

# 24<sup>TH</sup> ANNUAL GENERAL MEETING

## AGENDA

1. Confirmation of the minutes of the 23<sup>rd</sup> AGM (7.45pm)
2. Matters Arising from the Minutes (7.55 pm)
3. Chairman's Report (8.10pm)
4. Secretary's Report (8.20pm)
5. Treasurer's Report (8.30pm)
6. Any Other Business (8.45pm)
7. Election of Returning Officer (8.55pm)
8. Election of Office Bearers 2001/2 (9.00pm)
9. Incoming Chairman's Address (9.30pm)
10. Presentation of token of appreciation to 2001 Committee by IEEE Region 10 Director, Prof. Low Teck Seng (9.35pm)
11. End (10.00pm)

# MINUTES OF THE 23<sup>rd</sup> ANNUAL GENERAL MEETING IEEE SINGAPORE SECTION

Held on Tuesday, 21<sup>st</sup> November 2000 at 8.15 pm at the Theatrette, Orchid Country Club

## Present:

A. Alphones	Michael Buschauer
A. Rahim Leyman	Nahidh Karim
Anil Varma	Narasimhan Sundararajan
Anselm Yip Tze Yieng	Nemai C Karmakar
Chan C. K. Alex	Ng Yean C.
Chan K Choong	Ong Soon Huat
Chan Wai Yeong	Pan Feng
Chang Wee Lee	Pratab Siraprakosapillai
Chen M. Ben	Premangshu Ghosh
Chen Chun	Quek Wei Ching
Chen Shiun	Raj Rajkumar
Cheok Adrian	S.Satheakeerthy
Chin Mern Yung, Bernard	Saeed Sanei
Chockalingam Subramanian	Sanjib Panda
D' KW Eccleston	Shankar Muthukrishnan
Er Meng Joo	Shen Zhongxiang
Fazlur Rahman M H R	So Ping Lam
Foo Say Wei	Somnath Girl
Gan Woon Siong	Sridkanthan Nadarajah
Goh Kiah Mok	Subramanian Krishnan
Govinda B. Shrestha	Sunil Puri
Hideyuki Oka	Suparto
Ho Hooi Chee	Tan Cher Ming
Hu Bei	Tan Chong Heng
Hu Min	Tan Kok Peng
John Potter	Tan Wilson
Joseph Jjimson	Tang Hung Kei
K R Subramanian	Tay Bun Hwa
Kimizo Ono	Teh Gek Huat
Koh Ronald	Teh Jin Sim
Kwok H Li	Tien Dapeng
Lai Ming-Kit	Tseng King Jet
Lalit K. Goel	Vidyut Sooryakant Gandhi
Lee Charles	Vun Chan Hua, Nicholas
Lee Choon Sun	Wang Jianliang
Leong Fai Choy	Wang Qing Guo
Leong Kin Seng	Wang Youyi
Lian Yong	Wen Chang Yun

Liang Y C  
Lim Kar Soon  
Lin Fujiang  
Lin Wei Si  
Liu Zhe Jie  
Low Kay Soon  
Lu Yilong  
Luo Fang Lin  
M.H.Haque  
Ma Kai Kuang  
Mahinda Vilathgamuwa  
Manikkai Baduge D.C.  
Maung Win Aung

Wong Alan  
Wong Seng On  
Xie Lihua  
Xu Jun  
Yao JianChao  
Yao Su Su  
Yeo Tat Soon  
Yeo Tiong Lai  
Yim Kok Kean  
Yong Ching Tong  
Zhang Hua  
Zhao Si Ping

A letter of apology was sent by Lim Yong Ching.

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The Chairman, Dr Tien Dapeng declared the 23<sup>rd</sup> Annual General Meeting of IEEE Singapore Section open at 8.15 pm. Approximately 101 members attended the meeting.

**1. CONFIRMATION OF MINUTES OF 21<sup>ST</sup> AGM**

The minutes were confirmed by Dr. Yeo Tat Soon and seconded by Dr. S. Krishnan.

**2. MATTERS ARISING**

There were no matters arising.

**3. CHAIRMAN'S REPORT**

The Chairman presented the 1999/00 IEEE Singapore Section's Annual Report. The main points mentioned in the report are:

**3.1 Technical Conferences**

The section had conducted 9 technical conferences. Some of the conferences were organised jointly with or sponsored by higher learning institutions in Singapore. It was also mentioned that there were great strength in this area in Singapore due to the contribution from various Chapters. For example, Australia with a population about 18 million, organised about 9 technical conferences this financial year. Singapore being a smaller Section had arranged 9 conferences this year.

**3.2 Technical courses**

It was reported that the details of the technical courses conducted could be found in the Chapters' report.

### 3.3 Video night

4 video nights were organised and were very well attended.

### 3.4 Workshop and Public Seminars

In addition to the above, many workshops and public seminars were also organised by various Chapters.

### 3.5 Membership Services

#### 3.5.1 Electronic Email Database

The chairman reported that this year, the Section's main effort was on marketing services. This was greatly efficient due to the number of members who owned e-mail account. It was reported that 87% of the members have an e-mail account. Monthly IEEE newsletters were also sent by e-mail to members.

#### 3.5.2 Career Resource

IEEE Singapore Career Resource Service (ISCRS) was set up to link companies with members and allow them to send their job vacancies through e-mail especially for their students and engineers to find employment opportunities.

#### 3.5.3 Web page

Dr Y C Liang initiated the Section's web page for members to post their CVs for potential employees the year before. Therefore, this year, it was a supplement to the main web page.

#### 3.5.4 Financial Advantage Programme

It was reported that the financial advantage programme was a service which tie-up with 2 major credit cards company. This is useful when members travel overseas. For example, Diners cardholders are also entitled to utilise the VIP lounge at the transit destination lounge.

### 3.6 Industry Liaison Committee

It was reported that IEEE Singapore industry liaison committee was set up because 88% of IEEE members are from the industry. Some members also provided feedbacks to IEEE stating that IEEE should pay a lot of attention to the members from the industry.

The idea for setting up this committee was to get industry people to network with each other. For example this committee is needed for organising conferences or to persuade the companies to recruit IEEE member or students from the local Universities or Polytechnics.

3.7 Student Branches

It was reported that a decision had been taken in the past to set up 4 student branches, one at each Polytechnic. Student branches have been set up in 2 Polytechnic and for the other 2 Polytechnic it would be completed next year.

3.8 Members Activities

A membership night with BBQ was organised. It was mentioned that IEEE should organise more activities for all members instead of organising for committee members only.

3.9 Financial Report

It was reported that out of an annual rebate of \$25K, the IEEE Singapore Section had built up a cash reserve of \$700,000. Further details would be highlighted by the treasurer in his report.

3.10 Regional 10

It was found out that many conferences were held in the same area had actually clashed with each other in the Asia Pacific Region. During the month of October and November, up to 20-30 conferences were going on in the same area and at the same time. However, during the month of February and March, only 1 or 2 conferences were being organised.

**4. TREASURER'S REPORT**

The treasurer presented the amount of seed money as at 30<sup>th</sup> September 2000. He also presented the Income & Expenditure for the period ended 30<sup>th</sup> September 2000. He noted that there was a decrease in conference revenue because ICMIT's account was not ready at this point of time.

The treasurer mentioned that the accounting fee was not paid according to how big the profit each Chapter made, but rather according to the exact accounting time required to process that Chapter's accounts.

Queries on the reports were raised:

- A member from the Industrial Application Chapter reported the Chapter's book keeping fees had been paid, but was not reflected in the report. He suggested that the cheque should be send to the treasurer instead of sending it to the chairman only. Treasurer had agreed with the suggestion.

- A member from the Engineering Management Chapter enquired if they could place money in the fixed deposit account. Dr. Tien replied that it is possible but not recommendable because the money will than be placed everywhere and it would be difficult to locate all the IEEE accounts. It was said to be the individual committee decision.
- A member from the Computer Chapter required the treasure to explain the increase in travelling expensed from 1999 to 2000. The treasurer replied that it was because this year happened to be the once in every 3 years IEEE Chairman meeting held at USA.
- There was also a request of the histogram of the number of conferences held per year. This histogram should also include the increase or decreasing number of conference, profit and expenditure. Dr. Tien replied that this year there were 9 conferences. Every year, there were an estimated number of conferences with maximum number of 12 conferences to a minimum number of 6 conferences.

