IEEE India Bulletin Vol. 12 No. 2 October 2004

INDEX

Features

| Chairman's Message | Editor's Desk | IEEE News & Events | | | Technology in Brief | | | Library Scan | |

ISSUE SPONSORED BY UP SECTION

CHAIRMAN'S MESSAGE

Dear fellow members,

WORLD'S FIRST MOTOR VEHICLE 'BLACK BOX' STANDARD CREATED AT IEEE as IEEE 1616. Standardized Event Data Recorders for Crashes Promise to Improve Highway Safety. Driven by a lack of the uniform scientific crash data needed to make vehicle and highway transportation safer and reduce fatalities, the IEEE has created IEEE 1616, the first universal standard for motor vehicle event data recorders (MVEDR) much like those that monitor crashes on aircraft and trains. The IEEE Standards Association (IEEE-SA), a global standards-setting body, develops consensus standards through an open process that brings diverse parts of an industry together. It has a portfolio of more than 870 completed standards and more than 400 in development. IEEE-SA promotes the engineering process by creating, developing, integrating, sharing and applying knowledge about electro- and information technologies and sciences for the benefit of humanity and the profession. For further information on IEEE-SA visit: http://standards.ieee.org/. After many a deliberations, the Engineering Council of India has finally submitted the draft of "The Engineers Bill 2004" to the Ministries of HRD, Urban Development, Commerce and the Planning Commission for further action. Once this Bill comes into effect as an act of Parliament, IEEE, one the founder & life members of ECI hopes to be automatically recognized as a legal and valid entity for many Government purposes.

This is the time of year to choose whom you would like to see in leadership positions at the IEEE. The opportunity to vote in the annual IEEE election is a privilege of your membership. We hope that you will take the time to complete and submit your ballot. This year we have to elect the "Region 10 Director-Elect" for 2005-06 and our Hyderabad section chair J A Chowdary is the lone candidate from India.

Election ballots have been mailed to all IEEE members who are eligible to vote. If you have not already received yours, Contact the IEEE at corp-election@ieee.org

Additionally, this year, for the first time, members may choose one of two ways to cast their ballots.

- -- You may transmit your ballot electronically. Information on this procedure is provided in the election ballot materials that have been mailed to you. Or
- -- You may choose to mail your ballot, as in the previous years.

All ballots must be received by 1 November 2004.

Please take this opportunity to make your voice heard as an IEEE member and thanks in advance for casting your vote.

The prestigious annual event of IEEE in India viz. "INDICON 2004" is scheduled to be held at IIT Kharagpur between Dec 20 to 22, 2004. Preparations are underway and all are once again requested to participate. Another important annual event for the student members is the India Council's M V Chauhan Students' Paper Contest 2004. Please see the announcement elsewhere in this issue of the Bulletin.

Please join me in expressing our gratitude and sincere thanks to Prof. S C Gupta for an excellent job as the Council's VC for SA for the last many years and the last one and a half year in particular. Thanks much dear Prof. Gupta and wish you all the best and IEEE looks forward to your resuming the volunteer activities at the earliest.

The Council welcomes Prof. M. M. Shah of Bombay section as the IC's new VC for SA and looks forward to his valuable contributions.

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

Mumbai

10cober **�**04

R. MURALIDHARAN

Chairman - IEEE India Council

r.muralidharan@ieee.org



EDITOR'S DESK

Every breakdown is an opportunity for a breakthrough

The joy and sense of achievement of R&D personnel when they find that their creation works well in the lab in the first instant itself, are well founded. More so, if the first prototype also performs satisfactorily during the field trials. So far, so good. But, many a time, these early victories lead to complacency on the part of the developers who blissfully go ahead with the rest of the activities like finalizing the design, transferring technology to production etc. Some mandatory testing done in this process may not often bring to light the dormant problems likely to surface in rare or special situations to be encountered in future, especially after it has reached the customer.

On the other hand, assume that during laboratory trials itself, some problems crop up, affecting the smooth working of a new product. The developers are forced to go deep into every step of the design in this formative period, to suddenly become aware of certain grey areas they have ignored. A timely correction will definitely save the project from commercial disasters.

Breakdowns, prima facie, are not welcome • either for the developer or the end user. But each breakdown teaches a new lesson and gives real insights into unexplored territories, the knowledge of which is a must for better results in the long term. The developer will benefit immensely from the new-found wisdom, which he can use gainfully for his future designs. On the part of the user, even though breakdown is unwelcome and unpleasant in general, the lessons learned could become handy to avert failures in future, especially if it has occurred due to an oversight.

