

Report on IEEE Singapore Section 2004

Part A – Section Summary

A.1 Executive Summary

The year 2004 is a successful year for the Section considering various types of technical as well as social activities held by the Section as well as the Chapters. This would not have been possible without the hard work of various committee members both at the Section as well as Chapter level.

The Section was involved in the Senior Membership drive since the summer of 2003 where nearly 200 odd members were selected depending on their years of membership with IEEE as well as their services to engineering profession. These selected IEEE Members were invited to apply for Senior Membership up-gradation exercise. We are happy to note that 47 members were upgraded to SM from June-December 2003. Moreover, 39 members have been upgraded to SM until September 2004. The success of this drive also goes to many IEEE SMs and Fellows who have written recommendation letters for our members.

During the period 16 – 17th April, 2004, we had a delegation of four Section executive committee members to attend the R-10 meeting held at Adelaide, Australia. This was an eye opening experience for all of us as we come to know how many other Sections are being run and we shared their experiences. Many issues discussed during the meeting provided us ways to have better functioning of our Section.

On 24th April, 2004, we had a MOU re-signing ceremony between the IEEE Inc. and IES Singapore. The joint IES-IEEE National Society Agreement was initiated three years earlier. The cooperative activities, which have been organized since the inception of the agreement, especially the IES/IEEE Joint Award of Excellence have raised the image of both IES and IEEE. During this year's re-signing ceremony, IEEE Singapore Section became one of the signatory of the MOU. This is to establish close working relationship between IEEE Singapore Section and IES. The terms of the agreement covers visiting members, joint activities, co-ordination of technical meetings, publication exchange, standards information and membership.

This year IEEE Singapore Section became the host to the 2nd IEEE Asean Meeting held on 22nd May 2004 in Singapore. Representatives from IEEE Sections of five Asean countries namely, Malaysia, Indonesia, Thailand, Philippines and Singapore attended the meeting. The main objective of this meeting was to identify areas where IEEE Sections/Chapters from the Asean countries could organize joint activities. As a result of this, an MOU was signed with IEEE Malaysian Section to organize the Power Electronics and Drives Systems Conference 2005 at Kuala Lumpur. The PEDS Conference has been the flagship conference of the Industry Applications/Power Electronics Chapter and had been organized jointly with other

IEEE entities in the Asean region. It is expected that in future more chapters would organize such joint activities with their counterparts in the Asean region.

IEEE Singapore Section has its bank accounts with DBS for quite sometime. In the recent past, DBS had imposed a rule of charging an administrative fee of S\$15/month for not able to maintain the minimum balance in the bank account. This had caused serious concerns for our newly formed chapters as they are formed recently and do not have sufficient fund to maintain the minimum balance in the bank account. This year, the Section has successfully negotiated with the DBS to have a minimum total balance of S\$600,000 at any time and in return DBS would provide 30 different accounts without the need to maintain a minimum balance in each and every bank account. This has helped the newly formed chapters to open their own bank accounts for their chapter activities without the worry of maintaining a minimum sum in the bank account.

This year, the Section had initiated the IEEE e-notice facility. It is through the e-notices, the IEEE Members in Singapore Section have been informed about various activities organized by the Section and its various chapters. This has provided a mechanism to communicate with IEEE Members in an economical and more convenient way. We had sent a total of 18 e-notices throughout the year.

The Section had also introduced the 1st Section's E-Newsletter which was circulated in late September.

This year, we had a number of visitors from IEEE HQ. During the period of 15 – 20th October 2004, the IEEE President, Dr. Arthur W. Winston, was in Singapore to attend the official opening of the Engineering Management Society's IEMC 2004 Conference. The Section had taken this opportunity and organized a talk by the President on "IEEE: Meeting Members Needs with Global Vision and Local Perspectives". Various IEEE members as well as Section/Chapter committee members had discussions with the IEEE President.

