



The Institute of Electrical and Electronics Engineers Inc.  
**IEEE BANGALORE SECTION**

**25 YEARS' SERVICE TO THE PROFESSION**

**ANNUAL REPORT 2001**

**PART A - SECTION SUMMARY**

**A.1 Executive Summary**

The Section had a very eventful and successful Silver Jubilee year 2001. Prof. K Rajgopal, Chairman received the IEEE Silver Jubilee Section Banner from Mr. Ray Findlay, IEEE President-Elect at the R10 Meeting 6-7 April, 2001 at Singapore.

The Section registered a substantial growth of 45% in the membership including a 93% growth in student membership.

**Annual General Meeting**

The Annual General Meeting for the year 2000 was held at the Capitol Hotel, Bangalore on the 10th February 2001. The AGM was well attended with 112 members participating. Dr. Surendra Pal gave the welcome address. The minutes of the AGM for the year 1999 were adopted. Mr. A Anoop presented the Secretary's report for the year 2000. Mr. K Ramakrishna presented the Financial report. These reports were adopted by the general body with due appreciation.

**Election of the Executive Committee**

The Nomination Committee, whose members were Prof. Lawrence Jenkins, Dr. Sridhar Mitta, and Mr. S Parameswaran with Prof. Jenkins as the Chairman had proposed the Nomination Slate for the year 2001. The Nomination Slate consisted of the following members.

**Office Bearers**

Prof. K. Rajgopal (SM 4295531)	IISc	Chairman
Dr. Surendra Pal (SM 40147408)	ISRO	Vice Chairman
Mr. S.V. Sankaran (SM 3251592)	CHEMTROLS	Vice Chairman
Mr. Anurag Tyagi (M41346798)	Subex Systems	Secretary
Mr. K. Ramakrishna (SM 01706076)	POWERGRID	Treasurer

**Members**

Mr. A Raja Rao (SM 03912953)	Ex-BHEL
Mr. S Sasikumar (M 40153138)	Dexcel
Wg. Cmdr H R Parthasarathy (M 04001012)	C-DOT
Dr. A Chockalingam (SM 03004546)	IISc
Prof. Vinod K. Sharma (SM 04263760)	IISc
Mr. Arjun Rao Chavala (SM4772760)	Honeywell
Dr. B. S. Rajanikanth (SM 00171231)	IISc
Dr. D. B. Fakruddin (M08552804)	KREC, Surathkal

The slate for CCEM Society Chapter

Mr. S Nagarajan (SM 40064348)

Mr. S V Sankaran(SM 3251592)

Dr. K Rajan(SM 40073424)

Dr. V Jayaram (M06890362)

Philips SoftwareChairman

Chemtrols Vice Chairman/ Secretary

IISc Treasurer

IISc Member

There were no other nominations by petitions received and the Members nominated in the Slate were elected unanimously by the General Body to be the Executive Committee for the year 2001.

The past Chairmen Prof. M.A.L. Thathachar, Prof. H.P. Khincha, Mr. P.N. Hiriyanaiyah, Prof. Lawrence Jenkins and Mr. S. Parameswaran continue to be members of the EXECOM.

The society chapters' chairs serving as ex-officio members are as follows:

Mr. S Nagarajan (SM 40064348)

Prof. V U Reddy (F 05859947)

Dr. Navakant Bhat (M 03422318)

Mr. A. Anoop (M40201174)

Chairman, CCEM Society

Chairman SP Society

Chairman EDSSC Society

Chairman, GOLD group

Co-opted members

At the monthly meetings of the EXECOM, the following members were co-opted to the EXECOM 2001.

Mr. G N Shivakumar (M40261598)

Siemens Communication Software

The EXECOM met regularly for the monthly meetings and the proceedings were duly minuted and kept on record. The organizational work - Silver Jubilee Celebrations, Technical Talks, Tutorials and Workshops, Technical Colloquia, Distinguished Lecture Programs, Student activities and organization of the Annual Symposium - were taken up with good fervor by the members of the EXECOM.

#### **Formation of the EDSSC Chapter**

The Electron Devices and Solid State Circuits Chapter was formed in October 2001 with Dr. Navakant Bhat as the Chair and approved on 16th October 2001. The chapter has organized talks by distinguished personalities in this short time before the end of the year.

#### **Silver Jubilee Celebration of the Section**

Section was presented "IEEE Silver Jubilee Section Banner" at the R10 meeting held at the Pan Pacific Hotel, Singapore on 6-7 April 2001 by Mr. Ray Findlay, then IEEE President-Elect.

The section celebrated its Silver Jubilee on 21st July 2001. It was a sentimental gathering of IEEE members and families – from the youngest student member to the veteran, from the current EXECOM member to the Section's first office bearers and Fellows. They gathered in large numbers, about 250 including spouses, at the Hotel Le Meridien on July 21, 2001 and filled the hall in a great mood of celebrations.

The section brought out a special issue of the newsletter BROADCAST on this occasion which traced the history of the section, its growth, some of the major achievements, variety of technical activities organized, contribution of distinguished officers, strengths and weaknesses, and recognition and awards to the members.

The Section recognized the contribution of past Chairmen, Fellows, and Life Members by presenting momentos.

The Silver Jubilee Celebration Committee headed by Mr. Parameswaran, with Mr. Sankaran, Dr. Surendra Pal and Mr. Anoop as its members, were responsible for meticulously planning and organizing the celebrations. Mr. Ramakrishna, Treasurer and Mr. Anurag Tyagi, Secretary were responsible for providing organizational and technical support, Email registration and correspondence for the event.

### **Awards**

2000 RAB Section Sustained Membership Growth Award for Outstanding Leadership and Results in IEEE Membership Development Activities for Region 10.

RAB GOLD Committee Certificate to the Bangalore Section -'In recognition and appreciation of the leadership and your continued support to the IEEE Bangalore Section GOLD Affinity group. The support enabled the GOLD group's enthusiasm and activities be formalized and accepted into the IEEE community'.

### **Tenth Annual Symposium and Student Paper Contest 2001**

The Annual Symposium of the section was held on 22-24 of November 2001. The topic of the symposium was 'MULTIMEDIA COMMUNICATIONS AND SIGNAL PROCESSING'. The BRV Vardan Undergraduate Student Paper Contest was held along with the Symposium. This year a Post-graduate student Paper contest was also added and held along with the Symposium. The Prize monies for the Vardan Paper contest were substantially raised from previous years to attract better participation.

### **Distinguished Lecturer Tours**

The following Distinguished lecturers visited the section and gave state of the art talks. Prof. Chockalingam, Professional Activities Chair and Mr. Anurag Tyagi, Secretary have coordinated these events with great success.

