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**CHAIRMAN'S MESSAGE**

Dear members,

Please join me in congratulating Prof. Gopal Dubey of IIT Kanpur. He is the lone member from India to be elected to the highest grade of membership viz. FELLOW in 2003. Congrats again Prof. Dubey.

Surveys conducted by Sections in India show that many associate members overdue for Member grade are still continuing as associates and so is the case with Senior Members. In order to retain higher grade members and most importantly provide the due grade to all members it is important that Sections take up the task of motivating members to attain the highest grade that they are eligible for.

Coming to the Council's financial standing - it needs support from all Sections. This point was deliberated during the Execom meeting in Dec 2002 in Kolkata with section chairs in attendance. It can be discussed in detail during the April meeting of Region 10 committee.

IEEE membership just got better with the IEEE Member Digital Library that brings you instant access to all 83 IEEE Journals and all 32 Magazines - all of every Society along with all the 350+ conference proceedings right back to 1998. Seek. Discover. innovate. Visit [www.ieee.org/ieeemdl](http://www.ieee.org/ieeemdl) to subscribe or for further details.

Those of you who are yet to renew the 2003 membership please do so on priority. On line renewal with credit card could be considered.

All Life members also need to send in their renewals. All volunteers are requested to proactively take up the task of student membership renewals and enrollments. Students form a major part of our membership and we need to nurture them.

with best regards,

Mumbai  
Chairman  
1 Feb 2003  
Council

**R. MURALIDHARAN**

IEEE India

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**“The path from dreams to success does exist. May you have the vision to find it, the courage to get on to it, and the perseverance to follow it. Wishing you a great journey”**

Kalpana Chawla in an e-mail from Columbia Space Shuttle to students of her former school.

**“We are proud of Kalpana and fellow astronauts, and pray that their souls rest in peace”**

**IEEE Fraternity**

**EDITOR'S DESK**

“Aim to become nothing but a world-class performer in your chosen field of activity”

This is an old incident but may make some sense even today. It was the first job for that young person who joined duty as telex operator, in those good old days when e-mail was not even dreamt of. The boss while welcoming him, gave some piece of advice as is

customary on all such occasions, but with a different message. He wanted the youngster to strive towards becoming the *best telex operator in the world* – fastest in typing the message without any mistakes and sending it instantly, may be through repeated attempts if necessary, retrieving new messages and reaching them to the people to enable them to take action urgently, in the true spirit of a telex message etc. In some cases if the recipient of a message is sitting away from the telex room, he has to be alerted through a phone call about the urgency of a new message - yet another way to be efficient in handling this service, he was advised. In short, a world-class telex service!

Once I was in a small village post office to buy some stamps. As soon as I reached the counter, the man in charge smiled at me, took my orders and started to work in haste. I looked behind several times to see if a long queue was formed in between for him to work so fast. He handed over the stamps and the balance, again with a smile and wished me a good day. I saw him sitting back in full readiness to offer his *world-class service* to the next person - in his chosen field of service, however small it may appear to some.

Trivandrum **N.T.NAIR**  
1 Feb. '03 Editor  
e-mail: del@vsnl.com

## IEEE NEWS & EVENTS

### ELITEX'2003 Seminar-cum-Exhibition

#### Electronics and Information Technology Exposition 2003

**Organised by Dept of Information Technology , Govt of India.**

The theme : "Moving up the Value Chain: India ? A Global destination for R&D".

Date : 28-29 APRIL, 2003

Venue : India Habitat Centre, Lodi Road, New Delhi

Dept. of Information Technology (DIT) has been funding research and development projects in the areas of electronics and information technology at various institutions. To disseminate information on Technologies and Products developed among the users and the industry, DIT had organized ELITEXs, which had generated a lot of interest and given commercial boost. The industry has very enthusiastically responded and participated in the event with the same zeal.

The Seminar during ELITEX will cover the state-of-the-art technologies and will provide special focus on the theme. The scope of the ELITEX has been enlarged to include official participations from European countries besides the Central and West Asia, Gulf, Latin American and SAARC countries. The official delegations of these countries will focus on the commercial potential and tie-up possibilities on the technologies/ services available from India in a separate session during the seminar. Efforts are made to have all the member countries of Asia Electronics Info-Communications Union (AEIU) participated.