On 5th November, IEEE past president, Dr. Raymond D Findlay was present in Singapore for the IEEE-IES Award of Excellence. This year, the winner of the award is Prof. C. C. Hang. The Power Engineering Chapter together with the Section had organized a technical talk on "Some Aspects of the Design of Induction Motors" delivered by Dr. Findlay.

From 6-8th November, a delegation of four members from IEEE Singapore Section had attended the workshop on "Engineering Accreditation Around the World", organized by IEEE Educational Activities Board (EAB), Committee on Global Accreditation Activities (CGAA) and IEEE Region 10. The primary goal of this workshop was to help strengthen engineering education through contributions to the accreditation process and inform IEEE members the accreditation process and encourage them to get involved in the process.

At the Chapter level, we are pleased to report the formation of the Engineering in Medicine & Biology Society Chapter and is led by Dr. Lipo Wang.

For 2004, the Singapore Section and its chapters had organized a total of more than 250 activities including technical, administrative, social, professional and educational for the IEEE Singapore Section as a whole. This shows the strong and vibrant nature of the IEEE activities being organized by the Singapore Section and its various Chapters.

For the membership benefits at the local level, IEEE Singapore Section has successfully negotiated with Starhub Singapore to provide corporate mobile phone subscription plan for IEEE members in Singapore. The Section had also negotiated with an Insurance Company to provide Personal Protection Plan specially designed for IEEE members in Singapore. However, due to the restriction imposed by IEEE HQ this service could not be offered to its members until further study.

A.2 Financial Report

The Singapore Section has a very healthy financial situation in 2004. The balance sheet from our L50 submission is attached below. The loans and advance receivables are entirely composed of conference seed-monies, an indication of the large number of conferences the Section and its Chapters are organizing.

| | | CURRENCY: | | Singapore Dollars | |
|------------------------------------|--------------------------------------------|----------------------------------------|-------------------|-------------------|----------------------------------|
| Line # | | A Balance @ Beginning of Year | B Current Year | | D Balance @ End of Year |
| | | | C Increases | C Decreases | |
| | | | | | |
| ASSETS | | | | | |
| A. | Cash Accounts (*) | 856,213.86 | - | 99,665.48 | 756,548.38 |
| B. | Investments (*) | - | - | - | - |
| C. | Loans and Advance Receivables | 146,555.00 | 167,166.72 | 97,155.00 | 216,566.72 |
| | Accounts Receivables | - | - | - | - |
| D. | Furniture and Equipment | - | - | - | - |
| | Accumulated Depreciation (if applicable) | - | - | - | - |
| E. | Other Assets: | - | - | - | - |
| F. | TOTAL ASSETS | 1,002,768.86 | 167,166.72 | 196,820.48 | 973,115.10 |
| LIABILITIES & NET WORTH | | | | | |
| G. | Loans / Advance Payables | - | - | - | - |
| | Accounts Payables | 36,119.06 | 323.33 | 36,119.14 | 323.25 |
| H. | Other Liabilities: | - | - | - | - |
| I. | TOTAL LIABILITIES (Lines G + H) | 36,119.06 | 323.33 | 36,119.14 | 323.25 |
| J. | NET WORTH | 966,649.80 | 166,843.39 | 160,701.34 | 972,791.85 |

Part B – Organizational Activities

B.1 Membership Development Programs

The Section was involved in the Senior Membership drive since the summer of 2003 where nearly 200 odd members were selected depending on their years of membership with IEEE as well as their services to engineering profession. These selected IEEE Members were invited to apply for Senior Membership up-gradation exercise. We are happy to note that 47 members were upgraded to SM from June-December 2003. Moreover, 39 members have been upgraded to SM until September 2004. The success of this drive also goes to many IEEE SMs and Fellows who have written recommendation letters for our members.

B.2 Professional and Continuing Education Activities

For 2004, the Singapore Section and its chapters had organized a total of more than 150 activities including technical, administrative, social, professional and educational for the IEEE Singapore Section as a whole. This shows the strong and vibrant nature of the IEEE activities being organized by the Singapore Section and its various Chapters.