1. **Prof. Robert W. Newcomb**, Professor, Department of Electrical and Computer Engineering, University of Maryland, USA, "Semistate Theory and Design of Analog VLSI Circuits", under the DLP of IEEE Circuits and Systems Society, 8th August 2001
2. **Dr. Prabha S. Kundur**, President and CEO of Powertech Labs Inc., Surrey, B.C., Canada, "Power Systems in the 21st Century: Trends, Challenges and the Role of Advanced Technologies", under the DLP IEEE Power Engineering Society, 12th November 2001.
3. **Prof. Rajesh Gupta**, Department of Information and Computer Science, Center for Embedded Computer Systems, University of California, Irvine. USA, "Design Technology And Architectural Adaptation For Deep Sub-Micron VLSI Systems", under the DLP IEEE Circuits and Systems, Co-sponsor ED&SSC Chapter, Bangalore 6th December 2001.
4. **Prof. RAJ JAIN**, Co-Founder and CTO, Nayna Networks, Milpitas California, USA, "Optical Networking With IP Over DWDM: Recent Advances, Trends, And Issues", under the DLP IEEE Communication Society, Co-sponsor CCEM Society Chapter, Bangalore, 19th December 2001

### **Section Technical Colloquia at Student Branches**

The Section Technical Colloquium initiated in 2000 had taken deeper roots in the student activities of the Section in 2001 due to the efforts and coordination of Prof. K Rajgopal, Prof. Lawrence Jenkins, Prof. S V Sankaran, Mr. Arjuna Rao Chavala and the respective student branches.

1. Technical Colloquium (one day) at Basaveshwar Engineering College, Bagalkot, on 20th October 2001 chaired by Prof. K Rajgopal and coordinated BEC Student Branch, Bagalkot & Dr. Suresh Jangamshetty.
2. Technical Colloquium (half day) at University Vivesvaraya College of Engineering, Bangalore, on 3rd November 2001 chaired by Prof. Lawrence Jenkins and coordinated by UVCE Student Branch, Bangalore & Prof. V K Raju.
3. Technical Colloquium (full day) at National Institute of Engineering, Mysore on 3rd November 2001 chaired by Prof. S V Sankaran and coordinated by NIE Student Branch, Mysore & Prof. Shivakumar.

### **Technical Talks, Workshops and Tutorial**

Seven technical talks, and five workshops & tutorials as part of educational and professional activities were organized by the section and its chapters. Details are given in later sections of the report.

### **Co-sponsorship of Conferences**

The Section co-sponsored the International Radar Symposium organized by the IETE, India on Dec 11-15, 2001 at Bangalore.

### **Student Branch Activities**

Mr. Arjuna Rao Chavala, Student Activities Chair has contributed immensely to activate the student branches and its members across the section with enthusiasm, perseverance, patience and untiring efforts, equally well supported by the EXECOM Members in his efforts. The activities included initiation of new student branches, activation of dormant student branches, technical colloquia at colleges, support to student branch annual events, updation of REP list, student membership promotion, leadership training program for student branches, student surveys and visits to student branches.

### Section Newsletter

The Section Newsletter, Broadcast, has continued to be issued quarterly – the issues of March, June, September and December 2001 have been produced and circulated due to the untiring efforts of the Editor, Prof. S.V. Sankaran. The issues carry a great deal of information for the members including announcements of forthcoming events and various achievements of the Section and its members.

A Special Issue was also brought out in commemoration of the Section's SILVER JUBILEE year, which was made possible by the excellent efforts of Mr. Arjuna Rao Chavala and supported by Prof. Lawrence Jenkins, Mr. Hiriyannaiah and others.

### Section Webpage and Electronic Mailing

The short URL for the Section homepage is <http://www.ieee.org/bangalore>. Continuing in its efforts to reach out to the members using this communication media, the Section has consolidated its presence on the web in its 2nd year. The high growth rate in membership (Overall 44.87% and students 92.57%) can be partly attributed to website and electronic communication. Thanks to the dedicated efforts of the Webmaster, Mr. G N Shivakumar, in updating the activities on the website regularly, the section has been successful in disseminating information to the members in a timely manner and adding useful features such as majordomo lists to the website.

The section SAMIEEE has been maintained very efficiently for the last 5 years by Prof. K Rajgopal and requirement of mailing label lists for section, chapters and affinity groups and email list for electronic mailing was generated from the SAMIEEE.

## A.2 Financial Report

### INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDING ON 31.12.2001

(All figures in Indian Rupees)

To Annual General Meeting expenses	33,145=00	By F.D. Interest	1,11,978=00
“ Executive Committee meeting expenses	1,359=00	“ S.B. Interest	10,060=00
“ Symposium expenses	1,42,333.25=00	“ Receipt from	
“ Traveling Expenses	26,817=50	Annual Symposium	57,250=00
“ Secretarial Assistance	2,150=00	“ Rebate from HQ	3,92,001=00
“ Postage & Telephone	2,903=60	“ Receipt from	
“ Printing & Stationery	4,709=75	CCSP Conference	3,28,803=00
“ BR Vardan Awards	2,400=00	“ Receipt from	
“ Membership Fee	500=00	Tutorials/ Workshops:	
“ Tutorials/ Workshops/		VLSI Tutorial	28200
Distinguished Lectures:		WS on GSCM	78400
VLSI Tutorial	27,128.00	WS on Know.Mgt	11350
Workshop on GSCM	61,962.00		-----
Workshop on Know.Mgt.	23,001.00		1,17,950=00
Distinguished Lectures	15,952.00		
Tech. Colloquiums	8,384.75		
	-----		
	1,36,427=75		
“ Newsletter	1,00,828=00		
“ TDS	6,699=00		

“ Seed Money to:		
SJCE Student Branch	10,000=00	
UVCE Student Branch	10,000=00	
NIEEE Student Branch	15,000=00	
“ Student Leader Workshop	8,596=60	
“ Silver Jubilee Celebration Expenses	1,53,691=00	
“ Gold Activities	4,644=00	
“ Bank Charges	339=00	
“ Excess of Income Over Expenditure	3,55,498=98	
	-----	-----
	Rs. 10,18,042=43	Rs. 10,18,042=43
	-----	-----

## BALANCE SHEET AS AT 31.12.2001

(All figures in Indian Rupees)

Corpus	20,000=00	Cash on Hand	47=83
Computer Society, Bangalore	1,00,000=00	Canara Bank I	5,013=76
Capital Fund:		Canara Bank II	9611=09
Opening Balance	20,30,164=91	Corporation Bank I	16,019=85
Add:		Corporation Bank II	1,10,478=43
Excess of Income over Expenditure	3,55,498=98	Bank of India	4,778=93
		Fixed Deposit / KDR :	
		Canara Bank	7,99,348=00
		Bank of India	1,48,033=00
		Corporation Bank I	5,79,333=00
		Corporation Bank II	3,33,000=00
		Syndicate Bank	2,00,000=00
		Andhra Bank	3,00,000=00
	-----		-----
	23,85,663=89		
	-----		-----
	Rs. 25,05,663=89		Rs. 25,05,663=89
	-----		-----

-- Reproduced from the Audited Statement of Accounts dated 25<sup>th</sup> January 2002.