Another session in the seminar will focus on presentation from the States in India. State Governments are being requested to exhibit the available/proposed e-governance facilities and the status of IT industry in their respective States. State Governments will also be requested to ensure the dissemination of information generated through the ELITEX'2003 in their respective States.

The exhibition will focus on the technologies/know-how developed at various institutions related to the above theme. The participating institutions will get an opportunity to highlight their activities and technologies/management services that can be offered to the industry and public at large.

This would be a unique opportunity

- \* For industry to pick a product/technology for commercial exploitation
- \* For R&D institutes and academics to identify industry needs
- \* Sharing your views and experience with other experts
- \* Interaction with commercial attaches and delegates of other countries

ELITEX'2003 will provide a forum for interaction among the technology developers and technology users. Electronics industry, R&D and academic institutions and users are invited to participate.

For further details, please visit [www.elitexindia.com](http://www.elitexindia.com)  
and contact Dr.R.G.Gupta, Director, Department of Information Technology  
Tel No.011-24363095(O), 011-26255675(R) Fax No.011-24365404

## SEMINAR ON ELECTRIC SUPPLY TO THE FARMERS (Gujarati name:KHEJUT NE VIJALI)

organized by:

**IEEE India Council's POWER ENGINEERING CHAPTER,  
IEEE India Council's ENGINEERING MANAGEMENT CHAPTER  
INSTITUTE OF RURAL MANAGAEMENT, ANAND**

Time:9.30 am to 5.00 pm, Monday 10<sup>th</sup> February, 2003. Venue:IRMA AUDITORIUM, ANAND, GUJARAT STATE

The program includes inauguration by Shri Bhupendrasinh Chudasama, the Minister of Agriculture, Gujarat State, the presentation by Shri Saurabhbai Patel, the Minister of State for Energy, Shri Hasmukh bhai Shah, the Chairman of the Power Engineering Chapter and many eminent engineers and engineering managers.

## IEEE ANNUAL CONVENTION & EXHIBITION ACE 2002

*A Report by Prof. Nirmalendu Chatterjee, Organising Chair, ACE2002*

The 28th Annual Convention & Exhibition (ACE) 2002 of IEEE India Council was held at Science City, Kolkata during December 20-21, 2002. The function was inaugurated on December 20, 2002 by Shri Viren J. Shah, His Excellency, Hon'ble Governor of West Bengal. The welcome address was given by Prof. N. Chatterjee, the Organizing Chairman. Sri Manabendra Nath Mukherjee, Hon'ble Minister-in-charge of IT, Govt. of West Bengal graced the occasion as Guest of Honour. Dr. F.C. Kohli, former Vice-Chairman, TCS, was the Chief Guest. The vote of thanks was proposed by Dr. S.K. Sanyal, Jt. Organizing Secretary.

The keynote address was delivered by Prof. Saifur Rahman, VP-TAB, IEEE-PES and Director ARI, Virginia Tech, USA on "Power for Internet". The First invited talk was on "New Technologies to support human exploration of space" delivered by Dr. Kumar Krishen of NASA, USA. The Second invited talk on "Grid Computing" was delivered on Dec. 21 by Dr. Peter Luksch of Technical University, Munich. The Technical Program of IEEE ACE 2002 was arranged in such a way that participants from academia as well as professional fields were brought on a common platform to share ideas and to find solutions to problems by mutual co-operation.

The papers were divided into three major categories, viz. Communication, Information Technology and Power. Out of 124 papers finally accepted for presentation and subsequent publication in the Proceedings, 42 were on Communication, 40 on Information Technology and the balance 42 on Power. Nine papers were contributed by authors from outside India, e.g. USA, UK, Netherlands and Malaysia.

In a session held on December 21, 2002, the Prize winning papers of MV Chauhan Student Paper Contest 2002, organized by IEEE India Council were presented by the respective student authors.

A 475 -page Proceedings of EPIC-IEEE ACE 2002 incorporated the papers as per suggested format of all the authors who have Registered themselves for the program. The Third EXECOM Meeting and also the Annual General Meeting of IEEE India Council were held on December 20, 2002.