**5. ELECTION OF ELECTION RETURNING OFFICER**

Dr. Y C Liang was elected as the Election Returning Officer (ERO). This was proposed by Tien Dapeng, and seconded by John Potter.

Dr Liang briefed all the procedures for the election and how the nomination had been done. It was mentioned that for every candidate to be successfully nominated, a minimum of 4 nominations was required. Empty positions would be nominated by inviting member from each individual Chapter to nominate for their own Chapter committee. Each Chapter must not have more than 4 committee members. Chapters with more than 4 members would have to be balloted.

**6. ELECTION**

The results of the election for 2001 were as follows:

**Main Section**

<b>Position</b>	<b>Nominee</b>	
Past Chairman	Tien Dapeng	
Chairman	A. Rahim Leyman	
Deputy Chairman	Lim Yong Ching	
Secretary	Sanjib K. Panda	
Treasurer	Adrian D. Cheok	
Member	Luo Fang Lin	
	Andrew Teo	
	Bi Chao	
	Nemai Karmakar	(nominated by A. Rahim Leyman)

### **MTT/AP/EMC Chapter**

<b>Position</b>	<b>Nominee</b>
Chairman	Chew Siou Teck
Deputy Chairman	Ng Geok Ing
Secretary	Ooi Ban Leong
Treasurer	Lin Fujiang
Member	Arokiaswami Alphones Yeo Tat Soon

### **Communications Chapter**

<b>Position</b>	<b>Nominee</b>
Chairman	Kwok H. Li
Deputy Chairman	Kam Pooi Yuen
Secretary	Kannan Balakrishnan
Treasurer	Ho Hui Chee (nominated by Kwok H. Li)
Member	Cheng Tee Hiang Zhao Minzhe (nominated by Kwok H. Li)

### **Industrial Electronics Chapter**

<b>Position</b>	<b>Nominee</b>
Chairman	Luo Fang Ling
Deputy Chairman	Wen Chang Yun
Secretary	Hu Bei
Treasurer	Ng Kai Meng
Member	Fazlur Rahman M.H.R.

### **Engineering Management Chapter**

<b>Position</b>	<b>Nominee</b>
Chairman	Foo Say Wei
Deputy Chairman	Tang Hung Kei
Secretary	Dharma Nadarajah
Treasurer	Kenny Lee
Member	Hong Guan Yue Anil Varma (nominated by Foo Say Wei)

### **REL/CPMT/ED Chapter**

<b>Position</b>	<b>Nominee</b>	
Chairman	M.K. Radhakrishnan	(nominated by Y. C. Ng)
Deputy Chairman	Ong Soon Huat	(nominated by Y. C. Ng)
Secretary	Yean C. Ng	
Treasurer	Chim Wai Kin	
Member	Andrew Tay	
	Wilson tan	(withdrew)
	Charles Lee	(Withdrew)
	Kin Leong Pey	
	Yong Ching Tong	
	Chin Mem Yung	

### **Industry Applications Chapter**

<b>Position</b>	<b>Nominee</b>	
Chairman	Leong Fai Choy	
Deputy Chairman	Mahinda Vilathgamuwa	
Secretary	Ali Maswood	
Treasurer	Tseng King Jet	
Member	Roger Chiun Koon Yoon	
	Low Kay Soon	
	Tan Cher Ming	
	Sanjib K. Panda	

### **Signal Processing Chapter**

<b>Position</b>	<b>Nominee</b>	
Chairman	Ma Kai Kuang	
Deputy Chairman	Li Gang	
Secretary	Tan Yap Peng	
Treasurer	Bi Guoan	
Member	Alex Kot	
	Ng Boon Poh	
	Koh Soo Ngee	
	Lin Wei Si	(nominated by Ma Kai Kuang)

### **Consumer Electronics Chapter**

<b>Position</b>	<b>Nominee</b>	
Chairman	N Sriskanthan	
Deputy Chairman	Y Yamada	
Secretary	Pan Feng	
Treasurer	Nicholas Vun	
Member	Jimmy Abraham	
	Joseph Jimson	
	Lian Yong	
	Lee Choon Sun	(nominated by Pan Feng)

### **Control Systems Chapter**

<b>Position</b>	<b>Nominee</b>	
Chairman	Wang Qing Guo	
Deputy Chairman	Soh Cheong Boon	
Secretary	Xie Lihua	
Treasurer	Ben M Chen	
Member	Lee Tong Heng	(Lost the ballot)
	Wang Jian Liang	(Won the ballot)
	Wang Youyi	(Won the ballot)
	Ding Zhengtao	(Won the ballot)
	Lie Tek Tjing	(Won the ballot)

### **Circuits & Systems Chapter**

<b>Position</b>	<b>Nominee</b>
Chairman	Lim Yong Ching
Deputy Chairman	Ganesh S. Samudra
Secretary	Yang Rong Huan
Treasurer	(Empty)
Member	Lian Yong

### **Computer Chapter**

<b>Position</b>	<b>Nominee</b>
Chairman	Gourab Sen Gupta
Deputy Chairman	Gwee Bah Hwee
Secretary	Chan Khim Choong
Treasurer	Lau Lee Yee
Member	Teo Tat Khai
	Manikka B Chanakya (nominated by Sulsvamaniam Satheakeethy)

### **Power Engineering Chapter**

<b>Position</b>	<b>Nominee</b>
Chairman	G. B. Shrestha
Deputy Chairman	L. K. Goel
Secretary	Teh Gek Huat
Treasurer	M. H. Haque
Member	Cheong Yow Kin
	Seow Kang Seng
	Sim Wee Meng
	So Ping Lam

(nominated by Govinda Shrestha)

#### **7. ADDRES BY INCOMING CHAIRMAN**

Dr. Rahim Leyman thanked all members for supporting him. In his new role as Chairman of the IEEE Singapore Section, he ensured that he would do his utmost for the Section. Dr. Leyman also presented the areas to focus for 2001.

The incoming chairman mentioned that IEEE Singapore Section should continue with the work on the Financial Advantage program (FAP) for IEEE members in Singapore. There was a need to increase industrial participation in IEEE Singapore. The formation of new Chapters and assist Chapters in increasing their technical activities should be continued.

A devise of new working model for Continuing Education Program should be done. Student Activities should be enhanced to increase membership in Universities. Student branches at the 4 polytechnics should be form and activated.

Lastly, there's a need to continue the work on regional cooperation with Malaysian, Indonesian, and Thailand Sections.

#### **8. PRESENTATION OF CERTIFICATES OF APPRECIATION**

Dr. Tien Dapeng thanked the outgoing office bearers for their contributions and presented the certificate of appreciation to them.

There being no further business, the 23rd Annual General Meeting was declared closed by the Chairman at 10.00 pm.

Minutes recorded by: Integrated Meetings Specialist Pte. Ltd,  
IEEE Singapore Section's Secretariat

Approved by: A. Rahim Leyman

# IEEE SINGAPORE SECTION

## 2000/2001 ANNUAL REPORT

### CHAIRMAN'S REPORT

*Chairman: A. Rahim Leyman*

On behalf of the IEEE Singapore Section, I extend my warmest welcome to all of you to the 24<sup>th</sup> Annual General Meeting. It is always a great pleasure to meet old friends and make new ones in this meeting, and also to assess the Section's past year activities.

We started well in the year with a plethora of planned activities by various Chapters. IEEE HQ has approved the formation of two new Chapters, Electromagnetic Compatibility, and the Systems, Man, and Cybernetics. IEEE Singapore Section hosted the key annual Region 10 conference (TENCON2001) on a cruise boat. Based on the number of registrants, the conference was very well received. This year also marked two Societies' activities that were organized in Singapore – Electron Devices Society organized their AdCom meeting in July, and Signal Processing Society held their premier workshop on Statistical Signal Processing in August. In the year 2004, Singapore will host the Instrumentation and Measurement Society's Annual IMTC Conference. We record our profound gratitude to our volunteers from past Section Committee, various Chapters Committee, and Members for their significant contribution in organizing these activities.

