

## CHAIRMAN'S MESSAGE

Dear fellow members,

On the eve of my taking over as Chairman of the Council, I take the opportunity of wishing all the fellow members and their families a very happy, prosperous and eventful year 2005. I wish the year will fulfill all your cherished desires.

The year 2005 has set in with a couple of significant IEEE activities in India. 2005 IEEE President W. Cleon Anderson took over on 1st January 2005 and his first international destination as IEEE President was India. Cleon Anderson accompanied by his wife Dixie and Kumar Shah arrived India on 9th January and had left back for US on 22nd January 2005. During his stay of 14 days he visited 6 sections namely Mumbai, Hyderabad, Bangalore, Chennai, Kerala and Delhi. He was delighted to be in India and praised every section for the hospitality extended to them and the precise engagements chalked out for him. While in Delhi, besides various activities planned, two are worth mentioning. First as a foreign tourist a visit to Taj Mahal at Agra, which every foreigner looks forward. Second was signing a Memorandum of Understanding between IETE (The Institution of Electronics & Telecommunication Engineers) and IEEE. The MOU encompasses joint activities between the two entities, coordination of technical meetings, exchange of publications and standards information. Further, it allows 10% discount on the basic membership dues of IETE and IEEE basic dues and Region 10 assessment. However the discount will not apply to additional fees such as IEEE society enrolments or subscriptions to other IEEE publications. This shall not apply to dues already discounted from the full dues.

I also wish to inform you that I have been associated with the Council as Secretary / Treasurer from 1991 to 1993, as Treasurer from 1994 to 1995 and again as secretary / Treasurer from 2001 to 2002.

I look forward to your continued support and guidance.

With warm regards,

Delhi  
1 February '05

**RAJENDRA K. ASTHANA**  
Chairman - IEEE India Council  
asthana@ieee.org

*This Issue is Sponsored by*  
**IEEE BOMBAY SECTION**

# IEEE INDIA BULLETIN

## FIFTEENTH YEAR OF PUBLICATION

Newsletter of IEEE India Council, Rs. 2/- Volume 17 - Number 2 February 2005

Regd. No. KL/TV(N)/76/03-05 Licensed to Post without Pre-Payment under Licence No. Tech/62-2/TV(N)/19/04-05 Posted at Trivandrum GPO. Posting Date : 8<sup>th</sup> & 9<sup>th</sup>

### Editor's Desk

#### *"Mementos – Some Thoughts"*

At the end of the function, the keynote speaker was honoured with a memento – a classy replica of a boat, about two feet in length and well decorated. He accepted the gift with all humility. Later he was seen moving around with the delicate boat in his hand, as it won't go into his brief case.

A memento which serves to remind us of a person or an event, is always given with the best of intentions by the organizers. Back at home, some of them become worthwhile additions to the showcase. But in many cases, they do not form part of the enviable items, either from an artistic or utility point of view, leave alone the difficulties encountered in transporting them without damages.

Here are some thoughts in this connection:

- First and foremost, the memento should remind one of the function associated with it.
- It should be an elegant piece, representing some cultural or ethnic values connected with the event or the place.
- Once these are decided, the handling of the memento by the recipients on their way back home is to be well planned. Secure packing, in an easy to carry manner is to be thought of.

Even with all these aspects well taken care, we find a number of non-utility items occupying prime space in drawing rooms. Quite often, the old ones end up in the hands of scrap dealers.

As engineers, we have a role to conserve the scarce resources. Can we think of mementos that combine art, utility and convenience? Then they will occupy place of pride on our office tables or homes, playing some useful roles in our daily chores.



**N.T.Nair**

Editor

e-mail: del@vsnl.com

Trivandrum  
1 February '05

*"Speak when you are angry and you will make the best speech you will ever regret"*

- Harold Wilson

## IEEE NEWS & EVENTS

### IEEE president inaugurating the national seminar on 'Bioinformatics' - IEEE BIOS 2005 organised by IEEE Kerala Section at Trivandrum on 17 Jan.'05



*L-R Mr.Subodh PS, Convenor, IEEE BIOS 2005, Dr. Ashok S. Kolaskar, Vice-Chancellor, University of Pune EE Rajkumar, Chairman, IEEE Kerala Section, Mr.Philip John, Vice Chairman, IEEE Kerala Section*

### **Message from Mr W.Cleon Anderson, IEEE President 2005**

*(Sent to Mr R. Muralidharan, Past Chair, IEEE India Council)*

Dear Murali

We arrived safely home with all our luggage in tow. Dixie and I are well and strong. The effects of jet lag are now behind us.

