

**IEEE India Bulletin Vol. 11 No. 9 September 2001****INDEX****Features**

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**CHAIRMAN'S MESSAGE**

Dear Fellow Members,

The month of August 2001 has been very significant for us as we had the privilege of having amidst us Mr. Joel B. Snyder, President IEEE and his wife in Delhi. Mr. Snyder agreed to attend the Meeting of India Council Executive Committee on 17th August 2001. Though the participation of members from outside Delhi was quite low (which generally is the case in all IC Exe-Com. Meetings in India), the presence of the President in the Meeting made the deliberations useful and purposeful as we all could interact with him on various issues like signatory from headquarter on bank accounts, financial support to Council's operations, access to technical literature through internet on payment, low representation from India in IEEE committees seeing the Indian membership etc. Most of these issues, however, cannot have immediate solutions, particularly those with financial implications but I feel, the free and frank discussions with the President and putting up our viewpoints to him will certainly make some impact and I am sure, the President will definitely keep in mind these points for consideration at appropriate time.

The signing of agreement to extend the MoU between IEEE and IETE for another three years i.e. up to 31st December 2004 should be welcomed by all of us. The Sections and members can derive benefits from it whenever and wherever feasible. We can look forward to more cooperation between the two organisations for mutual benefits.

Prof. S C Gupta, Vice Chair (Student Activities) India Council has recently issued a notification for inviting papers for 'M V Chauhan Student Paper Contest' to all Student Branches. This notification may be given wide publicity among all the student members so that we get good response. The contest carries monetary rewards and I am sure, good quality papers in large number will be received.

With best wishes,

Sincerely yours,

Noida  
01September,  
2001.

**P. K. Srivastava**  
Chairman



**E-mail :** [pkstri@ieee.org](mailto:pkstri@ieee.org)

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**EDITOR'S DESK**

**'Loyal Manpower - For Sustainable Business'**

It is a season of lay-offs and pink slips, especially in the telecom and IT sectors, with North America taking the lead in this exercise.

Thousands of brilliant engineers in the lower, middle & upper levels are facing the threat of job-loss on account of the economic slow down, which sends shockwaves to the entire engineering community. It could be attributed to 3 major reasons, among many others:

- Corporations are facing a real slow down in their businesses, warranting urgent action
- There are under-performers in any organization, who are to be shed.
- Some firms over-react to a temporary slow down through immediate layoffs and such other drastic steps.

The last one is the most disturbing situation requiring an immediate introspection on the part of the organizations.

Loyal workforce at all levels is the mainstay of corporations aiming at long term stability. The present trend of treating everybody as dispensable, may not be the right approach, as years of loyal working for an organisation doesn't get recognised at all. They become demoralised in this process and even undergo a permanent change in their attitude for the worse.

This trend needs to be checked before it gets too far. For economy to get back to its original, healthy form, professionals will have to work with their heart and soul in it. Lay offs do exactly the opposite, the long term ill-effects of which could not be reversed. Of course, it may provide a quick and easy solution to the problem of economic slow down, which could be even temporary in nature. Instead, corporations should work hard to identify better methods to combat the problem - if they are serious about building up sustainable businesses.

Trivandrum **N. T. Nair**  
01 August Trivandrum Editor  
2001 [email: del@vsnl.com](mailto:del@vsnl.com)

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**This issue is sponsored**

by  
**IEEE HYDERABAD SECTION**

IEEE India Council Executive Committee Meeting



(L to R) Dr. R. Balasubramanian, Mr. Joel Snyder, Mr. P K Srivastava, Chair, IC,  
Mr. R K Asthana, Secy cum Treasurer, IC and Mr. H L Bajaj

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## The World's Largest Corporations - Global 500

FORTUNE magazine's rankings - 2000

Corporation	Rank	Country	Revenues (\$ billion)
Exxon Mobil	1	US	210
Wal-Mart Stores	2	US	193
General Motors	3	US	184
Ford Motor	4	US	180
Mitsubishi	9	Japan	126
Toyota Motor	10	Japan	121
IBM	19	US	88
Sony	30	Japan	66
Honda Motor	40	Japan	58
Intel	110	US	34
Microsoft	201	US	23
Indian Oil	209	India	22

### Other highlights:

US has 185 Corporations in Global 500 list.

Others:

Japan - 104  
Germany - 34  
Britain - 33  
South Korea - 11  
France - 37  
India - 1

500th Corporation is Sodexho Alliance of France with a revenue of 10 billion US\$ (Rs 47,000 crore, approx)

### Histone Code

Even before the dust has settled on the mapping of the human genome, scientists report that there may be a second type of human genetic code.

According to one of the proponents of the new idea, this code, dubbed as 'histone code', seems to work as a "master switch" to help turn genes off and on. The DNA in the nucleus of body cells carries our genetic information. But sometimes, DNA alone does not explain why some genes are expressed or 'turned on'. Histone code helps control the expression of genes in the human body, according to Dr. David Allis of the University of Virginia.