It is our pleasure to inform you that IEEE HQ and Institute of Engineers Singapore have jointly established an Award of Excellence for the most outstanding engineer in Singapore. This prestigious award is open to anyone who has achieved excellence in work. A Selection and Joint Administration Committee has been formed to work on the details.

Our Section is reviving student activities programs in Singapore. We have established a student branch at Temasek Polytechnic. We have frequently met student branch leaders from our two universities, and are urging them to realize more practical and valuable programs for students. We hope to enhance IEEE Student Membership in Singapore.

On the financial front, we have closely monitored the Section's expenditures, and where possible we have cut costs. Our financial situation is healthy. We hope this will spoon next year's committee in organizing more value-added activities.

It is obvious that most of our technical committee volunteers and participants in our programs are from the academia. We have aggressively called on members from the industry to come forward and contribute and participate in our programs. The response has been quite low. We will need more creative and sophisticated technical solutions to this problem.

To partially address this problem, we have set up a full-blown Section's website (<http://www.ieee.org.sg>). We believe this website will be a powerful attractant to our members to

yield the latest information about Section's activities. We strongly urge all our members to routinely check in this site for the latest.

The Sept. 11 attacks have also affected a number of IEEE activities both locally and internationally. Many of the planned conferences were either cancelled or had markedly reduced participants. As we are still feeling the temblor of these attacks, we are, locally, also going through a difficult economic downturn. Our members may be affected by wage restraints, lay offs, slow-downs and etc. We hope the future Section and technical committees will give explicit focus on re-training programs through inexpensive short courses, serial technical talks and other activities that will potentially lead to the upgrading of our members' skills sets.

I would like to wish you a good meeting, and hope you will continue to extend your support to the Section. It has been an extraordinary experience for me in leading the Section. The support given by many has been most useful. To conclude, I personally like to thank all those who have dedicatedly spent time in organizing and participating in the IEEE Singapore Section activities.

4<sup>th</sup> December 2001

# SECRETARY'S REPORT

Secretary: Sanjib K. Panda

The summary of various activities held under the IEEE Singapore Section/Chapters for the year 2001 can be found in the following table and the details of each activity can be found in Chapter's Report in the latter part of this report.

## IEEE Singapore Section/Chapter Meeting Activities Report (24/11/01)

SECTION/CHAPTER	Administrative	Technical	Social	Professional	Educational	Total
Section	1-(30/01/01),2-(13/03/01), 3-(23/04/01),4-(05/06/01), 5-(17/06/01),6-(18-09/01), 7-(02/11/01)			1-(19-22/08/01)		8
MTT/AP Chapter	1-(30/07/01)			-	-	1
EMC Chapter (Pro-tem)	1-(26/04/01)	1-(07/09/01)		-		2
Communications Chapter	1-(01/02/01),2-(26/04/01), 3-(11/06/01),4-(03/10/01),	1-(05/02/01),2-(16/05/01), 3-(06/07/01),4-(11/07/01), 5-(19/10/01), 6-(15-18/10/01)			1-(15/02/01)	11
Engineering Management Chapter	1-(04/04/01), 2-(06/06/01), 3-(08/09/01), 4-(07/11/01)	1-(06/04/01)			-	5
REL/CPMT/ED Chapter	1-(22/02/01), 2-(21/06/01), 3-(10/08/01),4-(29-02/06/01), 5-(07-08/07/01),6-(21-22/06/01), 7-(20/10/01), 8-(29/10/01)	1-(08/01/01),2-(08-03-01), 3-(12/03/01),4-(09/05/01), 5-(09-10/06/01),6-(19/10/01), 7-(19/10/01), 8-(19/10/01), 9-(19/10/01)	1-(09/02/01), 2-(07/07/01), 3-(19/10/01)	1-(09-13/07/01), 2-(09/11/01)		22
Industry Applications Chapter	1-(15/02/01)		1-(20/04/01)	1-(22-25/10/01)	-	3
Signal Processing Chapter		1-(03/03/01), 2-(10/03/01), 3-(06/08/01),4-(27/09/01), 5-(15-/10/01)		-	1-(17/08/01), 2-(19/09/01)	7
Consumer Electronics Chapter	1-(05/01/01), 2-(16/01/01), 3-(19/01/01),4-(14/04/01), 5-(27/07/01),6-(1/08/01)			1-(01-02/03/01)	-	7
Control Systems Chapter	1-(15/03/01)	1-(10/04/01),2-(17/04/01), 3-(16/08/01),4-(23/08/01)		-	-	5
Computer Chapter	1-(13/10/2001), 2-(10/11/2001)	1-(16/05/01), 2-(30/05/01), 3-(13/11/01)		1-(xx/09/01)	-	6
Power Engineering Chapter	1-(23/02/01),2-(17/04/01), 3-(01/08/01),4-(21/09/01)	1-(15/05/01), 2-(27/09/01)	1-(18/05/01)	-	1-(09/11/01)	8
Industrial Electronics Chapter	1-(26/01/01),2-(22/03/01), 3-(19/07/01),4(07/11/01)	1-(26/02/01)		1-(22-25/10/01)	-	6
Circuits & Systems Chapter	1-(14/03/01),2-(12/09/01)	1-(14/05/01), 2-(08/08/01), 3-(30/08/01), 4-(19/10/01), 5-(22/10/01), 6-(23/10/01)		-	-	8

## **TREASURER'S REPORT**

*Treasurer: Adrian Cheok*

The balance sheet as at 30<sup>th</sup> September 2001 is enclosed in the following three pages.

# CHAPTER REPORTS

## MTT/AP CHAPTER

*Chairman: Chew Siou Teck*

2001 is a quiet year for the Antenna Propagation/Microwave Theory and Technique Chapter in terms of activities organized for its members. The major events that the Chapter was involved in are summarized below:

1 Technical Talk

This was held on 30th July 2001 at DSO National Laboratories. The talk is “Design Considerations for Antenna in the Development of Wideband Phased Array Systems” by Dr. Dan Schaubert from University of Massachusetts, Amherst, USA.

2. Technical Talk

This will be held on the week of 11<sup>th</sup> November 2001 at DSO National Laboratories. The talk is “Anisotropic PBG” by Prof. Tatsuo Itoh from University of California, Los Angeles, USA. We will confirm soon if the talk is possible.

3 Short-Course

This course will be held from 21-23 November 2001 at DSO National Laboratories. This is jointly organised with Nanyang Technological University. The title of the course is “RF MEMS SWITCHES AND VARACTORS and DESIGN OF RF MEMS CIRCUITS AT 0.1-100 GHz” by Prof. Gabriel M. Rebeiz from Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, USA.

4 Book Prize

We have been investigating the possibility to provide IEEE book prize for final-year student projects in the area of Microwave circuits and antenna design. We are in the midst of getting information from National University of Singapore and Nanyang Technological University. Preliminary discussion with US headquarter has been established.

For Year 2002 and beyond, the Chapter will try its best to plan and organize more meaningful activities (technical talks and courses) for its members. We will attempt to close the initiative on Book Prize. The Chapter will support the successful bid by NUS to host PIERS 2003. We are in the planning phase.

# SIGNAL PROCESSING CHAPTER

*Chairman: Kai-Kuang Ma*

## **I. Introduction**

During the calendar year of 2001, the Singapore IEEE Signal Processing Chapter has the honor to organize multiple technical events. In summary, we have very successfully organized one international workshop on the area of Statistical Signal Processing, one international conference in the areas of communications and signal processing, one suite of international standard meetings in the area of multimedia compression (under the respective development of ISO/IEC SC29/WG1, WG11, and WG12), several talks from international speakers, and one Video Nite seminar held on the campus at NTU.

A 19-days of Digital Signal Processing training course, called Inforcomm Signal Processing, has been held by a local research institute (IME). The Chairman and other Signal Processing Chapter's members have participated on lecturing this training course.

The efforts of inviting the IEEE Distinguished Speakers have been sought by the Chairman, with only one potential agreement from Prof. Alan C. Bovik, as he requested to postpone and review this possibility in the first quarter of the next year due to personal reason.

Another on-going important activity is that Singapore has submitted an official bidding proposal for hosting the *International Conference on Image Processing (ICIP) 2004*. The main organizer is School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore. Signal Processing Chapter is very pleased to see such golden opportunity to contribute its own society's community and will provide full support in every aspect unreservedly.

