

# IEEE New South Wales Section Report 2016

## PART A - SECTION SUMMARY

### A.1 Executive Summary

- Section Executive Committee Member List 2016
  - Chair - Karu Esselle
  - Vice Chair - Ray Brown
  - Secretary - Dushmantha Thalakatuna
  - Treasurer - John Ypsilantis
- Section Highlights
  - Winning bid to host ANZSCON 2017 in Sydney
  - participation in Science Week
  - reactivation of the Young Professionals Affinity Group
  - IEEE Standards Forum
  - IEEE Fellows Event hosted by Business Events Sydney
  - four new NSW Fellows
  - formation of a Women In Engineering Student Affinity Group at Macquarie University
- Major Events (International, National)
- Major Chapter Activities
- Major Student and Affinity Group Activities
- Awards
  - See below

### A.2 Financial Report

Refer NetSuite for detailed financial information.

The NSW Section maintained a strong financial position in 2016, with reserves increasing by approximately \$13,000. One feature of the year was significant income from conferences, totalling more than \$25,000.

## PART B - ORGANIZATIONAL ACTIVITIES

### B.1 Membership Development Activities

- Total number of active members in the past 3 years.
  - 31 December 2014 2,754 + 107 (affiliates)
  - 31 December 2015 2,751 + 92 (affiliates)
  - 31 December 2016 2,683 + 82 (affiliates)
- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

### B.2 Chapter Activities

- Total number of Chapters in the Section
  - 14
- Number of Chapters formed in the current year
  - Nil
- Number of active Chapters (Chapters who have reported required number of meetings during the year)
  - 10
- Summary of Chapter activities (Chapter wise with attachment table/information)

Group/Chapter	Admin.	Technical	Professional	Social	Subtotal	Remarks
NSW Section	11	1		1	13	
AP03/MTT17		10			10	
Computer		2			2	
SP01/COM19/OE22		5			5	
IE13/IA34/PEL35		3			3	
Education E25	1	3			4	
EMB18		2			2	
PES PE31	1	4			5	
CAS04/PHO36/SSC37/ED15	1	2			3	
SIT30		1			1	Reported by Victorian Section
IT12					0	
GRS29					0	Reported by ACT Section
SMC		3			3	
VT		2			2	
DEIS	1				1	
EMC		1			1	
BT/CE/PSE		1			1	
Young Professionals			5	2	7	
Life Members	1			2	3	
Women in Engineering		3			3	
<b>TOTAL</b>	<b>16</b>	<b>43</b>		<b>5</b>	<b>64</b>	

### B.3 Professional and Continuing Education Activities

Refer above.

### B.4 Students Activities

- Total number of Student Branches in the Section
  - 7
- Number of Student Branches formed in the current year
  - 0
- Section level student activities (student congress, paper and other contests, awards etc)
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)
  - 4 (Macquarie, UNSW, UTS, UoW)
- Summary of Student Branch activities (Student Branch wise with attachment table/information)

### B.5 Affinity Group Activities

- Young Professional (YP)
  - 7
- Women In Engineering (WIE)
  - 3
- Life Member
  - 3

### B.6 Awards & Recognition Activities

- Award constituted by the Section
  - Outstanding Engineer Award (PES NSW Chapter) – Awarded to Trevor Blackburn
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year 2016
  - Eddie Fong, R10 Outstanding Volunteer Award
  - Macquarie University Student Branch - 2nd place, Australia Council Outstanding Student Branch Award
  - University of Wollongong - Special commendation, Australia Council Outstanding Student Branch Award
  - Education Society NSW Chapter – Chapter Achievement Award
  - PES NSW Chapter – financial reward under PES High Performing Chapter Program

## **B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)**

- Newsletter (name and number of issues in the year)
  - *Circuit*
  - Issued three times per year
- Home Page of the Section (give the URL and how often it is updated)
  - <http://sites.ieee.org/nsw/>
  - Updated as required
- Other means of contacts with Section members including social media
  - eNotices and direct email

