CHAIRMAN'S MESSAGE

Dear Enginieeer,

This is the first Newsletter of the new year. I take this opportunity to felicitate all our members and, on behalf of the re-elected office bearers, thank them for the confidence in us. Year 2001 is already proving to be a challenging year for our Economy, Capital Market and the IT sector. The effect of slowdown in the US economy, which accounts for 30% of the global economy is being felt in India's Software Industry too. The news of massive job cuts by large US corporations like CISCO, NORTEL, COMPAQ, INTEL and others and the large number of Indian software programmers idling in America without jobs (100,000 by certain reports!) is a cause of concern and worry to the Indian software industry. There is a school of thought that the economic slow down will eventually benefit India by forcing companies in US and Europe to opt for more outsourcing to cut costs. Hopefully, this could be the case, but it is going to take time and only those companies with adequate holding capacity may survive. Many may shed people to survive the downturn in the market. The salary levels may also dip in the process.

The above outlook appears pessimistic. But once we discount this challenge and factor this into our future strategies, India should look at this as a great opportunity for strengthening our IT industry. I can see several potential positive outcomes.

1. Software companies, so far used to abundance will now feel the need to use resources more carefully and efficiently. This will make IT affordable for the Indian customer and will provide a never-before opportunity for the domestic market to grow. The Government should realise this and actively promote IT consumption within India.

2. Software companies, so far used to the off-shore development mode, will be forced to develop vertical segments and application expertise, which will further strengthen them. This will create a more balanced utilisation of our engineers and professionals rather than moulding every engineer as a programmer.

3. The potential in the domestic market can give a boost to business consulting, where the value addition is much moret hat technical consulting.
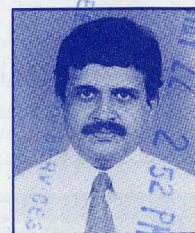
4. The Hardware sector, which is predominantly dependent on the domestic market, will have an opportunity to revive itself.

5. The present skew in compensation patterns could level out to a certain extent.

6. Most importantly, Indian software companies will have an opportunity to increase their competitiveness and take on the global market on a more diverse scale.

This is not the first time that the industry has been challenged. There has been a point of inflexion, in the form of either a challenge or an opportunity, every five or six years in the history of development of the Indian software industry In 1977, IBM was asked to leave the country. In 1984 the pronouncement of Software Policy Resolution opened up a new opportunity. During early 1990s, visa restrictions imposed by USA challenged the Indian companies who then opted for off-shore work through satellite links giving a major boost to the sector. Since 96-97 the various State Governments and Union Government have initiated policy measures for popularising the use of IT within the country, which created a tremendous opportunity. In 2001, we are faced with global economic slowdown immediately after a dotcom industry consolidation. Going by the cycle, one should believe that this challenge too will help strengthen our software industry.

The key to success this time will be how effectively we manage our resources-human resources, application expertise and domestic markets. The Government will play an important role, yet a professional organisation like IEEE can effectively catalyse the process. I would be keen to listen to the views our learned members on this.

K.G.Satheesh Kumar

CONTENTS

home page
http://www.ewh.ieee.org/r10/kerala

e-mail
ieeek@vsnl.com

phone
91-0471-473515

office
IEEE Kerala Section
"Harmonieee", 2695-5
Ambujavilasom Road
Trivandrum - 695 001

chairman
K.G.Satheesh Kumar
kgsatheesh@vsnl.com

secretary
Unnikrishnan A.K.
unnikrishnan@ieee.org

DIARY OF EVENTS

03-01-2001 "Virtual University" - Dr. B.Narayanan Nair, Director, Prathibha Soft Pvt. Ltd.,Trivandrum.

04-01-2001 A function organised by IEEE Kerala Section with other organisations to honour Lord Swaraj Paul - "Corporate Leadership Award for Excellence" at VJT Hall, Trivandrum.

10-01-2001 "Kerala's interest in Mullaperiyar" - Er.M.K.Parameswaran Nair,Former Member, KSEB

13-01-2001 Annual General Meeting (AGM-2000) of IEEE, Kerala Section at 18.30 Hrs at Hotel Horizon, Trivandrum.

17-01-2001 "Challenges in Hi-Tech Fabrication" - Er.V.K.Ramakrishnan, Deputy Division Head, MVIT/VSSC

24-01-2001 "Computerisation in Government Billing and Collection System of Kerala Water Authority-A Case Study" - Er.Sujatha.G, Data Base Administrator, Kerala Water Authority

27-01-2001 Meeting of new Office Bearers to nominate Executive Committee members for the year 2001.

27-01-2001 "Electromagnetic Interference-Problems and Remedies"-one day tutorial by Prof. Paolo Tenti, Distinguished Lecturer, IEEE (Professor of Power Electronics,Depariment of Electronic and Informatics, University of Padova, Italy) organised by IA & IE Chapter of IEEE Kerala Section, under the IEEE Distinguished Lecture programme.

07-02-2001 "Scientific Heritage of India" - Dr.V.B.Panicker, Retd.Principal, NSS College of Engineering, Palakkad.

09-02-2001 First meeting of the Executive Committee for the year 2001 of IEEE Kerala Section at 18.30 Hrs at Harmonieee.

10-02-2001 "High points of 20th century science"- P. Radhakrishnan, DD,LPSC,Valiyamala,Organized at IE Hall, Trivandrum.

14-02-2001 "The Second Mile"- Sri.Anthony Lobo, Assistant Manager,(HR),TCS, Mumbai.

14-02-2001 "Software Engineering Code of Ethics and Professional Practice" - Dr. S.R Ganesh, Consulting Advisor and Ethics Councellor, TCS and Mr.Anthony Lobo, Assistant Manager, Human Resources, TCS, at 18.00 Hrs at IE Hall, Trivandrum.