Signal Processing Chapter has attended all the Section meetings in the past year, either by Chairman or a representative from Chapter's committee.

## **II. Activities in Detail**

In the following, the key events held in this year are summarized:

1. 2001 IEEE Workshop on Statistical Signal Processing (SSP'01), 06 to 08 August 2001 at Orchid Country Club, Singapore. (General Co-Chairs: Tariq S. Durrani and A. Rahim Leyman)
2. The 3<sup>rd</sup> International Conference on Information, Communications, and Signal Processing (ICICS), 15-18 October 2001.
3. JPEG2000 Seminar, 3 March 2001 (Speakers: international JPEG experts; Seminar Venue: Marina Mandarin Hotel, Singapore)
4. MPEG-7 Awareness Event, 10 March 2001 (Speakers: international MPEG experts; Seminar Venue: Pan Pacific Hotel, Singapore)

5. Encryption, Authentication and IP Protection of Audio/Speech Data, (Speaker: Prof. C.C. Jay Kuo, University of Southern California, USA; Seminar Venue: Nanyang Technological University, Singapore)
6. A Review of Recent Evaluation Methods for Segmentation, (Speaker: Prof. Y.J. Zhang; Seminar Venue: Nanyang Technological University, Singapore)
7. Applications of Wavelets to Data Compression, by P.N. Topiwala, Video Nite held in Nanyang Technological University, Singapore.

For the upcoming year and beyond, the Chapter will be continuously endeavoring those on-going tasks carrying from the previous year, besides trying its best to plan and organize more meaningful activities (technical talks and courses) for its members. We would like to urge the members to continue supporting its events and also urge more members to join the Chapter Committee.

Last but not least, Signal Processing Chapter Chairman would like to express his personal thanks to all his support staff members in helping him throughout the year.

Prepared by Chairman

Dr. Kai-Kuang Ma, Associate Professor  
School of Electrical and Electronic Engineering  
Nanyang Technological University, Singapore

## INDUSTRIAL ELECTRONICS CHAPTER

*Chairman: Luo Fang Lin*

The Industrial Electronics Chapter has been involved in several activities in the year 2001. The main activities are outlined below:

### (A) Four Committee Meetings

The first meeting was held on 29th January 2001 at Marina Square.

Second IE Chapter Committee meeting on 22nd March 2001 at IMM.

Third IE Chapter Committee meeting on 19th July 2001 at Bukit Timah Road.

Fourth one on 7/11/2001 at NUSS Guild House.

### (B) IEEE International Conference on Power Electronics and Drive Systems (PEDS'01) and International Symposium on Materials for Advanced Si-based Technologies (MAST'03).

The Chairman Assoc Prof. Luo is the member of IEEE-PEDS Central Management Committee to represent IE Chapter. We are the co-sponsors of an overseas conference IEEE PEDS' 01 on 22-25/10/2001 in Bali, Indonesia.

1. It was decided that IE Chapter will share the expenses with IA Chapter incurred for the participation in PEDS' 01, for the meetings of IEEE-PEDS Central Committee and the cost of the initial mailing services.
2. The Chapter have paid the seed money for PEDS'2001. IE Chapter shares 20% and IA 80%.
3. The Chapter planed to organize the International Symposium on Materials for Advanced Si-based Technologies (MAST'03). The proposal will send to IEEE Singapore section for approval.

### (C) Technical talks/Videonites and Short Course

1. Title: "Advanced DC/DC Converters"

Speaker: Prof. Luo Fang Lin

Date: 16/2/2001

Venue: TR 67, NTU

2. The technical talk by Prof. Wang Zhao An of Chinese Xi'an Jiaotong University was proposed in August, has been postponed to January 2002.

### (D) Social Events:

1. A get-together one night for all IE Committee members & their immediate families was held on 15/9/2001 in Shangri-La's Rasa Sentosa Resort. It was a very successful event.

2. IE Member dinner was proposed in September, has been postponed to 2002.

(F) Summary

In summary, the IE Chapter of IEEE Singapore Section has been very active and successful this year, and we are confident that with the various activities planned for the year, 2002 will be even more successful for the IE Chapter.

Thank you and Regards,

Honorary Secretary: Dr. Hu Bei

Chairman: A/Prof. Luo Fang Lin (DR)

## COMMUNICATIONS CHAPTER

*Chairman: K. H. Li*

2001 has been a very successful and productive year for the Communication Chapter in terms of activities organized for its members. The major events that the Chapter was involved are summarized below:

1. Technical talks, Distinguished lectures and Courses:

- Seminar on “Photons and Fibres Fashion the Future,” by Prof. W. A. Gambling from City University, Hong Kong, was held on 05 Feb 2001. One hundred and fifty IEEE members and one hundred guests attended the seminar.
- Technical talk on “UMTS/IMT-2000 and Beyond”, by Prof. Hamid Aghvami from King’s College, London, was held on 16 May 2001. One hundred and fifty IEEE members and fifty guests attended the talk.
- Technical talk on “IP Impact on the Evolution of Telecom Networks”, by Dr. Salah Aidarons from NEC, USA, was held on 06 July 2001. Fifty IEEE members and twenty guests participated in the talk.
- Distinguished lecture on ”Wireless Multimedia Communications”, by Prof. Lajos Hanzo from University of Southampton, UK, was held on 11 July 2001. Two hundreds and fifty IEEE members and two hundreds and fifty guests attended the lecture.
- Seminar on “ Photonics research in COBRA Inter-University Research Institute on Communication Technology and recent Research Break-through in All –optical Packet Switching”, by Dr. H. J. S Dorren from Eindhoven University of Technology, Netherland, was held on 19 Oct 2001. The talk was well received with 250 participants.

2. Educational activities for students:

Communication Chapter helped the NTU students to organize the Math Olympiad 2001 held on 15 Feb 2001. One hundred IEEE members and fifty guests participated

3. Meetings:

- Chapter has organized one appreciation dinner to introduce the new committee members to the chairman and others at the beginning of year 2001 and four regular meetings to plan and discuss various administrative issues and activities.
- Chairman will attend the GCCC in the USA in November 2001.

4. Conference:

Three of our Chapter members are actively participating in the organizing committee of the ICCS’02.

For year 2002 and beyond, the Chapter is planning to organize a few distinguished lecture series and technical talks and courses for its members and students. The Chapter is also trying to come out with guidelines that will help those eligible IEEE members in Singapore to become senior IEEE members.

## COMPUTER CHAPTER

*Chairman: Gourab Sen Gupta*

Computer Chapter got a bit more active compared to the past couple of years. The following activities were arranged during the year 2001

### 1. Technical Talks

- (a) IEEE 802.1x User Personalised Networks  
by Mr. Dick Bussiere, Enterasys Networks

The talk was held on 16<sup>th</sup> May and attended by 35 people.

- (b) Using IT and Communication Technology in Primary Health Care  
Case Study: Home Telecare for Managing Chronic Disease  
By Prof. Branko Celler, University of New South Wales

The talk was held on 30<sup>th</sup> May and attended by 25 people.

### 2. Conferences

- (a) International Conference on Networks (ICON)

The flagship conference of IEEE Computer Chapter, ICON2001, was held in Bangkok, Thailand from 10<sup>th</sup> to 12<sup>th</sup> October 2001 and was a big success. 83 participants attended.

The committee met at regular intervals to deliberate on the issues concerning the society members and discuss ways of enhancing the programs for them. At the time of writing this report, the following activities were in the pipeline for the rest of the year 2001.

- (i) A technical talk on “Developing Web Services using the Microsoft .NET framework”  
by Lee Wei Meng
- (ii) A short course titled “Mastering Web Graphics and Animation Design”  
This is a 3-day course.

ICON2002 will be held in Singapore from 27<sup>th</sup> to 30<sup>th</sup> August 2002. It will be jointly organised by IEEE Singapore, Computer Chapter and Singapore Polytechnic, School of EEE. We need volunteers to come forward and join the committee in order to help organise many more activities for the members.

# POWER ENGINEERING CHAPTER

*Chairman: Govinda Bol Shrestha*

The Power Chapter has been involved in several activities in the year 2001. The major activities of the Chapter and some highlights of the years are summarized in the following.

