

---

**IEEE Australian Capital Territory Section Report (1999)**  
**to**  
**IEEE Region 10 Committee Meeting**  
**Kuala Lumpur, September 2000**

**Part A Section Summary**

**A-1 Executive Summary**

- Dr Xin Yao resigned from his Chair in March to take up an appointment overseas. The Section Committee appointed A/Prof William Cheung to the Chair effective from 1 April 1999. Committee members were as listed in Attachment 1.
- The Executive Committee held a total of five meetings over the year, one chaired by Xin Yao and four chaired by William Cheung.
- The Web Pages of IEEE ACT section, IEEE Australian Chapter of EDS & LEOS, IEEE ACT Student Branch are now located at:

<http://beth.canberra.edu.au/IEEEACT/>  
<http://www.physics.mq.edu.au/~goldys/home.htm>  
<http://goblet.anu.edu.au:80/ieeesg/>

- The Section and Chapters sponsored or co-sponsored a Workshop, a Symposium, and a Seminar. The Section continued the practice of holding monthly seminars jointly with sister institutions IEAust/ITEEE in the ACT. Details are as given in Attachment 3.
- A new Chapter of Information Theory (Australia-wide) has been formed and the Interim Chair Dr Lei Wei has been invited as a Section Committee member.
- At the AGM held in November, a new Committee was formed and the members are as listed in Attachment 2.

**A-2 Financial Report**

The financial position of the ACT Section continued to be healthy. Total receipts and expenses for the year were AU\$9,047.99 and AU\$6,540.49, respectively. Total amount of cash in the bank was recorded as AU\$22,457.07.

## **Part B Organisational Activities**

### **B-1 Membership Development Programs**

The total membership has grown by 17 to a total of 284 over the year to 31 Oct 1999. Most of this increase was in the Member grade.

By providing subsidy and convenience to applicants, the ACT Section launched a mid-year recruitment campaign and succeeded in recruiting 15 students to join IEEE as student members.

### **B-2 Professional and Continuing Education Activities**

These activities were held in the form of monthly seminars and occasional workshops for the benefits of all members, as detailed sections B-6, B-7 and Attachment 3.

### **B-3 Recognised Educational Programs**

These have not been organised in view of easy access to the three tertiary institutions in the Territory.

### **B-4 Student Activities**

The ACT Section continued to encourage students to take part in the Australia Council and Region 10 Paper Competitions by offering prizes to the best two entries to each of the Postgraduate and Undergraduate categories. Competition Prize winners for the 1998 competition were announced in March 1999 and the list is as shown in B-5.

The 1999 Student Paper Competition closed on 31 December 1999 and awards will be announced early in 2000.

### **B-5 Awards**

Student Paper Competition Awards:

Postgraduate Papers

First Prize (\$100 + \$25 membership)

Dat Tat Tran

Second Prize (\$50 + \$25 membership)

Thushara D. Abhyapala

Undergraduate Papers

First Prize (\$100 + \$25 membership)

Darryl Stokes

Second Prize (each \$25 membership)

Yong Liu

Deva K. Borah

### **B-6 Conference Activities**

The IEEE ACT Section and Centre for Advanced Telecommunications and Quantum Electronics Research, UC co-hosted the Canberra Optical Free Space Systems Workshop on Monday, 15 November 1999 at University of Canberra. There were about 30 attendees.

## **B-7 Chapter Activities**

- The LEOS & EDS Chapter and the ANU co-hosted a seminar by Prof Richard De La Rue from Glasgow University on 1-2 July 1999.
- The IEEE ACT Signal Processing and Communications Chapter and UC co-hosted the “Speech, Image and Video Symposium” on Wednesday, 14 July 1999 at University of Canberra. There were about 25 attendees.
- The Information Theory Chapter was formed in Australia earlier this year and is now chaired by Dr. Lei Wei.

## **Part C Goals and Plans**

- Revision of the Section Bylaws as required by the IEEE HQ.
- Formation of the Computer Chapter  
Since we have a large number of members in the computing area we are preparing to form a Computer Chapter in the ACT. We look forward to its formation in the coming year.
- The ACT Section/Chapters are planning to host or co-host the following conferences and workshops for the benefit of continuing education of members:

University of Canberra and Australian Intelligent Cybernetic Systems are co-hosting The International Conference on Advances in Intelligent Systems: Theory and Applications, AISTA'2000, to be held on 2-4 February 2000 in Canberra. The IEEE ACT Section is a co-sponsor of the Conference.