Thanks to you and all our other hosts in India; this trip exceeded our most favorable expectations. The members of the India Council, as well as the section leaders, have been most gracious. Thank you all so much. Thanks again for arranging a state visit with President Kalam. We were well received. I think the people of India are very fortunate to have a noted scientist as President, and to have such a strategic leader, as Dr. Kalam, whose vision for India so parallels the IEEE Vision in these critical times as India pursues the 2020 goal of a developed country.

Monday, after our return I was back on the airplane to IEEE HQ in Piscataway, NJ. I took much of the material that was given me at the various venues to the appropriate staff management at IEEE HQ, and I explained to them many of the concerns and thoughts that were expressed to me during my visit with our members in India. I returned two nights ago to a mountain of mail. As you can guess, I had wall-to-wall meetings at IEEE HQ and have had little time to take care of the more pleasant tasks of the Presidency such as this response to you. Please forgive me if this note of thanks seems late. Today, my children and grandchildren will come to the house and we will tell them about our trip, show pictures, and explain to them about the gifts of friendship that we received. Truly this has been an experience of a lifetime.

W. Cleon Anderson,  
P.E., President, IEEE

31 Jan.'05

w.c.anderson@ieee.org, 801-594-7323

### **Excerpts from Mr W.Cleon Anderson's interviews while in India**

“Today with India becoming a powerhouse in the software arena, there is a considerable amount of collaboration between engineers which stimulates ideas and creativity. Our aim is to provide networking among them so that innovative ideas come up”

“We are looking at a more concerted effort from Indian developers who are working on emerging technologies. For instance, there is significant work being done on smart appliances and bio-medical devices. If there is closer collaboration between the developers here and others in the different regions, these technologies are bound to take off much sooner than expected”.

“Today the key to success is how fast one learns new things to keep pace with technology and change. For an engineer, knowledge becomes obsolete as soon as he graduates from his college”.

Mr Anderson is yet another proponent claiming that India could become a huge manufacturing base. He adds: “India will soon become a force to reckon with in manufacturing too, like software. No doubt, China is way ahead in manufacturing but there is no reason why India can not catch up too”.

## TECHNOLOGY IN BRIEF

### Steer-by-wire

Automobile electronics is entering every facet of function in a vehicle, with computer chips and sensors making driving a less tasking activity.

The new technology, steer-by-wire, is going to turn computers into back-seat drivers. These new systems can serve as fast-reacting co-pilots that take the wheel if the driver gets into trouble, thereby cutting down accident rates.

A steer-by-wire car still has the same old steering wheel and pedals, but they are connected to nothing but a computer chip, which makes driving a bit like playing a video game. The chip monitors what the driver is doing with the steering wheel and pedals, and signals small electric motors to turn the front wheels, control the brakes and operate the throttle.

Steer-by-wire could keep a driver from turning too hard and sending the car into a skid on slippery roads. And it could also keep drunken, distracted or dozing drivers from drifting out of their lanes - the driving misstep behind 40 percent of all vehicle fatalities.

Down the road, steer-by-wire systems will be able to detect imminent collisions, take over the controls and whisk the car away from another speeding vehicle.

However, there is a risk that an errant computer would interfere with a driver who is trying to avoid hitting a pedestrian, warn some experts. Automakers insist that they will test the computers for utmost reliability before letting them hit the roads.

### Remote Cut-off Switch for Stolen Vehicles

A novel method of implementing engine performance degradation in stolen vehicles to intercept them easily by police has been developed by a company in UK, Mobilizer Ltd. This remote cut-off switch can be applied to all types of vehicles and has worldwide patent protection.

The idea behind the system is that the police can progressively limit an engine's revolution range to slow it down. Communication with the system is bi-directional so that a police official or monitoring service operator will be able to see, via the application software, what is actually happening in the vehicle at any time.

Engine performance degradation is implemented by reducing the maximum rpm available down to approximately 400 rpm above the normal tick-over speed, without the risk of introducing a stall condition. If the thief driving the vehicle accidentally stalls the engine in the course of normal driving, it may be restarted until the "Engine Stop" command is signaled by the police or vehicle pursuers.

After the revolutions have been cut, the Engine Stop command can be used at any time. Other inputs and outputs allow for hazard lights to be switched on to warn other motorists, or door lock switches to be activated.

The installation cost per car would be in the range of \$600, it is indicated by the company.

