# IEEE INDIA BULLETIN



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**Newsletter of IEEE India Council** 

**VOLUME 8 NUMBER 2 FEBRUARY 1998** 

#### CHAIRMAN'S MESSAGE

Am sure, by now most of our Sections/ Chapters would have completed their election / nomination process, as per IEEE byelaws and norms; and would be sending the same to IEEE HQ, along with the Activities Report and Accounts. Kindly send it to reach IEEE HQ before 22 Feb 1998, to get that special 10% Bonus Rebate; which is sizeable, with Rupee conversion rate touching 40. Hurry! Kindly also endorse a copy to India Council Secretary-cum-Treasurer for actions at our end!

For a professional Society like IEEE, the office bearers must ensure that the following are done by the time new teams take over:

- 1. Close the accounts, get these audited and approved by the AGM, along with the Activities Reports for the previous year.
- Prepare Activity Plan for the current Year along with Provisional Budget for approval by the New Executive Committee.
- 3. Inform all concerned about the details of new Team including India Council, so that it can be included in our monthly Bulletin.

In my view, sharing of information about people and activities at All India level will have a Catalytic effect on IEEE movement, especially in this Information Revolution era! India Council Home Page on the Internet will bridge the existing gap in this direction. Based on your suggestion, Partha has designed an excellent Home Page, which is under Alpha testing at present. It is now being released for Beta testing at http://members.tripod.com/ ~ieeeindia to get feedback from our active Professionals upto 28 Feb 1998. From March 1998, IEEE India Council will be on ewh. ieee.org, where we have been allotted our Permanent Home! This puts an additional responsibility on our Volunteers in Sections / Chapters to ensure

that we are always updated. Dr. Parthasarathy is being designated as Pagemaster for India Council and he will be a permanent Invitee to India Council meetings, like the Editor of our Newsletter. You all can approach him for any suggestions / help.

Computer Society members may be aware of Joint Task Force of IEEE-CS and ACM for finalising Software Engineering Ethics and Professional practices. These are over and the 10 point ETHICS of IEEE sent to all, along with our renewal cards every year. Final draft has now been circulated for feed back through IEEE Computer Nov. 97 issue and Web at http:/ /computer.org/tab/prof/se/. The draft gives the Preamble, Code containing 8 Principles relating to Product, Public, Judgement, Client & Employer, Management, Profession, Colleagues and Self. Each of these Principles has clear cut clauses for guidance to software professional. Since Information Technology is now covering every area of Engineering, I strongly recommend our members to see these and give their comments. Sooner or later, we

all are going to be affected by the Software.

Once again, I request our IEEE professionals to give me or any member of India Council, your valuable Comments/ Suggestions for helping us to do our job in better way in 1998.

DO SEE OUR HOME PAGE!



Hyderabad 01 February 1998

Dr. R K Bagga Chairman

#### **WISE AND OTHERWISE**

Life has its many mysteries, among which is why there is always one key on your chain that doesn't fit anything.

The life of a needle is always hanging by a

Don't tell the world what you can do; just do it



Mr. N. Vyaghreswara Rao, Secretary, IEEE India Council, who received the Outstanding Volunteer Award Region - 10, with Prof. Paul Y.S. Cheung, Secretary, IEEE at Brisbane, Australia during TENCON 97.

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## 1998 MEMBERSHIP RENEWAL PAYMENT

#### Mail from Fanny Su, Manager

"Our office has been receiving enquiries regarding the 1998 renewal invoice payment especially from those who have not renewed and are hesitating to do so because of the drop in currency exchange rates against the USD which is affecting the majority of countries in the Asia Pacific.

The IEEE is aware of the currency turmoil and the effect it is having on our members. Our priority is to retain our members.

Please let your local members know that if they have not renewed, they can send in their renewal with a local currency bank check using the exchange rate that is indicated in their renewal invoice. The exchange rate is very much more favourable as to what current exchange rate is now.