## PART B - ORGANIZATIONAL ACTIVITIES

### B.1 Membership Development Programs

#### Membership Development

At the end of the year 2001, the Membership of the Bangalore Section grew substantially in various categories as given below.

	Year 2000	Year 2001	% Growth
Fellows (F)	4	4	0
Senior Members (SM)	83	96	15.66
Members (M)	750	786	4.80
Life Senior Members (LS)	11	11	0
Life Members (LM)	6	7	16.66
Life Associates (LA)	1	1	0
Pending Members (PM)	28	58	107.10
Associates (A)	349	574	64.47
Affiliate of an IEEE society	28	45	60.70
Student Members	485	934	92.57

Misc.	--	9	
<hr/>			
<b>Total</b>	<b>1745</b>	<b>2528</b>	<b>44.87</b>

### **Evidence of retention of members**

Various measures that were taken to improve the retention and upgrade the membership status by the Membership Development Chair and the Section's EXECOM have evidently shown excellent results - not only was there no loss in any category, but substantial boost in various significant categories, and an overall growth of about 44.87%. Thanks to good efforts to identify and nominate potential senior members, Senior Members grew by 15.66%. This is reflection of the growing stature of the Section. Student membership grew very significantly by 92.57% (almost double) mainly due to the exemplary efforts of the Student Activities Chair and utilizing of the Circuits and Systems Society's free membership offer by 16 colleges. Associate members category also grew by 64.47% which is a forerunner for regular members in future.

### **GOLD Activity**

The Graduates Of the Last Decade (GOLD) affinity group of the Section showed further growth in its activities of developing young leaders, supporting student activities, colloquia and leadership workshop and organising several technical and some social events during the year. The GOLD webpage was linked to the Section website and played a good role in dissemination of information on GOLD. The Section received an appreciative award from the RAB GOLD Committee for support to the GOLD Group.

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

### **2-1 Tenth Annual Symposium and Student Paper Contest 2001**

The Annual Symposium was held on 22-24 November 2001. The topic of the symposium was '**MULTIMEDIA COMMUNICATIONS AND SIGNAL PROCESSING**'.

Two pre-symposium tutorials were organised on 22nd November:

OFDM on wireless networks: **Prof. K Giridhar, IIT, Madras**

MPEG-4, **Dr. H S Srinivas, Satyam Computers.**

They were very well attended and appreciated.

Plenary Talks organised:

"Digital communications: past, present and future" by **Dr. P. G. Poonacha, Sasken Comm.**

**Tech. Ltd**, Bangalore on 23rd November.

"Stochastic approximation: Old liqueur in new cocktails" by **Prof. Vivek Borkar, TIFR, Bombay** on 24th November.

35 contributed papers were accepted after review for the symposium from more than 75 papers submitted. Significantly, 32 papers were presented. 147 participants registered for the symposium which highest registration in past 10 years. In the symposium on 23rd and 24th November dropout rate for paper presentations was very low and presentations very well received. The student paper contest of the section for the under graduate and post graduate students was held as part of the symposium.

### **2-2 Distinguished Lecturer Tours**

The following Distinguished lecturers visited the section and gave state of the art talks. Prof. Chockalingam, Professional Activities Chair and Mr. Anurag Tyagi, Secretary have coordinated these events with great success.

1. **Prof. Robert W. Newcomb**, Professor, Department of Electrical and Computer Engineering, University of Maryland, USA, "**Semistate Theory and Design of Analog VLSI Circuits**", under the DLP of IEEE Circuits and Systems Society, 8th August 2001

2. **Dr. Prabha S. Kundur**, President and CEO of Powertech Labs Inc., Surrey, B.C., Canada, "**Power Systems in the 21st Century: Trends, Challenges and the Role of Advanced Technologies**", under the DLP IEEE Power Engineering Society, 12th November 2001.
3. **Prof. Rajesh Gupta**, Department of Information and Computer Science, Center for Embedded Computer Systems, University of California, Irvine. USA, "**Design Technology and Architectural Adaptation For Deep Sub-Micron VLSI Systems**", under the DLP IEEE Circuits and Systems, Co-sponsor ED&SSC Chapter, Bangalore 6th December 2001.
4. **Prof. RAJ JAIN**, Co-Founder and CTO, Nayna Networks, Milpitas California, USA, "**Optical Networking With IP Over DWDM: Recent Advances, Trends, And Issues**", under the DLP IEEE Communication Society, Co-sponsor CCEM Society Chapter, Bangalore, 19th December 2001.

### **2-3 Section Technical Colloquia at Student Branches**

The Section Technical Colloquium initiated in 2000 has taken deeper roots in the student activities of the Section in 2001 due to the efforts and coordination of Prof. K Rajgopal, Prof. Lawrence Jenkins, Prof. S V Sankaran, Mr. Arjuna Rao Chavala and the respective student branches.

A. Technical Colloquium (one day) at Basaveshwar Engineering College, Bagalkot, on 20th October 2001 chaired by Prof. K Rajgopal and coordinated BEC Student Branch, Bagalkot & Dr. Suresh Jangamshetty. Following speakers participated.

Introduction, Prof. K Rajgopal, Chairman, IEEE Bangalore Section

1. An Overview of Artificial Neural Networks, Prof. P S Sastry, Dept. of Electrical Engineering, IISc Bangalore
2. Surface-Acoustic-Wave Filters for RF Signal Processing Applications, Dr. Raghavendra G Kulkarni, Bharat Electronics Ltd., Bangalore
3. Electricity System Restructuring, Mr. A Raja Rao, Ex Executive Director, BHEL
4. Extra Skills for Young Engineers, Mr. A Anoop, Siemens Communication Software
5. Bluetooth Technology and Applications, Mr. Arjuna Rao Chavala, Honeywell India Software Operations
6. Intelligent System Applications in Power Engineering, Prof. D Thukaram, Dept. of Electrical Engg., IISc, Bangalore
7. Wireless Communication - Future Possibilities and Challenges, Mr. Anurag Tyagi, Secretary, IEEE Bangalore Section, Bodha: Intelligent and Networked Systems

B. Technical Colloquium (half day) at University Vivesvaraya College of Engineering, Bangalore, on 3rd November 2001 chaired by Prof. Lawrence Jenkins and coordinated by UVCE Student Branch, Bangalore & Prof. V K Raju. Following speakers participated from the Section.