21-02-2001 "Software in Power Electronics", - Er.Madhu Mangal, MD, Beldrive (Pvt.) Ltd., Trivandrum.

01 TO 03-03-2001 "Conseg 2001 - Software Engineering: Emerging Paradigms" at Technopark, Trivandrum, Preceeded by one-day pre-conference on "Challenges in Software Project Management", organized by CSI Trivandrum Chapter in association with IEEE Kerala Section.

06 TO 09-03-2001 All India Students Congress (AISC-2001) of IEEE India at Mumbai, hosted by IEEE VESIT Student Branch of Bombay Section.

07-03-2001 "Earthquakes and Earthquake Proof Constructions" - Er.Subhash Chandra Bose, Retd. SE, PWD.

14-03-2001 "Oral Communication Skills" - Willington T Nevis, CTM, USA.

17-03-2001 Second meeting of the Executive Committee for the year 2001 of IEEE Kerala Section at 18.30 Hrs at Harmonieee.

21-03-2001 "Smart Cards"- G. Gopakumar, ER & DCT, Trivandrum.

28-03-2001 " Creativity to counter corruption "-Dr. N.N. Panicker, Tatsat Corporation,Trivandrum.

FORTHCOMING EVENTS

04-04-2001 "Modern Trends in Energy Conservation" - Dr. P.S. Chandramohan, Prof. College of Engineering, Trivandrum.

18-04-2001 "Road-digging Pitfalls" - Er. M.N.Prasad FIE, Retd. Chairman, Railway Board.

July 2001 Annual Seminar of IEEE Kerala Section.

18 TO 21-10-2002 The IEEE Sections Congress (SC 02) in Washington,DC.

19 TO 22-08-2001 TENCON 2001 at Superstar Virgo, Singapore, organised by IEEE Singapore Section.

2002 All India Students Congress (AISC-2002) of IEEE India hosted by IEEE Kerala Section.

Benchmarking for Global Competitiveness
- An overview

N.T.NAIR (Editor, IEEE India Bulletin)

In this era of globalized economy, enterprises are scouting around for knowledge on best practices that have helped many an organization to be world class. It is in this context that benchmarking, a late entrant to the management arena, is assuming importance after strategic planning and mission/vision statement, in the blueprints for achieving corporate excellence.

The story of modern benchmarking begins with the Xerox corporation of US, during the early 1980s when they found themselves in sudden crisis. The inventor of Xerography process, the company enjoyed monopoly status in 60s and 70s, with literally no rivals in sight. But the competitors were there who struck with a better quality product at a ridiculously low price - what it took Xerox to produce the copier in the first place. Realizing the gravity of the situation, Xerox went into a reverse engineering exercise on the rival product from Japan and what came out was astounding. The quality was far better than their own. In other fronts like delivery, customer care, technology up-gradation etc also Japanese were way ahead of Xerox. The end result was a business of looking at best practices and benchmarking.

There are two parts of benchmarking. One is the 'what' part, which is the benchmark itself - the specific goal the company wants to achieve. The other part is, 'how' is the company going to achieve this goal. This requires looking into similar practices that are being followed by different companies in the same industry, other industries or even around the globe. Benchmarking is comparing your practices with others and coming up with 'best practices' that reduce costs and generally result in efficiencies.

The most interesting example of benchmarking in the world is of the airline industry in the US. Every time an aircraft is on the ground, it does not earn revenue. Typically, turn around time of an aircraft is 40- 60 minutes, depending on size of aircraft. Some of the US airlines in bad shape during 80s looked at ways to reduce cost, through better capacity utilization. This meant reducing time on the ground. Taking cue from racing cars whose tyres are changed in a record time of 8 seconds, airlines could also cut down the turn around time of aircrafts to 18 minutes, thereby being able to operate an extra flight with the same aircraft.

Benchmarking is the most powerful technique for gaining and maintaining competitive advantage. The benchmarking process could be summarized as follows:

- Analyze the position you are currently in
- Find someone who is performing measurably better
- Learn from them what they are doing to achieve that performance

You then adapt your practices and processes as a result of that learning and so implement relevant changes which will effect superior performance in your organization.

The ideal time for benchmarking is not when business is bad, that is, when you are fighting with your back to the wall. Since benchmarking is not a recovery process, but an improvement process, it should be taken up when the going is good. This only will ensure that the organization goes through a steady and continuous growth pattern, always.

Malcolm Baldridge National Quality Award introduced in the USA in 1987, with the objective of providing firms with an incentive to improve the quality of their products and services, has helped in firming up benchmarking criteria.

References:
1. Benchmarking - by Sylvia Codling
2. Ravinder Singh in Economic Times
3. Robert C Camp in The Times of India

STUDENTS CORNER

Student Congress - 2001

An important program for all IEEE Student Branches in India - the National Level Student Congress and Symposium (Melange 2001) - was organised under the auspices of IEEE India Council from 6 to 9 March 2001. The event was hosted by the IEEE VESIT Student Branch in Bombay Section. A team of student representatives from various Engineering Colleges in Kerala, represented the Section.

Issac Muckadayil Paper Contest

Papers are invited from IEEE Student Members of Kerala Section for participating in the Annual Isaac Muckadayil IEEE Student Paper Contest 2001. Three cash prizes along with certificates shall be presented to the winners.

The prize-winning papers shall be presented at the IEEE Students Congress of Kerala Section to be held in Trivandrum and the prizes shall be presented at the Annual General Meeting of

IEEE Kerala Section in January 2002. Last date for the receipt of papers is 31 July 2001. For more details contact IEEE Student Counsellor of the concerned College or Dr. Madhu Mangal, Chair, Joint Chapter on IA & IE.

R-10 Student Paper Contest

Papers are invited from Student Members for participating in the IEEE Region 10 Student Paper Contest 2001. For more details contact IEEE Student Counsellor of the concerned College or Prof. C.V. Chang, SAC Chair.

