

**IEEE India Bulletin Vol. 12 No. 2 February 2002****INDEX****Features**

[|| Chairman's Message ||](#) [|| Quotation ||](#) [|| Editor's Desk ||](#) [|| This issue is sponsored ||](#)  
[|| Customer Care-General Motors way||](#) [|| News-scan||](#) [|| Technology in Brief||](#)

**CHAIRMAN'S MESSAGE**

Dear Fellow Member,

The year 2002 has started and this is the time when new executive committees will take over in all IEEE Sections. The new execomms always with some new faces, are expected to give new directions to the activities and growth of IEEE. Let us hope the year 2002 shows still better results and breaks all records of the previous years, particularly in membership growth, starting new student branches, establishing new sub sections and organising more technical activities. India Council will be too happy to provide support whatever is needed.

Indian Sections have many highly qualified engineers who have excelled in technical fields and whose works are well recognised in the world. The highly reputed academic institutions like IITs and recognised R&D Centres in India are carrying out good work and producing excellent engineers but it is a matter of concern that the number of IEEE Fellows in India is not commensurate with the talent and capabilities available. Either the Sections are not seriously sponsoring them or the engineers themselves are feeling shy in coming out with their achievements. Let us resolve this year to sponsor as many engineers as possible for Fellowship of IEEE and continue our efforts in future also so that our Fellowship number reaches a respectable figure. All the Sections will have to make efforts in this direction.

Due to some problems, the 3rd All India Student Congress scheduled to be held during Feb. 1 to 3, 2002 at Trivandrum has been postponed to sometime in June/July 2002. I hope the organisers will finalise the dates soon and inform all the student branches well in time. This year, Kolkata Section is organising the A C E 2002 at Kolkata and I hope, they also announce the dates soon to give enough time to authors and participants.

With best wishes

Noida  
31 Jan. '02

Promod K.  
Srivastava  
Chairman India  
Council, IEEE



**E-mail :** [pk Sri@satyam.net.in](mailto:pk Sri@satyam.net.in)

[Goto Top](#)

**Quotation**

"The biggest obstacle to launching a successful company is no longer attracting financial capital but attracting intellectual capital"

**Creativity**

" What separates the average person from Edison, Picasso or even Shakespeare isn't creative capacity - it's the ability to tap that capacity by encouraging creative impulses and then acting upon them."

[Goto Top](#)

**EDITOR'S DESK**

**'20% of the items only are used 80% of the time'**

The other day I visited an old friend who was planning to move out of this city to his native town. Most of the house-hold articles have been shifted and he was retaining only a small portion of the big house as a guest house, with some essential furniture, kitchenware and the like. He was waiting to tell me that for a comfortable living, we need only 20% of the items we hold today, as was discovered late by him. The balance 80 % are used very rarely, may be once in a month or worse, once in a year. But still, we have to take care of them by finding place to keep them safely, periodically dusting & checking them and what not ! As per Pareto principle, this 80-20 phenomenon is applicable to every facet of our daily activity, which brings to light a very important aspect concerning the utilization of our scarce resources. For these not-so-essential commodities or services, we waste a lot of our fast depleting resources, leading the world to an un-sustainable situation.

As engineers, charged with the responsibility of devising technical and managerial ways for efficient and optimal utilization of the resources on the earth, let us have a re-look at our daily activities and identify the 80% variety and put them to better use. There are millions who do not even have the other 20 % !

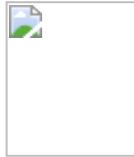
**N. T. Nair**

Trivandrum Trivandrum Editor

1 Feb.'02

[email:](#)

[del@vsnl.com](mailto:del@vsnl.com)



**H L BAJAJ "BEST CORPORATE MANAGER"**



Mr. Harbans L. Bajaj , Past Director, IEEE Asia-Pacific Region, and Director (Commercial) NTPC was selected for the "Best Corporate Manager 2001" award by the National Foundation of Indian Engineers (NAFEN), a professional body of engineers.

Shri I K Gujral, former Prime Minister of India presented the award to Mr. Bajaj on 10th January 2002 at New Delhi during the Annual International Conference of NAFEN.

**IEEE member co-authors  
text books:**

1. Parallel Computers: Architecture and Programming, Prentice-Hall of India, New Delhi, 2000.
2. New Parallel Algorithms for Direct Solution of Linear Equations, John Wiley & Sons, Inc. USA, 2000.
3. Resource Management in Real-Time Systems and Networks, MIT Press, USA, 2001.
4. WDM Optical Networks: Concepts, Design, and Algorithms, Prentice Hall, USA, 2001.

Co-authored by:  
Dr.C.Siva Ram Murthy  
(IEEE Member No: 40196870)  
Professor, Dept of Computer  
Science and Engg.  
Indian Institute of Technology, Madras  
Chennai 600 036.  
Email: [murthy@iitm.ernet.in](mailto:murthy@iitm.ernet.in)  
Web: [www.cs.iitm.ernet.in/murthy](http://www.cs.iitm.ernet.in/murthy)  
Tel: 044 - 4458340



[Goto Top](#)

**This issue is sponsored**

by  
**IEEE KHARAGPUR SECTION**

[Goto Top](#)

**News-Scan**

### **IBM appoints Palmisano as CEO**

Sam Palmisano will become IBM's chief executive March 1, 2002, succeeding Lou Gerstner, the company announced. Palmisano, currently IBM's president and chief operating officer, has been widely expected to take over from Gerstner, who has been credited with transforming IBM from a lumbering giant into a profitable services titan. Although he will step down as CEO, Gerstner will remain chairman through 2002

[Goto Top](#)

**Technology in Brief**

## **Goodbye, rearview mirrors!**

Renault's concept car, the Talisman, recently unveiled at a motor show in Frankfurt, has no rearview mirrors. It is, instead, fitted with a series of rear-facing CCTV sensors that provide perfect view of what is occurring behind and around the vehicle.