B.3 Students Activities

- A MATLAB Course was organised to help interested students learn to use the powerful tool, explore its benefits and develop better solutions to technical problems.
- Linux Course: 3 sessions had to be held to accommodate all the interested students.
- NET Revolution Course provided students an exposure to the latest popular computer technology.
- Distinguished Lecturer Program Talk on Professionalism and Ethics (PR Comm). Titled “Professionalism and Ethics in an IT career today”, the seminar was jointly organized by IEEE Engineering Management Society and IEEE NUS and NTU Student Branches.
- Tech Quiz 2003/04(External Project)

Tech Quiz is an annual collaboration between the IEEE NTU and NUS student branches which tests students on engineering technical knowledge, information technology and general knowledge of science.

- MATLAB Seminar

Different from the previous MATLAB Course, this setting is less formal. The seminar was guided by a professional instructor from the TechSource Systems, a company which is the sole distributor of MATLAB in Asean region.

- NetHunt 2004

The competition is aimed to test the contestants’ ability to search for information using Internet. The answers to all the questions could be found on the web. The scope of the questions was very wide and covers IEEE, NUS ECE department and the latest technologies.

- Science Symposium 2004

Initiated this year, Science Symposium 2004 is one of the major national-based events jointly organized by IEEE NUS Student Branch and NTU Branch. All students from the two universities, 5 Polytechnics, 18 Junior Colleges, were invited to participate in Science Symposium.

- Industrial Visit to Cisco(External Projects Comm)

The visit gave students a good exposure to the real working environment and experience the advanced technology and management in network world. A presentation by Mr. Craig Gledhill, Manager Director-Singapore was followed by a demonstration conducted by Mr. Tang Chi Hwa, system engineer to introduce the advanced telecommunication technologies.

- Launch of IEEE NUS e-Newsletter(Publication Comm)

This year, we introduced the first IEEE NUS newsletter. It aims to inform all the IEEE members of the latest Research and Development in NUS. The writers visited several of the Research Institutes in NUS and reported the latest researches.

- MMU Visit(Public Relations Comm)

IEEE NUS Student Branch played an important role to host students from MMU. They were brought to various ECE labs for visit.

- Membership Drive

Besides pasting posters in the faculty and distributing flyers, the committee went extra miles to visit various research labs to introduce IEEE.

- Light Venture 2004 (Community Relation Comm)

i-Light Venture 2003 is the second overseas community service project organised by IEEE NUS Student Branch. 20 NUS undergraduates from different faculties went to Bangalore, India. Initiation of Youth Expedition Projects (Community Relations Comm)
A meeting with SIF was held in order to enhance the communication between IEEE NUS Students Branch and Singapore International Foundation regarding to i-Light Venture, and initiating other Youth Expedition Projects.

- Charity Outing(Community Relation Comm)

The committee organized a charity outing for Chen Su Lan Methodist Children's Home. 15 students from NUS took 18 children aged from 7 to 15, to Singapore Science Center.

- IEEE Week

It was an annual IEEE event engaging students from engineering and SOC to gather together for learning and fun. It aimed to initiate innovations and promote cooperation between ECE students on aspects other than academics through various competitions and activities.

- Rocket Competition

This is a new highlight of IEEE week introduced this year. The objective of the competition is to challenge student to design and construct a feasible rocket model using PET bottles and a few other provided components.

- Sourcing Vocation Internship(Public Relations Comm)
- Sub-Committee Gathering(Membership Comm)

With the purpose to bring together all the sub-committees for a time of bonding and fun, a sub-committee gathering was held on March 18th.

B.4 E-mail and Newsletter Activities, Home Page

This year, the Section had initiated the IEEE e-notice facility. It is through the e-notices, the IEEE Members in Singapore Section have been informed about various activities organized by the Section and its various chapters. This has provided a mechanism to communicate with IEEE Members in an economical and more convenient way. We had sent a total of 18 e-notices throughout the year.