Learning more about the histone code may lead to new ways to stop or prevent some diseases. For example, it might be possible to turn off cancer-causing genes or switch on tumor-suppressing ones by some how manipulating the histone code.

"We are entering an era of exponential growth in our capabilities in biotech, molecular engineering and computing. The cross-fertilization of these formerly discrete domains compounds our rate of learning and our engineering capabilities across the spectrum. Lab science, from biotech to nanotech, is becoming information science - designed on a

computer, not at a lab bench. With replicating molecular machines, physical production itself migrates to the rapid innovation cycle of information technology. Matter becomes code."

*Steve Jurvetson*

MD, Draper Fisher Jurvetson

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<b>FORTHCOMING EVENTS</b>
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**IEEE TENCON'02**

**17th Annual International Technical Conference of IEEE Region 10 on Computers, Communications, Control and Power Engineering**

**October 28-31, 2002**

**Beijing, China**

Sponsored by:

**IEEE Region 10**

Organized by :

**IEEE Beijing Section**

**IMPORTANT DATES:**

**Submission of papers:**

March 15, 2002

**Notification of acceptance:**

May 15, 2002

**Early Registration:**

August 1, 2002

Web-site:

**<http://TENCON02.njtu.edu.cn>**

**BIO VISION 2001**

"Unleashing the power of Indians"  
International Conference on Biomedical Engineering

**December 21-24 2001**

Venue:

J.N . Tata Auditorium, Indian Institute of Science, Bangalore 560 012,

Schedule:

**Tutorial on Biometrics December 21, 2001**

Conference:

**December 22-23, 2001**

Student paper competition:

**December 24, 2001**

Address for correspondence:

**Dr. A. G. Ramakrishnan**

Conference Chair, BioVision 2001

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[www.bmesi.org](http://www.bmesi.org)

## IEEE- IAS Workshop on Electrical Safety in Industry Call for Papers and Registrations

### Topics:

Electrical safety standards and regulations update, Designing for reduced exposure and risk,  
Personal protective equipment, Arc flash hazard analysis,  
Auditing, Implementing electrical safety programmes, Accident case histories

### Venue:

NSC Complex, Goregaon(East), Mumbai

### Date:

January 22-23, 2002 at ELECRAMA Exhibition

### For more details please contact:

Mr. C.Satish IAS Area Chairman, Reg 10 West 10-5-3/2/6,  
Masab Tank Hyderabad 500 028 Ph: 666 4658 e-mail: [c.satish@ieee.org](mailto:c.satish@ieee.org)

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**IEEE ACE 2001**

## 27th Annual Convention and Exhibition of IEEE India Council

### CONVERGENCE

### Semiconductors, Power, Information Technology, Communications and Entertainment

1 - 3 November 2001, New Delhi

Venue :

**INDIA HABITAT CENTRE,  
New Delhi - 110 003 Industry Exhibition, Invited Talks and Panel Discussions**

A three-day Industry Exhibition and Expo is also planned along with the Conference, besides Invited Talks from Industry, Seminars and Panel Discussions on themes related to SPICE Convergence. The Fees for display of Exhibits/Ideas/Products is Rs. 25,000 for three days. For participation and details please contact Mr. P.K. Srivastava at 0118-4552570, ([pk@ieee.org](mailto:pk@ieee.org)) or Mr. Harish Tejwani at 91-7221116, ([htejwani@ieee.org](mailto:htejwani@ieee.org)).

### ACE-2001 Sponsors

**GOLD** Sponsor Rs. 75,000 5 Full Complimentary Registrations, Compli. Exhibition Space (or 2500 USD) along with due publicity at the Conference Venue

**SILVER** Sponsor Rs. 50,000 3 Full Compli. Registrations, Compli. Exhibition Space along (or 1500 USD) with due publicity at the Conference

**BRONZE** Sponsor Rs. 25,000 3 Full Complimentary Registrations along (or 750 USD) with due publicity at the Conference

	<b>Tutorial (Rs)</b>	<b>Overseas (USD)</b>	<b>Convention (Rs)</b>	<b>Overseas (USD)</b>
IEEE Member	500	25	2000	65
Non Member	1000	50	3000	80
IEEE Student Member	Complimentary	10	500	15

Other students	250	15	1000	30
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Cheques (in case of Delhi sponsors & delegates) and Demand Drafts (in case of sponsors & delegates from outside Delhi) should be in favour of "ACE-2001" payable at Delhi.