Inaugural Remarks: Prof. Lawrence Jenkins, IISc

1. Electricity System Restructuring, Mr. A Raja Rao, Ex Executive Director, BHEL
2. System on Silicon - An overview, Ramanujan Valmiki, Manager, VLSI design. Broadcom India
3. An Introduction to Embedded Systems Engineering, S Nagarajan, CEO & CTO, Bluefont Technologies Pvt. Ltd.
4. Managing oneself and one's career in turbulent times, C. Mahalingam (Mali), VP and Country Manager, HR, HP Ltd,

C. Technical Colloquium (full day) at National Institute of Engineering, Mysore on 3rd November 2001 chaired by Prof. S V Sankaran and coordinated by NIE Student Branch, Mysore & Prof. Shivakumar. Following speakers participated from the Section.

Inaugural Remarks, Prof. SV Sankaran, IIITB

1. Digital Data Compression and DSP, Dr. S. Jagannathan, Infineon Technologies
2. Photonics: Challenges and Future, Hitesh Mehta, Product Manager, TVS Interconnect Systems Limited
3. Intelligent System Applications in Power Engineering, Prof. D Thukaram, IISc, Bangalore
4. How to prepare for an exciting career, Mr Arjuna Rao Chavala, Honeywell India SW Operation.

### **2-4 Workshops and Tutorials**

Following Workshops and Tutorials were organized by the section during the year. Mr. Anurag Tyagi, Secretary, has been responsible for providing organizational support and email registration and correspondence for these events.

- \* Tutorial On VLSI Packaging for Mobile Communications Applications, **Dr. Shankara Prasad**, APT Interactive Ltd., Bangalore, 21st April 2001
- \* Workshop on Foundations Of Global Supply Chain Management, **Prof. N Vishwanatham**, The Logistic Institute Asia-Pacific, Singapore, **Prof. Y. Narahari and N.R.S. Raghavan**, Indian Institute of Science, Bangalore, 10th August 2001
- \* Workshop on Knowledge Management For ASIC Designers, **Dr. Shankara Prasad**, APT Interactive Ltd., Bangalore, Ram Anand, General Manager, Indian Telephone Industry, Bangalore, and H V Ananda, Managing Director, Synplicity software India Pvt Ltd., Bangalore. 29th September 2001.
- \* OFDM on wireless networks: **Prof. K Giridhar**, IITM; 22nd November 2001
- MPEG-4, **Dr. H S Srinivas**, Satyam Computers, 22nd November 2001

### **2-5 Technical Talks**

- \* Microelectronics & Entrepreneurship, **Mr. Prakash Bhalerao**, Chairman, CMOS Chips, Inc., Hotel Windsor Manor, GOLD Talk, Sponsors –CMOS Chips, Co-sponsors IEEE Bangalore Section, 24th January, 2001,
- \* LINUX, **Mr. Atul Chitnis**, Director, Exocore Consulting, Siemens Communications Software, GOLD Talk, Co-sponsors IEEE Bangalore Section, 31st January, 2001,
- \* Space-Time Wireless: The New Frontier, **Prof. A. Paulraj**, Department of Electrical Engineering, Stanford University, USA, The Gateway Hotel, IEEE Bangalore Section & CCEM Chapter, Sponsor: BPL Telecom Limited, 9th August 2001,
- \* Implementing the Wireless Internet: 3G and Beyond, Trends and Challenges, **Mr. Peter Garrett**, former Vice President, Nortel Networks, Canada, The Gateway Hotel, IEEE Bangalore Section & CCEM Chapter talk, Sponsor: AXCEND India Pvt. Ltd., 31st October 2001
- \* MPEG-4 Based Speech Codec and Its Variations for Wideband Applications, **Dr. Jayakumar Singaram**, CTO of Epigon Audicare Pvt Ltd., at Philips Software Centre, GOLD Talk, Co-sponsor IEEE Bangalore Section, 19th November 2001
- \* The Opportunities and Positive Impact of the IT Slowdown on the Indian IT Industry, CCEM Chapter **Panel Discussion**, Hotel Rama, 13th December 2001
- \* Application of Quantified Linear Programming to Real Time Scheduling, **Dr. K. Subramani**, Dept. of Computer Science and Electrical Engineering, West Virginia University, USA, at IISc, 21st December 2001

### **2-6 Co-sponsorship of Conferences**

Section sponsored the International Radar Symposium India 2001, Hotel Ashok, 11-15 December 2001.

## **B.3 Recognized Educational Programs**

IEEE Reference List of Educational Programs (REP) in the Section's geographical area was updated during the year to include 44 new colleges recognized by the AICTE (All India Council of Technical Education).

## **B.4 Students Activities**

### **4-1 Student Annual Paper Contest**

The student paper contest of the section for the under graduate and post graduate students was held as part of the symposium. 10 under graduate papers selected were presented in two sessions and 5 postgraduate papers in one session. The paper contest winners as follows: Sri B.R.V.Vardan Memorial Prize was awarded to the following undergraduate student papers:

First Prize

"Turbo codes for WCDMA Systems", Y A P Shankar and Vijay R K, NIE, Mysore.

Second Prize

"A simple load balancing scheme for task allocation in parallel machines", P Wadikar and V Javali, Bhomareddi College of Engineering, Hubli.

The Bangalore Section Best Graduate Paper Award for postgraduate student was awarded to: "Improved robustness of zero - crossing based frequency estimation", S Chandrasekhar, IISc, Bangalore.

#### **4-2 Student Activities**

Mr. Arjuna Rao Chavala, Student Activities Chair has been able to galvanize the student's branches and its members across the section with enthusiasm, perseverance, patience and untiring efforts and equally well supported by the EXECOM Members in his efforts.

New Students Branches: National Institute of Engineering, Mysore, Indian Institute of Information Technology, Bangalore have been formed. Formation of student branches at KSIT Bangalore, and Siddhaganga Institute of Technology Tumkur and GVIT at KGF have been initiated.

**Activation of Student Branches:** Basaveshwar Engineering College Bagalkot, University Visvesvaraya College of Engineering, Sir M Visvesvaraya Institute of Technology, and R V College of Engineering at Bangalore.

**Technical Colloquia:** at BEC Bagalkot, UVCE Bangalore, and NIE Mysore.

**Support for Annual Events:** Cyberia-2001-SJCE Mysore, Ankura-2001 NIE Mysore, Intellect-2001 MIT Manipal, Impetus-2001 UVCE Bangalore.

**REP List Update:** IEEE Reference List of Educational Programs (REP) got updated to include 44 new colleges recognized by the AICTE.

**Membership:** Student membership **increased by 93%** to 934 due to the IEEE Circuits and Systems Society's free Membership offer being effectively utilized by 16 colleges.

