



## Chairman's Message



Dear Fellow Members,

The second All India Student Congress held at SSN College of Engineering at Kalavakka, Tamil Nadu from 28<sup>th</sup> to 30<sup>th</sup> September 2006 was a grand success. The Congress was attended by a record number of 415 Students. Out of this 145 were local and rest from outside. Besides various Student activities, the programme also included talk by India Council Executive Vice-Chair, Mr. N T Nair, and Student

Activity vice Chair, Mr. M MShah, Chair Madras Section, Dr. Ponnaivaikko, Student Activity Chair, Madras Section, Dr. Suresh Chander Pal, and Madras Section Vice-Chair, Mr. T S Rangarajan, Principal SSNCE, Dr. S Salivahanan and many other eminent Speakers. The Congress concluded with a sight seeing trip to Pondicherry. Heartiest Congratulations to Student Volunteers of SSNCE, Dr. Salivahanan, Dr. Suresh Chander Pal, SAC Chair, Dr. Ponnaivaikko, Chair and others for organizing the AISC in a big way. We are confident that with this success they are geared up to host other IEEE Mega Events.

I wish to apprise all our members that one of the recent notifications issued by Ministry of Urban Development has granted some exemption under sub-section 2 & 3 of Delhi Laws (Special Provisions) Act 2006 to some of the Professionals but has excluded Engineers. Vide para 10.8 of the notification dated September 07, 2006 such an exclusion has seriously undermined the position of Engineers and has put them at a great disadvantage. This becomes more serious in view of the fact that India produces more than 3,50,000 Engineers every year through various technical institutes and many of those are of international repute. It is further estimated that apart from those who are employed in Govt., PSUs & Corporate Sectors almost 35% Engineers are engaged in professional activities. Many of such professionals operate from their residence. Thus this notification is detrimental to such professionals, which is not fair for engineering profession as a whole. Engineering Council of India (ECI) has already taken up this issue with Ministry of Urban Development. One of the possible reasons for this exclusion could be Engineers do not enjoy the benefit of an Act of Parliament. I hope all of you are well aware that ECI is continuously striving to get the Engineers Bill enacted. It is hoped that with the help of Institution of Engineers (India), ECI will succeed in getting the bill enacted in due course of time. It is expected that all other states will follow the similar action. In case some of you come across with any individual / institutions facing such a problem, please pass on the full details to enable me to take up with ECI / keep them informed of developments in other States.

I am pleased to inform you that result of the recent election has been announced and Mr. Yong Jin Park, Professor, Hanyang University, Seoul, Korea, is elected as Director Elect R 10 for 2007-08 and Director, R 10 for 2009-10. I wish him all success and extend support of all members in India.

With warm regards,

Delhi  
01 November '06

**Rajendra K. Asthana**  
Chairman - IEEE India Council  
asthana@ieee.org

## Editor Writes....

Friends,

*'Simple practices, to save time and also to convey meaningful messages'*

He is an artist with exceptional creative talents. Starting in the era of brush and paint, he subsequently transformed himself into an artist who could handle the modern PC based ways of generating art forms, with ease.

This is about a simple management practice he follows. When he is in his working seat, anyone making a phone call to him will get a response within two rings, invariably. He also makes it a point to keep the discussion shortest and to the point. If the ring extends beyond two, all his associates have by now learned that he is not there and there is no point in continuing the call, unless one is particular to know his whereabouts from some one else there. This simple two-ring practice could be a pointer to many to evolve their own methods in other areas.

'Always on' is the way of working in offices these days. e-mails pour in as and when some one sends it, alerting a busy executive in each case. Some have now found a way to circumvent these frequent interruptions by scheduling the system to collect the mails once in every 30 minutes or hour, so that you get time to act on the earlier set.

On the gadget side, the new caller ID watch with Bluetooth connectivity to the mobile will flash the name of the caller on the small display in watch dial. You have the option to respond or reject or call later, by pressing the appropriate button on the watch.

All these point to a new need of busy bodies: simple, fast, and less time consuming ways to respond to other's need for our time or response.

Let us devise innovative methods to introduce two-ring like simplicities in other areas, as well.

Trivandrum  
01 November '06



**N.T.Nair**  
Editor  
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**'Please understand my friend, that where you find yourself tomorrow is a function of the positive decisions and actions you take today.'**

- Akin A. Awolaja

## IEEE NEWS & EVENTS

### IEEE INDIA COUNCIL - SLATE FOR 2007 OFFICE BEARERS

The Nomination Committee Chaired by Mr. R. Muralidharan, Past India Council chair and Prof. H P Khincha and Mr. P K Srivastava as members has proposed the following Slate for the year 2007.