The Signal Processing & Communications Chapter of the ACT Section has agreed with WA and other sections to jointly invite Prof Edward J Delp as an IEEE Distinguished Lecturer to deliver a sequence of lectures on multimedia security; image and video watermarking; new approaches to scalable image; and video compression and analysis of digital mammograms. Prof Delp is with Purdue University, Indiana and the tentative date for this event is June 2000.

The 11<sup>th</sup> International Semiconducting and Insulating Materials Conference sponsored by the IEEE Electron Devices Society will be held in Canberra during 3-7 July 2000. The IEEE ACT Section and the Australian Chapter of EDS & LEOS will be technical co-sponsors of the conference.

## **Attachment 1**

### **The Executive Committee for 1999 (ending 31<sup>st</sup> December 1999)**

#### ***Chair (1 Jan – 31 March 1999):***

Dr Xin Yao  
School of Computer Science,  
University College, UNSW, ADFA,  
Northcott Drive, Canberra ACT 2600 Australia  
Office Phone: 612 6268 8819 Fax: 612 6268 8581  
Email: xin@csadfa.cs.adfa.oz.au

#### ***Chair (1 April – 31 Dec 1999):***

Dr W. N. Cheung  
School of Electronics Engineering and Applied Physics,  
University of Canberra, P.O.Box. 1, Belconnen ACT 2616, Australia  
Office Phone: 612 6201 2514 Fax: 612 6201 5227  
Email: wnc@ise.canberra.edu.au

#### ***Past Chair (1997-98):***

Dr Chennupati Jagadish  
Dept of Electronic Materials Engineering,  
Research School of Physical Sciences and Engineering  
Australian National University, Canberra, ACT 0200, Australia  
Office Phone: 612 6249 0363 Fax: 612 6249 0511  
Email: cxj109@rsphysse.anu.edu.au

#### ***Vice Chair (1 Jan – 31 March 1998):***

Dr. W N Cheung

#### ***Vice Chair:***

Dr Paul Whitbread  
DSTO/ITD ( Fern Hill Pk), Department of Defence,  
Canberra ACT 2600 Australia  
Office Phone: 612 6265 8023 Fax: 612 6265 8010  
Email: paul.whitbread@dsto.defence.gov.au

#### ***Secretary:***

Andrew Kerans  
PO Box 3060 Belconnen ACT 2617, Australia  
Office Phone: 612 62565545 Fax: 612 62565256  
Email: akerans@aca.gov.au

#### ***Treasurer:***

Dr Hoe Tan  
Dept of Electronic Materials Engineering,  
Australian National University, Canberra ACT 0200, Australia  
Office Phone: 612 6249-0371 Fax: 612 6249-0511  
Email: hoe109@rsphysse.anu.edu.au

#### ***Newsletter Editor:***

Dr Masoud Mohammadian  
School of Computing,  
University of Canberra, P.O.Box. 1, Belconnen ACT 2616, Australia  
Phone: 612 6201 2917, 612 6201 2417 Fax: 612 6201 5231  
E-Mail: [masoud@ise.canberra.edu.au](mailto:masoud@ise.canberra.edu.au)

***Professional Activities and Membership Development:***

Professor Paul Edwards  
School of Electronics Engineering and Applied Physics,  
University of Canberra, P.O.Box. 1, Belconnen ACT 2616, Australia  
Office Phone: 612 6201 2515 Fax: 612 6201 5227  
Email: Paule@ise.canberra.edu.au

***Student and Educational Activities and Student Branch Counselor:***

Dr Andres Cuevas  
Department of Engineering, FEIT  
Australian National University, Canberra ACT 0200, Australia  
Office Phone: 612 6249 3702 Fax: 612 6249 0506  
Email: andres.cuevas@anu.edu.au

