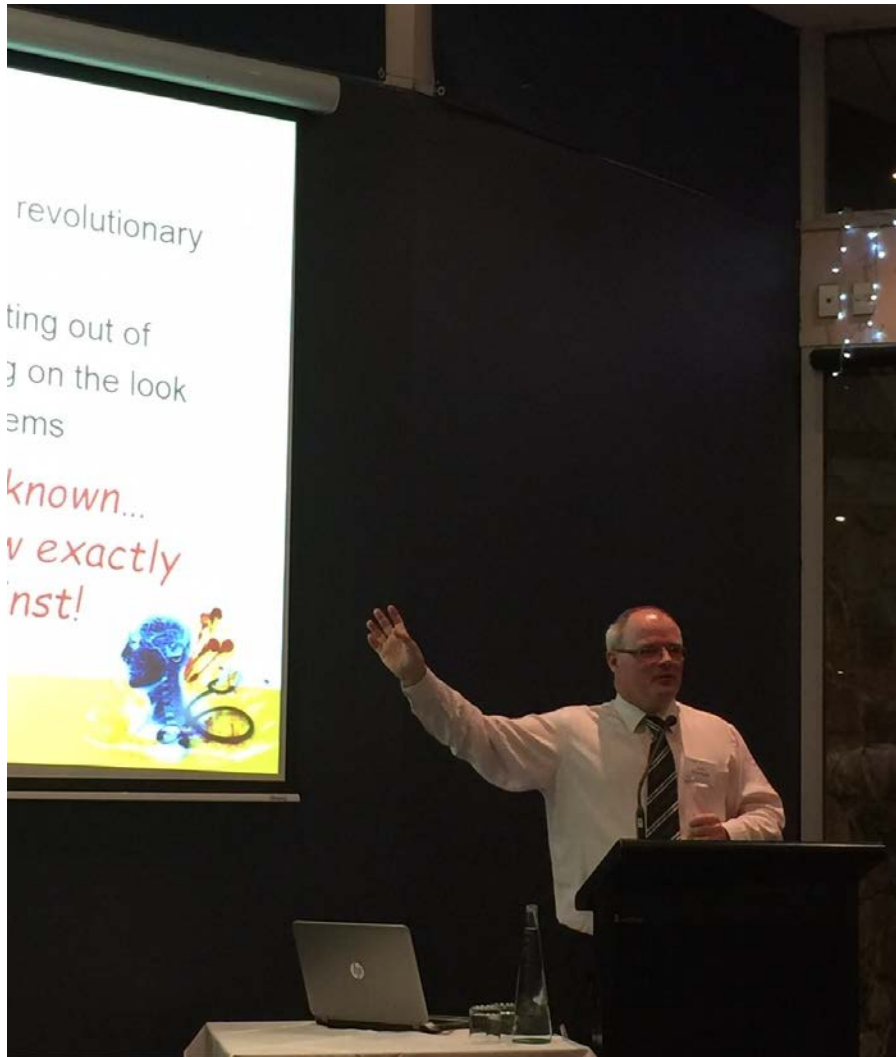
24th March Host EA	Radar detection of biological targets - An overview Venkataraman, Krishna, Radar Specialist, DSTO
21th April Host IEEE	**Site Visit - DSTO 'Iron Bird' Project Dr Andrew Walters, E3 Program Lead, DSTO
19th May Host IET	**Site Visit - Upgrading the Seaford Train line Peter Lindqvist - Rollingstock Engineer.
23th June Host EA	Subsea Electrical Installation Maintenance Andy Petersen, Principal Power & Control Systems Reliability Engineer, Santos
30th June Host EA	Making Software and Software Engineering Visible Professor Ali Babar, Chair of Software Engineering School of Computer Science at the University of Adelaide.
21th July Host EA	Detecting and Preventing Data Exfiltration Professor Ali Babar - Professor M. Ali Babar, Chair of Software Engineering School of Computer Science at the University of Adelaide.
18th Aug Host IEEE	Bayesian methods and the search for MH370 , Dr Neil Gordon, DSTO
15th Sep Host IEEE	Project OPAL – Addressing Network Survivability Through Autonomy , Brad Fraser, Communications Researcher, DSTO
20th Oct Host IET	STUDENT PAPERS NIGHT
17th Nov Host TelSoc	Hybrid Radio Professor Reg Coumts, Chairman, Telecommunications Society; Managing Director, Coumts Communication

C.2 Special Events

2015 IEEE SA Section Distinguished Lecturer

The 2015 IEEE SA Section Distinguished Lecture “Exploring the Dark Continent of the Human Body - An unexpected voyage of discovery for a naïve optical fibre telecommunications engineer ” was presented by Professor John Arkwright – South Australian Premier's Professorial Research Fellow in Biomedical Engineering, Flinders University. The 2015 DLD was held at the Adelaide Pavilion.

Prof Arkwright presented a highly interesting and entertaining lecture on the development of the development of the telecommunications grade optical fibre into the Fibre Bragg Diffraction arrays as used for measuring mechanical and thermal properties. He then went on to describe the application of FBGs as fibre optic catheters for in-vivo diagnostics, and also for other non-invasive biomedical applications. The talk was very well received by the members and guests attending the DLD. The event was attended by over 60 members, professional colleagues and guests



The DLD Committee, comprising Pina dall'Armi-Stoks, Sherry Randhawa, Morgan Smith and Scott Sleep, accomplished an outstanding job in organising a very successful event and arranging the menu and schedule for the evening. They deserve our thanks for having achieved an excellent outcome, especially given the constraints on the DLD budget.

C.3 Collaboration with other IEEE Sections

Collaboration with other neighbouring IEEE Sections has been handled through IEEE Australia Council. In addition we have collaborated on supporting joint Conferences including IEEE GEMCCON 2015 (Adelaide Nov 2015) and preparation for IEEE RADAR 2018 (Brisbane 2018).

C.4 Problems ongoing/anticipated

The Section anticipates that finding young people to be active IEEE members and volunteers is one of the biggest challenges that our section is facing in the future. This problem is also faced by many other sections around the world. Young members are under increasing time pressure from their employers and finding time for IEEE volunteering is a challenge. Another major concern is that we need to develop new Chapters that are in-tune with new directions in

the industry. Two new interest groups, Robotics, and Biomedical Engineering have been proposed, to address these emerging areas and it will be the Chair's priority to seek the development of these groups in 2016.

C.5 Best Practices of your section

It would be an understatement to say that South Australia Section Distinguished Lecturer series is an important part of South Australia IEEE Section calendar providing not only opportunity for social interactions between members but also expanding their horizon beyond electrical and electronic engineering.

Part D - GOALS AND PLANS

D.1 Continuation of Project/Activity in Progress and Their Implementation Plans

In 2016, we plan to commence the development of new Joint Chapters in Robotics and Biomedical Engineering that can attract more younger members to IEEE-SA. .

Associate Professor Karl Sammut,
Chair IEEE SA Section
17 December 2015
karl.sammut@flinders.edu.au