Contact Persons:  
Tutorials and Technical Papers:

**Dr. S. Mukhopadhyay**, D11 62, Pandara Road, New Delhi 110 003, [subrata@ieee.org](mailto:subrata@ieee.org)

Participation and details:

**Mr. Harish Tejwani**, [htejwani@ieee.org](mailto:htejwani@ieee.org); **Mr. P.K. Srivastava**, [pks@ieee.org](mailto:pks@ieee.org), Tel: 0118-4552570

Chief Co-ordinator

**Prof. R. Balasubramanian** Centre for Energy Studies, IIT, Hauz Khas, New Delhi - 110 016, [balu@ieee.org](mailto:balu@ieee.org),

Tel: 011 - 6591246 (O), 011 - 6591954 (R), Fax: 011 - 6591954, URL:  
[http:// www.ewh.ieee.org/r10/delhi](http://www.ewh.ieee.org/r10/delhi)

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### Technology in brief

#### Plastic stents for heart patients

Researchers at the Shiga Medical Center for Adults in Japan have developed biodegradable plastic stents for implantation in humans suffering from coronary artery stenosis, or constriction. The development was led by Hideo Tamai, who was searching for an alternative to the metallic stents currently used. While metallic stents have been used effectively for nearly 15 years, they can occasionally damage blood vessels. When used in children, they can come loose as the repaired vessel increases in size as the child grows. The new stent is made of a poly- l - lactic acid (PLLA) monopolymer that is 0.17 mm thick formed into a zigzag helical coil. The 12 mm long PLLA stent comes in 3 diameter sizes: 3, 3.5 and 4 mm. Lactic acid polymer is already used in other medical applications, such as binding broken bones and surgical sutures. Tamai says that stents are typically needed for only 6 months after implantation because the blood vessel strengthens naturally. The new stent is absorbed by the body in 18 to 24 months. In studies conducted at the center, patients with the plastic stents had a lower rate of restenosis than patients with metallic stents.

(Courtesy: Global Design News, June '01)

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### IEEE NEWS & EVENTS

#### IEEE PRESIDENT MEETS STUDENT BRANCHES

Mr. Joel B. Snyder, President, IEEE, while on visit to New Delhi on 17th & 18th August 2001 met the Student Branches of Delhi Section at the Student Branch of Jamia Millia University, New Delhi. The student members of JMI University, Delhi College of Engineering, Netaji Subhash Institute of Technology, IIT Delhi and Mahila Institute of Technology in large numbers along with their Branch Counsellors were present on this occasion. Mr. Snyder was highly impressed by the enthusiasm shown by the student members. He made an informative presentation on IEEE scenario mentioning the advantages of its membership for career growth and the benefits which students can derive.

Mr. S S Mahdi, Vice Chancellor and other high dignitaries from JMI University, H L Bajaj, Past Director IEEE Region 10, P K Srivastava, Chairman, India Council and Dr. R

Balasubramanian, Chairman, IEEE Delhi Section were present on this occasion.

An interactive session in which the President answered the queries raised by the student members followed.

### **MoU Between IEEE & IETE Extended**

The Memorandum of Understanding (MoU) signed first in 1995 to encourage the exchange and dissemination of technical information and to promote understanding and cooperation between the members of IEEE and the Institution of Electronics & Telecommunications Engineers (IETE) has been further extended upto 31st December 2004. The agreement to this effect was signed by the IEEE President Mr. Joel B. Snyder and IETE President Maj. Gen. Yashwant Deva on the 17th August 2001 at New Delhi.

The MoU broadly covers the mutual cooperation between the two organisations and their members in respect of facilities for visiting members, joint activities such as conferences, publications, standards, educational activities, meetings, exchange of publications at concessional rates, discount on membership dues, exchange of standards information etc.

### **IEEE- IAS Distinguished Lecturer**

**Prof. A K Chattopadhyay**, IEEE Fellow, has been elected as distinguished lecturer of IEEE- IAS for two years, 1902-1903

#### **Prof. Ajit K Chattopadhyay**

Dept of Electrical Engg B E College (DU) Howrah-711 103, India

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"If you take all of today's computers and sum them together you will end up with the equivalent intellectual power of  $1 \times 10^{17}$  flops/sec, which is what one human brain is capable of processing. Sounds like we humans are in good shape from this perspective, right? Wrong. With computer power increasing exponentially and doubling every 18 months or so, computers are catching up quickly. At the current rate, it will be approximately 2021 when computers will have the equivalent processing power of all humans on this planet combined!"

Chris Moy Artificial Intelligence, Today and Tomorrow

### **In lighter vein**

- Never argue with a fool - people might not know the difference
- The chance of the bread falling with the buttered side down is directly proportional to the cost of the carpet
- At any event, the people whose seats are furthest from the aisle arrive last.
- When a body is immersed in water, the telephone rings.

### **BITS & PIECES**

- The visiting card of Thomas J Bata , chairman, Bata Shoe Foundation carries the title "Senior Shoe Salesman"
- Maruti Udyog Ltd donated the first Maruti 800 produced, to the Lord Venkateswara Temple at Tirupati
- Bill Gates of Microsoft once predicted thus: "Why any software needs more than 640 kilobytes of RAM" However, his company keeps introducing newer versions of software, each of which requires several more megabytes of RAM and hard disk space than previous versions
- The most sophisticated and longest standing application of Virtual Reality is 'Flight Simulation'

**"We, the members of the IEEE ... do hereby ... agree to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to**

**credit properly the contributions of others"**

- IEEE Code of Ethics

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**This electronic version of the IEEE India Bulletin is an adaptation of the official, printed newsletter. This adaptation has required some minor modifications and restructuring of the original text, to suit its viewing as a webpage.**

**Thank you for visiting this webpage.**

**Administrivia:**

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