## **B.8 Industry Relations**

- Membership growth and retention
- Activities for/with industrial members

## **B.9 Humanitarian Technology Activities**

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
  - Nil
- SIGHT Activities
  - Nil

## **B.10 Community Activities**

- IEEE Social activities (Family day, IEEE day, Engineers Week)
  - Annual dinner for members and partners

## **PART C - OTHERS**

### **C.1 Special Events**

- Please briefly describe the importance of special events and the outcomes achieved
  - Nil to report
- Funding secured from the IEEE and external sources including sponsorships
  - Nil to report

### **C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)**

- Nature of relationship and details of any formal agreement signed
  - Nil to report
- Details of joint activities
- Benefit to IEEE members (for example discounts, access to technical information etc.)
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

### **C3. Collaboration with other IEEE Sections**

- Support extended to neighbouring Sections
  - Nil to report
- Joint activities with any other Section
  - Joint sponsorship with the Queensland PES Chapter on bringing to Australia Prof. Janaka Ekanayake as a PES Distinguished Lecturer in April 2016

- Coordination of four Distinguished Lecturer tours across Australia by AP/MTT Chapter with sister chapters in other Australian sections.

#### **C.4 Support extended to Sub-sections & Society Chapters within the Section**

- Support extended for organising technical, educational and professional activities
- Joint activities for membership development
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

#### **C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)**

- Nil to report

#### **C.6 Problems anticipated and suggestions for solutions, if any**

- Nil to report

### **PART D - GOALS AND PLANS**

#### **D.1 Continuation of project/activity in progress and their implementation plans**

- Nil to report

#### **D.2 Goals and Future Plans**

- Nil to report

#### **D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.**

- Nil to report

#### **D.4. Business Plan for Sustainable Growth and Financial Stability.**

- Nil to report

## APPENDIX - L31 Meeting Reports 2016

Meeting Title	Meeting Date
IEEE NSW Section Committee Meeting February 2016	1/02/2016
NSW PH/CAS/SSC/ED Lecture Process Variability - A Curse or an Opportunity?	16/02/2016
Post Grad WIE Meeting at UNSW	3/03/2016
Child Safety - Button or Coin Batteries	10/03/2016
IEEE NSW Section Committee Meeting March 2016	14/03/2016
International Biomedical and Bioelectronics Workshop 2016	17/03/2016
IEEE NSW Section Committee Meeting April 2016	4/04/2016
DEIS NSW Chapter Committee Meeting	7/04/2016
Wind Generation and Its Grid Connection	7/04/2016
Big Data Challenge From Machine Learning and Pattern Recognition Perspective	8/04/2016
Dry Type Transformer Technology	14/04/2016
Seminar on MICROWAVE AND MILLIMETRE WAVE IMAGING OF COMPOSITE MATERIALS	27/04/2016
IEEE NSW Section Committee Meeting May 2016	2/05/2016
EMC Essentials - from Grassroots to Advanced Design and Diagnostics	5/05/2016
Where to for nuclear in Australia?	12/05/2016
NSW Life Members Lunch	15/05/2016
BBQ Networking	29/05/2016
SEMINAR: INTELLECTUAL PROPERTY AWARENESS AND PROCESSES IN NSW	6/06/2016
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IEEE NSW Section Committee Meeting June 2016	6/06/2016
NSW Edu Society Lecture/Workshop - Prof Jeffery Froyd	9/06/2016
Three-and-a-half great operational sonars	23/06/2016
Workshop on PUBLISHING SCIENTIFIC PAPERS	24/06/2016
IEEE NSW Learning and Teaching Forum	28/06/2016
ICITA Day 2	2/07/2016
ICITA Day 3	3/07/2016
IEEE NSW Section Committee Meeting July 2016	4/07/2016
NSW Casual Teacher Forum - Education Chapter	13/07/2016
Lecture on Research and Development in Autonomous Vehicles	28/07/2016
IEEE NSW Section Committee Meeting August 2016	1/08/2016
Machine Learning in Complex Situations	3/08/2016
DISTINGUISHED LECTURE ON ULTRA-HIGH EFFICIENCY PHASED ARRAYS FOR ASTRONOMY, REMOTE SENSING, AND SATELLITE COMMUNICATIONS	11/08/2016
Workshop on COMPUTER SIMULATION TECHNOLOGY: FULL-WAVE MODELLING OF COMPOSITE ELECTROMAGNETIC MATERIALS	11/08/2016
An Introduction to Risk-based Earthing of Power System Assets	11/08/2016
WORKSHOP: FUTURE OF COMMUNICATIONS: INTERNET OF THINGS	16/08/2016
Engineers@Work Event - Aquanet Recycling Project	18/08/2016
IEEE Engineers@Work workshop - New Directions in Innovation from ROV Work Experience	22/08/2016
Workshop on EXPERIMENTAL MATERIAL CHARACTERIZATION USING DIELECTRIC PROBE KITS	23/08/2016
IEEE NSW Section Committee Meeting September 2016	5/09/2016
Cognitive Wireless Communications for Industrial Internet of Things	9/09/2016
DISTINGUISHED LECTURE ON MULTIPHYSICS MODELLING IN COMPUTATIONAL ELECTROMAGNETICS: CHALLENGES AND OPPORTUNITIES	12/09/2016
Down to Earth Conference 2016	13/09/2016