### An International Conference on Information Technology: Prospects and Challenges (ITPC - 2003)

May 23-26, 2003, Kathmandu, Nepal

*Organized by*

Nepal Engineering College Royal Nepal Academy of Science & Tech, MOST and NCIT

*Cosponsored by*

IEEE India Council's, COMPUTER SOCIETY CHAPTER

A WORKSHOP on Formal Methods and Application is being organized as a part of the Conference. For details, please contact Prof. Jay Bagga (JBAGGA@bsu.edu)

Special Arrangements for payment of Registration Fees & Travel support for delegates from India: The organizers of the Conference are working with AICTE to meet the registration fees, travel support etc for Indian Participants limited to 200 numbers provided their papers are accepted by the ITPC-2003.

The Conference invites research papers (Last date: Feb 23, 2003) as well as proposals for Workshops and Tutorials. For details, please refer to <http://www.nec-itpc.org.np>.

### Library Scan

#### "Manufacturing the Future - Strategic resonance for enlightened manufacturing"

**Book by: Steve Brown**

A Financial Times-Prentice Hall book published by: Addison Wesley Longman

Many manufacturing firms fail in their aspirations to becoming 'lean', 'flexible', and 'world class' not because they are incompetent but because they miss out on key strategic ingredients that enable outstanding capabilities to be put in place. These capabilities do not come about by chance but follow on from an enlightened approach to manufacturing. The book gives a real insight into various aspects relevant in this respect.

#### READER'S RESPONSE

Dear Mr. N.T. Nair,

Your "Editors Desk" in IEEE India Bulletin of January 2003 issue titled "Loyal to the Organization or to the Boss" prompted me to write this. Years back, when we were young budding engineers at KELTRON, some of us had a discussion on this subject. Three types of loyalties were discussed. The one missed by you is "Loyalty to the Profession". In the discussion, what glaringly stood out was that the noblest is loyalty to the profession. Both loyalty to the organization and loyalty to the boss would require you to divert from the "right" path. I think even IEEE in their "Code of Ethics" professes loyalty to one's profession. In being loyal to the boss gives you maximum material benefits and the least spiritual. On the other end is loyalty to the profession. The organization may want you to do dishonest things, tell things which are professionally incorrect, etc.

I feel that one should be loyal to the profession and loyal to fellow beings, then be loyal to the organization or the boss!

You will have short-term gains if you are loyal to your boss, medium-term gains if you are loyal to your organization and long-term gains if you are loyal to your profession.

Dr Madhu Mangal, Former Secretary, IEEE Kerala Section

**[I missed this point. Compliments to you, Dr. Madhu Mangal, for bringing this important aspect to the attention of our learned members - Editor]**

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**News - Scan**

### Software Productivity

TCS with a workforce of 20,000 is estimated to have a per capita employee productivity of US\$ 44,000. The over 10,000 strong Infosys has a contribution per employee of US\$ 54,000, while Wipro and Satyam (both with employee count of 10,000 each) both have per person productivity of US\$ 50,000 each.

On the other hand, the per employee productivity of MNCs like CISCO, Microsoft, HP or Adobe is nearly 10 times more than that of Indian Cos.

### The Science & Technology Policy 2003

Science and Technology Policy 2003 released by the Prime Minister while inaugurating the Science Congress Session at Bangalore recently has the following policy elements as applicable to IPRs and their connectivity to industrial R&D. The policy document says:

"Intellectual Property Rights (IPR), have to be viewed, not as a self-contained and distinct domain, but rather as an effective policy instrument that would be relevant to wide ranging socio-economic, technological and political concepts. The generation and fullest protection of competitive intellectual property from Indian R&D programs will be encouraged and promoted.

The process of globalisation is leading to situations where the collective knowledge of societies normally used for common good is converted to proprietary knowledge for commercial profit of a few. Action will be taken to protect our indigenous knowledge systems, primarily through national policies, supplemented by supportive international action. For this purpose, IPR systems which specially protect scientific discoveries and technological innovations arising out of such traditional knowledge will be designed and effectively implemented.

Our legislation with regard to Patents, Copyrights and other forms of Intellectual Property will ensure that maximum incentives are provided for individual inventors, and to our scientific and technological community, to undertake large scale and rapid commercialization, at home and abroad.

The development of skills and competence to manage IPR and leveraging its influence will be given a major thrust. This is an area calling for significant technological insights and legal expertise and will be handled differently from the present, and with high priority".

On Industry and Scientific R&D, the document says:

"Every effort will be made to achieve synergy between industry and scientific research. Autonomous Technology Transfer Organizations will be created as associate organizations of universities and national laboratories to facilitate transfer the know-how generated by them to the industry and be a partner in receiving the financial returns. Industry will be encouraged to financially adopt or support educational and research institutions, fund sources of interest to them, create professional chairs etc. to help direct S&T endeavors towards tangible industrial goals.