AISC-2002

IEEE Kerala Section is hosting the All India Student Congress 2002 (AISC-2002) and a core committee is formed with the following members in the group to initiate early arrangements. Dr. P.S.Chandramohan, Chair.

Shri. Jayanarayanan, Chengannur Engineering College.

Ms. Veena Venugopal, College of Engineering, Trivandrum.

To Do or Not To Do

R. Narayanan, Vice President, TCS

With the advent of several quality frameworks, we are bombarded by slogans to document our "good" practices (there can be only one "best" practice"!) so that others can benefit by reusing them. Working as we are with a science that is rather inexact at this point of time, I thought it makes equal sense if not better sense to document "bad" practices so that others are prevented into falling in the same traps. Learning through negatives has been one of the paradigms from the vedic ages. Many of our Vedic sayings describe abstract concepts in terms of a series of "Not this". Mathematical results and conjectures are often "disproved" through counter examples. They are also proved through a proof technique called "reductio ad absurdum" whereby an allegation is made containing the inverse of the desired result and then through rigorous arguments arriving at a contradiction. The prefix "anti" usually has a negative connotation. But a little reflection would tell us that antibiotics, antiseptics, antibodies and antidotes do us a lot of good.

Deriving from architecture, the concept of "design patterns" has assumed significance among software practitioners. They document solutions to commonly occurring problem contexts. There has been no controlled study to measure the increase in productivity due to "reuse" of design patterns. It is fairly easy to document and reuse patterns that have an algorithmic flavor. We are all too familiar with the Library of scientific subroutines and the library of "classes" for commonly occurring data structures. But designs often incorporate "soft" and heuristic attributes. Many of us, even with the best of intents to reuse existing software artifacts, are disappointed because these were not created at the right level of abstraction. Hence rather than risking applying these in wrong contexts we feel that we would be better

off by inventing the wheel for ourselves.

Documenting the bad practices does not require elevating concrete experiences to a higher level of abstraction. Most software developers are not trained to discern the abstract - concrete mappings and can not recognize isomorphic structures. They feel more at home when they find descriptions of scenarios that creates a sense of déjà vu. An Antipattern then is a commonly occurring pattern that produces undesirable effects. It could also be a case of a pattern applied in a wrong context. The history of software development to date is rich with a storehouse of antipatterns. While one can attempt at a countable set of "do's" the set of "don't do's" is infinite and hence offers greater research potential.

In the industrial use of chemicals it is common to demand not only the presence of desirable properties but also the absence of undesirable properties. Software perhaps can take a clue and the quality assurance mechanisms may include a checklist of undesirable properties and processes to show their absence. In qualifying a software we have experienced that it is easier to detect the absence of a desired property but it is trickier to show the absence of undesired properties - "side effects" in procedural designs and "hereditary" defects in Object Oriented designs are too common to be ignored

We can create software antipatterns from unsuccessful software projects after demonstrating (or preferably through rigorous arguments) that it was the presence of these antipatterns that led to the failure of the software solution.

These antipatterns are omnipresent all around us, they clarify the most common mistakes, they bring the software development process from ideal to ground reality, they guide us during change management efforts.

EDITORIAL

Closing the news-filled 2000, dawn of the real millennium has come into existance, neglecting the controvercy in inception. People all over the world had celebrated the arrival of the new millennium, with gorgeous preparation. It was a memorable year, but has gone silently without much disaster to the technological innovations. Still the global changes are happening around us and, of course, changes definitely continue.

Congratulations to the new Office bearers of IEEE Kerala Section, a covetable team - without much change in the major roles - comprising of enthusiastic and energetic professionals with proven capabilities in taking intelligent, safe and concrete decisions every time. Their ability to interweave several strands with an intense touch over them to keep them united, is something marvellous. It is a pleasure, being with them this year also.

I have privilege to continue the Editorship for the fifth year, that too with the whole-hearted support and guidance of the members of the team. Actually, it is a fact that for the first three years I was following the conventional style used by my predecessors, in its form, layout, etc. After gaining much confidence and experience, I tried to put new ideas into practice in the Vol 9 # 1, for the year 2000. Earnest attempts were made to redesign the layout and form, increase the number of pages to twelve and to equip with news on various technical activities from various sources.

The enhanced work of the newsletter was a success and was well appreciated by the readers, which gave me immense pleasure and satisfaction. For the last two years, there are sufficient quantum of materials regularly reaching me and I found it difficult to choose 'the right' and to equip the limitted pages with 'the best'. In this context, we have to remember the fate of the newsletters of some other organisations, which are lean and irregular publications, for lack of news materials, as they mentioned in their reports. Here, I have to highlight the services of the IEEE Kerala e-Group over the Internet, as great blessing and boon to me in this regard in equipping with messages and supplying reports and articles from all possible sources. Thanks to the initiators.

A little bit about the secret of success. It is only due to devotion to duty and the precious time rightly spent for the formation of each issues of the newsletter, in addition to the co-operation and support from the colleagues that it became appreciable. One of the specialities of the current issue is that all its works - collecting news, editing, etc., except printing are completely done abroad, using the Internet facility.
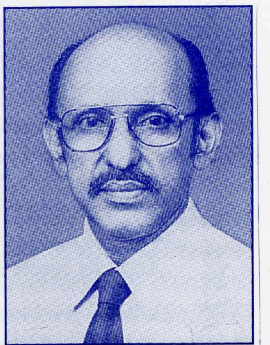
In the last year, we have celebrated the completion of twenty five years (1975-2000) of meritorious services in the professional arena of Kerala. Incidently, I happened to see a publication of Microsoft ("inside out! Microsoft - in our own words"), in connection with the celebration of their twenty fifth year (1975-2000). That too, Year 2000 - Silver Jubilee year ! Now, in this year, IEEE Bangalore is celebrating their Silver Jubilee.