#### **4-3 Leadership Training Program**

Nineteen student branch representatives from nine colleges participated in this event organized on 23rd November 2001. Prof. Thathachar, IEEE Fellow gave the inaugural talk highlighting the benefits of IEEE Membership and its importance in professional advancement. Prof. Khincha, R10 Educational Activities Chair, enlightened about the IEEE Organization and future plans. Prof. Rajgopal presented the section activities and motivated the students to be more active in IEEE activities. Mr. Arjuna Rao gave the branch administration and management training followed by Mr. Anoop, R10 GOLD Coordinator on GOLD activities and mentor program. Mr. M. Ramakrishna, GM-HR, Philips Software Centre, conducted brainstorming and discussion session on Vision for the student branches and approaches to resolve the issues.

#### **4-4 Survey and Student Feedback**

Student survey and feedback on IEEE and activities of the Section and Student Branches was initiated to know the needs and pulse of the students. Analysis of the survey and feedback has given the section and the student branches valuable insight in to the aspirations and problems faced by the students and the student branches, which is very useful input in planning the activities.

73 students from Bagalkot, 33 students from Bangalore and 30 students from Mysore submitted valid feedback forms totaling 136, participated in the survey. There were 33 girls and 103 boys. Majority of these students are graduating in 2002 i.e. final year of their course. The main mode of the Internet access, which is available to all the participants, is through college for students from Bangalore, Mysore, while it is Cybercafe for students from Bagalkot. 55% visited IEEE webpage, while 15% visited Bangalore Section web page and about 25% are IEEE members. Only about 30% participated in technical competitions, 10% gave technical talks or presented papers in conferences/symposia. Cost of membership and very few local technical activities are cited as the main deterrents in becoming a member by about 55% and 40% of respondents respectively.

Assistance and guidance in Jobs and placement, Projects, organizing technical talks, organizing technical competition are ranked as the priorities with no marked difference among them.

#### **4-5 Visit to student branches by Officers and EXECOM members**

Visits were made by:

Dr. AIT and RVCE colleges by Prof. Lawrence Jenkins and Arjuna Rao

KREC Surathkal by Arjuna Rao

UVCE, Bangalore and Sir MVIT, Bangalore by Prof. K Rajgopal and Arjuna Rao

KSIT, Bangalore by Prof. Sankaran and Mr. Arjuna Rao

RVCE, Bangalore by Prof. Sankaran, Mr. Rajarao and Mr. Arjuna Rao

GVIT, Kolar Gold Fields, Mr. Rajarao and Mr. Arjuna Rao

## **B.5 E-mail and Newsletter Activities, Home Page**

### **5-1 Section Newsletter**

The Section Newsletter, Broadcast, has continued to be issued quarterly – the issues of March, June, September and December 2001 have been produced and circulated due to the untiring efforts of the Editor, Prof. S.V. Sankaran. The issues carry a great deal of information for the members including announcements of forthcoming events and various achievements of the Section and its members.

The Broadcast introduced the new Section and Chapter EXECOMs to members at large. Also carried reports on the AGM, annual symposium, various lectures, workshops, tutorials, R10 & IC meetings and other events of the Section and Chapters, as also GOLD activities, throughout the year. Also carried articles and reports on Student Branch activities, colloquia, branch formations, tech fests, etc. And carried announcements of Paper Contests, Symposium, Tutorials/Workshops/Lectures, and other events of interest to members. The December issue of Broadcast also carried the AGM notice and the Slate announcement.

A Special Issue was also brought out in commemoration of the Section's SILVER JUBILEE year, which was made possible by the excellent efforts of Mr. Arjuna Rao Chavala and supported by Prof. Lawrence Jenkins, Mr. Hiriyannaiah and others.

### **5-2 Section Webpage and Electronic Mailing**

The short URL for the Section homepage is [www.ieee.org/bangalore](http://www.ieee.org/bangalore). Continuing in its efforts to reach out to the members using this communication media, the Section has consolidated its presence on the web in its 2nd year. The impact of the website can be judged by about 3500 hits recorded, up from about 1000 recorded last year. Similarly, the high growth rate in membership (Overall 44.87% and students 92.57%) can be partly attributed to website and electronic communication. Thanks to the dedicated efforts of the Webmaster, Mr. G N Shivakumar, in updating the activities on the website regularly, the section has been successful in disseminating information to the members in a timely manner. It also acts as a one point source of information regarding the IEEE for the members.

Majordomo electronic email list subscription has been setup for the section and execom. In particular, the [bangalore-execom@majordomo.ieee.org](mailto:bangalore-execom@majordomo.ieee.org) has been very useful and effective in consultation and administration of the executive committee.

Similarly, [bangalore-section@majordomo.ieee.org](mailto:bangalore-section@majordomo.ieee.org) mail list was used for the first time by the professionals working on 4G Mobile Broadband Network for a lively discussion and expressing their concern on sluggish progress in 4G pilot project. It appears that some headway has been made subsequent to this discussion.

The section SAMIEEE has been maintained very efficiently for the last 5 years by Prof. K Rajgopal and requirement of mailing label lists for section, chapters and affinity groups and email list for electronic mailing has generated from the SAMIEEE.

## B.6 Awards

The Section received --

- \* **"IEEE Silver Jubilee Section Banner"** at the R10 meeting held at the Pan Pacific Hotel, Singapore on 6-7 April 2001 by Mr. Ray Findlay, then IEEE President-Elect.
- \* **2000 RAB Section Sustained Membership Growth Award** for Outstanding Leadership and Results in IEEE Membership Development Activities for Region 10.
- \* **RAB GOLD Committee Certificate to the Bangalore Section** -'In recognition and appreciation of the leadership and your continued support to the IEEE Bangalore Section GOLD Affinity group. The support enabled the GOLD group's enthusiasm and activities be formalized and accepted into the IEEE community'.

## B.7 Chapter Activities

### 7-1 CCEM Chapter

IEEE Computers, Communications and Engineering Management Societies, Bangalore Chapter continued activities strongly during 2001. The report of its activities is enclosed as **Appendix 1**.

### 7-2 SP Chapter

IEEE Signal Processing Society, Bangalore Chapter also continued with several significant activities during 2001. The report of its activities is enclosed as **Appendix 2**.

### 7-3 EDSSCS Chapter

The IEEE Bangalore Electron Devices and Solid State Circuits Chapter was formed in October 2001 with Dr. Navakant Bhat as the Chair and approved on 16th October 2001. The chapter has organized several talks by distinguished personalities within the short time before the end of the year. The report is enclosed as **Appendix 3**.

### 7-4 GOLD Group

IEEE GOLD Affinity Group, Bangalore Section was very active and had interesting and varied activities in 2001. The report of its activities is enclosed as **Appendix 4**.

## PART C - GOALS AND PLANS

### C.1 Goals

The Section has planned several significant and varied activities for the year 2002. Some of the important goals that have been set for 2002 are:

**TENCON 2003** – The Section has been conferred the privilege of organising the TENCON 2003 at Bangalore. Section will kick start and continue all activities related to TENCON 2003.

**Educational and Professional activities** – Tutorial and workshops, Distinguished Lectures and Technical colloquia to cater to professionals as well as students.

