



IEEE Bangalore Section

BROADCAST


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CHAIRMAN'S COLUMN

Dear Members & Readers,

Well, a year has indeed whizzed by fast, and before we realise year 2002 is over and we are well into 2003 ! A Hearty Welcome to all for the New Year 2003 !!

The year 2002 has been quite exciting and eventful for the Bangalore Section as well as the Chapters, GOLD and Student Branches. Several awards have come our way - that of Sustained Membership Growth Award for 2001 (after getting same for 2000), Distinguished Section Award for 2001 and Outstanding Student Branch Award to NIE, Mysore, all for Region 10. Adding to these, the Outstanding Volunteer Award for 2001 to our past Chair Prof. Rajgopal too! The Section and Volunteer Awards will be presented formally at the Region 10 Meeting in Penang in early April.

The AGM went off well, with usual gaiety and comradery (see the report and photos inside) at Ashoka Hotel, and with an excellent attendance. The new Execom 2003 is in place. Thanks to the Nomination Committee and the General Body for the expression of confidence continuing me as Chairman and several of the 2002 Execom as officers and members. It will be our combined endeavour to do well in 2003 to benefit all sections of members.

The Section has earned a good name for the quality of the Symposium, lectures and tutorials/workshops. We will continue this tradition and will seek help of volunteer members to make these even better. Student activities should receive greater attention, with the challenge of retaining membership in the face of a steep increase in the dues. GOLD and other volunteers should particularly pitch in here. Leadership workshop and colloquia will be planned and conducted to benefit more branches. Three new branches approved should be inaugurated soon.

The SP, CCEM and EDSSC Chapters should continue their activities strongly with a basket of offerings and activities. Efforts will be made to start one more Chapter this year.

The Section has a special project this year, that of organising and conducting the TENCON 2003 in October. We will need

contd...

REGION 10 OUTSTANDING VOLUNTEER AWARD

It is our great pleasure to announce, as many of you may be already aware, that our Past Chairman of the Section Prof. K. Rajgopal has been selected for the **REGION 10 OUTSTANDING VOLUNTEER AWARD**. It is indeed a great, but fully-deserved honour for our Prof Rajgopal. As you know, he has been a consistent contributor to IEEE and the Bangalore Section over several years in various capacities - from Student Branch Counselor to Execom Member, to Secretary, to Vice Chairman and finally Chairman during 2000-2001. He was instrumental in the Section receiving the Outstanding Membership Growth Award for 2000 and 2001.



Prof. Rajgopal will receive the REGION 10 OUTSTANDING VOLUNTEER AWARD at the Region 10 Meet at Penang, Malaysia to be held on 4-5 April, 2003.

Our Hearty Congrats to Prof. Rajgopal !!

Chairman's Column contd...

the support of many volunteer members for this event. The Committees have been doing their work and the activities will move into greater pace and focus soon now. The conference website has been in place for sometime now and will reflect the mounting activities and information.

At the AGM, in reply to our feedback survey, a number of members have indicated their willingness to serve the Section and Chapters. We will call upon these members, and hope to raise 2003, including TENCON, to a level of success that all of you will be proud of.

Best Wishes and Regards.

S.V. Sankaran
Chairman

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REPORT ON THE ANNUAL GENERAL MEETING



AGM Registration in Progress

The Annual General Meeting (AGM) of the Bangalore Section of the IEEE for the year 2002 was held on February 1, 2003 at Hotel Grand Ashok, Kumara Krupa Road, Bangalore. The AGM was well attended, by 142 members, several of them with their spouses, and 5 invitees. The total attendance was about 200 which included 22 student members. Prof. SV. Sankaran, Chaiman chaired the meeting. Ms. Rooparani was the master of ceremonies for the event. A handout comprising of the Agenda, Minutes of the AGM 2001, Secretary's report for the year 2002, Treasurer's report for the year 2002 and a compliment were distributed to the members.

Dr. Pal welcomed the gathering and thanked the members for taking time out of their busy schedules to attend the AGM which was the important annual meeting of the section.



(L to R) Mr. Arjuna Rao Chavala, Prof. Sankaran, Dr. Pal and Mr. Ramakrishna

Report of the Secretary for the year 2002

Mr. Arjuna Rao Chavala, Secretary presented the highlights of the various activities of the Section. He said that the section recorded a robust growth in membership. He pointed out that section has been very active in conducting various activities i.e. Tutorials, Workshops, Distinguished Lectures, Technical talks, and supporting student branches in various technical activities. He highlighted the Eleventh Annual Symposium and the Student paper contest, which was conducted in three categories and covered even non-Karnataka entries this year. He said that Prof. Jenkins' workshop on "RTOS" drew a huge attendance and generated significant income for the section. He said that the student branch leadership workshop was conducted for the second time in succession with active contribution from UVCE Student



Mr. Subramanian presenting the Student Paper Contest Award

branch. He highlighted the awards won by the section, i.e., Sustained Membership growth award, R10 Distinguished Section award and R10 Outstanding student branch award for NIE student branch and congratulated Prof. Rajgopal, Chairman for 2001 and the EXECOM for 2001. He thanked the members, speakers, volunteers for the support extended for the section's activities in 2002.