Another most comprehensive and timely report recently published from the Headquarters of IEEE is on the crossing of membership target of 2000. It also reveals an appreciable (+ 8.4 %) growth of membership in Region 10. As our Section forms a part of the Region 10, we should be proud of this and presume that our membership development team can quite aptly move for a splendour growth in percentage of members and students in the coming years by retaining the existing members and recruiting new ones in a substantial and significant way, eventhough it may not be an easier task.

As usual, the beginning days of the year are beautiful to reflect, reminisce and thereby to reorganise plans for the coming days. But challenges and opportunities are there and one has to consider both, bearing in mind how to overcome the hurdles and roadblocks on the way. Always viewing the activities through a critical lens is natural and conspicuous. The constructive criticism from all corners, whether valuable or invulnerable will definitely encounter the strength and vitality of every activity. Let's move hand in hand with great perception and utmost dedication.

May this year be an eventful one than all the previous years.

Regards,

K. Gopalan Nair

Chapter News

IA & IE Societies

A tutorial on "Electromagnetic Interference- Problems and Remedies"

Power Electronics has gone through intense technological evolution during the past three decades and it has been finding wide application in industrial, aerospace, commercial, and residential environments. With the technological advancement, many associated problems came into existence. The most important among them is the Electromagnetic compatibility. Releasing its importance, a tutorial on "Electromagnetic Interference-Problems and Remedies" was arranged by the Chapter on IA & IE Societies of IEEE Kerala Section on 27-01-2001 at the Amphitheatre of ER&DCI, Trivandrum. The speakers of the tutorial were Prof. Paolo Tenti, Distinguished Lecturer of IEEE

and Prof. Giorgio Spiazzi both of University of Padova, Italy. Dr. Paolo Tenti is an expert in the industrial electronics, static power conversion, and electromagnetic compatibility. He holds national and international patents and published more than 100 scientific and technical papers. Dr. Giorgio Spiazzi is an expert in areas such as control techniques of ac to dc converters with high power factor, soft switching techniques and electromagnetic compatibility in Power Electronics. The tutorial was mainly oriented to the discussion of the European Directive 89/336 and Harmonized standards series IEC 1000/CENELEC 61000. They have given the details of this directive which specifies the emission and immunity requirements of every electric/electronic equipment sold in the European market and involves a comprehensive EMC regulation environment, from low frequency harmonics

---

IEEE KERALA SECTION ANNUAL REPORT FOR YEAR 2000

The activities of IEEE Kerala Section, for the year 2000, commenced with the Annual General Meeting held on 29th January at Hotel Horizon, Trivandrum. During the meeting, the following members were unanimously elected as office bearers for the year 2000.

Shri Satheesh Kumar K.G	:	Chairman
Shri Narayanan R	:	Vice-Chairman
Shri Unnikrishnan A.K	:	Secretary
Shri Sunil Kumar I. N	:	Treasurer

The first meeting of the Office Bearers was held at Technopark on 31 January 2000. In the meeting, various sub committees, chapter officers and other section officers were nominated in consultation with the concerned members.

HIGHLIGHTS OF ACTIVITIES

1. Year 2000 was the Silver Jubilee year of IEEE Kerala Section. Silver Jubilee talks by Dr. F.C. Kohli, Fellow IEEE and Dy Chairman TCS were organized as a curtain raiser for the year's activities, on 17th February.

2. Co-sponsored National Seminar COMM 2000, on "Communication Technologies in the New Millennium" with IETE.

3. Conducted Computer-Internet awareness class for school children jointly with Computer Society of India (CSI) and Internet Society.

4. Organised a meeting and distributed the Millennium Medals to seven distinguished members of the Section and felicitated them by Shri K.P.P Nambiar, founder Chairman.

5. Conducted a talk by Shri R. Muralidharan, General Manager (Engineering), OSS Systems India, a Computer Society Distinguished lecturer, on "Optical Networks - Issues and Data transport".

6. Student Congress "ELIXIR" organised by Chengannur Engg. College Student Branch.

7. Co-sponsored "Trends - 2000, one-day Seminar on "Internet - Server side technologies", with CSI.

8. Launched the "ieeekerala, e-group" bringing all IEEE Kerala Section members under one email id.

9. Launched the affinity group - IEEE & Society.

10. Launched the affinity group - IEEE Women in Engineering.

11. Organised the section Annual Seminar, TECON 2000 on "Technology Convergence for Global Communication".

12. Co-sponsored 15th National Convention of Computer Engineers of Institution Of Engineers "E Governance - Challenges and Prospects" EGO 2000 along with Institution Of Engineers.

13. Over 50 Technical talks by eminent professionals

were held as weekly events jointly with sister professional bodies.

14. Organised a one-day workshop on "Latest Trends in Power Electronics", by IA&IE Society Chapter.

In addition to the above activities, different Student Branches all over the State held a number of programmes.

IEEE SECTION AND OFFICE

The present membership position of IEEE Kerala Section is as follows:

Members	:	206
Senior Members	:	28
Life Member	:	1
Senior Life Members	:	2
Associate Members	:	160
Total Higher grade	:	397
Students	:	408
Total	:	805

The Section has three Society Chapters. A Joint Chapter on Industry Applications and Industrial Electronics, a Computer Society Chapter and a Power Engineering Society Chapter. There are 10 Student Branches functioning in various Engineering colleges of Kerala.

This year, two new affinity groups were formed with the aim of reaching out to the Society at large. They are IEEE & Society and IEEE Women in Engineering.

SILVER JUBILEE

We started off this year's activities with a Silver Jubilee lecture by Dr. F.C Kohli, Fellow IEEE, who was instrumental in starting our Section. The lecture was conducted on 17th February, at Technopark. Dr. Rane, former Chairman and Life Member presided over the function.