***EDS & LEOS Chapter Chair:***

Dr Chennupati Jagadish

***Comms & SP Chapter Chair:***

Dr. Robert Prandolini  
DSTO, Fern Hill Pk.  
Department of Defence,  
Canberra ACT 2600 Australia  
Office 612 6265 8010  
Email: robert.prandolini@dsto.defence.gov.au

***Information Theory Chapter Chair:***

Dr. Lei Wei  
Department of Systems Engineering,  
Australian National University  
Canberra ACT 2600 Australia  
Office Phone: 612 6279 8274 Fax: 612 6249 0506  
Email: leiwei@faceng.anu.edu.au

## **Attachment 2**

### **Executive Committee for 2000 (ending 31<sup>st</sup> December 2000)**

#### ***Chair :***

Dr. W N Cheung  
School of Electronics Engineering and Applied Physics,  
University of Canberra, P.O.Box. 1, Belconnen ACT 2616, Australia  
Office Phone: 61-2- 6201 2514 Fax: 61-2- 6201 5227  
Email: [wnc@ise.canberra.edu.au](mailto:wnc@ise.canberra.edu.au)

#### ***Past Chair (1997-98):***

Prof Chennupati Jagadish  
Dept of Electronic Materials Engineering,  
Research School of Physical Sciences and Engineering  
Australian National University, Canberra, ACT 0200, Australia  
Office Phone: 61-2- 6249 0363 Fax: 61-2- 6249 0511  
Email: [cxj109@rsphysse.anu.edu.au](mailto:cxj109@rsphysse.anu.edu.au)

#### ***Vice Chair(1) :***

Dr Hoe Tan  
Dept of Electronic Materials Engineering,  
Australian National University, Canberra ACT 0200, Australia  
Office Phone: 61-2- 6249-0371 Fax: 61-2- 6249-0511  
Email: [hoe109@rsphysse.anu.edu.au](mailto:hoe109@rsphysse.anu.edu.au)

#### ***Vice Chair(2):***

Dr Masoud Mohammadian  
School of Computing,  
University of Canberra, P.O.Box. 1, Belconnen ACT 2616, Australia  
Phone: +61 2-6201-2917, +61 2-6201-2417 Fax: +61 2-6201-5231  
E-Mail: [masoud@ise.canberra.edu.au](mailto:masoud@ise.canberra.edu.au)

#### ***Secretary:***

Andrew Kerans  
PO Box 3060 Belconnen ACT 2617, Australia  
Office Phone: 61-2- 62565545 Fax: 61-2- 62565256  
Email: [akerans@aca.gov.au](mailto:akerans@aca.gov.au)

#### ***Treasurer:***

Dr Hoe Tan  
Dept of Electronic Materials Engineering,  
Australian National University, Canberra ACT 0200, Australia  
Office Phone: 61-2- 6249-0371 Fax: 61-2- 6249-0511  
Email: [hoe109@rsphysse.anu.edu.au](mailto:hoe109@rsphysse.anu.edu.au)

#### ***Newsletter and Website Editor:***

Dr Masoud Mohammadian

#### ***Educational Activities:***

Dr Tuan Pham  
School of Computing,  
University of Canberra, P.O.Box. 1, Belconnen ACT 2616, Australia  
Office Phone: 612 6201 2394 Fax: 612 6201 5227  
Email: tuanp@ise.canberra.edu.au

***Membership Development:***

B. S. Nagaraja  
ACTEW Corp Ltd.,  
Canberra 2601, Australia.  
Phone: 612 6270 7443 Fax 612 6270 7445  
Email: rajea.nagaraja@actew.com.au

***Professional Activities:***

Dr Max Lederer  
Dept of Electronic Materials Engineering,  
Australian National University, Canberra ACT 0200, Australia  
Office Phone: 612 6249 0692 Fax: 612 6249 0029  
Email: mjl111@rsphysse.anu.edu.au

***Student Activities and Student Branch Counselor:***

Dr. Lei Wei  
Department of Engineering,  
Australian National University  
Canberra ACT 0200 Australia  
Office 61-2- 6279 0506  
Email: Lei.Wei@anu.edu.au

***EDS & LEOS Chapter Chair:***

Prof Chennupati Jagadish

***Comms & SP Chapter Chair:***

Dr. Robert Prandolini  
DSTO, Fern Hill Pk.  
Department of Defence,  
Canberra ACT 2600 Australia  
Office 61-2- 6265 8010  
Email: robert.prandolini@dsto.defence.gov.au