For example, a member in Singapore can send in his renewal invoice by cutting a check drawn on a local bank in Singapore such as United Overseas Bank etc. and sending it back along with the renewal invoice in the "Enclosed envelope" back to the United States. When the check reaches the United States, it will go through a banking clearing house for reconversion back to USD. IEEE has agreed to hold that exchange rate constant for the entire membership renewal cycle.

If you are uncertain as to what the exchange rate for your currency is against the USD in your renewal invoice, please email us and we will let you know what it is.

Note: If you have authorised a payment via your credit card, the transaction by the credit card company will be in USD. The credit card company will bill you at equivalent local currency at current market exchange rate against the USD and not at the exchange rate stipulated on your renewal invoice.

Members have until end Apr 1998 to renew, before they are dropped from the membership list and subscriptions terminated. So please encourage your local members to renew as soon as possible

If you have any questions regarding the above, please do not hesitate to contact our

Wishing all our Chinese members a Happy & Prosperours Lunar New Year and all our Muslim members a Selamat Hari Raya Puasa Aidil Fitri."

Best Regards,

Fanny Su Beh Noi (Manager) IEEE Asia Pacific Operations Centre/ IEEE Communications Society Office #59E Science Park Drive The Fleming

Singapore Science Park, Singapore 118244 Tel No: (65) 778-2873

Fax No: (65) 778-9723 e-mail: <ieeeapo@pacific.net.sg>

#### CONFERENCE FOR PETROLEUM & CHEMICAL INDUSTRIES

EEE in North America has been holding regularly Conferences which explore the use of IEEE technologies for specific segments of industry. The IEEE Industry Applications Society has played a leading role in such efforts. Such Conferences act synergically with technology-specific Conferences which present new developments in a specific field of technology. In India IEEE regularly holds the latter type of Conferences, through its Sections & Chapters.

One Conference, which IAS has been regularly holding, every year since 1954, is called IEEE Petroleum & Chemical Industry Conference, known as PCIC. However, till now it has always been held in North America only.

In India, the State of Gujarat has both, the upstream as well as the downstream industries in the oil sector. Moreover, it has a leading share of the chemical industries in India. Hence, it was natural that the effort to hold a PCIC-like conference, for the first time at a place outside North America, should begin in Gujarat. IEEE Gujarat Section and the Joint Chapter of Industry Applications, Industrial Electronics and Power Electronics Societies in Gujarat Section have jointly taken up the challenge.

A number of Joint meetings of the Section EXECOM and the Chapter ADCOM were held since November 1996. Separate meetings of interested members were held in the cities of Ahmedabad and Vadodara. After a careful analysis of the strengths and weaknesses of the IEEE entities in Gujarat, it has been decided to hold an International Conference on 'Computers, Electronics and Electrical Engineering in Petroleum and Chemical Industries' at Ahmedabad from Dec. 10-12, 1998.

The organisers of the conference hope that the conference would provide a platform where, the EE & Computer Professionals from the Petroleum & Chemical Industries. and the organisations engaged in satisfying the need for EE goods and computer hardware & software for the petroleum & chemical industries in India, will be able to meet their counterparts from all over the world. In particular large participation from outside India may be from the West Asian and the East Asian industries. Thus in a large measure, it is expected to be a Conference for the Petroleum & Chemical Industries from the Asia-Pacific region.

Since this is the first effort to hold a Conference of IEEE technologies as used in a specific - industry segment, it may be a pathbreaking event in India. However, such a conference can be useful to India only if our industry and our academic & research institutions participate in it in a big way. A Program Committee has been formed under the Chairmanship of Dr. M Ramamoorty, F.I.E.E., Director of Electrical Research & Development Association. At the first meeting of the P.C., members from ONGC and engineers from a number of Petroleum & Chemical Industries were present. With this excellent beginning, the conference of December 10-12, 1998 is likely to prove to be a major event in the technical calender of the year in the Asia-Pacific region. I therefore want to call upon all our members in India to associate themselves actively with the Conference so that the foreign delegates from West Asia, East Asia and some from other parts of the world are able to have an opportunity of meeting their counter-parts in India for an active mutual interaction.