Developed by Donnelly Corporation in Michigan, USA, and the Panoramic Vision, this system digitally merges the images from three cameras to relay a seamless, panoramic view of the area behind and around the vehicle. The view is displayed on a screen located on the upper part of the dashboard. The screen also provides information on a number of other in-vehicle applications, including navigation, the sound system, the heating and cooling systems, and the vehicle's warning and security systems

## **Early warnings for tyre problems**

A telematics-based system that can provide early warnings of potential tyre problems has been developed jointly by ATX Technologies Inc. and Cycloid of USA.

When a Cycloid's Reactance 'smart' software detects a tyre is losing air on a telematics-equipped vehicle, ATX collects that data point through telematics and quickly notifies the automotive OEM and the driver. ATX can then direct the driver to the nearest garage.

Cycloid manufactures a totally self-contained inertial compressor which is mounted at the centre of the wheel. The compressor uses its rotation to power a pump that continuously maintains tyre pressure as the vehicle moves along the road. The Reactance software produces tyre alerts, which include such data points as wheel position, current pressure and estimated hours to reach the proposed NHTSA warning pressure threshold.

ATX and Cycloid provide a solution for OEMs that addresses the growing public concern about proper tyre pressure and potential tyre failure. The system also promotes the consumer benefits of properly inflated tyres, saving money with longer-lasting tyres and saving the environment with improved fuel efficiency.

## **'Smart' Road Studs**

Intelligent Road Studs (IRS) are about make an entry into India for the benefit of road users. Astucia of UK is offering these "on-at-dusk-off-at-dawn" studs known as 'Solar-Lite' which are expected to help both drivers and road authorities in different ways.

Significantly, the studs work on solar power, therefore the name. When the studs are fully charged , they work for several nights totaling around 240 hours. This makes the device environmentally-friendly, besides being cost-effective.

The flush-set, hardwired IRS are fitted with five bi-colour red and amber ultra-bright LEDs linked to a control unit and activated by signals received from the intersection controller.. The high performance LEDs provides valuable extra information to drivers. During the red phase, the studs across the junction show constant red and studs along the extended approach line flash at a frequency of 2 Hz. The stud colour changes to amber during the amber and red/amber phases. On green, all studs are deactivated. The Astucia control unit is equipped with a sensor to detect ambient light and control the stud system illumination by day.

Illumination levels are controlled at night to reduce the possibility of glare.

A pilot project for the intelligent studs, which is already underway, will cover a distance of 1 km on the Delhi-Jaipur Highway and half a km within the capital city of New Delhi by the end of February 2002.

[Goto Top](#)

**Customer care- General Motors way**

The Pontiac division of General Motors received a complaint:

"This is the second time I have written to you, and I don't blame you for not answering me,

because I sounded crazy, but it is a fact that we have a tradition in our family of ice cream for dessert after dinner each night. But the kind of ice cream varies, so every night, after we've eaten, the whole family votes on which kind of ice cream we should have and I drive down to the store to get it. It's also a fact that I recently purchased a new Pontiac and since then my trips to the store have created a problem. You see, every time I buy a vanilla ice cream, when I start back from the store my car won't start. If I get any other kind of ice cream, the car starts just fine. I want you to know I'm serious about this question, no matter how silly it sounds. What is there about a Pontiac that makes it not to start when I get vanilla ice cream, and easy to start whenever I get any other kind?"

The Pontiac President was understandably skeptical about the letter, but sent an engineer to check it out anyway. The latter was surprised to be greeted by a successful, obviously well educated man in a fine neighborhood. He had arranged to meet the man just after dinnertime, so the two hopped into the car and drove to the ice cream store. It was vanilla ice cream that night and, sure enough, after they came back to the car, it wouldn't start. The engineer returned for three more nights.

The first night, they got chocolate. The car started. The second night, he got strawberry. The car started. The third night he ordered vanilla. The car failed to start.

Now the engineer, being a logical man, refused to believe that this man's car was allergic to vanilla ice cream. He arranged, therefore, to continue his visits for as long as it took to solve the problem. And toward this end he began to take notes: he jotted down all sorts of data: time of day, type of gas used, time to drive back and forth etc. In a short time, he had a clue: the man took less time to buy vanilla than any other flavor.

Why? The answer was in the layout of the store.

Vanilla, being the most popular flavor, was in a separate case at the front of the store for quick pickup. All the other flavors were kept in the back of the store at a different counter where it took considerably longer to check out the flavor. Now, the question for the engineer was why the car wouldn't start when it took less time. At once time taken became problem - not the vanilla ice cream

"Eureka!"

The engineer quickly came up with the answer: "vapour lock". It was happening every night; but the extra time taken to get the other flavors allowed the engine to cool down for the client to start. When the man got vanilla, the engine was still too hot for the vapour lock to dissipate. Even crazy looking problems are sometimes real and all problems seem to be simple only when we find the solution with a cool thinking.

Don't just say it's "IMPOSSIBLE" without putting a sincere effort...

Observe the word "IMPOSSIBLE" carefully... You can see "I'M POSSIBLE"...

What really matters are your attitude and your perception.

(Culled from the Internet)

[Goto Top](#)

**"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

[Goto Top](#)

**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:**

**This page last modified on: July 13, 2002**

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

**This page, developed and maintained by : [s.gopakumar@ieee.org](mailto:s.gopakumar@ieee.org)**