### Innovative Night Vision System

Honda of Japan has developed an innovative and intelligent night vision system, which it believes could reduce night time pedestrian fatalities. Two 'far-infrared' cameras mounted in the front bumper of the vehicle detect objects by the heat they emit. Based on shape and size, the system determines if the object is a pedestrian. In addition to the conventional night vision function of giving the driver an enhanced view of the road ahead, the system is believed to be the world's first to provide cautions that inform the driver of the presence of pedestrians who are on the road or about to cross the vehicle's path. In addition to an audio warning, an image is also reflected in a retractable mirror positioned on top of the dash.

### In Lighter Vein

- ❖ A chemist walks into a pharmacy and asks the pharmacist, "Do you have any acetylsalicylic acid?"  
"You mean aspirin?" asked the pharmacist.  
"That's it, I can never remember that word."
- ❖ A woman walked up to a little old man rocking in a chair on his porch. "I couldn't help noticing how happy you look," she said. "What's your secret for a long happy life?" "I smoke three packs of cigarettes a day," he said. "I also drink a case of whisky a week, eat fatty foods, and never exercise." "That's amazing," the woman said. "How old are you?" "26," he said.

*Library Scan***" Successful Innovation "**

Book by: **Michel Syrett and Jean Lammiman**

Published by: **Profile Books Ltd in association with The Economist**

In recent years innovation has been promoted as the latest core capability without which businesses cannot prosper and may not survive. In the new economy, it has become clear that ideas and adaptability are crucial.

The book describes the processes and capabilities required by organizations to foster creative thinking and, equally important, to capture and shape the resulting output. The topics discussed are:

- ❖ What inspires and informs original ideas
- ❖ The role of champions and teams in getting ideas off the ground
- ❖ The importance of continuous evaluation and testing of ideas throughout their development, together with the free flow of information
- ❖ The roles of consultants and specialists
- ❖ The crucial factor of leadership

**NEWS SCAN****Functional MRI**

A powerful scanning technology known as functional Magnetic Resonance Imaging (fMRI) is making its way out of the labs and into marketers' tool kits for studying consumers' emotions and motivations. Essentially a \$2.5 million tricked-out version of the MRI machines in hospitals, an fMRI detects the ebb and flow of blood to the brain's centres of pleasure, thought or memory. Research by Baylor College of Medicine neuroscientist Read Montague suggests that when you like what you are seeing, blood flow increases in certain parts of your prefrontal cortex. This doesn't mean science has found humankind's buy button; too many other factors intervene between desire and action. For example, even if one loves wine, putting him in a scanner after he had a heavy breakfast and show wine, his brain might not show a preference response.

Even so, companies are continuing the experiments. Ford ran a market test using brain scan studies in Europe and Hollywood is interested in testing viewers' reactions to movie trailers. In fact, researchers have created an fMRI service for film makers and plan to offer fMRI studies on everything from logos to packaged goods.

**Office Space - London Most Expensive**

Rents in Mayfair, London, home to companies including Cadbury and some major private banks are at Rs 1.28 lakh per sq. metre per annum, the highest for office space in the world.

The second ranking Paris charges Rs 53,784 per sq. metre while fifth ranking Hong Kong, Rs 36,254, a sq. metre.

"Success consists of a series of little daily victories"

- Laddie F. Hutar

"Human beings are the lowest cost, lightweight, non-linear, all-purpose computer systems that can be mass produced by unskilled labour"

- NASA

" Behind every successful man there's a lot of unsuccessful years"

- Bob Brown

" You don't get paid for the hour. You get paid for the **value you bring** to the hour"

- Jim Rohn

*Editorial Board*

Er. N.T. Nair	Editor
Prof. V.K. Damodaran	Member
Er. J. Muraleemohan Lal	Member

IEEE India Bulletin Website:  
[http:// www.ewh.ieee.org/rr10/india\\_council](http://www.ewh.ieee.org/rr10/india_council)

# IEEE INDIA BULLETIN

## F E B R U A R Y 2 0 0 5

Rs.2/-

PRINTED MATTER

To

From

**N.T.Nair, CMS Computers Ltd, Santhi Nagar, Trivandrum 695 001.**

Licensed to post without pre-payment under Licence No: Tech/62-2/TV(N)/19/04-05  
Posted at Trivandrum GPO  
Posting dates: 8<sup>th</sup> & 9<sup>th</sup>  
Regd. No. KL/TV(N)/76/03-05