SI. No	POST	SECTION	NAME
1	Chair	Kerala	Mr. N. T. Nair
2	Exe. Vice Chair	Bangalore	Prof. Kasi Rajagopal
3	Secretary / Treasurer	Kerala	Mr. K. G. Satheesh Kumar
4	Immediate Past Chair	Delhi	Mr. R. K. Asthana
5	VC - Professional Activities	Hyderabad	Mr. R. Kannan
6	VC - Student Activities	Madras	Dr. Suresh C. Pal
7	VC - Technical Activities	U. P.	Dr. S. C. Srivastava
8	VC - Educational Activities	Calcutta	Mr. K. K. Mallik
9	VC- Membership Dev.	Gujarat	Dr. A. R. Dasgupta
10	News Letter Editor	Kerala	Prof. V. K. Damodaran
11	Ombudsman	Bombay	Prof. M. M. Shah
12	Member at Large	Bombay	Mr. Quraish Bakir
13	Member at Large	Kharagpur	Prof. Rajib Mall

Additional nomination by petition, if any may be submitted no later than 15th December 2006 to the Secretary / Treasurer, India Council at the following Address. To be valid, such petition shall carry the signatures of no fewer than 25 voting members of the Council & include a statement of the willingness of the candidate to serve.

**Dr Ram Nath,**

Secretary / Treasurer, IEEE India Council,  
C-1/1484, Vasant Kunj, New Delhi-110070

### WIE Affinity Group

#### *Initiatives under IEEE Kerala Section*

Women In Engineering (WIE) Affinity Group of IEEE Kerala Section had applied for IEEE Foundation grant under "International Initiatives in Regions 8, 9, And 10" and support for enhancing School Laboratories was granted by the Foundation. While interacting with various schools in Kerala it was found that the schools were in need of Infrastructure for conducting the science experiments in their curriculum in a more meaningful way. WIE along with IEEE Kerala Section then identified few needy schools and after a round of discussions with the school authorities came up with a list of lab equipment urgently wanted by the schools.

As per this, on October 20, 2006 Mr. NT Nair, Vice-chair, IEEE India Council, Mr. Dinesh Thampi, Centre Head, TCS, Kochi and Ms. Jyothi Ramaswamy from WIE group visited St. Joseph's School, Kizhakkambalam, Eranakulam to hand over the lab equipment. The students were celebrating Youth Festival and the team members addressed the gathering. This 60 year old school has a strength of over 800 students from 1<sup>st</sup> to 10<sup>th</sup> standard

mainly from the surrounding rural areas. The lab equipment were handed over to the school authorities in a brief function. On the same day, WIE team visited SreeKrishna Vilasom High School, Pathiyoor, Kayamkulam, Kerala and handed over another set of lab equipment to the school. This school again is in a rural place with its limited resources. Both the schools expressed their gratitude to IEEE Foundation and IEEE WIE for the support provided to them.

Reported by: Ms. Jyothi Ramaswamy

### Dr. B.I. Gururaj, Life Member Passes Away

With deep sorrow, we report the sad demise of Dr. B I Gururaj, a Life member of IEEE and a member of the Power Engineering Society on Oct. 18th 2006.

Born in 1933 at Madurai, Prof. B I Gururaj received B.E. in Electrical Engg. from Madras University, M.E. in HV Engg (1958) and Ph.D for research work on natural frequencies of 3 phase transformer windings both from IISC, Bangalore.

He served in IISC and retired as a Professor in 1993. His research interests were over voltages and insulation coordination, HV testing and measuring techniques, pollution performance of surge arresters, partial discharge measurements, signal processing and artificial intelligence techniques in HV engg. He had published in IEEE Transactions, IEE Proceedings and CIGRE. He has participated in the activities of CIGRE Study Committee 33 and it's working groups as well as IEC TC's 28 and 42 working groups.

IEEE fraternity salutes Prof B I Gururaj, the IEEE Veteran who lived his life for electrical engg.