***Information Theory Chapter Chair:***

Dr. Lei Wei

### Attachment 3

#### **Meeting Report**

- Sponsor of meeting: Section ( joint with IEAust and ITEE Soc.)  
-Meeting date: March 9, 1999  
-Was there an admission charge? No  
-Category: Technical  
-Attendance: 25 (12 members, 13 guests)  
-Did student members attend? Yes  
-Description of activity: “Satellite co-ordination, concepts, techniques and tools”, a seminar by Mr Andrew Kerans, Australian Communications Authority, Australian Government. Recommended.
- Sponsor of meeting: Section ( joint with IEAust and ITEE Soc.)  
-Meeting date: April 13, 1999  
-Was there an admission charge? No  
-Category: Technical  
-Attendance: 30 (12 members, 18 guests)  
-Did student members attend? Yes  
-Description of activity: “The Iridium satellite mobile telephone system”, a seminar by Mr Sahala Silalahi, VP, GTO Development, Iridium South Pacific, Recommended.
- Sponsor of meeting: Section ( joint with IEAust and ITEE Soc.)  
-Meeting date: May 11, 1999  
-Was there an admission charge? No  
-Category: Technical  
-Attendance: 32 (15 members, 17 guests)  
-Did student members attend? Yes  
-Description of activity: “Authentication by voice - the state of the art of speaker recognition and its future applications in computer security, the internet and electronic commerce”, a seminar by Prof Michael Wagner, Human-Computer Communication Lab, University of Canberra. Recommended.
- Sponsor of meeting: Section ( joint with IEAust and ITEE Soc.)  
-Meeting date: June 8, 1999  
-Was there an admission charge? No  
-Category: Technical  
-Attendance: 25 (11 members, 14 guests)  
-Did student members attend? Yes  
-Description of activity: “Microwave Radio Propagation in the Troposphere,

.	Discovering What Really Happens”, a seminar by Mr Andrew Martin Chairman, Martin Communications Recommended.
-Sponsor of meeting:	Section ( joint with IEAust and ITEE Soc.)
-Meeting date:	July 13, 1999
-Was there an admission charge?	No
-Category:	Technical
-Attendance:	28 (14 members, 14 guests)
-Did student members attend?	Yes
-Description of activity:	“Greenhouse Gas Reduction”, a seminar by Dr Colin Grant, Deputy Chief Executive, Australian Greenhouse Office. Recommended.
.	
-Sponsor of meeting:	Section ( joint with IEAust and ITEE Soc.)
-Meeting date:	August 10, 1999
-Was there an admission charge?	No
-Category:	Technical
-Attendance:	34 (20 members, 14 guests)
-Did student members attend?	Yes
-Description of activity:	“Photovoltaic (solar cell) Devices and their Application”, a seminar by Prof Stuart Wenham, Head of the Department of Electronics, University of NSW. Highly recommended.
.	
-Sponsor of meeting:	Section ( joint with IEAust and ITEE Soc.)
-Meeting date:	October 19, 1999
-Was there an admission charge?	No
-Category:	Educational and technical
-Attendance:	32 (18 members, 14 guests)
-Did student members attend?	Yes
-Description of activity:	IREE Student Presentation Night and Occasional Seminar by Mr Peter Churchill, Director, Canberra Deep Space Communication Complex at Tidbinbilla, Canberra. Highly recommended.
.	
-Sponsor of meeting:	Section
-Meeting date:	November 26, 1999
-Was there an admission charge?	No
-Category:	Administrative and social
-Attendance:	50 (25 members, 25 guests)
-Did student members attend?	Yes
-Description of activity:	Annual General Meeting of the Section and Chapters and Annual BBQ with families
.	
-Sponsor of meeting:	Section
-Meeting date:	November 26, 1999

-Was there an admission charge?	No
-Category:	Technical
-Attendance:	30 (22 members, 8 guests)
-Did student members attend?	Yes
-Description of activity:	“Online Virtual Environments for Speech Fundamentals”, a seminar by Dr M Barlow, University College, UNSW. Recommended.