Let us convert every breakdown, if we are destined to go through it, to our advantage • to learn new lessons or to open doors to exciting opportunities!

Trivandrum

1 October '04

N.T.Nair

Editor

e-mail: del@vsnl.com

IEEE NEWS AND EVENTS

M.V. Chauhan Students Paper Contest 2004

Open to : Student members of IEEE

Topic : Any subject in the area of interest to IEEE

Last date : November 22nd, 2004

Prizes : First 6000 Second 4000 third 3000

In addition, certificates will be awarded to the authors of the selected papers.

First author of the top three papers will be invited for presentation at IEEE Indicon 2004 to be held in IIT-Kharagpur between Dec. 20th and 22nd, 2004

Rules and Guidelines

the contest is open to all student members of ieee in india

- papers in any subject of interest to IEEE may be submitted
- the no. of authors for any paper should not exceed three
- a student can be an author in more than one paper.
- two hard copies of the paper should be submitted.
- papers should be neatly typed on bond quality paper in 1.5 spacing.
- length of the paper should not exceed 10 typewritten pages.
- each entry should have a title page giving the affiliation of the author(s)
- ♦ declaration from the branch counsellor should accompany each entry in the following manner ♦it is certified that the author♦♦♦♦ is an IEEE student member. The paper entitled♦♦♦♦♦ is his/her own work, eligible for the M.V.Chauhan Students♦ Paper Contest 2004.♦
- in case the institution does not have an ieee student branch, this declaration should be signed either by a faculty member who is an IEEE Member, or by the Principal.
- in addition to 2 hard copies of the paper, electronic submission through attachments is encouraged. (mvcspc2004@yahoo.com or mmshah@yahoo.com
- travel assistance will be provided to first author of the top three prize winning papers for presentation in IEEE Indicon 2004 to be held at IIT-Kharagpur.

Submit your entries to:

Prof M.M. Shah, Vice Chair - Students Activities, IEEE India Council.

Sardar Patel College of Engg, Munshi Nagar, Andheri (West), Mumbai 400 058

Tel: 022-26707440, 022-26701410 (ext: 304)

e-mail: Mvcspc2004@yahoo.com, or mmshah@yahoo.com

IEEE Annual Election - 2004

Dear fellow IEEE Voting Member,

This is the time of year to choose whom you would like to see in leadership positions at the IEEE. The opportunity to vote in the annual IEEE election is a privilege of your membership. We hope that you will take the time to complete and submit your ballot. This year we have to elect the Region 10 Director-Elect for 2005.

Election ballots have been mailed to all IEEE members who are eligible to vote. If you have not already received yours, it should be arriving shortly. Contact the IEEE at corp-election@ieee.org if you do not have your ballot by 21 September.

To help you make an informed decision this voting season, please visit our election Web site at:

http://www.ieee.org/corporate/elections/candidates.xml

There you can link to the candidates statements and their background information.

In 2004, members are also being asked to vote on a Constitutional Amendment containing revisions to the wording of the IEEE Constitution. For detailed information on these changes, please visit the Proposed Constitutional Amendment Revisions Web site at:

http://www.ieee.org/about/whatis/bylaws/changesgrid.xml

Additionally, this year, for the first time, members may choose one of two ways to cast their ballots.

- You may transmit your ballot electronically. Information on this procedure is provided in the election ballot materials that have been mailed to you. Or
- ♦ You may choose to mail your ballot. To ensure that your paper ballot is counted, you must sign and return it in the postage-paid envelope provided in the ballot package. Mail early to allow for delivery by the deadline date. If you do not use the envelope provided, you may mail your signed ballot to:

Survey & Ballot Systems, Inc. P.O. Box 46430 Eden Prairie, MN 55344-6430 USA

If you transmit your ballot electronically, it is NOT necessary to return a signed ballot by postal mail. If a member casts ballots both ways, only the first ballot received will be counted.

All ballots must be received by 1 November 2004 by 12 occlock noon, Central Time USA (18:00 GMT).

Please take this opportunity to make your voice heard as an IEEE member. Thank you.

Best regards,

R.Muralidharan, Chair - IEEE India Council

IEEE Senior Members

Dear All,

IEEE India Council congratulates the following distinguished 6 new Senior Members elevated this month from India.

The next A&A Senior Member Review Panel Meeting will be held on 20 November 2004 in San Antonio, TX. This will be the last panel meeting for the year.