### M. V. Chauhan Paper Contest 2006 Results

From among the 73 entries received, the following papers have been adjudged as the best three. [In Oct'06 issue, only a brief report of this was given]

- 1. First Prize : Rs. 6000/-** *Implementation of Vedic Algorithm in VLSI for Digital Signal Processing Applications.* By: A. Selvaraj of Kongu Engineering College, Perundurai, Erode 638 05
- 2. Second Prize : Rs. 4000/-** *An Adaptive Clusterhead and Gateway Discovery Scheme for MANETS* By: Pritam Som, Rahul Ghosh and Aritra Das, Dept. of Electronics and Telecommunication Engineering, Jadavpur University, Kolkata 700 032
- 3. Third Prize : Rs. 3000/-** *Digital Fortress [The New Standard for Encryption]* By: Manojkumar Parmar of Institute of Technology, Nirma University of Science and & Technology, Ahmedabad 382 481.

Reported by: Prof. M. M. Shah  
Vice Chair, IEEE India Council  
(Students Activities)

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## IEEE NEWS & EVENTS (Contd.)

### IEEE REGION 10 Executive Committee 2007

The following committee will take over their new responsibilities from 1<sup>st</sup> January 2007:

Director: Prof Janina. Mazierska

Immediate Past Director: Prof Seiichi. Takeuchi

Vice Chair & Director-Elect : To be determined by election.

Secretary: Prof Marzuki Bin Khalid

Treasurer: Mr. Takatoshi Minami

Life Member Coordinator: Dr Graeme Gwilliam

Women In Engineering Representative: Dr Tuptim Angkaew

Awards & Recognition Committee Chair : Dr Hirohisa Gambe

Industry Liaison Coordinator: Prof Isao Shirakawa

Electronic Communication Coordinator & Newsletter: Dr Zia Ahmed

Section & Chapter Regional Coordinator: Prof Miki Yamamoto

By Laws /Operations Manual Coordinator: Prof Akinori Nishihara

Educational Activities Coordinator: Dr Norman Mariun

GOLD Coordinator 2007: Dr Yasuharu Ohgoe

Recognised Education Program Coordinator: Prof Robert Hodgson

GOLD Coordinator 2008: Miss Helene Hoi-Ying Fung

Membership Development Coordinator: Prof Tieniu Tan

Region 10 Student Representative : Mr. Kazuyuki Sudoh

Regional Conference Coordinator: Prof Lawrence Wong

Special Project Coordinator: Dr Lance Chun Che Fung

**Student Activities Coordinator: Prof Mini Shaji Thomas (Delhi Section)**

Strategic Planning Coordinator: Dr Michael Evans

**Technical Activities : Prof Mahendra Shah (Bombay Section)**

Advisory Committee - Dr Jung Uck Seo

Advisory Committee - Prof Teck Seng Low

**H.Kalyanasundaram, veteran IEEE Member, writes about representation in this Execom....**

I am real glad, opportunity has been given for two of our IEEE stalwarts, Dr Mini Thomas and Prof. M M Shah in the IEEE REGION 10 Executive Committee 2007. Four years ago there were none from India. Taking 31 Dec 2005 as base, please note:

- We have 43 Sections in R 10, ten in India. But we have only 2 reps out of 25.
- Sections in India have a membership of 22134, more than a third of Region's 62, 533. But we have less than 10 % of quota.
- Japan Council has a strength of 12,703 and they have 8 reps, while we at India have 22,134 and compelled to be content with 2, same as Malaysia with 1266 membership and 2 reps.
- We in India have 327 Student Branches, against R 10's 439 .- but are not given a chance to have "R 10 student representative " from our ranks.

I am hopeful, both Prof Mini and Shah ,will, in the discharge of their duties, not only earn respect for themselves but for the country and IEEE. Our present representatives, Prof Khincha and Sankaran have done well especially Prof Sankar , has done a yeoman service, during his 2+ year term of office as MDC. His particular contribution of stabilizing Region grants to Branches thru' Sections based on year end strengths (instead of new admissions of the year ) was a bold move. I salute him for his efforts, though I must confess that not all Sections passed on the benefit to Branches.

## NEWS SNIPPETS

### U.S. Green Building Council (USGBC)

USGBC is America's foremost coalition of leaders from every sector of the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to live and work. There are more than 7,200 member organizations and network of more than 80 regional chapters who are united to advance the mission of transforming the building industry to sustainability.

The U.S. Green Building Council's core purpose is to transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life. The built environment has a profound impact on our natural environment, economy, health and productivity.