## **1. Distinguished Lecturer Program**

One day seminar on Power System Transients by Prof Allan Greenwood was organized under PES Distinguished Lecturer program on 15<sup>th</sup> May 2001 at Marina Mandarin Hotel, Singapore. A total of 26 participants from different industries and academic institutions attended the seminar.

## **2. Technical Talk**

A technical talk on Power Quality by Dr Lock KS was arranged on the 27<sup>th</sup> September 2001. A total of 23 participants attended the talk.

## **3. IPEC 2001**

International Power Engineering Conference IPEC'01 was sponsored and organized jointly with Nanyang Technological University in May 17-19.

## **4. High Performing Chapter Award YR2000**

Power Engineering Chapter Singapore received the High Performing Chapter Grant of US\$1,000 awarded by IEEE PES.

## **5. Scholarships**

Power Engineering Chapter donated one time donation of S\$ 20000 to NUS for establishing perpetual annual awards in the form of Gold Metal and Book Prize to be awarded to the best performing power engineering student. Similar donation was made earlier to NTU.

## **6. Book Prizes For NP & SP**

One book prize each was donated to Ngee Ann Poly and Singapore Poly to be awarded to the deserving Electrical Engineer student.

## **7. Social Activities**

### *Reception to PES president*

Power Engineering Chapter hosted a dinner to PES president Mr Don Volzka and his wife on 18<sup>th</sup> May 2001 at Pan Pacific Hotel. All the PEC Committee members were invited to the dinner along with their spouses.

### *Power Chapter Annual Dinner*

The annual dinner is planned on 9<sup>th</sup> November 2001. All power Chapter members are invited to the dinner free of charge. A non-technical talk on "Cancer Awareness" by Ms Audrey Low will be a part of this social event.

## **8. Outstanding Power Engineer Award (OPEA) YR2001**

The outstanding engineer award for 2001 will be given away in the power Chapter annual dinner. It consists of a plaque provided by the IEEE PES. The recipient of the OPEA for this year is Mr Seow Kang Seng of Singapore Power Ltd.

## **INDUSTRY APPLICATIONS CHAPTER**

*Chairman: Leong Fai Choy*

The year 2001 has been rather quiet years for the Industry Applications Chapter in terms of activities organized for its members. The major events that the Chapter was involved in are summarized below:

1 IA Millennium Get Together

This was held on the 20 April 2001 at Ferntree Café (Hotel Miramar). There are 22 IA members and their spouse attended on that evening.

2 PEDS'01

This Conference was held from 22 to 25 October 2001 at Bali (Indonesia). It was sponsored and organized jointly with the IE Chapter (Singapore) and Bandung Institute of Technology (Indonesia)

For Year 2001 and beyond, the Chapter has planed to organize more meaningful activities (technical talks and social get together) for the members. We would like to urge the members to continue supporting its events and also urge more members to join the Chapter Committee.

## **ENGINEERING MANAGEMENT CHAPTER**

*Chairman: Foo Say Wei*

The 2000 IEEE ICMIT (International Conference on Management and Innovation Technology) first held in Singapore in 2000 was a success having attracted over 170 participants, much more than expected. The committee decided to hold the conference in rotation in Region 10. South Africa was the first to respond to hold it in 2001. They have since informed us that they found the time too short to hold one in 2001. The good news is that Zhejiang University China will hold the 2<sup>nd</sup> ICMIT in Zhejiang 2002. The committee is assisting the organizer in the conference.

The Chapter has been actively promoting the social gathering of members cum technical talks. A plan to hold a social gathering and talk in July in Raffles Town Club did not materialize as the number responded fell far short of the minimum number required by Club. Another social gathering is planned in November for a smaller scale gathering.

Some short courses planned for the year also met with poor response due to the economic downturn.

The Chapter will, subject to its available budget, organize social gatherings and talks free for members to attract participation in the Year 2002. We will also continue to assist in the ICMIT 2002 in China. Courses will be offered as and when suitable. We would appreciate it if members would support the activities organized for them.

## ELECTROMAGNETIC COMPATIBILITY CHAPTER

*Chairman: See Kye Yak*

The Singapore Chapter of the EMC Society came to the fore when the petition by thirteen EMC Society members was submitted to the IEEE in September 2000. The IEEE HQ accepted this petition in February 2001 and a call for the first Chapter meeting came in March 2001. The first Chapter meeting cum election was held on 26 April 2001. This meeting was well attended by members of the IEEE and EMC Society. The following members were elected to form the first committee:

Chairman: A/P See Kye Yak (Nanyang Technological University)  
Deputy Chairman: Dr Lee ErPing (Institute of High Performance Computing)  
Secretary: Mr Tim Foo (Ngee Ann Polytechnic)  
Treasurer: Mr M. Sampath\* (Advanced Micro Devices Singapore)  
Committee Members: A/P Yeo Tat Soon (National University of Singapore)  
Mr Tan Joo Huat (DSO National Laboratories)  
Dr Roger Tay (Motorola Electronics)  
Mr Chow Wee Sing (CET Technologies)  
Dr Samuel Chan (Land Transport Authority)

\*Mr Sampath was later relocated out of Singapore and consequently he resigned from his post of Treasurer. Mr. Chow Wee Sing was co-opted into the post as treasurer in the July meeting.

From April – October 2001, the Chapter held two administrative meetings and one technical activity. The two administrative meetings were held on 26 April 2001 and 20 July 2001. The technical activity was co-organized with CET Technologies on 7 September 2001 and two distinguished speakers were invited to deliver two talks. The technical activity was well attended with more than 42 members and engineers from the industry. The topics of the talks were:

1. *“Electrophobia, or Why are people so scared of Electromagnetic Fields?”* by Mr Elya Joffe. Mr Joffe was a member of the Board of Directors, IEEE EMC Society; immediate Past-Chairman of the Israel IEEE EMC Chapter and Vice President of Engineering at K.T.M. Project Engineering, Israel.
2. *“Decoupling, Bypassing and Buried Capacitance for Enhanced PCB Performance”*, by Mr Mark Montrose. Mr Montrose was also a member of the Board of Directors, IEEE EMC Society; and Principal Consultant of Montrose Compliance Services, in Santa Clara, California, USA.



A well-attended Chapter activity on 7 September 2001



The speakers, Mr Joffe and Mr Montrose with the committee members

The activities for October 2001 to September 2002 have been planned and listed in the table below. We would like to urge the members to continue supporting its events and also urge more members to join the Chapter Committee.

Date	Title/Topic	Speaker
15 Nov 2001	<b>EMC Simulation and Design</b>	<b>Dr Ye Chunfei</b> Mr Chow Wee Sing Dr Zhang Da Ming Mr Wee Siang Beng
Feb 2002	You must be kidding! How could a simple digital circuit interfere with a radio station?	A/P See Kye Yak
May/Jun 2002	Why the modern digital electronic design implements electromagnetic design concept?	Dr Lee ErPing
July 2002	Whole System EMC Consideration in MRT Environment	Dr Sam Chan
Q3 2002	<b>EMC Short Course</b>	Dr Lee ErPing A/P See Kye Yak
Q4 2002	Seminar Title to be Announced	Dr Roger Tay

## CONTROL SYSTEMS CHAPTER

*Chairman: Wang Qing Guo*

The Control Chapter held 6 Chapter meetings this year to discuss various issues of Chapter activities. Our activities mainly include the organization of Control Theory and Applications Conference (ICCTA'01) to be held in South Africa on December 12-14 2001, industrial short course and seminars, and other activities. The details are as follows

### 1) Conference

Over the year, the Chapter Committee has put great effort in organizing the third International Conference on Control Theory and Applications (ICCTA'01) in collaboration with the IEEE Control Chapter of South Africa which will be held on December 12-14 December 2001. The conference received over 200 submissions. Over 120 papers have been accepted and included in the final program. We have received over 90 registrations and intended participations even after the disaster on Sept 11, 2001. The conference will be a great success.

### 2) Industrial Short Course

The Chapter has organized a one day short course on “Industrial Vibration – Analysis, Measurement, Testing and Control” by Professor D Silva on 8 June 2001. The short course was attended by 7 participants.