Bombay Manish B. Damle

Delhi Simrath L. Surana

Gujarat Subbarao Hegde

Bombay Ramanathan Ramanan

Delhi Mummadi Veerachary

Bombay (Pune Subsection) Prashant P. Khankhoje

♦We, the members of the IEEE ♦ do hereby ♦ agree to accept responsibility in making engineering decisions consistent with the safety,health and welfare of the public, and to disclose promptly factors that might endanger the public or the environment♦ - IEEE Code of Ethics

Technology in Brief

OFC AMPLIFIER &INDIAN INITIATIVE

Indian scientists have successfully developed India s first optical fibre based amplifier that comes with a bonus of wider network coverage and faster connectivity, it is reported. The result will be significant reduction in monthly bills of cable TV, telephones and Internet, it is claimed, as these indigenous amplifiers would offer a cheaper alternative to costly imports. The amplifiers are now being imported by cable TV and Telecom Cos at a cost of around Rs 5 lakh. Indigenisation is expected to slash the price to half, helping these companies to bring down their infrastructure costs, in turn benefiting the consumers in the process.

The amplifier has been developed jointly by CSIR lab-Central Glass and Ceramic Research Institute (CGCRI), Kolkata, Central Electronics Engineering Research Institute (CEERI) Pilani, and private partners Network Systems Technology of Kochi and Optiware Photonics, Hyderabad. The much awaited \$\phi\$ fibre-to-home \$\phi\$ technology will soon become a reality in India, providing consumers high end all-purpose connectivity through a single fibre-optic cable, according to Dr. H S Maiti, Director of CGCRI.

Christened & Erbium Doped Fibre Amplifier (EDFA), the gadget bypasses the need for conversion of optical waves into electronic waves and their subsequent re-conversion into optical waves for restoration of energy losses during transmission. (Courtesy: Economic Times)

IEEE workshop on Accreditation -Bangkok, 7-8 Nov 2004

A 2 day workshop on & Engineering Accreditation Around the World is being held in Region 10 on 7-8 Nov 2004. It is sponsored by the IEEE Educational Activities Board (EAB) and Hyderabad and recipient of 2002 EAB Meritorious Region 10. C.Satish, a member from Achievement Award in Education is invited to make a presentation on the Continuina eligibility to practice engineering. It is essential for the well being of the profession and the society that such eligibility is controlled / regulated. Certain factors and systems like accreditation of engineering educational institutions, continuing and career long professional education requirements, engineering ethics are to be established in a fool proof manner. Various countries in North America, Europe, few countries in Region 10 are developing systems based on Washington Accord, Professional Engineer Register / certification, Engineer s Mobility Forum. Since global mobility requirements have increased national borders, mutually acceptable quality and equivalence standards are developed. India is not yet a member in such global / or even Asia Pacific agreements though India produces lakhs of engineers every year. If India has to become a member, it has to be willing to adopt fool-proof quality controls and high standards and subject them for scrutiny by the world / regional bodies.

C.Satish solicits your view points / concerns on the issues involved, which may be sent to him at e-mail: c.satish@ieee.org, with copy to Chair, IEEE India Council at: r.muralidharan@ieee.org

Library Scan

"A Bias for Action"

Book by:

Heike Bruch and Sumantra Ghoshal

Published by:

Harvard Business School

Mr Ghoshal's last work, with Heike Bruch of the University of St Gallen, in Switzerland, discusses a common problem among managers: they might be dedicated and eager enough, well-paid and given proper responsibilities, and yet fail to get anything worthwhile done. The authors divide managers into four types: the rare ones who can focus their energies to get the job done; the detached, who fail to engage themselves or their colleagues; the procrastinators, who put off tasks for fear of failure; and the frenzied, who get so caught up in answering every e-mail and attending every meeting that they lose sight of larger goals. "A Bias for Action" is aimed mainly at this last group-wisely, since most managers would probably prefer to think of themselves as frenzied, rather than detached or procrastinating. After spending the first part of the book explaining how managers can learn to focus and get more (and more useful) work done, the authors move on to describe how to create a whole company of "action-takers".