Report of the Treasurer for the year 2002

Mr. K. Ramakrishna, Treasurer for the third consecutive year, presented the audited section accounts for the year 2002 and highlighted the fiscal matters of the Section as given in the financial statement. The report presented a healthy financial position of the section with a growth of 17% in contribution to the corpus of the section over the previous year.

Society Chapters and GOLD Affinity Group Reports

Mr Shivakumar from CCEM Chapter, Prof. TV Sreenivas from SP Chapter and Ms. Rooparani from Gold group presented the details of various activities conducted during the year 2002 and plans for 2003.

Reports of Student Branches

There are a total of 20 student branches. The branch at IIIT Bangalore and KSIT, Bangalore were inaugurated this year. Approvals for branches at Dr AIT, Bangalore and SIT, Tumkur were received. Mr Sandeep from MIT, Manipal, Mr Sharjeel from UVCE, Mr Nishant Patel from Sir MVIT and Mr Sudhir Sreenivasachar from IIIT-B presented their branch reports. Mr. Arjun Rao Chavala, Chairman of Student Activities, presented reports of SJCE, Mysore and BEC, Bagalkot as the students or branch counsellors could not attend the AGM due to examinations.



Members and spouses sharing tea

Presentation of Student Paper Contest Awards

The certificates and prizes were distributed by Prof. LM Patnaik, Fellow of IEEE, Mr. CS Subramaniam, Life Senior Member and Mr Hiriyannaiah, Founder Secretary of the Section to the prize winners in the three categories of PG, Sri BRV Vardan UG(Karnataka) and UG(Non-Karnataka) respectively.

Election of the Executive committee for 2003

Mr Parameswaran, Chairman of the Nominations Committee (other members being Prof. LM Patnaik and



A Section of the AGM audience

Dr. Sridhar Mitta) presented the Slate for the Executive Committee for 2003 and in the absence of any nominations by petition, the Executive Committee for 2003 chaired by Prof. Sankaran was elected unanimously. Prof. Sankaran on behalf of new EXECOM thanked the members and the Nominations Committee.

Prof. Sankaran recounted the programs during the year 2002. He said that the Section plans to continue the momentum built up over the years in the year 2003. He said that the main event in the year 2003 would be the R10 TENCON international conference. He invited feedback from members and requested more members to become volunteers for the section's activities.

Wg. Cdr Parthasarathy proposed a vote of thanks. The AGM was followed by dinner.



The new 2003 Executive Committee



PROFESSIONAL ACTIVITIES THIS QUARTER

The Section organised Lectures by three distinguished experts during this quarter 2003. The first was by Dr. Rajasekhara from Delphi, USA on 29th January, the next by Dr. Kailas of Siemens, Bangalore on 12th March and the third by Prof. Dina Goldin of the University of Connecticut, USA on 13th March.

Dr. K.S. RAJASEKHARA

Dr. Rajasekhara presented a seminar on "Power Electronics for the Future of Automobiles" on January 29, 2003. This was co-organised by the Section and IISc and held at the Dept. of Electrical Engineering, IISc, Bangalore. This was a timely topic of much interest and the talk was well-attended by over 60 members, non-members and students from a cross-section of the industry and academics.

In his talk, Dr. Rajasekhara presented about the power electronic systems used for various future automobiles. The power electronics also has a major role in the 42 V architecture based vehicles. Series, parallel, and Integrated starter generator systems, and fuel cell vehicles were described. He talked about some of the architectures, converter/inverter topologies, and control strategies in these vehicle systems. He also discussed on the challenges related to power device selection, packaging constraints, topology selection, control issues, and cost issues. And gave a peek into the automotive technology that is likely to evolve in the next 8 to 10 years.

Dr. Kaushik Rajashekara received the B.Eng., M.Eng, and Ph.D. degrees from the Indian Institute of Science, Bangalore and MBA from Indiana Wesleyan University, USA in 1992. From 1977 to 1985, he was a Senior Scientific Officer, CEDT, Indian Institute of Science, Bangalore, India.