A Fisher-Rao metric for curves using the information in edges	27/09/2016
IEEE NSW Section Committee Meeting October 2016	10/10/2016
On System-Level Analysis & Design of Cellular Networks: The Magic of Stochastic Geometry	11/10/2016
Post Grad WIE Meeting at UNSW	13/10/2016
Panel Session-FEMALE vs MALE ENGINEERS: WHO IS BETTER PREPARED TO FIND A JOB?	13/10/2016
NSW Life Members Lunch	16/10/2016
SEMINAR: METAMATERIALS IN ELECTROMAGNETICS: A BIRD'S-EYE VIEW	25/10/2016
DISTINGUISHED LECTURE ON METAMATERIALS IN ELECTROMAGNETICS: A BIRD'S-EYE VIEW	26/10/2016
MTT SPECIAL WORKSHOP ON ANTENNAS AND MICROWAVE FILTERS	3/11/2016
Workshop on Antennas and Microwave Filters	3/11/2016
IEEE NSW Section Committee Meeting November 2016	7/11/2016
Engineers@WorkEvent: Colongra Gas Compression Station and Colongra Gas Delivery Station	9/11/2016
DISTINGUISHED LECTURE ON VERIFICATION AND VALIDATION OF COMPUTATIONAL ELECTROMAGNETICS SOFTWARE	10/11/2016
NSW Education Society Chapter AGM	10/11/2016
HF Ocean Radar - from down under to Europe	10/11/2016
NSW Life Members AGM 2016	17/11/2016
NSW PES AGM 2016	17/11/2016
IEEE NSW SECTION ANNUAL GENERAL MEETING 2016	17/11/2016
IEEE NSW SECTION 2016 ANNUAL DINNER	17/11/2016
Young Professional Achievers	24/11/2016
CREACTIONS Conference 2016	28/11/2016
COMPUTER SIMULATION TECHNOLOGY: INTERDISCIPLINARY APPLICATIONS	28/11/2016
WORKSHOP: ENVIRON & ENERGY: ROBUST CHEMICAL SENSORS FOR MONITORING OF HYDROCARBONS DISSOLVED IN WATER	1/12/2016
SEMINAR: MULTIPHYSICS MODELLING IN COMPUTATIONAL ELECTROMAGNETICS: CHALLENGES AND OPPORTUNITIES	12/12/2016
NSW PH/CAS/SSC/ED Visit to UNSW Quantum Computation and Communication Technology Centre	13/12/2016
NSW PH/CAS/SSC/ED AGM 2016	13/12/2016