IEEE has in the recent past, held in India, two excellent International Conferences in which the Indian members can take pride. In both of these conferences, there was a large-scale participation by the professionals from the developed world. The papers and tutorials were of the highest international

Though both the conferences had a large participation, I personally feel that a larger Indian participation would have been of greater benefit to the country. Hence, whereas we do expect a large international participation in the Conference, and the Organising Committee will naturally be paying attention to this aspect, I would expect the Organising Committee to pay an equal attention to bringing the conference to the notice of every Indian engineer working in the relevant fields. May I take this opportunity to request every member, who can help the Organising Committee to reach out to professionals in India and abroad to lend their hands for this important task?

A K AGGARWAL

Executive Vice-Chairman. IEEE INDIA COUNCIL

(e-mail: aka@ad1.vsn1.net.in)

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# FRIENDLY PREVIEW OF HOME PAGES OF IEEE - INDIA COUNCIL AND IEEE - HYDERABAD SECTION

Greetings from Hyderabad. Greetings from India.

On behalf of the IEEE India Council, and IEEE Hyderabad Section, I invite you to make a preview visit to IEEE INDIA COUNCIL home page at :

http://members.tripod.com/~ieeeindia and a preview visit to HYDERABAD SECTION home page at :

http://members.tripod.com/~ieeehyder

\*\*The preview will terminate exactly one month from now.\*\*

#### PLEASE READ THE FOLLOWING VERY CAREFULLY

This is only a beta version, for preview, and is kept \*temporarily\* in my sponsor's webserver. We are working with IEEE HQ for a permanent hosting arrangement. So, do not put links to these pages, or use the URL in your stationery and mails just now. I have already contacted the IEEE Headquarters and have got URL allotted for these pages. The IEEE designated URL will be announced to you very soon, after this PREVIEW.

Please visit the above webpages, and verify:

- 1. Completeness and accuracy of contents
- 2. Accessibility of all links within the same webpage and across webpages.
- 3. Structure and layout of these webpages.

Please feel free to make constructive criticisms of the above, as well as give your suggestions for improvement.

Please send by separate mails, your remarks on the India council homepage and your remarks about the Hyderabad Section homepage.

#### \*\*\*\*VERY IMPORTANT \*\*\*\*

\*\*\*\*Please specify which web-browser did you use. The presentation, and behaviour of webpages change with the browser you use. We have tried to keep browser dependent features to a minimum. We would still like to know if you face any unexpected behaviour. So, please let us know, and also please specify the browser you used.\*\*\*\*

Please spread the word about this preview, and ask other members also to visit these webpages and send in their comments.

#### Dr. S Parthasarathy

Algologic Research & Solutions 78 Sancharpuri Colony, Bowenpally. P.O. Secunderabad - 500 011, INDIA <algolog@hd1.vsnl.net.in>

# **POWER QUALITY '98**

18 - 20 JUNE '98

HOTEL VICEROY Hyderabad, India

POWER ENGINEERING SOCIETY INDUSTRY APPLICATIONS SOCIETY JOINT CHAPTER HYDERABAD SECTION IEEE

> in cooperation with INDIA COUNCIL

REGISTRATION

(a) Registration fee schedule

	Conference	Tutorials			
		IRs	US\$	IRs	
	IEEE Member	1500	75	750	
	Others	2000	100	1000	
	Bonafide Students	600	30	300	
_					

- (b) The registration fee covers Conference/ Tutorial participation, literature and receptions.
- (c) Last date for registration: 18 May 1998 Contact :

#### N.V. Rao

Secretary, India Council 644, Al-Karim Trade Centre, Raniguni Secunderabad - 500 003

Telefax : 040 822574 (O) : 040 4066453 (R) Tel Email : nvr@dmrl.ernet.in

#### FIRST MEETING OF IC COMMITTE - 1998

The First meeting of the IC Committee 1998, will be held on February 14, 1998 (Saturday) at 1500 hrs.

#### Venue

Dept. of Computer Science Gujarat University, Ahmedabad

#### Contact Person

Dr. A.K. Aggarwal

Professor, Dept.of Computer Science Phone : 079-440164 (O) 079-400144 (H)

Fax : 079-6631437 e-mail: aka@ad1. vsnl.net.in.