Since July 1989, he has been working in various technical and managerial positions in Delphi Corporation in the area of Electric and Hybrid propulsion systems, and electrical/electronic systems for automobiles. He was responsible for technical direction and management of several projects in the areas of electrical/electronic systems in automobiles, and propulsion systems for alternative powered vehicles, such as electric, hybrid, and fuel cell vehicles.

Presently, he is the Chief scientist, Propulsion, Fuel Cell & Energy systems in Delphi Corporation. Dr. Rajashekara has published more than 60 papers and has sixteen patents. He is a Fellow of IEEE. He was inducted into Delphi Innovation Hall of Fame in 1999.

Dr. SUDARSH V KAILAS

Bangalore Section organised a talk by Dr. Sudarsh V Kailas on 12th March 2003 at the Training Hall of C-DOT, Bangalore. The topic was "**Recent Activities in Pattern Recognition at Siemens**". There was a sizeable audience of forty professionals attending this.

Dr. Kailas is a multidisciplinary - an oceanographer, turbulence engineer, then a signal processing specialist. He received his Ph.D. in Aeronautical Engineering guided by Prof. R Narasimha, FRS. He has over 20 years of wide international experience and considered an expert in each area of his work. He is the inventor of the world's fastest digital filtering algorithms and is now writing a book on Digital Filters. He has published a number of papers in technical journals and guided several Ph D theses and academic projects.

Dr. Kailas was the head of planning and execution of the MONTBLEX weather project, later head of the NABLO project to build the tallest atmospheric boundary layer sensing facility in the tropics and Deputy Director of the SARAS Light Transport Aircraft. Dr. Kailas is presently General Manager (Technology) at Siemens Information Systems Ltd., Bangalore.

In his talk Dr. Kailas outlined the state of the art developments in pattern recognition, and discussed on the highly effective algorithms developed at SISL, India, and illustrated the development by examples. He mentioned how Indian talent at Siemens, India could develop the best algorithms that excelled in speed and dexterity, and the potential that exists in India.

Prof. DINA GOLDIN

The lecture by Prof. Goldin was organised by the Section and CCEM Chapter and was held on 13th March 2003 at the Philips Software Centre. She spoke on the topic "**Sensor Network Querying**".

Prof. Dina Goldin (BS, Yale University, USA; MS and PhD, Brown University, USA) is a faculty member at the University of Connecticut, USA. Her research interests include sensor network queries, models of interactive computation, constraint and spatial databases, database models and query languages, and similarity queries for time-series data.

Prof. Goldin is the Information Director and member of the Board for the ACM Computing Reviews. She was a recipient of the prestigious NSF CAREER award, and a member of the Information Management Panel of CC-2001 (ACM/IEEE-CS Joint Curriculum Task Force). She is a member of the ACM and the IEEE Computer Society.



BROADCAST ON THE WEB

Dear Members,

You are aware that the BROADCAST newsletter has been in your service for the last six years and going into the seventh year with this issue. Meanwhile our membership has grown substantially and postal costs have quadrupled since inception of Broadcast. You are also aware that the Section's website www.ieee.org/bangalore has been operative for quite sometime now, and has been carrying portions of the Broadcast. In order to minimise our postal costs and yet reach the membership, we have proposed, during the recent AGM, placing the newsletter on our Section website this year besides the mailing. We would like all of you to make it a habit to see the newsletter on the website, and let us know if you would still like to receive the mail copy. Please give your feedback by email to ieeblr@vsnl.net

IEEE Delhi Section is already having the newsletter on their website, and Sections in other countries are already doing the same. Your help and cooperation is solicited in cutting costs and to help the Section be more effective in serving your needs.

Best Regards
S V Sankaran, Chairman

EDITOR'S REFLECTIONS

Dear All,

It is my pleasure to greet you all in the new year 2003, as the new Editor of Broadcast.

This newsletter has now entered its seventh year of publication. Hopefully it has been serving the members well and you enjoy receiving it as much as we have enjoyed producing it for you.

The March 2003 issue is here. Broadcast always welcomes suggestions and contributions of News, Reports, Technical activities from the membership. Let us know of any special awards and achievements too. Letters to the Editor are also welcome.

Let's look forward to a good year 2003!

Best Wishes & Regards

A. M. Bhagwat,
Editor



professional activities contd...

Prof. Goldin was visiting Bangalore in the context of the ICDE International Conference at Bangalore and agreed to present an IEEE talk, on very short notice. The audience, though limited, was very interested and interactive, making it a lively presentation.

In her talk she spoke of how in network computing the computers will soon become "invisible", and how networks of autonomous sensors can be embedded in a variety of environments, such as high-rise buildings, airports, highway stretches, or even the ocean. They enable the monitoring of environments for a wide variety of applications, from security to biological. The ability to query sensor networks in an ad hoc fashion would be key to their usefulness. Rather than re-engineering the network for every task, as is commonly done now, ad hoc querying allows the same network to process any of a broad class of queries, by expressing these queries in

some query language. She discussed how transparency is achieved by giving the user a single point of access to the network (the server), and by focusing on query primitives that are independent of the exact number and routing configuration of the sensors in the network.