"There has to be increased investments by industry in R&D in its own interest to achieve global competitiveness to be efficient and relevant. Efforts by industry to carry out R&D, either in-house or through outsourcing will be supported by fiscal and other measures. To increase their investments in R&D, innovative mechanisms will be evolved".

(Courtesy: patentmatics.com -  
February 2003 issue)

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**Technology in brief**

### NanoNET : A low-power successor to Bluetooth

Introduced by Nanotron Technologies, Germany, the NanoNET network operates in the International and licence-free ISM (Industrial, Scientific, Medical) band at 2.4 GHz. It is especially developed for the requirements of battery powered mobile applications and is said to be extremely robust against disturbances. Based on MDMA (Multi Dimensional Multi Access) technology developed by Nanotron, MDMA uses so called chirp impulses for the transmission of information. Chirp impulses are very robust against disturbances and can be generated and processed relatively simply. For communication over the air, the new chirp technology developed by Nanotron is utilized. Compared to other wireless transmission systems, NanoNET offers the lowest energy per bit. While for example, a Bluetooth implementation needs 2,497 nWs in order to successfully receive data sent over a distance of 10m, NanoNET needs only 41 nWs under the same conditions.

### Airbus A380 – Indian Roles

India is not only a buyer of commercial aircrafts from Airbus Industrie, the maker of A320 and other variants of aircrafts, but is also expected to play key roles in the development and manufacture of certain parts of the world's largest commercial aircraft, the 555-seater A380, which is expected to enter service in 2005-2006. Singapore Airlines will be the first customer for the double-decker plane pitted against Boeing 747. Hindustan Aeronautics Ltd already enjoys a close business relationship with the European aircraft-maker, having built nearly 350 doors for A320 aircraft family under a US\$ 50 million 600-door programme.

Infosys and Airbus have also entered into a design alliance by which Infosys will design wings of A380.

## Push-to-talk over wireless data networks

Push-to-talk over wireless data networks, provides users a convenient method to wirelessly communicate one-to-one or one-to-many. Through the simple touch of a button, users can initiate a push-to-talk dialogue with users on their contact list, similar to existing instant messaging services available today. Use of wireless data networks enables a rich user experience including presence status and attendance lists with capabilities for visual enhancements.

Airvana Inc. ([www.airvananet.com](http://www.airvananet.com)), a provider of All-IP 3G CDMA2000 1xEV-DO infrastructure, and Winphoria Networks Inc. ([www.winphoria.com](http://www.winphoria.com)), a core infrastructure provider for wireless networks, have developed push-to-talk applications working under CDMA2000 1xEV-DO network and having interoperability with 1xRTT networks. It is believed that this application will gain much traction in the global wireless community

"Broadband wireless packet networks aren't just for data," said Randy Battat, president and CEO of Airvana. "The combination of Airvana's All-IP 1xEV-DO network and Winphoria's core network equipment delivers a valuable 'push-to-talk' service for users and operators."

CDMA2000 1xEV-DO is an "always on" mobile wireless technology that enables data to be sent over PCs and cellular wireless networks at broadband speeds, and at a cheaper cost per byte than any other 3G technology. The International Telecommunications Union (ITU) recognizes CDMA2000 1xEV-DO as a global 3G IMT-2000 standard. CDMA2000 1xEV-DO's peak data rates can reach up to 2.4 Megabits per second (Mbps), with average, per user sustained rates of 300 to 600 kbps.

Subscribers can connect to a 1xEV-DO network using a 1xEV-DO mobile phone or by connecting their mobile phone or a PC card to laptops or PDAs. Users will experience speeds comparable to cable and DSL services and be able to use all popular business, information and entertainment applications without any modifications to the applications. The technology can be added to existing CDMA2000 base stations with a simple channel card upgrade or overlaid on existing CDMA, TDMA and GSM networks.

**"We, the members of the IEEE, ... do hereby ... agree to reject bribery in all its forms"**

**Code of Ethics**

**-IEEE**

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### Administrivia:

**This page last modified on: February 01 2003**

**Send your comments about this page, to: [s.gopakumar@ieee.org](mailto:s.gopakumar@ieee.org)**

**This page, developed and maintained by: S.Gopakumar**

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