#### Agenda

- Review of the minutes of the fifth meeting (1997) held on 12 December 1997.
- 2. Budget for 1998
- 3. ACE-98 organisation
- 4. Any issue for discussion at Region 10 to be held in April 1998.

All members are requested to attend and also to intimate their plans to Prof. Aggarwal immediately. They may also send their views, specially on item 4, to the Secretary.

(N. Vyaghreswara Rao)

#### HONOURED

#### P V INDIRESAN ELECTED HONORARY MEMBER OF THE IEEE

The IEEE Board of Directors, at its 9 th November 1997 meeting, elected Professor Pavaguda Venkata Indiresan as an IEEE Honorary Member, effective 1 January 1998,

with the following



citation: "For contributions to the growth of electrical engineering in India through his leadership in education, applied research and professional engineering institutions". With this election, Professor Indiresan joins a very rare group of 22 others in the Life of the IEEE. Many of them are Nobel Laureates or equivalently distinguished. This is indeed a very high honour to India, to IITs and is certainly the highest international honour for an Indian Electrical Engineer. It is a matter of great pride for his family, friends, associates and former students. Educated at the Presidency College, Madras; Indian Institute of Science, Bangalore and the Birmingham University, UK, Professor Indiresan began his career at the Roorkee University. In 1965, he was transferred to IIT Delhi where besides teaching and research, he also worked as Head of the Department and Dean of Undergraduate Studies. In 1979, he went to IIT Madras as Director and, after completion of his tenure, returned to IIT Delhi as the Bharat Electronics Chair Professor, where he served till 1993.

He consistently attracted top students and inspired many of them to pursue careers in signal processing and communications technology. He also placed great emphasis on faculty development. The high standard of faculty in IITs today owes much to Professor Indiresan's tireless efforts during the 1960s and 70s in persuading bright Indians settled abroad to return home to a teaching career.

Winner of many awards, Professor Indiresan is

a Fellow of the INAE and a Distinguished

Fellow of the IETE.

Professor Indiresan has a passion for applied research, and in particular, for systems development. Despite limited funding, poor infrastructure and restrictive import controls. he led the development of several systems spanning sonar receivers, railway signalling and control units, and aircraft landing systems, all of which were produced and successfully deployed.

He is currently the President of the Indian National Academy of Engineering.

February '98 February '98

February '98 February '98 February '98 February '98 February '98 February '98 February '98 February '98 February '98

### INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS, INC. INDIA COUNCIL Statement of Receipts & Payments - 1997

Receipts	Rs. Ps.	Payments	Rs.	Ps.	Rs. I	Ps.
Opening balance actual (Statement - 1996)	2,67,829. 82	Expenditure pertaining to 1996			13,206	. 32
	and entitiones	Seed Money to ACE'97			30,000	00
Interest earned in 1996	2,745. 00	Student Activities MVC - SPC '97			10,025	. 00
	-0.00	Newsletter a/c			LONG SEC.	
From Hyderabad Section IA & C-95 a/c	25,000. 00	Old dues 1996	17,000.	00	EX-SPES	
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From IETE - Seminar on Inf. Tech.	5,585. 00	Travel	7,813.	00	Three	
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dan será horsgalicacionomorba ri	10,000. 00	Bank Charges	591.	00	14,668	. 00
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twolers internalismed henom te	attwintshop.	SBI (Powai, C/A)	628.	89	2,70,313	3. 44
Total	3,65,242.96	Total			3,65,242	. 96

Hyderabad 10 January 1998 Maj.Gen.(Dr.) R K Bagga Chairman

R V N Sastry Auditor

N Vyaghreswara Rao Secretary & Treasurer

#### **TECHNOLOGY CORNER**

#### Breakthrough in Wind Direction Measurement

A non-doppler optical sensor for inexpensive and accurate measurements of cross wind speeds over long distances has been developed. This single ended, long path laser wind sensor registers even faint wind movements that an anemometer finds difficult to record. Developed at the Georgia Tech Research Institute, this device was originally meant for having an idea of the rate at which a pollutant is leaving a factory. But because the sensor measures average wind directions over long distances, it might have additional applications in aviation, meteorology, or aerosol dispersion studies. It is particularly useful in locations where erratic winds are the norm. This device can, unlike conventional lidar systems, pick up turbulence. It is also easier to use. Unlike doppler systems which measures wind along the beam, this device does it across the beam allowing sensing of erratic winds more