### 3) Seminars

The Chapter has been very active in organizing technical seminars in the year 2001. The seminars held include:

- (a) “Design of Servo Mechanisms for Large Antennae” by Professor I. Mareels, the University of Melbourne.
- (b) “Model and Controller Reduction” by Professor V. Sreeram, University of Western Australia.
- (c) “Performance of Discrete-time and Sampled-Data Systems under Periodic Control” by C. Zhang, the University of Melbourne.
- (d) “Probability Guaranteed Robust H-infinity Performances” by Professor U. Shaked, Tel-Aviv University.
- (e) “Linear Quadratic Control with Input Saturation” by Professor M. Fu, The University of Newcastle.

## REL/CPMT/ED CHAPTER

*Chairman: MK Radhakrishnan*

This year has been busy year for the REL/CPMT/ED Singapore Chapter. The Chapter is honoured to receive two Chapter awards and one individual award. Dr. Radhakrishnan (Chapter Chairman) was in Orlando ECTC conference, Florida in 2 June, 2001 to receive the Best Chapter Award from CPMT Society for Year 2000 along with the Hongkong Chapter. While, YC Ng (Chapter Secretary) was in San Diego, California in 22 July, 2001 for the Reliability Society (RS)'s Chapter Chair's Congress Meeting and received the award for the third position for the Best RS Chapter of Year 2000. Charles Lee, one of the Chapter Executive Committee Member, received the "IEEE/CPMT Outstanding Young Engineer Award" for the Year 2000 in Orlando.

The Chapter organised one international conference – the 8<sup>th</sup> International Symposium on the Physical and Failure Analysis of Integrated Circuits (**IPFA**) in July 1999 at Westin Stamford & Westin Plaza, Singapore. The symposium drew 168 participants from 19 countries from Asia, Europe and America. There were 52 papers (two of which are invited papers and three exchange papers) presented in the symposium from participants of 15 countries across Asia, Europe and America. The papers were selected by peer review from among more than 90 extended abstracts received. The three exchange papers were from ESREF 2000 Best Paper and ISTFA 2000 Best Paper / Outstanding Paper. Along with the Symposium, four tutorials were conducted by experts in each area of failure analysis and reliability, which was attended by more than 80 participants. The equipment exhibition arranged along with IPFA has attracted a number of personnel from industry with a total of 25 exhibition booths.

The Chapter organised eight technical talks, so far this year. The first technical talk was presented by Dr. JJ Liou from University of Central Florida, USA, titled "Electrostatic Discharge (ESD) in Semiconductor Devices: Improved Measurement Technique and SPICE Modelling" on 8 Jan, 2001, attended by 28 participants. Prof. Rao R. Tummala, of Georgia Institute of Technology, USA, and IEEE CPMT President, presented the second talk on 8 March 2001. The talk was entitled "Global Collaboration in SOP and SOC for the Microelectronic Systems of the Future" and was well attended by more than 70 participants from industry and academia. The third one was presented by Dr Jezdimir Knezevic of Exeter University, UK, titled "System Operational Success through System Operational Science" in 12 March, 2001 and organised along with Temasek Polytechnic. There were 170 participants. The fourth technical talk was presented by Dr. Shankara Prasad, of CEO APT Interactive, Bangalore, titled "Knowledge Management: A Key to an Assembly and Packaging Enterprise's Future" in 9 May, 2001. They were 22 participants.

Four guest speakers from the IEEE Reliability Society presented the next four lectures. The venue for this Special Lecture series was held at Nanyang Technical University (NTU) so as to encourage more participation from staff and students and the event was held on 19 October, 2001. Dr. Sam Keene from Seagate Technology presented "Six Sigma Impact on Reliability", Mr. Dick Doyle from Doyle and Associates presented the topic, "Thermal analysis (Minimize Stress)", Dr. Alan Street from Integrated Reliability Laboratory presented, "FIB Device Modification Technology" and Prof. Shuichi Fukuda presented the title, "Emotional

Engineering: A New Technology for Product Development". The turnouts were very overwhelming with 200 attendees for the whole day event with 150 participants from the industries and 50 students from the universities.

We are also planning to have the ninth technical talk in November, 2001, as an Electron Devices Society Distinguished Lecture (EDS-DL) talk. Prof. K.M Lau from Hong Kong University of Science and Technology (HKUST), our guest speaker from EDS Distinguished Lecture Programme will be in Singapore

The Chapter hosted IEEE-Electron Devices Society (EDS) AdCom Meeting in Singapore on 7-8 July, 2001. Two of our senior chapter members have been elected as the Region ExCom members. On 20 Oct, 2001, the Chapter committee also held a meeting with the four AdCom members from the IEEE Reliability Society to exchange views on activities between Reliability Society and the Chapter. Currently, two of our Chapter members are running for elections for AdCom for both the CPMT and Reliability Society.

On the encouragement of more student and academic participation, besides the book prize that the Chapter donated to National University of Singapore in 1999, Chapter also gave the book prize to another local educational institution, Temasek Polytechnic, for the top final year student in Diploma in Microelectronics this year. This award is an encouragement to academic excellence and professional development in the area of Microelectronics studies especially in the device analysis and reliability, which is in line with the objectives of the Singapore Reliability/CPMT/ED Chapter. It will also be used as a means of membership development in promoting awareness of IEEE and its activities

For more information on Chapter activities, please contact Chapter Chair: Dr. Radhakrishnan, email: [radhakrishnan@ieee.org](mailto:radhakrishnan@ieee.org)

### **Chapter Committee for Year 2001**

Singapore Rel / CPMT / ED Chapter

Chapter Chairman	: Dr. MK Radhakrishnan
Deputy Chairman	: Dr. Ong Soon Huat
Secretary	: Mr. Ng Yean Chuan
Treasurer	: Dr. Chim Wai Kin
Member	: Dr. Andrew Tay
	: Dr. Pey Kin Leong
	: Mr. Wilson Tan
	: Mr. Yong Ching Tong
	: Mr. Bernard Chin
	: Mr. Charles Lee

Report by: YC Ng, Secretary of Singapore REL/CPMT/ED Chapter.  
Dated 29 October, 2001.

## CONSUMER ELECTRONICS CHAPTER

*Chairman: Sriskanthan Nadarajah*

### 2<sup>nd</sup> IEEE Workshop on Networked Appliance

This year CE Chapter has successfully organized the “2<sup>nd</sup> IEEE Workshop on Networked Appliance.” Seven administrative meetings have been held so far, among which four are devoted to discuss the details and smooth rollout of the programs and schedules regarding this workshop. Attached please find the detailed workshop program.

#### Administrative Meetings

Thanks to the kindness of Mr. Y. Yamada, our vice chairman and the general manager of JVC R&D Center, most of the meetings were held at JVC office, 27<sup>th</sup> floor, United Square.

1. 01-05-2001
2. 01-16-2001
3. 01-19-2001
4. 03-01-2001
5. 04-24-2001
6. 06-27-2001
7. 08-01-2001

#### **Oncoming Technical Talks**

Two technical talks have been scheduled to be held in November and December this year. The first one will be the end of November and the topic will be “Use of mobile Thin clients to connect to existing internet devices”. The second topic will be on MPEG-4.

#### **Report of Third International Workshop on Networked Appliances 2001 (IWNA'01)**

##### Summary

The Consumer Electronics Chapter of Singapore had organized a two days workshop on Network Appliances - The Third International Workshop in Networked Appliances 2001, which was held in Singapore on 1-2 March 2001. The workshop was well attended by international and local participants. Three tutorial seminars were conducted for all participants attending the workshop; (i) Bluetooth Technology by Mr. Foo Chuan Choong, (ii) Powerline Communications by Dr. Shinji Tsuzki, (iii) MPEG-4 by Dr. Hifang Sun. In addition, 23 papers were also published and presented during the workshop covering the topics of Network appliances that Wearable and Bluetooth, Internet and Network, Systems and Appliances, and Other Advanced Technologies.