ANNUAL SEMINAR

This year's annual Seminar, TECON 2000, was conducted at Technopark, on 29th July 2000. The theme of the seminar was "Technology Convergence for Global Communication". The Seminar was a great success in terms of attendance, sponsorship and speaker line up. The total number of delegates registered was 147. The speakers were drawn from multi national companies like NOKIA, MOTOROLA, INFINION, ALCATEL and IIT, Kanpur. The Seminar was sponsored by SunTec, USsoftware, Tata Consultancy Services, TechniSoft, IT Mission Group, Govt. of Kerala and NesT. The seminar generated a surplus amount of Rs.1.31 lakhs. The WEB based on line registration of delegates was introduced for the first time. The success of on-line registration even lead to closing of the registration much before the scheduled closing date. The Proceedings of the seminar was also made available on-line. The Seminar Organising Committee, in particular the Organising Committee Chair, Shri Philip John, and Secretary Shri Simon Zachariah deserve special mention for the excellent conduct of the Seminar.

TECHNICAL TALKS

Over 50 Technical talks on various topics of current interest were conducted in association with other Professional bodies at Trivandrum, viz., Institution of Engineers (India) - Kerala State Centre, Computer Society of India -Trivandrum Chapter and Institution of Electronics and Telecommunication Engineers - Trivandrum Centre.

The following are some of the talks held.

1."Recent Trends in Networking", V.K. Bhadran, Dy. Dir. ER&DC(I)" - March 8, 2000.

2."Automobile Scenario" Shri N.T Nair, Vice President, CMS Computers, Trivandrum - April 5, 2000.

3."Career Opportunities in IT Enabled Services", Dr. V. Gopalakrishnan, GM BHEL Trichy - April 11, 2000.

4."Rise in Energy Charges and flow of Fault Currents" Shri K.K Vasu, Electrical Design Engineer - April 12, 2000.

5."The Magic of Neuro Linguistic Programming" Dr. A. Abraham, M.D, Hidden Resource, U.K - May 5, 2000.

6."Role of Technology in the Advertising Profession" Shri V.S.S Nair Consultant engineer, Trivandrum - May 10, 2000.

7."Energy Management", Prof. V.K.Damodaran, Director Energy Management Centre, Trivandrum - June 7, 2000.

8."Custom Power", Mrs. K.A Fathima, Addl. Dir. ER&DCI(T) - June 21, 2000.

9."Internet- Broadband options" Shri N.T Nair, Vice President, C.M.S Computers Ltd.- July 5, 2000.

10."R&D Management", Shri Sreenivasan CMD, Keltron- July 12, 2000.

11."Image Processing and its Applications" Dr. Kesavasamy, TCS- July 19, 2000.

12."Toward Dependable Software", Shri R Narayanan, Vice President T.C.S- August 16, 2000.

13."Networking & Process Industry ", Shri N. Krishnan, Addl. Director, ER&DCI(T) - September 20, 2000.

14."Role of Professional Societies in the Information Age", Shri N.T Nair, Vice President, CMS Computers, Trivandrum - October 11, 2000.

15."Distribution Automation using Auto-Reclosures", Mr. K. Balakrishnan Nair, Sr. Manager, Design & Development, ALIND, Mannar. - Nov 24, 2000.

16."Virtual University", Dr. B.Narayanan Nair-January 3, 2001.

Other than the weekly talks, two special lectures were conducted - first the Silver Jubilee Lecture by Dr.F.C. Kohli, and the second, "Optical Networks-issues and Data transport " by Shri Muralidharan, Chairman IEEE, Bombay Section and General Manager (Engineering), OSS Systems India.

AWARDS

Seven former Chairmen of Kerala Section won "Millennium Medals" from IEEE Head Quarters, for their meritorious services to the Institute. The Medals and Certificates were presented at a Special Ceremony, organised by the Section, at ER&DCI, Trivandrum, on June 1, 2000, by Shri K.P.P Nambiar, the founder Chairman. The recipients of the prestigious medals were

· Dr. D.S Rane
· Shri. N.T. Nair
· Prof. V.K Damodaran
· Dr. Vijay Kulkarni
· Shri. Koruthu P Varughese
· Shri. N.A.P Thampy
· Shri. S. Gopakumar

India Council has honoured Prof. V.K Damodran and Shri N.T Nair by awarding plaques in recognition of their meritorious service to the Council as newsletter editors for several years.

CHAPTER/ AFFINITY GROUP ACTIVITIES
IES & IAS CHAPTER

The Officers of this Joint Chapter are Dr. Madhu Mangal, Chairman and Shri R. Sudeep Kumar, Secretary. The Joint Chapter on Industrial Application and Industrial Electronics Societies, organised a one-day Workshop on "Latest Trends in Power Electronics", at ER&DCI(T), on August 24, 2000. Eminent speakers including Prof Ramanarayanan, IISc, Bangalore, Prof. V.K Damodaran, Energy Management Centre, Trivandrum and experts from Power Electronics Group, ER&DCI, Trivandrum delivered lectures on emerging Power Electronics technologies and their application. Keptech Power Controls, New Delhi, sponsored the workshop. More than 30 delegates from various industries participated in the workshop.

The chapter arranged a talk by Smt. K.A Fathima, Addl. Director, ER&DCI, Trivandrum, on June 21, 2000. The topic was "Custom Power".

PES CHAPTER

The Officers of this Chapter are Dr. Chandramohan, Chairman and Shri Simon P.V, Secretary.

Power Engineering Society conducted the following professional activities:

-Talk by Mr. K. Balakrishnan Nair, Sr. Manager, Design & Development, ALIND, Mannar, on "Distribution Automation using Auto-Reclosures"

-Industrial visit by Trichur Engineering College Students to Mannar ALIND Organised by PES Chapter

Power Engineering Chapter Secretary, Sri P.V Simon attended the PES Chapter Congress held at Washington, in July 2000.

