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CHAIRMAN'S MESSAGE

Dear fellow members,

Many thanks to all members for renewing their memberships and continuing in the IEEE family for the year 2004 also.

IEEE is continuously making efforts to improve the benefits to its members and towards this is the new release of IEEE Explore upgrade, the document delivery system for all of IEEE's journals, magazines, and conference proceedings. Read more about the improvements at: http://www.theinstitute.ieee.org/portalindex.jsp?pageID=institute_level1_article& TheCat=2202&article=tionline/legacy/inst2004/feb04/2w.newsxploremr.xml.

Last month, I urged all Sections to seriously explore the possibility of forming Society chapters. So far there has been no response and I am hoping that some home work is going on at all sections. Please remember that Society Chapters with the help of the parent Societies can conduct in depth and specialized programs for its members. This way we can reach more value and benefits to our members.

The IEEE All India Students Congress (IAISC 04) hosted by the MEPCO Student branch in Sivakasi under Madras Section from 5 to 7 Feb 2004 was a very big success. Prof. Balakrishnan and team at Mepco had put in enormous efforts to make IAISC 04 a real success. More than 250 student volunteers participated. The Council congratulates Prof. Balakrishnan and team for a noteworthy IAISC 04.

The 224 plus student branches spread all over India need attention and proper administration. Mr H.Kalyanasundaram, a veteran volunteer of IEEE, is working hard to create a database of student branches in India. The Council is appealing again to all Section SACs to provide the data of their respective section student branches. With this, we should go on line with an All India Student Branch Roster.

Looking forward to your active participation in IEEE activities, and with best wishes and regards,

Mumbai

1Mar.�04

R. MURALIDHARAN
Chairman - IEEE India Council
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EDITOR'S DESK

"Mastery in weapon usage�.lest!"

Soldiers, when undergoing training in handling a weapon, understand with all seriousness that they have to achieve mastery in using it, since it is a matter of life and death. Even if the weapon is world class, unless the user is well versed in its operation, the risk of losing life at the skilful hands of an opponent is very much there.

In the case of engineers and managers also the situation may be similar at present, even though it may not be life threatening or anything like that. The demand on work-front definitely is much more than ever before, warranting us to be most proficient in our chosen field of activity. During a visit to a mini-hydroelectric plant by a group of engineers from a professional society, the new engineer on duty there unabashedly told the team that he had joined only 6 months back and hence not aware of the system details. In this era of fast changing technologies, 'six months' is quite a lot of time to learn, un-learn and re-learn things. If there is will and urgency on the part of the person, the avenues for learning are aplenty today, thanks to Internet, libraries, trade publications, seminars, workshops etc. However, if complacency sets in, the outcome would be disastrous, as the competitive environment at workplace is becoming more and more intense, resembling that of a war front. One may not lose life as in a war, but the situation would be worse than that, with job loss and what not!

There is no way other than being the master of our field, through continuous learning, lest the unkind business world will show its ugly face on us.

Trivandrum

1 Mar.'04

IEEE NEWS & EVENTS

IEEE INDIA COUNCIL SLATE FOR 2004

The Nomination Committee has nominated the following
Slate to continue, for a second term, for the year 2004.

Office	Name	Section
Chairman	R. Muralidharan	Bombay
Executive Vice Chairman	Rajendra K. Asthana	Delhi
Secretary/Treasurer	Raju R. Hira	Bombay
Past Chair	Promod Srivastava	Delhi
Vice Chair-Professional Activities	Nirmalendu Chatterjee	Calcutta
Vice Chair-Student Activities	S. C. Gupta	UP
Vice Chair-Technical Activities	R. G. Gupta	Delhi
Vice Chair-Membership Development	Kasi Rajgopal	Bangalore
Vice Chair-Educational Activities	Arun Agarwal	Hyderabad
Newsletter	N. T. Nair	Kerala
Webmaster	S. Gopakumar	Kerala
Major-domo Coordinator	Subrata Mukhopadhyay	Delhi
Ethics Committee	Q. Bakir	Bombay
Member at Large	H. Kalyanasundaram	Bombay
Member at Large	A. K. Aggarwal	Gujarat

Reported by: **Raju R. Hira**

Secretary/Treasurer, IEEE India Council

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IEEE COMPUTER SOCIETY DISTANCE LEARNING

CAMPUS EXPANDS TO 200 FREE COURSES

Members of the IEEE Computer Society may now take advantage of 200 free online courses through the newly expanded Distance Learning Campus. This is double the number of classes previously available. Courses include Java, Cisco, Windows, Oracle, Unix, and Visual C++, among many other subjects.