Prof. Goldin mentioned that in each of the areas of database querying, the sensor network setting introduced novel aspects that need to be acknowledged and addressed. She discussed on some of these novel issues introduced by the sensor network context, outlined some of the work done at the University of Connecticut and concluded with some of the open questions in this emerging new area of research.

More talks are slated for the near future; members may please be on the lookout for the announcements.





STUDENT ACTIVITIES Q1, 2003

Hello,

It is time for change. Mr A Raja Rao, has taken over as Student Activities Chair for the year 2003 recently. Here is a brief update on the student activities for the Q1, 2003 and plans for Q2 2003.

Student branch update.

What better way to summarize the momentum we built up on student activities than this email from Hiromasa Haneda, R10 Membership Development Committee received few weeks back.

-----Extract from Original Message-----

From: Hiromasa Haneda <haneda@cs-ee.eeddept.kobe-u.ac.jp>
To: svsan@ieee.org <svsan@ieee.org>

Cc: marzuki@utmkl.utm.my <marzuki@utmkl.utm.my>;
Date: Thursday, January 30, 2003 12:06 PM
Subject: 2002 New Student Branches in Your Section:
Bangalore Section

Dear Dr. Sattupathu V. Sankaran:

Congratulations on your big efforts on promoting new Student Branches (SB) in your section during the year of 2002.

I have asked The Treasurer to allocate R10 subsidy to your section regarding those new SB's. In your section five SB's were created and I hope they have already been enjoying a lot of activities.

Each SB is granted \$100 for the start-up, and hence your section will receive \$500 in total. Please make it sure that the grant be used exclusively for new SB's with \$100 each. I hope you can work with The Student Activities Committee in your Section on that matter.

On behalf of The Region 10, IEEE, I thank you again for your constant contributions.

Best regards,

Hiromasa Haneda

R10 MD Coordinator

--end of extract--

I congratulate the key faculty and students from, KSIT, Bangalore, Dr AIT, Bangalore; SJCIT Chickballapur; SIT, Tumkur for taking the key step in establishing student branches in their colleges.

Other updates

We have submitted the paper from GVIT for the R10 student paper contest. We have recognised six students from SJCE, Mysore and BEC, Bagalkot with Outstanding student certificates signed by IEEE President. Several student branches have also submitted application for best student branch, best branch counsellor awards. Let's hope for the best.

Plan for next quarter

Membership Development

As half year dues are in effect from March 1, We request the student branches to recruit members in large numbers. The Feb membership report from HQ reports that student membership did not decline, despite the increase in fee and this

is a reflection of the value provided by IEEE membership to the students. We hope that our students too will realize the benefit and join/rejoin IEEE soon. Please contact the section for any help.

Report of the activities from Jan 2002-Dec 2002 - Report should reach the HQ before 1 May 2003.

Student branch events

MIT Manipal, SJCE, Mysore' annual events are scheduled to be held in April. Please participate in these and other events and get benefitted.

Greetings!

A Raja Rao, Chair,
Student Activities-2003

Arjuna Rao Chavala,
Chair, Student Activities -2002
IEEE Bangalore Section

MESSAGE FROM ARJUNA RAO, MDC

Dear Members,

I greet you on taking over as Membership Development Chair for the Bangalore Section for the year 2003.

We have a tough challenge this year to retain current members and recruit new members. I request your support in meeting this challenge. As the half year membership dues are in effect from March '03, it should be easy to recruit new members. I am looking for volunteers from each company to represent IEEE and provide guidance to prospective members. Please drop me a mail and I will get in touch with you to send IEEE promotional material and membership forms.

As mentioned in the Secretary's report for the year 2002, we need to concentrate on upgrading the membership grades of our members, i.e, Associate to Member, Member to Senior Member. I urge all Members who have put in 5 years of service or more to spend some time to fill up the Senior membership elevation application form online and inform me. The URL is

<http://www.ieee.org/organizations/rab/md/smelev.htm>

If you prefer to fill up the paper form, please send me an email and I will send in the paper copy of application form.

Feedback, suggestions welcome.

Arjuna Rao Chavala
Chair, Membership Development Committee
IEEE Bangalore Section.
Email: arjunaraoc@ieee.org



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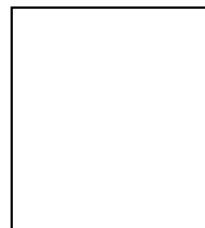
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