COMPUTER SOCIETY CHAPTER

The Officers of this Chapter are Shri Philip John, Chairman and Dr. Kesavasamy, Secretary.

The Computer Society organised the following events:

-Talk by Dr. V. Gopalakrishnan, GM BHEL Trichy, on "Career Opportunities in IT Enabled Services"

-Talk by Dr. Kesavasamy, TCS, Trivandrum, on "Image Processing and its Applications"

-Talk by R Narayanan, Vice President, TCS, Trivandrum, on "Toward Dependable Software "

IEEE AND SOCIETY AFFINITY GROUP

The Officer-in-charge of this Group is Shri Sasi P.M. The IEEE and Society affinity Group organised a Computer and Internet awareness programme for school students jointly with CSI and Internet Society. This ten-day programme with lot of practical training was well appreciated by the participants.

STUDENT ACTIVITIES

Student branches in the Engineering Colleges functioned actively during the year. This year's All Kerala IEEE Students Congress -"ELIXIR" was organised by Chengannur Engineering College, Student Branch at Kottayam, on 10th & 11th November 2000. The two-day programme was a great success. The various events included the Spot Programming Contest, Technical Quiz, Electronic Circuit Design contest, Paper presentation, Brand Wars and Technical seminar. Shri Amit Raj Nair, Student Branch Chairman and his team deserves congratulations for the excellent conduct of ELIXIR. The Student Counsellor Shri Anil Kumar has given abundant motivation and encouragement to the Student Branch members. Prof. V.K.Damodaran, Director EMC, Trivandrum and former IEEE Kerala Section Chairman inaugurated the programme. IEEE Kerala Chairman presided over the inaugural function and Secretary felicitated. Prof. Sivakumar, IIT, Mumbai, Dr. Kesavasamy, TCS, Trivandrum and Shri S. Gopakumar, IEEE Kerala former Chairman were some of the eminent speakers of the technical seminar.

Student Chairmen's meeting was also held at Kottayam during the Students Congress, on 11th November. Shri S. Gopakumar represented the Kerala Section in this meeting. Activities of various Student Branches were discussed and reviewed.

Adoor Engineering College Student Branch organised a one-day programme called "ZEST", on 2 Dec. 2000. Shri S. Gopakumar gave three talks first on "IEEE", second on "Technology Trends" and third on "Real time system concepts".

Students' Professional Awareness Conference (SPAC - 2000) was organised by College of Engg. TVM, Student Branch at Technopark, TVM, on 4 March 2000.

REGION 10/ INDIA COUNCIL

Shri K.G Satheesh Kumar, Section Chairman attended the Region10 Meeting, at Langkawi, Malaysia, between 29 -30 September 2000. He also attended India Council Meeting, which was held there during those days.

Prof. V.K. Damodaran, India Council member and former Chairman of Kerala Section, extended his outstanding service as the Editor of "IEEE India Bulletin", the newsletter of IEEE India Council this year also.

Prof. V.K Damodaran, Shri S Gopakumar, Shri Muraleemohan Lal and Shri R Narayanan attended ACE 2000 at Mumbai.

INTER SOCIETY RELATIONSHIP

IEEE Kerala Section has been enjoying a unique relationship with other sister professional Societies, namely, Institution of India (IE), Trivandrum, Computer Society of India (CSI), Trivandrum and Institution of Electronics and Telecommunication Engineers (IETE), Trivandrum. The Section has actively participated in organising several joint activities with the sister-Societies, this year also. The following are some of the important activities organised jointly:

· National seminar on E Governance s- Challenges and Prospects " EGO 2000" with Institution Of Engineers.

· One-day Seminar on Internet - Server side technologies "Trends - 2000", with CSI

· National Seminar on Communication Technologies in the New Millennium "COMM 2000" with IETE

· Computer-Internet awareness class for school children with CSI and Internet Society.

NEWSLETTER

IEEE Kerala Newsletter has been redesigned with glossy paper and friendly layout. The new look of the Newsletter was well appreciated by the readers. Now the Newsletter carries advertisements to cover a part of the expenses. Newsletter Editor Shri K.Gopalan Nair deserves full credit for his commendable services in bringing out our newsletter regularly, giving a good coverage of all the section activities.

WEB-SITE

IEEE Kerala WEB-site http://www.ewh.ieee.org/ r10/kerala has been maintained in an excellent manner by our WEB Master, Shri Ajayaghosh. The on-line registration of the Annual Seminar TECON 2000, and down load facility of proceedings have received wide appreciation from the professional community. The WEB site is updated to include current news and events of the Section. The Section appreciates the services rendered by Ajayaghosh.

CONCLUSION

May I conclude this annual report for year 2000 expressing my sincere thanks to my colleagues in the Executive Committee, all members of the IEEE fraternity and the sister Professional bodies; namely IE(I), CSI and IETE for their co-operation, active support, encouragement and valuable criticism.