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B.5 Chapter Activities

| L31 Submission status based on Web Query System (as of 26 Jan 2005) | | | | | | |
|----------------------------------------------------------------------------|--------------|------------------|---------------|---------------------|--------------------|--------------|
| CHAPTER | Admin | Technical | Social | Professional | Educational | Total |
| Section | 4 | 18 | 0 | 2 | 0 | 24 |
| Circuits & System Chapter | 7 | 10 | 0 | 0 | 1 | 18 |
| Communications Chapter | 1 | 4 | 0 | 0 | 0 | 5 |
| Computational Intelligence Society | 1 | 3 | 0 | 0 | 0 | 4 |
| Computer Chapter | 2 | 4 | 0 | 0 | 0 | 6 |
| Consumer Electronics Chapter | 2 | 2 | 0 | 0 | 0 | 4 |
| Control Systems Chapter | 6 | 9 | 2 | 0 | 0 | 17 |
| EMC Chapter | 0 | 2 | 0 | 0 | 1 | 3 |
| Engineering Management Chapter | 1 | 6 | 0 | 1 | 6 | 14 |
| GOLD | 6 | 0 | 0 | 2 | 0 | 8 |
| Industrial Electronics Chapter | 3 | 4 | 1 | 0 | 0 | 8 |
| Industry Applications/Power Electronics Joint Chapter | 4 | 3 | 0 | 0 | 0 | 7 |
| Magnetics Chapter | 1 | 6 | 0 | 0 | 0 | 7 |
| MTT/AP Chapter | 3 | 32 | 0 | 0 | 0 | 35 |
| Oceanic Engineering Chapter | 8 | 2 | 0 | 0 | 0 | 10 |
| Power Engineering Chapter | 7 | 3 | 2 | 1 | 3 | 16 |
| REL/CPMT/ED Chapter | 4 | 21 | 0 | 0 | 0 | 25 |
| Robotics & Automation Chapter | 2 | 5 | 0 | 0 | 2 | 9 |
| Signal Processing Chapter | 2 | 5 | 0 | 3 | 0 | 10 |
| Solid State Circuits | 3 | 0 | 0 | 0 | 1 | 4 |
| Systems, Man & Cybernatics Chapter | 1 | 2 | 0 | 2 | 0 | 5 |

Part C – Goals and Plans

C.1 Goals

- To retain existing members
- To recruit new members
- To increase level of technical, professional and educational activities

C.2 Implementation Plans

Retaining existing members by

- More frequent and personal contact by Section office through email and e-notices.
- Formation of Women in Engineering Affinity Group to help retain lady members
- More vibrant GOLD Affinity Group activities to help retain GOLD members
- An individualized appeal program to convince graduating student members to convert to full members
- Creation of more members' benefits to make membership more attractive
- Encouraging eligible members to upgrade to senior membership

To recruit new members by

- Providing more funding to student activities which double up as recruitment drives
- Participation in National Engineering Week event to raise profile of IEEE Singapore Section

To increase technical activities by

- Formation of more new chapters
- Improving financial structure to facilitate easier organization of conferences
- Promoting the establishment of chapter web home pages via Entity Web Hosting system

Part D – Others

D.1 Relationship with National Societies

On 24th April, 2004, we had a MOU re-signing ceremony between the IEEE Inc. and IES Singapore. The joint IES-IEEE National Society Agreement was initiated three years earlier. The cooperative activities, which have been organized since the inception of the agreement, especially the IES/IEEE Joint Award of Excellence have raised the image of both IES and IEEE. During this year's re-signing ceremony, IEEE Singapore Section became one of the signatory of the MOU. This is to establish close working relationship between IEEE Singapore Section and IES. The terms of the agreement covers visiting members, joint activities, co-ordination of technical meetings, publication exchange, standards information and membership.

D.2 Special Events

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D.3 Concern Areas and Suggestions

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