**Student activities** will continue in 2002 with the momentum already started in 2001. Visit by officers or EXECOM members to several student branches in the section to encourage and foster them.

Coordinate with and support the society **Chapters and GOLD** to enhance their activities to serve their memberships.

Continue efforts to **activate the PE Society** to form a PE and IA joint Society chapter.

Maintain the **membership drive** from the strong performance in 2001 and continue to raise the membership, especially Senior Members and students. Also watch for and guard against dropping of student membership.

## C.2 Detailed Implementation Plans

The Section has already set in motion in 2001 several strategies for student activities (including surveys), member development and Chapter/GOLD support, which have yielded good results. In 2002 these strategies will be further strengthened and pursued. In 2002 a major and special focus will be the kick off of TENCON 2003 activities.

### TENCON 2003

Initiate all necessary activities for TENCON 2003 including:

- Appoint General Chair, Program Chair, and other key Chairs and committees
- Technical, logistic and financial planning, including Hotel Venue
- Release Conference announcement and call for papers
- Set up Conference Website
- Initiate action for invited speakers including Keynote speakers

**On Student Activities**, results of surveys conducted and Leadership Workshop done in 2001 will be utilised well so as to continue momentum of further activating dormant student branches, starting new student branches and membership watch of students. Visits to colleges by section officers and effective coordination with local faculty members will be done to encourage and activate the student branches. Technical colloquia at colleges and student leadership workshop will be continued as in 2001. Nomination for awards for student branches, student volunteers and counsellors will be encouraged to boost morale and recognition.

**On Membership Development** particular attention will be paid to identifying potential members for Senior Member and Associates who can move to regular membership, apart from student membership. Business houses with large number of professionals will be canvassed to promote IEEE membership in their ranks. The organising of technical and professional programs of high quality will be continued to show visible benefit to existing members and potential members.

## C.3 Budget for 2002

(All figures in Indian Rupees)

TENCON seed funding	1,00,000=00
AGM Expenses	90,000=00
Annual Symposium	90,000=00
Newsletter	1,00,000=00
Co-sponsorship of technical programs	20,000=00
Membership Development	20,000=00
Distinguished Lectures	20,000=00
Tutorials & Workshops	50,000=00
Student Branch Activity	80,000=00
Travel by Officers/EXECOM	40,000=00
Section Congress	60,000=00
Secretarial Support	10,000=00
Postage, printing , stationery	10,000=00
GOLD Activities support	10,000=00

-----  
**TOTAL            7,00,000=00**  
 -----

## PART D - OTHERS

### **D.1 Relationship with National Societies**

The section has forged close relationship with the The Institution of Electronics and Telecommunication Engineers, India, Karnataka Chapter, The ACM Bangalore Chapter, Computer Society of India (CSI) Bangalore Chapter, India WAP Initiative (IWIN) and Institution of Engineers, India, Karnataka Chapter. Several of the technical talks organised during 2001 by the IEEE Bangalore Section and Society Chapters were cosponsored by one or more of these national/international societies.

### **D.2 Special Events**

The Bangalore Section will be the host organiser for the TENCON 2003. All startup activities related to the TENCON will be initiated and set in motion.

### **D.3 Problems to be Anticipated**

None as of present.

## **APPENDIX**

### **X.1 APPENDIX 1**

## **IEEE Computer, Communications and Engineering Management Society**

### **Bangalore Chapter**

### **Annual Report 2001**

*Prepared by: S. Nagarajan, Chairman*

#### **Organizational Matters**

The Executive Committee for the year 2001 consisted of Volunteers who where approved by the IEEE Bangalore Section. The members were:

S. Nagarajan (SM 40064348) Chairman	Bluefont Technologies
S. Bhaskaran (SM 3251592) Secretary	Philips Software Ltd.
K. Rajan, Dr. (SM 40073424) Treasurer	Indian Institute of Science
V. Jayaram, Dr. (M 06890362) Member	Indian Institute of Science

Besides the above, the following members volunteered to support the activities of the Chapter, as co-opted members in the Executive Committee.

P. Madan, Kirloskar Electric

G.N. Shivakumar, Siemens

Nagendra Singh, Philips Software Ltd.

S. Sasikumar, Dexcel Electronics

Rahul Garg, Ittiam

Sandeep Relan, Intel

The IEEE CCEM Bangalore Chapter Executive Committee also places on record the encouragement and support it has been receiving from the IEEE Bangalore Section, and the thanks are due to its leader, Prof.Kasi Rajagopal, Chairman and his Executive Committee team.

The Executive Committee acknowledges their contributions with gratitude and a special thanks is due to Mr.S.V. Sankaran, (for being the *interim* Secretary for the Chapter, and also being an active supporter of the IEEE CCEM initiatives.)

The first AGM for the IEEE CCEM Bangalore Chapter is planned on Feb 9, 2002. The Election Nominations Committee for 2002 is constituted with Prof.L.M. Patnaik as the Chairman (IEEE Fellow and past Chairman of IEEE Computer Society) and Prof.S.V. Sankaran, Mr.Madan Pande and Mr.Asoke Talukder as members. The Elections for 2002 shall be held following the IEEE guidelines and under the supervision of the nominations committee, on Feb 9, 2002.

The membership stood at 638, at the end of 2001 combining Computer, Communications and Engineering Management Society memberships.

The IEEE CCEM Bangalore Chapter Internet home page is located at <http://www.ewh.ieee.org/r10/bangalore/ccem/>. Our special thanks to Mr.Shivakumar, G.N. for maintaining this website current.

#### Activities

The activities of 2001 started with the talk by Prof. Mehdi Harandi, Department of Computer Science, University of Illinois, Urbana-Champaign, USA, on January 20, 2001; Topic: The Future of Software: Fiction or Reality?

February 22, 2001: Prof. Roy H. Campbell, Dept. of Computer Science, University of Illinois, Urbana-Champaign, on *Active Computing Spaces and the New GAIA Operating System*. This talk was another popular event of IEEE CCEM Bangalore Chapter.

August 9, 2001 saw Prof. A. Paulraj, Stanford University speaking on *Space-Time Wireless: The New Frontier*. As always the case with Prof.Paulraj, the hall was full and there were many questions to the speaker.

IEEE CCEM Bangalore Chapter joined hands with IEEE Bangalore Section, ACM Bangalore Chapter, IETE Bangalore Chapter and CSI Bangalore

to organize a talk by Dr.Peter Garrett on *Implementing the Wireless Internet: 3G and Beyond, Trends and Challenges*. This event is an example of co-operation among several like-minded technical societies at Bangalore.