(source: www.lasersoptrmag.com)

#### Boost to Solar PV electricity?

A breakthrough in identifying Polymer emitters may give boost to Solar Pholto voltaic technology. Samson Jenekhe, a chemical engineer at the University of Rochester has

obtained two patents for his innovative work with plastics that emit or absorb light. The technologies related to this are being commercialised by Research Corporation Technologies(RCT) of Tucson, Arizona. One patent is for rigid ladderlike polymers that combine impressive strength with the capability of emitting light in all colours. Their good light conducting properties make them well suited for use in next generation electronic cameras and photocopiers, or for photo detectors that turns light on automatically. Such polymers are durable even at 500-600 deg. C, compared with ordinary plastics that melt below 200 deg. C.

His next patented work is on Conjugated polymer exciplexes, which can convert electricity into flashes of light four times more efficiently than most conjugated - means long molecular chains of alternating single and double bonds - polymers. Efficiency of 10% raised to 42 %. While this four fold efficiency increase in converting electricity to light in itself is noteworthy, the increase in efficiency of the opposite reaction is a real breakthrough. Dr. Jenekhe, who is Professor of Chemical Engineering, Chemistry and Material Science, believe that these polymer exciplexes could make the conversion of light to electricity, such as in solar energy converters, upto 1000 times more efficient. Let us be impatient!

Isaac Muckadayil Memorial Prizes Given Away. IEEE Student Paper Contest 1997

The IEEE-IAS Kerala Chapter organised the annual IEEE Student Paper Contest in the Engineering Colleges in Kerala

The papers were evaluated by a three member committee based on presentation, content, etc. on January 01, 1998.

First Prize of Rs. 2,500/- and Award Certificate for the paper "Infra-Red Remote controlled multiway switch" went to Mr. Vincent Naveen Maurice of 7th Semester Electrical & Electronics, College of Engineering,

Second Prize of Rs. 1,500/- and Award Certificate for the paper "Miniature Battery Charger and Charge extracter" was awarded to Mr. M.P. Sreejith of 5th Semester Electronics and Communication, College of Engineering, Trivandrum.

Third Prize of Rs. 1,000/- and Award Certificate for the paper "Automatic Speed Control" was bagged by Mr. Ajith N.C., Mr. Anupkumar and Ms. Divya Ravindranath of 7th Semester Electrical & Electronics of NSS college of Engineering, Palakkad.

The Prizes were distributed during the IEEE Kerala Section Annual General Meeting on 31.01.1998. Congratulations to the winners and thanks to all the participants.

Nelson R. George, Chairman, Joint IAS Kerala Chapter.

#### **EDITORIAL**

#### A NEW COLUMN ON DIARY OF EVENTS

It is proposed to have a new column entitled 'Diary of Events' in the Bulletin from March '98 issue onwards. This will list in Chronological order, the forthcoming programmes of our Sections and Chapters. Officials of Sections and Chapters may write/e-mail/fax the details like Topic, dates, contact persons to the Chairman/ Secretary of India Council with a copy to the Editor also. Such information should reach the editor, latest by the last Friday of every month/30 th of the month. e-mail address: vk\_deo@hotmail.com; Fax: 0471-345587.

The Bulletin goes to press every 1st, unless there is a stop press message from the Chairman, IC. The Bulletin is likewise posted on 8th of every month, unless that date is a holiday, in which case it gets posted on 9th. As the Bulletin has got Licence to post without pre-payment, this date cannot be changed. Kindly, formulate your notes and announcements accordingly.

Sections may also let us know of the 1998 Office bearers at the earliest.

01. 02. 1998

Trivandrum Prof. V K Damodaran

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