Unnikrishnan A.K.
Secretary
Trivandrum
10 January 2001

IEEE Kerala Section Office Bearers for the Year 2001

Chairman
K. G. Satheesh Kumar
Aiswarya, Nettayam
Ph: 527152(O), 360017 (R)
Fax: 417971
Trivandrum - 695013
E-mail: kgsatheesh@vsnl.com

Vice-Chairman
R. Narayanan
"Madhuvan"
TC 6 / 760 Arapparamukku
Vattiyurkavu PO, TVM 695013
Ph: 416691 (O), 361137 (R) ,Fax: 416682
E-mail: narayanan@tvm.tcs.co.in

Secretary
Unnikrishnan A.K
A4-05, Sastha Nagar,Thirumala
Trivandrum - 695006
Ph: 320116 (O), 352762 (R)
Fax: 331654
E-mail: unnikrishnan@ieee.org

Treasurer
Sasi Pilacheri Meethal
TC 14/1520
Near Valsala Nursing Home
P.O Thycaud, Trivandrum- 695014
Ph: 320116 (O), 320341 (R), Fax: 331654
E-mail: sasipm@ieee.org

Membership Development
Simon Zachariah
XI-394-1, 48, Christ Nagar Colony
Trivandrum - 695003
Ph: 332951 (O), 318435 (R), Fax: 331654
E-mail: simon@erdcitvm.org
        kariachan@hotmail.com

Professional Activities
E. E. Rajakumar
Group Director,
Computer and Information Group
VSSC, Trivandrum - 695022
Ph: 565506 (O), 448363 (R), Fax: 415212
E-mail: ee_rajakumar@vssc.org

Educational Activities
N.A.P Thampy
Gowrivilas, XXVI-1845, GPO Lane
Statue, Trivandrum - 695001
Ph: 321209 (O), 477390 (R) ,Fax: 321209
E-mail: napthampy@eth.net
        napthampy@mail.erdct.com

Newsletter Editor
K. Gopalan Nair
TC 5/1637, Ambalamukku
Peroorkada, Trivandrum - 695005
Ph: 04652-83842 (O), 437449, 435277 (R)
E-mail: kgnairs@hotmail.com
        kgnairs@eth.net

Student Activities
Chair: S. Gopakumar
Arathy, Chengalloor Road
Poojappura, Trivandrum - 695012
Ph: 364790 (O), 341209, 340194 (R)
fax: 364790, 361793
E-mail: s.gopakumar@ieee.org

Co-ChairC.V Anil Kumar
Student Counsellor,
Chengannur Engineering College
Chengannur
E-mail: a.r.nair@usa.net

Awards
J. Muraleemohan Lal
Madhava Mangalam, 14-651, Obs: Lane
Nandavanam, Trivandrum - 695033
Ph: 325359 Mobile:98470 64854
E-mail: j.m.lal@ieee.org

Conference Activities
V.J Jayakumar
TC 22-679, Aswathy
Manacaud P.O, Trivandrum 695007
Ph: 417222 (O), 459747 (R) ,Fax: 417971
E-mail: vjjayakumar@yahoo.com

Web Support
Ajayghosh T. S
"Anjali", KP 11/1313A
NCC Road, Trivandrum- 695005
Telephone: 320116 (O), 434259 (R),Fax: 331654
E-mail: t.s.ajayghosh@ieee.org

Inter - (Professional) Society Relations
N.T Nair
Radheyam, VI-1411, PTP Nagar (W)
Trivandrum - 695038
Ph: 331380 (O), 361316 (R)
E-mail: del@vsnl.com

IEEE and Society
I.N Sunil Kumar
T. C. No. 29/596, Seeveli Nagar
Kaithamukku, Trivandrum - 695024
Ph: 326531 (O), 472663 (R),fax: 321209
E-mail: sunilkumar@computer.org

IEEE Women in Engineering
Sudhamany S
Narayaneeyam, TC11-394
Kawdiar, Trivandrum-695003
Ph: 320116(O), 314872(R),Fax: 331654
E-mail: sudha@erdcitvm.org

GOLD
S. Meera
"Lakshmi", T.C. 31/1006
Pettah, Trivandrum - 695 024
Ph: 416671(O), 475851(R),Fax: 416682
E-mail: meeras@tvm.tcs.co.in

Student Representative
Chairman, Student Branch
College of Engineering, Trivandrum - 695016

Industry Applications and
Industrial Electronics Societies Chapter
Chairman
Dr. Madhu Mangal
"BHANU", Observatory Lane,Trivandrum-695033
Ph: 449769(O), 332087(R)
E-mail: mmangal@vsnl.com

Secretary
Sudeep Kumar R.
"Suroop", Tagore Nagar, Lane -J
AIR Road, Vazhuthacaud, Trivandrum-695014
Ph: 320116 (O), 331649 (R) ,Fax: 331654
E-mail: rskpeg@yahoo.com

Computer Society Chapter
Chairman
Philip John
Kattoor, V-822(3), GC Nagar
Peroorkada, Trivandrum - 695005
Ph: 415452 (O), 433594 (R), Fax: 417442
E-mail: philip@ushustech.com
        philipkjohn@hotmail.com

Secretary
Dr. K. Kesavasamy
Training-in-Charge, TCS
Technopark Campus, Trivandrum - 695581
Ph: 416671 (O), 325734 (R),Fax: 416682
E-mail: kesavasamy@tvm.tcs.co.in

Power Engineering Society Chapter
Chairman
Dr. P. S. Chandramohan
Professor, Dept. of Electrical Engineering,
College of Engineering, Trivandrum.
Ph: 418310 (O), 333490 (R),Fax: 418370
E-mail: pscnair@ieee.org

Secretary
Simon P. Verghese
TC 11/1698,"Prasanth"
Charachira, Trivandrum- 695003
Ph: 361704 (O), 317899 (R),Fax: 362760
E-mail: seemon@satyam.net.in

Members-at-large
Dr. D. S. Rane
8, Anantha Colony, Arappura,
Vattiyoorkavu, Trivandrum - 695013
Ph: 360865 , E-mail: dsrane@hotmail.com

Dr. Gomathy K. Muraleedharan
Kaivalya, XV-1533, Womens' College Lane
Vazhuthacaud, Trivandrum - 695014
Ph: 326039 (O), 326440 (R),Fax: 450541
E-mail: drkam@tinfo.net

N.T Nair
Radheyam, VI-1411, PTP Nagar (W)
Trivandrum - 695038
Ph: 331380 (O), 361316 (R)
E-mail: del@vsnl.com