In our effort to make a difference in the kind of interaction we facilitate, a panel discussion was held on December 13, 2001. The topic was *The Opportunities and the positive impact of the IT Slowdown on the Indian IT Industry*. The distinguished panel members were Mr.B.V. Naidu, Director, Software Technology Parks of India, Bangalore, Dr.Sherlekar, CTO, Sasken Communications, Mr.Ramana, Director, Agere Systems, Mr.Mahalingam, Director-HR, HP India. This event was well attended and had good participation from the audience.

Prof.Raj Jain, Co-founder and CTO, Nayna Networks, delivered talk under Distinguished Lecture Series, on December 19, 2001; Topic: Optical Networking with IP over DWDM: Recent Advances, Trends and Issues.

IEEE CCEM Bangalore Chapter initiated background work towards establishing a technical library of IEEE material for the students and technical community of Karnataka. The IEEE Student Branch at UVCE, Bangalore has come forward to manage and administer this library for the benefit of students & professionals from Karnataka, particularly Bangalore. Details of this library usage shall be published soon at the IEEE CCEM Bangalore Chapter Website soon.

#### **Concluding Remarks**

We need more help! We are looking for volunteers to strengthen the activities and take it forward to the next level. The potential for networking among professionals and learning is high and we urge more members to actively participate in the activities.

## **X.2 APPENDIX 2**

### **Activities of IEEE SP Society, Bangalore Chapter during the Year 2001**

During the year 2001, the activities of the chapter can be grouped as follows:

1.	Special Lectures	-	8
2.	Tutorial	-	1
3.	Conference	-	1
4.	Short-term course modules	-	3

The special lectures covered a wide range of topics, e.g., high speed data on CDMA downlinks, multitone techniques for broadband access, recent results in MIMO research, blind equalizability of non-linear channels, internet telephony, estimation of signals in the presence of non-stationary noise. The tutorial was on "Scale Invariance, self-similarity and relationship to network traffic characteristics". The speakers were from Lucent Labs,

Stanford University, University of Iowa, Kunsan National University, Korea, University of Debrecen, Hungary, UMIST, UK, RIT, Rochester.

The conference on Signal Processing and Communications was organised jointly by SP Chapter and Indian Institute of Science, Bangalore, during July 15-18, 2001. The first two days were devoted to tutorials; topics were JPEG 2000, Voice over IP and Fixed Broadband Wireless, and the later two days were filled with technical sessions. The technical sessions comprised of two plenaries, one delivered by Prof. Arye Nehorai and the other by Dr. M.M. Sondhi, and 24 contributory papers, stretched over six sessions, covering estimation and modeling, multimedia systems, image processing, speech processing, modulation and coding, wavelets and filter banks. The participation was overwhelming; about 250 for the tutorials and 175 for the technical sessions.

The short-term course modules were planned in collaboration with PES Institute of Technology, Bangalore. The three modules were

- i) DSP Theory
- ii) DSP Architecture and
- iii) DSP Applications.

All the modules were planned at a post-graduate level catering to the needs of a practicing engineer. Each module included 3 hours of lectures per day and afternoon lab sessions, spread over 5 days of a week. About 40 engineers attended and appreciated the course modules.

V.U. Reddy  
Chairman

T.V. Sreenivas  
Secretary

### **X.3 APPENDIX 3**

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.  
**IEEE ED/SSC Bangalore Chapter**

---

## **ANNUAL REPORT 2001**

### **1. ORGANISATIONAL MATTERS**

#### **1.1 Election of the Executive Committee**

Following are the office bearers for the year 2001 as well as 2002

##### Office Bearers

Dr. Navakanta Bhat (M 03422318)

Dr. P R Suresh (M 03822855)

Mr. Santosh Salunkhe (M 41291164)

IISc

Texas Instruments

Analog Devices

Chairman

Vice Chairman

Treasurer/

Secretary

## **2. TECHNICAL ACTIVITIES**

### **2.1 Distinguished Lecturer Tour**

**1. Prof. Rajesh Gupta**, Department of Information and Computer Science, Center for Embedded Computer Systems, University of California, Irvine. USA, “**Design Technology And Architectural Adaptation For Deep Sub-Micron VLSI Systems**”, under the DLP IEEE Circuits and Systems, In collaboration with IEEE Bangalore section on 6<sup>th</sup> December 2001.

### **2.2 Technical Talks**

**1. Dr. M. K. Radhkrishnan**, Phillips, Singapore, “**Failure Analysis Challenges in Deep Sub-micron Devices**” on 14<sup>th</sup> December 2001

**2.3 2. Prof. Gautam Sarkar**, Department of Mechanical Engineering, University of Alaska, Fair Banks, “**Development and Characterization of Low Dielectric Constant Materials for CMOS and other Microelectronic Device Applications**” on 19<sup>th</sup> December 2001

## **X.4 APPENDIX 4**

### **GOLD AFFINITY GROUP - IEEE Bangalore Section**

# ANNUAL REPORT 2001

## ORGANISATIONAL MATTERS

### Executive Committee

The Executive Committee consisted of four officers (Chair, Vice-Chair, Secretary and Treasurer), a web-master and volunteers. The following members were elected unanimously as the office bearers for the year 2001, in the first meeting of the GOLD Executive Committee held on 11<sup>th</sup> of January.

Chair	Anoop A
Vice-Chair	Roopa Rani
Secretary	Naved Narayan
Treasurer	Karthik C
Web Master	Sachin Goyal

The other members of the EXECOM were

Shivakumar G N  
Ranjit Castelino  
Pradeep B K  
Krishnaraj  
Mukunda Raju  
Joseph

### Co-opted members

The following members were co-opted to the EXECOM 2001, at the monthly meetings of GOLD EXECOM.

1. Mukund Raman
2. Anuj Gupta
3. Deepak
4. Aneesh Mathai

Roopa and Mukunda Raju have filled in as interim web-masters, as Sachin could not be present in meetings.

Mukunda Raju stepped down from the EXECOM in August 2001 due to personal reasons.

## EXECOM Meetings

GOLD monthly administrative meetings (EXECOM) were held on the third Wednesday of the Month. Thanks to Siemens Public Communication Network Ltd, all these meetings were held at SPCNL premises. There were 12 EXECOM meetings in 2001.

### GOLD programs for young engineers

Year 2001 saw GOLD group celebrate its 1<sup>st</sup> Anniversary. GOLD activities in 2001 were centered on technical talks. There were 6 talks on various topics ranging from Signal processing to career planning. But last year also saw some important changes as we evolved to meet the needs of the future GOLD members, the graduating student members. IEEE Bangalore section and GOLD group jointly organised a workshop for Student branch leaders in November 2001.

## A Report on GOLD Talks

### Talk on "Microelectronics & Entrepreneurship"

Speaker Mr. Prakash Bhalerao (Chairman, CMOS Chips Inc.)

Date January 24, 2001 at 6.30 PM

Venue Hotel Windsor Manor, Bangalore

Mr. Prakash Bhalerao, a recognized successful entrepreneur in the Silicon Valley, has successfully taken more than 25 start-ups through IPO or acquisition.