New classes start on 25 February, so for more information, or to sign up, visit: <http://www.computer.org/distancelearning> To join the IEEE Computer Society, visit: <http://www.ieee.org/addservices>

Reported by: **R.Muralidharan**

Chair - IEEE India Council

WANTED:GOOD ENERGY CONSERVATION DESIGNS

Students with ideas about how to build a more efficient electric motor or a way to link alternative energy sources to the existing power system could win US$35 000 in the 2005 International Future Energy Challenge competition. Proposals are due 10 April 2004. Find out how to enter at: <http://www.theinstitute.ieee.org/portaleID=institute_level1_article&TheCat=1003&article=tionline/legacy/inst2004/feb04/2w.deadinesenergychallenge.xml

Reported by: **R. Muralidharan**

Chair - IEEE India Council

It is no use saying, 'We are doing our best'.

You have got to succeed in doing

what is necessary

HE HYDROGEN ECONOMY:ITS IMPACT ON THE FUTURE OF ELECTRIC ENERGY

Four IEEE societies - Power Engineering Society, Power Electronics Society, Industry Applications Society, and the Society for Social Implications of Technology - have joined together to organize the topical meeting, "The Hydrogen Economy: Its Impact on the Future of Electric Energy" in Washington, DC, USA on April 19, 20, 2004.

It is focused on providing information about what a hydrogen-based economy would look like, what are the technologies and what impact will it have on our society. An impressive list of technical and policy experts has been assembled for this meeting to provide focus on the hydrogen production, its delivery infrastructure, power generation technologies, system interface issues, case studies from North America, Europe and Japan, and how hydrogen fuel will impact the future delivery of electric energy. The meeting will provide an opportunity for a lively and productive exchange of information among IEEE members and the hydrogen energy community on technical and policy issues related to the development of the hydrogen economy.

Please visit the conference website, http://www.ieee.org/power/hydrogen for further information and registration details.

ELECTRIFYING INDIA

on the theme, Power Sector: Role of Engineering Management organized by IEEE EMS Chapter of Bombay section was inaugurated on Thursday, Feb 12 in Mumbai by the Hon. Union Minister of State for Power, Smt. Jayawantiben Mehta.

Smt. Mehta is delivering the inaugural address and on the dais are [L to R] R. Muralidharan - Chair IEEE India Council, Kirit Seth - Chair EMS Chapter, H L Bajaj FIEEE - Past Region 10 Director & Chairman of CEA, M. Ramamoorthy FIEEE - Director ER&DA.

Library Scan

"A New Brand of Expertise" - How Independent Consultants, Free Agents, and Interim Managers Are Transforming the World of Work

Book by: **Marion McGovern and**
Dennis Russell
Published by: **Butterworth Heinemann**

In today's quick and turbulent markets, many leading companies find themselves turning to specialised professional talent on a project or interim basis to solve vital business problems. In addition to being a fruitful and often cost efficient collaboration for the hiring company, this major trend is creating huge opportunities and an alternate career path for many professionals who are joining the growing ranks of independent consultants around the world. The book takes a unique look at the tremendous benefits available to both sides of the transaction - from the perspective of the independent consultant and the hiring company. The authors outline the new skills and employment strategies independent consultants must master to succeed.

'Shakespeare on Management' - Leadership Lessons for Today's Managers

Book by: **Paul Corrigan**
Published by: **Kogan Page Ltd**

Modern-day managers may not have quite the same sort of problems as in Elizabethan times but they can still learn a great deal from the way Shakespeare's characters handled those around them. The author analyses their decision making and actions to see what leadership lessons can be learnt by today's managers. For instance:

What made Henry V a great leader?
How did he convince his men to follow him when the odds were against them?
Why did Richard II believe that the title "king" was enough to grant him the allegiance of his subjects?
Why did Macbeth believe that with one assassination he could easily become king?

Paul Corrigan deduces from his fascinating study that all successful leaders work at achieving their success: it is not just a matter of having a title.

Technology *in brief*

Samsung Develops XDR DRAM

Samsung Electronics Co, Ltd announced on Feb 19, '04 that it has developed an extreme data rate (XDR) DRAM that uses Rambus' XDR memory interface technology. Running at 3.2GHz, the XDR DRAM offers 8x the bandwidth of today's best-in-class PC memory. Samsung also plans to release an upgraded XDR chip that runs at 6.4GHz.