The advice in the first section concentrates more on personal development-set a goal, visualise the steps needed to reach that goal, and commit unequivocally to doing so-but Mr Ghoshal and Ms Bruch flesh out their tips with several one-page case studies of successful

goal-setters. Their use of examples from Lufthansa and Micro Mobility Systems, a Swiss

> firm, give the book an appealingly wide feel and might make it especially interesting to managers in Europe. The second half of the book takes a wider view of "organisational energy" and is meant more for top executives. The international examples continue, as the authors cite companies in Switzerland, South Africa, France, and Japan. It was published in April, just a month after its co-author, Suman Tagent and professor at London Business School, died auddonly, at the respected management guru and professor at London Business School, died suddenly at the age of 55

Turning Around Runaway Information-Technology Projects

Information-Technology Projects
It♦s almost drearily common: the IT project that ends up costing millions of dollars more than projected. After noting the obvious and hidden costs of such projects♦resources that could have been used elsewhere, damage to a firm♦s reputation, loss of morale among information-technology workers♦Charalambos L. Iacovou, who teaches IT management at Wake Forest University, and Albert Dexter, a professor emeritus at the University of British Columbia, survey 38 IT consultants to pick up tips on how to speed recovery from runaway projects. The ten recommendations include: see if the project can♦t be slimmed down and made less ambitious; re-estimate the case for the project in light of what♦s already been spent; break the project into small portions; and, once corrective plans have been put in place, make sure to communicate them within the organisation, so that people know both that the project is still worthwhile and that measures are being taken. Sometimes, if management is too wedded to the bloated project, an outside eye can help♦though the authors admit this is somewhat self-serving advice coming from a group of consultants. On a completely different topic is ♦What Matters Most, ♦ taken from a lecture given by Jeffrey Hollender, president and chief executive of Seventh Generation, to the University of California♦s Haas School of Business in March 2004. In discussing how a socially responsible approach might lead to greater profits, Mr Hollender combines realism♦ ♦You can find something wrong with every business on the face of the earth♦ with a thorough description of how he has tried to integrate a responsible ideal at every level of Seventh Generation, which produces environmentally friendly household products, such as biodegradable detergent.

[California Management Review, Summer 2004 (Volume 46, No. 4)]

Facing Challenges -The Japanese Way

The Japanese have always loved fresh fish. But the waters close to Japan have not held many fish for decades. So to feed the Japanese population, fishing boats got bigger and went farther than ever. The farther the fishermen went, the longer it took to bring in the fish. If the return trip took more than a few days, the fish were not fresh. The Japanese did not like the taste.

To solve this problem, fishing companies installed freezers on their boats. They would catch the fish and freeze them at sea. Freezers allowed the boats to go farther and stay longer. However, the Japanese could taste the difference between fresh and frozen and they did not like frozen fish. The frozen fish brought lower price.

So fishing companies installed fish tanks. They would catch the fish and stuff them in the tanks, fin to fin. After a little thrashing around, the fish stopped moving. They were tired and dull, but alive.

Unfortunately, the Japanese could still taste the difference. Because the fish did not move for days, they lost their fresh-fish taste. The Japanese preferred the lively taste of fresh fish, not sluggish fish. So how did Japanese fishing companies solve this problem? How do they get fresh-tasting fish to Japan?

To keep the fish tasting fresh, the Japanese fishing companies still put the fish in the tanks. But now they add a small shark to each tank. The shark eats a few fish, but most of the fish arrive in a very lively state. The fish are challenged.

As soon as you reach your goals, such as finding a wonderful mate, starting a successful company, paying off your debts or whatever, you might lose your passion. You donot need to work so hard so you relax.

Like the Japanese fish problem, the best solution is simple. L. Ron Hubbard observed it in the early 1950 s. Man thrives, oddly enough, only in the presence of a challenging environment.

The Benefits of a Challenge • The more intelligent, persistent and competent you are, the more you enjoy a good problem. If your challenges

are the correct size, and if you are steadily conquering those challenges, you are happy. You think of your challenges and get energized. You are excited to try new solutions. You have fun. You are alive!

Recommendations • Instead of avoiding challenges jump into them. Beat the heck out of them. Enjoy the game. If your challenges are too large or too numerous, do not give up. Failing makes you tired. Instead, reorganize. Find more determination, more knowledge, more help.

Donot create success and lie in it. You have resources, skills and abilities to make a difference. Put a shark in your tank and see how far you can really go!

"Man is the only animal that can remain on friendly terms with the victims he intends to eat until he eats them".

- Samuel Butler

Silence is the mother of truth.

- Benjamin Disraeli

A gem cannot be polished without friction, nor a man perfected without trials. -Chinese Proverb

I went down with the ship but I kept my mouth shut so I didn't drown like the rest of them. -Unknown

"When a company runs out of innovation, it runs out of growth."

-Unknown

" I don't think there's been anything more important or more widespread. Where does the Internet rank in priority? It's No.1, 2, 3, and 4"

Jack Welch,

Chairman & CEO, General Electric

This page last modified on: July 13, 2002

Send your comments about this page, to: s.gopakumar@ieee.org
This page, developed and maintained by: s.gopakumar@ieee.org