## 1. Dates

1st and 2nd/March/2001

## 2. Venue

Carlton Hotel, Singapore

76 Bras Basah Road, Singapore 189558,

TEL:+65-338-8333, FAX: +65-338-3208

## 3. Attendance and Registration Fee

- 55 attendees on 1st March, 2001
- 54 attendees on 2nd March, 2001
- S\$350 per 2 days, S\$200 per 1 day

## 4. Programs

### 4.1 Overview

<b>Thursday, 1<sup>st</sup> March, 2001</b>		
<b>Time</b>	<b>Session</b>	<b>Speaker</b>
9:00AM - 9:20AM	Opening	Sriskanthan Nadarajah IWNA'01 General Chairman
9:20AM - 12:30PM	Tutorial "Bluetooth Technology"	Foo Chun Choong, Ericsson Research/Cyberlab Singapore
1:30PM - 3:30PM	Technical Program "Wearable and Bluetooth"	
3:50PM - 5:50PM	Technical Program "Internet and Network"	

<b>Friday, 2<sup>nd</sup> March, 2001</b>		
<b>Time</b>	<b>Session</b>	<b>Speaker</b>
8:30AM - 10:30AM	Tutorial "Powerline Communication"	Shinji Tsuzuki Faculty of Engineering, Ehime University
10:50AM - 12:30PM	Technical Program "Systems and Appliances"	
1:30PM - 3:30PM	Technical Program "Other Advanced Technologies"	
3:50PM - 5:50PM	Tutorial "MPEG-4"	Huifang Sun Mitsubishi Electric Research Laboratories

## **4.2 Tutorials;**

- (1) Bluetooth Technology  
By Mr. Foo Chun Choong,  
Adjunct Research Engineer, Ericsson Research / Cyberlab Singapore
- (2) Powerline Communications  
By Dr. Shinji TSUZUKI  
Associate Prof., Dept. of Electrical & Electronic Eng.,  
Faculty of Eng., Ehime University
- (3) MPEG-4 Visual Standard Overview  
Dr. Huifang Sun  
Deputy Director, Mitsubishi Electric Research Laboratories,  
Murray Hill Laboratory,

## **4.3 Technical Sessions;**

### **4.3.1 Wearable and Bluetooth**

Session-chair: Dr. Hideyuki Tokuda / Keio University

- (1) An Application Framework for Wearable Network Computing  
Takeshi Iwamoto, Nobuhiko Nishio, Hideyuki Tokuda  
Tokuda Laboratory, SFC, Keio University
- (2) A Wearable Collaboration Solution for Industrial Environment  
Luiz M. A. Santos  
Fraunhofer Institute for Computer Graphics
- (3) Adaptive Service Availability Management Mechanism for Wearable Network Computing  
Tomohiro Nagata, Nobuhiko Nishio, Hideyuki Tokuda  
Graduate School of Media and Governance, and Faculty of Environmental Information, Keio University
- (4) Will Bluetooth Change the Windows GUI?  
Mikael Johnson  
Information Research Group, TAI Research Centre, Helsinki University of Technology
- (5) Group Awareness in Bluetooth  
Jarmo Parkkinen, Kristiina Karvonen  
Department of Computer Science, Helsinki University of Technology
- (6) Application of UPnP With Bluetooth  
Prakash Sandeep, Nicholas Vun  
School of Computer Engineering, Nanyang Technological University

### **4.3.2 Internet and Network**

Session-chair: Dr. Lee Bu Sung / Nanyang Technological University

- (1) Web Access for the Visually Impaired - Issues and Investigations  
K. Sridharan, N. Sriskanthan  
School of Computer Engineering, Nanyang Technological University
- (2) Internet Enabled Medical Monitoring System Based on Microcontroller  
Ma Zhongming, Ng Nai Fatt  
School of Electrical and Electronics Engineering, Singapore Polytechnic
- (3) High Quality VOD Service using ADSL and Local Mirror Station  
Sangyoun Lee, YoungSik Choi, Daegy Jang, OkTae Oh  
Multimedia Technology Laboratory, Korea Telecom
- (4) Scalable Layered MPEG-2 Video Multicast Architecture  
Fu Ruijin, Lee Bu Sung, Anil Gupta  
Computer Division, School of Computer Engineering, Nanyang Technological University
- (5) An Improved EFCI Scheme for ABR Flow Control in ATM Network  
Xiaonbing Leng, Lizheng Fu, Guixing Luan  
Shenyang Institute of Computing Technology, The Chinese Academy of Science
- (6) Adaptive Congestion Control Scheme for ABR Service in ATM Network  
Li Yongdong, Lau Chiew Tong  
School of Computer Engineering, Nanyang Technological University

### **4.3.3 Systems and Appliances**

Session-chair :Dr. Mikael Johnson / Helsinki University of Technology

- (1) SONA: Applying Mobile Agent to Networked Appliance Control  
Soko Aoki, Satoshi Makino, Tadashi Okoshi, Jin Nakazawa, Hideyuki Tokuda  
Faculty of Environmental Information, and Graduate School of Media and Governance, Keio University
- (2) Architecture Consideration for Optical-wireless Home Network  
Kazutoshi Hirohashi, Takayoshi Sasao, Satoru Toguchi  
HITS Laboratories, Inc.
- (3) Web-based Integrated VOD and AV-Archive system  
Lan Bo, Bay Chin Loo, Darren Chan, Tay Yeweng,  
JVC ASIA Laboratories of Singapore, JVC ASIA Pte Ltd

- (4) A Top-down Integration Scheme for Networked Appliances using VNA Markup Language  
Jin Nakazawa, Tadashi Okoshi, Yoshito Tobe, Hideyuki Tokuda  
Graduate School of Media and Governance, and Faculty of Environmental Information, Keio University
- (5) Network Enabled Shape Measurement  
Shum Ping, Yu Lee Wu, Kuek Hong Wee, Lai Wenn Jing, Tian Cher Chye, Loh Weng Chung, Ng Wee Seng, Wong Yean Wee, Yang Ming  
Network Technology Research Centre, School of Electrical Electronic ENgineering, Nanyang Technological University

#### **4.3.4 Other Advanced Technologies**

Session-chair :Dr. Michihiko Minoh / Kyoto University

- (1) I2C Serial Bus Analyser  
N. Sriskanthan, Tan Su Lim  
School of Computer Engineering, Nanyang Technological University
- (2) Smart Space Laboratory Project: Toward the Next Generation Computing Environment  
Tadashi Okoshi, Shirou Wakayama, Yousuke Sugita, Soko Aoki, Takeshi Iwamoto, Jin Nakazawa, Tomohiro Nagata, Daichi Furusaka, Masayuki Iwai, Akihiko Kusumoto, Noriyuki Harashima, Junichi Yura, Nobuhiko Nishio, Yoshito Tobe, Yasushi Ikeda, Hideyuki Tokuda  
Graduate School of Media and Governance, and Faculty of Environmental Information, Keio University
- (3) Multimedia Textbook For Engineering Courses  
Ng Kher Hui, Ryoichi Komiya  
Multimedia University
- (4) Cluster-based HLA Distributed Virtual Simulation Environment  
Chen Dan, Bu Sung Lee, Wen Tong Cai, Stephen Turner  
School of Computer Engineering, Nanyang Technological University
- (5) Autonomous Service Setup Method for AMIDEN  
Hiroataka Nishi, Michihiko Minoh, Motonori Nakamura, Keisuke Yagi, Hisao Watanabe, Yosuke Tajika  
Graduate School of Informatics, Kyoto University, Nippon Telecommunications Consulting Co., Ltd., and Corporate Research & Development Center, Toshiba Corporation

- (6) Communication Chain Setup Method for AMIDEN  
Tomoyuki Shimizu, Motonori Nakamura, Michihiko Minoh, Keisuke Yagi, Hisao Watanabe, Yosuke Tajika  
Graduate School of Informatics, Kyoto University, Nippon Telecommunications Consulting Co., Ltd., and Corporate Research & Development Center, Toshiba Corporation

## 5. Organising Committee and Sponsors

Organised by;

- IEEE Consumer Electronics Society Singapore Chapter

Sponsored by;

- IEEE COMSOC Multimedia Communication Technical Committee
- IEEE Singapore Section