The presentation was one of the most educative and informative ever for the audiences. The talk was well attended with a strength of slightly more than 85 people representing various companies.

### **Talk on "Corporate Linux"**

Speaker Atul Chitnis (Director, Exocore Consulting)  
Date January 31, 2001 at 6.30 PM  
Venue Siemens Communication Software, MG Road, Bangalore

Mr. Atul Chitnis has been involved with Linux since 1993. He touched up on the Evolution of Linux, how it differs from UNIX, its shortcomings, LINUX in India etc.

### **Talk on "Young Engineers at Crossroads"**

Speaker Dr. Gopal P. Mahapatra (General Manager, Corporate HR, BPL)  
Date July 09, 2001 at 6.30 PM  
Venue Siemens Communication Software, MG Road, Bangalore

It was a highly entertaining and enlightening talk on career planning.

The presentation was followed by an 'Open House' with the speaker clarifying things for the audience, and screening of a short piece from the motivational video, "Power of vision".

### **Talk on "A Random Walk Through Signal Processing"**

Speaker Mr. Murali Krishna (Research Scholar, IIT, Mumbai)  
Date August 16, 2001 at 6.30 PM  
Venue Philips Software Centre, Murphy Road, Bangalore

Mr. Murali Krishna's talk was a short trip through the various stages of development of signal processing. The talk was well attended with an audience comprising of students, academicians and professionals from various organisations and companies.

### **Talk on "Technical Aspects of Reva Electric Car"**

Speaker Mr. Chetan Maini (Managing Director, Reva Electric Car Company)  
Date September 14, 2001 at 6.30 PM  
Venue Robert Bosch India Ltd, Bangalore

Reva, the India's first Electric Car, is a joint venture between Bangalore based Maini Group and Amerigon Electric Vehicle Technologies (AEVT Inc.) of USA. In this talk, the speaker elaborated on the technical aspects of the car. The talk was well attended with over 80 participants.

All the participants took a test drive on the track around the Robert Bosch facility and most were very appreciative about the feel of the car.

### **Talk on "MPEG4 based Speech Codec and its variations for Wideband Applications"**

Speaker Dr. Jayakumar Singaram, CTO, Epigon Audiocare Pvt. Ltd)  
Date November 19, 2001 at 6.30 PM  
Venue Philips Software Centre, Murphy Road, Bangalore

Dr. Jayakumar Singaram has been working on Audio and Speech related area in the past for "more than half a decade". In the lecture, more emphasis was given to detail "how to design a New Generation Speech Codec that have maximum efficiency".

## **Student Branch Activities**

### **Student branch leadership program**

Date November 22, 2001  
Venue Dept. of Electrical Engineering, IISc, Bangalore

Student branch leadership program on 22<sup>nd</sup> November 2001 was organised by IEEE Bangalore section and GOLD affinity group. It had 19 registrants from 9 Engineering colleges.

In his inaugural speech, Prof. Thathachar addressed the benefits of IEEE membership. Prof. Khincha, Region 10, REP Coordinator, gave an overview of IEEE and its structure. Prof. Rajgopal, Chair IEEE Bangalore Section, talked about IEEE activities in Bangalore and the various programs that are underway. Mr. Arjuna Rao Chavala, Chair Student Activities, gave an overview on the student branch activities in the section. Mr. Anoop A, Chair GOLD-Bangalore, talked about IEEE GOLD affinity program and activities of GOLD-blr.

The highlight of the workshop was the brainstorming and discussion sessions on Vision for student branches, issues in realizing the vision and approaches to resolve the issues. Mr. Momidi Ramakrishna, General Manager Human Resources of Philips Software Centre, facilitated this session.

In the experience sharing session that followed, Ms. Roopa, GOLD-Bangalore Vice-Chair shared her experiences as a Student branch officer.

Copies of Branch Operations Guide were provided to all participants.

### **GOLDie's day out**

Social outings aim to offer a positive and enjoyable break for the member, providing an opportunity to meet people. It enhances relationships between the team members and helps in developing new skills.

On March 22<sup>nd</sup>, a group of 8 of us from GOLD group made it's first ever outing. We had an evening of FUN. All in all, it was a pleasant and informative evening for all.

We have learnt that group outings are ways in which members can be involved in introducing others to the GOLD activities.

### **GOLD Website**

GOLD-Bangalore heralded its presence on the Internet with the launch of its website, <http://www.ewh.ieee.org/r10/bangalore/gold/>, thanks to the dedicated efforts of Ms. Roopa and Mr. Mukunda Raju. The website provides loads of useful, well-organized information on GOLD in general and GOLD group activities in Bangalore. One can find an up-to-date GOLD Calendar, which lists all the oncoming GOLD programs, presentation slides from the previous GOLD activities and reports on the same, links to mailing list and Contact information. At the end of last year, the site has more than 400 hits.

### **GOLD e-Mailing list**

IEEE GOLD-Bangalore has an automated mailing list, [majordomo@majordomo.ieee.org](mailto:majordomo@majordomo.ieee.org). This mailing list is for all GOLD members who are interested in activities of IEEE GOLD Bangalore.

GOLD group also maintains a mailing list at yahoo, [gold-blr@yahogroups.com](mailto:gold-blr@yahogroups.com), for all those who are interested in GOLD activities.

### **Summary Of Activities**

3<sup>rd</sup> of August 2001 marked the completion of a very successful first year of operation for GOLD affinity group in Bangalore. To make a very long story short, we were successful in bringing forth and sustaining the GOLD affinity group activities in Bangalore. We also have established contacts with the student branches under IEEE Bangalore section, and were successful in publicizing GOLD among student members who would take over the reins of GOLD-blr in the coming years.

### **Plans for the future**

1. The GOLD Executive committee/ Core Group will have Student branch leaders, who will act as an interface between the GOLD group and the student branches.
2. The GOLD group is in the process of defining a mentorship program, which will link the GOLD/student members with the Section/GOLD members.
3. Another event the GOLD group is planning is a 'TechFest' - which will be a contest in technical skills. This will involve the students as well as the recent graduates.

4. As an added service to the members, GOLD group is planning to allow members to maintain their profiles at the GOLD site. The profile will contain information like the area of interest, work domain, hobbies etc.
5. It was decided to have monthly 'Knowledge Sharing sessions' where GOLD members interested in a particular topic of mutual interest can come together and interact. The format agreed upon for the Activity is for one volunteer to make a short presentation followed by a discussion on the topic. The other participating members are expected to make some preliminary study of the topic to make the best use of the discussion.
6. The venue of the programs of the GOLD group (talks on technical and management topics) will be split between the college campuses and the corporate facilities. A few student branches have shown their interest in hosting GOLD programs.
7. GOLD is also hoping to organize outings and team building activities in 2002.
8. Another idea is GOLD visiting Student branches.