LEED: the "Leadership in Energy & Environmental Design" Green Building Rating System developed by the USGBC, is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings in US. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

LEED provides a roadmap for measuring and documenting success for every building type and phase of a building lifecycle. Specific LEED programs include:

- New Commercial Construction and Major Renovation projects
- Existing Building Operations and Maintenance
- Commercial Interiors projects
- Core and Shell Development projects
- Homes
- Neighborhood Development
- Guidelines for Multiple Buildings and On-Campus Building Projects

US Green Building Council (USGBC) is also developing LEED for Schools, LEED Retail for New Construction, LEED Retail for Commercial Interiors, and LEED for Healthcare.

Recently, Adobe Systems, the \$2 billion software maker of US, became the first company to receive a platinum award from USGBC for its HQ in San Jose, the greenest corporate site on record. Adobe invested about \$1.1 million in 45 energy-efficiency projects, yielding nearly \$1 million in annual savings, including \$350,000 in energy rebates.

An Indian initiative is around the corner in these lines.

(For more: [www.usgbc.org](http://www.usgbc.org))

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**TECHNOLOGY SNIPPETS****Oil Slicks on Ocean Surface - Improved Machine to Remove it**

Oil is a complicated mixture of many components, and its fate and behavior on the sea surface largely depends on its initial properties and composition as well as on specific local environmental conditions. Spreading, evaporation, dispersion, and emulsification can rapidly alter oil properties within several hours, leading to formation of water-in-oil emulsion. Oil spills at sea can cause significant damage to the environment and impact commercial activities such as fishing, aquaculture, and tourism.

Mechanical recovery is one of the most popular and effective oil spill containment techniques. Most oil slicks can be removed using a drum skimmer, a plastic roller supported by floats. As the roller turns, oil sticks to its surface and is lifted off the water and scraped into a container behind.

Now engineer Arturo Keller at the University of California, Santa Barbara, has hit upon a simple improvement. The conventional machine for sucking up oil slicks from the ocean surface has been modified to work three times as efficiently, thanks to a groovy design change. By moulding deep grooves into the drum, he has increased its surface area, and therefore the amount of oil it picks up as it turns. The proposed grooved pattern can increase recovery efficiency by 100-200%

**3-D Maps from Microsoft**

Google's popular "Earth" software, which enables about one-third of the world's population to obtain an aerial view of their homes and neighborhoods is in for competition from a formidable opponent -Microsoft. Google claims to have distributed more than 100 million free copies of the Earth software since its June 2005 introduction.

Microsoft, the world's largest software maker, has now upgraded its online mapping service. Microsoft is touting its 3-D version of "Virtual Earth" as a more compelling alternative that provides "photorealistic" images of the 15 targeted cities: San Francisco, San Jose, Seattle, Boston, Philadelphia, Los Angeles, Las Vegas, Detroit, Phoenix, Houston, Baltimore, Atlanta, Denver, Dallas and Fort Worth, Texas. Additional cities are expected to be added in the coming months.

Probably, it is the beginning of the 3-D Web, according to Microsoft.

The Virtual Earth service, available at Microsoft's live.com site, is designed to work in a Web browser without opening another application - a convenience that Google Earth doesn't currently offer.

**NEWS SNIPPETS (Contd.)****Ocean Waves to Power Desalination Device**

Stephen Salter at Edinburgh University, UK, who first designed a device to generate electricity from wave power in the 1970s and his team are now working on a version that purifies seawater by driving a pump with the rocking motion created by sea waves. This would avoid the high energy demands of conventional desalination plants, and could be installed in arid countries with good access to seawater, such as Australia and Israel. The device converts wave energy into pressure changes that aid the collection of pure water as steam from seawater. By lowering air pressure, the system can draw steam from water at lower temperatures.

(Courtesy: New Scientist)

**Indian Manned Space Mission**

Indian Space Research Organization (ISRO) is planning a manned space mission as there is now a feeling that 20 years down the line, other countries would have explored the Moon for minerals and India must not be left behind. With its expertise, ISRO is in a position to undertake the manned mission in eight years, according to Dr G. Madhavan Nair, Chairman, ISRO. The estimated cost of such a mission would be in the region of Rs. 10,000 to 15,000 crores (US\$2.2 to 3.3 billion).

**Food for Thought**

- No one shall cause another pain or injury; All mankind shall live in peace together; Under a shield of administrative benevolence...Adi Granth, Sri Raga
- In the confrontation between water and the rock, the water always wins. Not through strength but through persistence.

**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/r10/india\\_council](http://www.ewh.ieee.org/r10/india_council)

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