The company said a sample of a 512Mb XDR DRAM will be provided to system companies starting in March. Mass production is to begin at the end of 2004. Samsung currently holds a more than 80% share of the world DRAM market.

Radiation from PCs used for spying

Radiation from personal computers could be used as a surveillance system to steal valuable corporate data. Electromagnetic (EM) emission from PCs travel great distances and can be intercepted, reconstructed and viewed by adversaries. EM emissions can pass even through walls and furniture and can be intercepted from almost a distance of 1 km. There are systems that can tap this radiation from a distance and reconstruct the data. There is no need to even come near the target.

The technology is believed to have been devised by intelligence agencies of the erstwhile Soviet Union. Named Transient Electromagnetic Pulse Standard (Tempest), the technology was conceived by a Dutch scientist, Wim Van Eck, in 1985. Mr Van Eck proposed that cathode ray tubes of monitors emit EM radiation, which are similar to radio waves and can be reconstructed from a remote location.

Mobile Phones Enabled for Satellite TV Broadcasting

SAMSUNG Electronics has completed development of the world's first satellite digital multimedia broadcasting (DMB) chip for mobile phones. The satellite DMB chip for mobile phones requires ultra-high integration, and SAMSUNG Electronics has paved the way for localization of satellite DMB components. Satellite DMB is in the spotlight as the next generation in broadcasting formats. The service will be accessible anywhere to users on the move via either receivers in automobiles or handheld terminals.

SAMSUNG has applied system-on-a-chip (SOC) technologies to enable the satellite DMB chip to select the signals intended for individual users from a myriad of signals transmitted from the satellite and convert them into high quality video images. The device also bills the payment for the service and identifies the user. SAMSUNG has also designed the device to be extremely energy efficient.

Both Japan and Korea are planning to start commercial satellite digital TV broadcasting for mobile terminals around September. In Korea, Samsung will release a mobile phone equipped with the new chipset in time for the start of commercial services.

In Japan, venture company Mobile Broadcasting Corp is preparing to launch a commercial satellite digital TV broadcasting service for mobile terminals. Dedicated terminals or in-vehicle devices will likely be released for the service ahead of compatible mobile handsets. In contrast, Samsung has aimed at mobile phone reception from the outset, and has been developing a highly integrated chipset with low power consumption for that purpose.

Toshiba Corp has completed development of a receiver chipset comprising five chips. Also, Toshiba is developing a highly integrated receiver chipset for mobile phones, and plans to ship samples around year-end.

Mobile Broadcasting is investigating the possibility of satellite digital TV-enabled mobile phones, in cooperation with mobile carriers in Japan. Such devices are unlikely to appear until 2005 at the earliest

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News - Scan

2004 LOK SABHA POLLS -SOME HIGHLIGHTS

- No of voters as on 31 Dec.'03 - 6,53,726,115
- Electronic Voting Machines needed for LS polls- 9,05,000
- No of votes one EVM can record: 3840(max.)
- No of candidates EVMs can cater to: 64(max.)
- Cost per EVM: Rs 5,500 (approx)
- Approx. cost of holding LS elections: Rs 1,100 crore

1999 LS polls

- No of contestants- 4600+
- No of political parties: 169
- Expenditure: Rs 800 crore
- No of polling stations: 7,73,667
- Electorate -Total: 6,19,559,944
- No of people who voted: 3,71,669,282

LIC AND IT USAGE

- Life Insurance Corporation is India's biggest user of Open Source software. With over 15 crore policy holders, LIC has 2,048 branches,100 divisional & 7 zonal offices and a central office.

SOME HIGHLIGHTS

- LIC settled 96.91 lakh claims in 2002-'03
- NASSCOM rated it as the best IT user among insurance companies
- IT staff (specialised): 2,750
- Servers: 4,390
- Computers: 30,000
- Printers: 30,800
- Spending on IT: 2002-'03 - Rs 132 cr 2003-'04 - Rs 160 cr

STATISTICS OF WORRY

We are all worriers, but many of us take time to analyse our worries. One worrier who did so found this result:
- 30 % of worries were over past decisions which could not be altered
- 12 % were over other's criticisms, most of them untrue
- 10 % concerned health

n 40 % were about events in the future which never occurred

n Only 8 % of the worries were legitimate

And most of these could be met when they came and as they came.

"We, the members of the IEEE� do hereby� agree to be honest and realistic in stating claims or estimates based on available data" -   IEEE Code of Ethics

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