## 6. Committee Members

### 6.1 Organising Committee

- General Chairman  
Sriskanthan Nadarajah / esris@ntu.edu.sg  
School of Computer Engineering, Nanyang Technological University
- Technical Program Chairman  
Yasuhiro Yamada / yamada@lab.jvcasia.com.sg  
JVC ASIA Laboratories of Singapore
- Members of Technical Program Committee  
Edmund Lai / asmklai@ntu.edu.sg  
School of Computer Engineering, Nanyang Technological University  
Yong Lian / eleliany@ntu.edu.sg  
Department of Electrical and Computer Engineering, National University of Singapore  
Hideyuki Oka / oka@psl.com.sg  
Panasonic Singapore Laboratories  
Jimmy Abraham / Jimmy.mm@sp.stems.com  
Stamford Technologies Pte Ltd
- Finance  
Joseph Jimson / joseph.jimson@philips.com  
Philips, Singapore
- Local Arrangement  
Lee Choon Sun / leecs@sp.edu.sg  
School of Electrical and Electronic Engineering, Singapore Polytechnic
- Publicity  
Nicholas C H VUN / aschvun@ntu.edu.sg  
School of Computer Engineering, Nanyang Technological University  
Pan Feng / efpang@ntu.edu.sg  
Centre for Signal Processing, Nanyang Technological University

## **6.2 International Advisory Committee**

- Chairman  
Takahiko Kamae, Japan
- Members  
Algirdas Pakstas, UK  
Charles N. Judice, USA  
David J Greaves, UK  
Danny Wilson, Canada  
Hang Hsueh-Ming, Taiwan  
Hiroshi Yasuda, Japan  
Michihiko Minoh, Japan  
Nelson Fonseca, Brazil  
Peter Schirling, USA  
R.M.Hodgson, New Zealand  
R. Michael Redfern, Ireland  
Rob H. Koenen, The Netherlands  
Stefan Mozar, Australia  
Yoshio Yasumoto, Japan

## **CIRCUITS AND SYSTEMS CHAPTER**

*Chairman: Xu Yong Ping*

The CAS Singapore Chapter has organized two technical talks under the IEEE Distinguished Lecturer Program and six other technical talks during 2001. The details are as follows.

### **Distinguished Lecturer Program**

#### **1. Technical talk by IEEE Distinguished Lecturer Professor Paulo Dniniz (14 May 2001)**

Professor Diniz, IEEE Distinguish Lecturer, gave the talk on 'Data-Reusing and Data Selective Adaptive Filtering Algorithms'. About 45 people from universities, research institutes and industry attended the talk.

#### **2. Technical talk by IEEE Distinguished Lecturer Professor Lim Yong Ching (30 August 2001)**

Professor Lim, IEEE distinguished Lecturer, from Department of Electrical and Computer Engineering, National University of Singapore gave a talk on 'Frequency-Response Masking Technique Synthesis of Digital Filters'. Around 25 people attended the talk.

### **Technical**

#### **1. Technical talk by Professor H.K. Kwan (14 May 2001)**

Prof. Kwan from Department of Electrical and Computer Engineering, University of Windsor, Windsor, Ontario, Canada, gave a talk on 'Fuzzy Inference Networks for Pattern Classification and Recognition'.

#### **2. Technical talk by Professor de Queiroz (14 May 2001)**

Prof. de Queiroz from Department of Electronic Engineering UFRJ and COPPE/UFRJ, Brazil gave a talk on 'Switched-Current Circuits'.

#### **3. Technical talk by Professor Teo Kok Lay (8 August 2001)**

Prof. Teo from Department of Applied Mathematics, Hong Kong Polytechnic University, gave a talk on 'Sensor Scheduling in Continuous Time'. Around 24 people attended the talk.

#### **4. Technical talk by Professor Tapio Saramäki (19 October 2001)**

Professor Saramaki from Tampere University of Technology, Finland gave a talk on 'Efficient DSP Algorithms and their Optimization for Signal Processor and VLSI Implementations'.

### **5. Technical talk by Professor Tapio Saramäki (22 October 2001)**

Professor Saramaki from Tampere University of Technology, Finland gave a talk on 'Design of digital filters and filter banks by optimization: applications'.

### **6. Technical talk by Professor Tapio Saramäki (23 October 2001)**

Professor Saramaki from Tampere University of Technology, Finland gave a talk on 'Polynomial-Based Interpolation for Digital Signal Processing Applications – A Tutorial Review'.

### **Promoting student membership**

The Chapter has been actively promoting the free student membership initiated by the CAS Society. The promotion materials were sent to all our senior students. So far there are about 20+ students who joined the Society during the promotion.

### **Activities in planning and preparation**

#### **1. Bidding for APCCAS 2006**

The Chapter has decided to bid for the Asia-Pacific Conference on Circuits and Systems in 2006. APCCAS is a regional conference organized by Region 10 of CAS Society biennially.

#### **2. More activities in 2002**

For Year 2002 and beyond, the Chapter will try its best to plan and organize more meaningful activities (technical talks and courses) for its members. We would like to urge the members to continue supporting its events.

# **SYSTEMS, MAN, AND CYBERNETICS CHAPTER**

*Chairman: Adrian Cheok*

Report not available at the time of print

## **NTU STUDENT BRANCH**

*Chairman: Dinesh Salwani*

The NTU Students' Branch of IEEE has been actively working to generate interest and to increase awareness about the latest technologies among students. IEEE also tries to identify and award talented students in the different walks of life. The following is a gist of events that we have organized in the year 2001.

TechQuiz 2000 was organized in the month of February in LT26, NTU. The top 2 teams represented NTU in the intervarsity finals held in NUS. The prizes and certificates awarded in the NTU round were highly appreciated by the participants.

Annual programming contest " Mindbend 2001" was held in March 2001. About 40 students submitted complete solutions out of whom top 3 students were awarded prizes for outstanding working solutions.

Also we introduced a new event Mathematics Olympiad which was wonderfully received. An overwhelming 170 students participated and the top 5 were awarded cash prizes while the top 15 were given merit certificates.

Talent Search 2001 was held from 27<sup>th</sup> August – 30<sup>th</sup> August in which more than 400 students participated in the preliminary round. There were 10 mental ability questions to be solved in 8 minutes and the aim was to stress on the importance of common sense in everyday life. The top 10 % of students were selected for a longer session of mental torment in which they were to solve 45 questions in 90 minutes. The top 3 students were awarded cash prizes worth S\$200, S\$150 and S\$100 respectively.

The NTU leg of Techquiz 2001 was organized on 21<sup>st</sup> September. The idea behind this contest was to stress on the importance of students being technology aware. The quiz consisted of general knowledge questions on the latest in technology. 2 teams from NUS and the 2 selected teams from NTU pit their wits in the 1.5 hour long quest and the winners and runners-up were awarded individual trophies and a rolling trophy to be continued with in the next TechQuiz, coming academic year.

So in this way we try to encourage and improve awareness about technology and its latest advancements among student population in NTU and also in the process increase the popularity of IEEE among students in our university too.

# NUS STUDENT BRANCH

*Chairman: Darrel Chong*

## Work Plan

a) Year 2001

Sept	-	Tech Quiz Preliminary Tech Quiz Finals in NTU Soldering Sales Welfare Service (Distribution of files) Associates Membership Drive	Project External com Project External com Business com Welfare com Welfare com
Oct	-	Registration for Flash and Multimedia IEEE Publication  ----- Break for exam -----	IT com Publication com
Nov	-	IEEE Retreat (chalet) IEEE NUS Alumni Connection Z Preparation for ECE Week 2002 Sponsorship T-shirt for IEEE main/sub com	Welfare com Public Relations Presidential Cell Sub-com Project Internals com Business com Publicity com
Dec	-	Publicity for ECE Week 2002	Publicity com

b) Year 2002

Jan	-	Membership Drive (Full/Associates) Soldering Sales Flash & Multimedia Submission Net Hunt ECE Week 2002 Industrial Visits	Welfare com Business com IT com IT com Project Internals com Project External com
Feb	-	Soldering Sales Mini Bazaar Community Awareness	Business com Business com Community Relations
Mar	-	IEEE Publication	Publication com
Apr	-	----- Break for exam -----	
May	-	Sponsorship Publication for Activities	Business com Publicity com

June	-	IEEE HQ activity Project in relations to Community Service	Project External Community Relations
July	-	Matriculation Fair Welcome Tea Welfare Services	Project Internal Project Internal Welfare com
Aug	-	IEEE Election Multimedia for the work year IEEE Dinner & Dance AGM	Main com IT/Publication Public Relations Main com