Prof. V. K. Damodaran (SM04119145)
Darshan, XXVII-444/1
Kunnukuzhy, Trivandrum - 695037
Ph: 345578 (O), 306883 (R) ,Fax: 345587
E-mail: vkd@ieee.org

Dr. V. P. Kulkarni
Matruchhaya, Ulloor, Akkulam Road
Thuruvikkal, Trivandrum - 695031
Ph: 305321 (O), 442478 (R) ,
E-mail: vijaykul@md2.vsnl.net.in

Koruthu P. Varughese
Bio-medical Engineer, SCTIMST
Trivandrum - 695011
Telephone: 524411 (O), 531384 (R),Fax: 550728
E-mail: koruthu@sctimst.ker.nic.in

G. Vijaya Raghavan
29, Chempaka Nagar
Bakery Junction, Trivandrum - 695001
Ph: 430959 (O), 331959 (R)
E-mail: vma@vsnl.com

N. A. P. Thampy
Gowrivilas, XXVI-1845, GPO Lane
Statue, Trivandrum - 695001,
Ph: 321209 (O), 477390 (R)
Fax: 321209
E-mail: napthampy@eth.net,
        napthampy@mail.erdct.com

S. Gopakumar
Arathy, Chengallur Road
Poojappura, Trivandrum - 695012
Ph: 364790 (O), 341209, 340194 (R)
Fax: 364790, 361793
E-mail: s.gopakumar@ieee.org

J. Muraleemohan Lal
Madhava Mangalam,
14-651, Observatory Lane
Nandavanam, Trivandrum - 695033
Ph: 325359, Mobile:98470 64854
E-mail: j.m.lal@ieee.org

⟹ *from Page 4 To Do or Not To Do*

The above thoughts were kindled while reading a book titled "Antipatterns-Refactoring Software, Architectures and Projects in Crisis" by a team of four experienced practitioners of Object oriented and distributed software environments. While trying to introduce practices that seem unconventional at the outset, the authors have resorted to a little exaggeration of the status of software development practices. I am sure that this license is permissible in order to drive home certain hard unpalatable truths that would otherwise be missed. For every antipattern discussed in the book, the paired desirable pattern is also indicated. I sincerely recommend the book as a compulsory reading to all our Project Leaders - it would count as the equivalent of four days learning out of the twenty days learning per year metric that has been introduced as part of Continuous Learning effort.

Reference: Antipatterns-William J Brown, Raphel C Malveau, McCormick III and Thomas J Mowbray, Wiley Computer Publishing, 1998.

(Reproduced with permission from SPARK, Newsletter of TCS, Trivandrum - Feb. 2001).

⟹ *from Page 6 Chapter News*

and flicker to conduct EMI and radiate noises and several immunity standards, either generic or product specific. As a part of the tutorial, the main problems occurring in industrial equipment (drives, refrigerators, air conditioners, UPS systems, welding machines, PC's, etc.) when subjected to certification tests were discussed together with some corrective provisions. Criterion to minimize low frequency and high frequency emission in the case of power electronic equipment (switching power supply with power factor control) was the subject of the discussion. The tutorial was designed mainly for engineers working in the industrial environment who are experiencing pressure to make their equipment to comply with the European standards or requirement.

The registration of the tutorial was started at 9.00hrs and 63 delegates were registered from different organisations viz., VSSC, ER&DCI(T), Toroid India Limited, Hykon, Peldrive, Calicut REC, AIT Coimbatore, CMS Computers etc. The overview of the tutorial was presented by Dr. Madhu Mangal, Chair, Joint Chapter on IA&IE, IEEE Kerala Section who introduced the speakers also. Mr. K. G. Satheeshkumar, Chairman, IEEE Kerala Section delivered the welcome speech. The Tutorial concluded at 17.30 hrs with vote of thanks by Mr. Sudeep Kumar, Secretary, Joint Chapter on IA&IE.

Computer Society Chapter

A talk on "Software Engineering Code of Ethics & Professional Practice" by Dr. S.R Ganesh (Consulting Advisor and Ethics Counsellor, TCS) and Mr. Anthony Lobo (Assistant Manager Human Resources in TCS) was organised by the Computer Society Chapter on 14 February 2001 at IE Hall, Trivandrum. They have given an exhustive picture on the Software Engineering Code of Ethics & Professional Practice (ACM/IEEE-CS v.5.2), adopted jointly by ACM and IEEE Computer Society. The Chapter is planning for at least 6 such events, this year.

Prof. V.K. Damodaran - IC Vice-Chairman

Prof.V.K. Damodaran has been elected as the Vice-Chairman of IEEE India Council. He was holding the Editorship of India Council Bulletin for more than last six years. Prof: V.K.D one of the recipients of the Special Award for the uninterrupted publication of the Bulletin. Hearty Congratulations and warm wishes for a very eventful year ahead as Vice Chairman.

Er.S.Gopakumar in Ethics Committee

IEEE India Council has established an Ethics Committee to provide the necessary advice and guidance to members and office-bearers at the Sections/Chapters/Student Branches, in the light of IEEE's policies, procedures and good practices. The nominated members are Quraish Bakir (Bombay)- Chairman, Dr.Kasi Rajgopal (Bangalore), S.Gopakumar (Kerala) and Dr.R.K.Vir (Delhi). These members will be invited members of the IC.

For Your Knowledge Bank
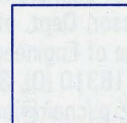
WORLD'S LARGEST IEEE STUDENT BRANCH

The World's ever largest IEEE Student Branch is in the PICT (*Pune Institute of Computer Technology*) with 857 student members. This is because of the collective efforts of the IEEE Volunteer Officers and Student branch volunteers, creating an awareness among the students on the advantages and benefits of IEEE membership. Always IEEE will provide help to remain on top with publications, International Conferences, Life long learning publications, etc.