



Chairman's Message



Dear Fellow Members,

As informed in the last issue of April 2006, IEEE President 2006 Prof. Michael Lightner along with his wife Linda visited India from 26th April to 1st may 2006. During his short visit he went to Bombay, Bangalore and Delhi. Prof. Lightner's visit to India has been very fruitful and enjoyable. He has thanked all Sections for being wonderful hosts and the excellent arrangements. The visit was exciting, informative and very useful and rewarding, he stated. He has found IEEE members in India are outstanding. During his Delhi visit, he went to see Taj Mahal at Agra, visited two Institutions and participated in India Council meeting. He had a short meeting with Honorable President of India, Dr. A. P. J. Abdul Kalam accompanied by IEEE's H L Bajaj, RK Asthana and PV Ekande and had very fruitful technical discussions. During India Council meeting, he met Section Chairs from Bombay, Calcutta, Delhi, Gujarat, Kharagpur, Madras and UP. All the Section Chairs made presentations to him, besides Council Chair on various IEEE activities being carried out in their Sections. At the end he summed up his visit thus: "It was a spectacular visit. I learned a great deal and am looking forward to a return visit".

More awards came IEEE India way this time also. They are: (1) Outstanding WIE student affinity Group award by Jamia Millia University, Delhi (2) Outstanding student branch award 2005 again by Jamia Millia University, Delhi (3) Region 10 Website contest award – 1st prize by VESIT, BOMBAY (incidentally they were FIRST in 2004 also in Region & Inter-regional contest), 2nd prize by IIT, Bangalore and 3rd prize by VIT, Pune and (4) 2005 PES large chapter award by PES Delhi Chapter. Heartiest Congratulations to all winners.

This year INDICON 2006 is being organized at Delhi jointly by Delhi Section and India Council from 15th to 17th September 2006 at India Habitat Center, Lodhi Road, New Delhi. All are requested to contribute for the same by way of papers and participation. Details are being published else where in this issue of News Letter.

Should you have any suggestions, please do write to me.

With warm regards,

Rajendra K. Asthana

Chairman - IEEE India Council
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Delhi
01 May '06

'People know the cost of everything but the value of nothing'

– Oscar Wilde

Editor Writes....

Friends,

A historic and epoch-making event took place in the Indian space arena recently. Mr Michael Griffin, NASA Chief and Dr G Madhavan Nair, Chairman, ISRO, signed an MoU agreeing to associate in India's moon exploratory mission, Chandrayan-1. This is no small feat and in fact, a much delayed recognition of the silent but significant strides made by India in space research. The Indian researchers have been doing excellent work in the field all these decades, facing stiff opposition from the technologically advanced, developed countries. They did not want another competitor to come up in this niche area with immense potential and implications in socio-politico-economic fields. They were even blocking supply of critical components needed for space research, some of which they only were making, in a monopolistic way. This has driven the Indian scientists and engineers to a difficult situation, for some time. But they did not relent and went to into an overdrive to get themselves out of the clutches of the so-called technology masters. This silent revolution undergoing in our space labs has now catapulted India to a position of excellence in space research, which the pioneers in the field had to finally acknowledge. Also, there is the new found wisdom that 'isolated living and working in this planet earth is no more the norm and all will have to join together combining their resources and expertise to make our lives progressively better.'

The gesture on the part of US to associate with Indian space scientists to carry research and exploration in this area, I believe, signals the dawn of a new era where all human beings are treated equal and allowed to co-exist, sharing the good, the bad and the ugly sides with compassion.

Let such joining of hands happen in several other areas of human activity.



N.T. Nair
Editor

Trivandrum
01 May '06

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Message From IEEE President



Dear Colleague,

I have the distinct pleasure of serving you as the 2006 President of IEEE. Today I am writing to ask for your help and participation in the 2006 drive to help increase our membership.

The foundation and strength of the IEEE is a strong and growing base of members.

IEEE does not have a professional sales and marketing force for membership. Rather, we depend on word of mouth to communicate our organization and that means you. To continue to grow and build the IEEE, we need your help. Here's what you can do.

Participate in the Member-Get-A-Member program. This program is available with incentives for finding new members. You will get a \$5.00 credit voucher for every member that you recruit. But the real reward is more than a credit voucher. It's a stronger, better IEEE with enhanced connections into industry and the community. These connections help to build the IEEE Network that supports our careers and the profession.

There are many tangible benefits associated with membership: career and professional development tools, discounts on products and services (both technical and non-technical), the award-winning Spectrum magazine, reduced conference registration fees, multiple opportunities to network with the leaders of the field, access to top technical information, an ever increasing number of continuing education courses, and much more. The list continues to grow each year. In 2005 we launched a members-only web portal, myIEEE. This portal puts all your membership benefits together in one, easily-accessible place.

In 2006 you will see the launch of IEEE.tv, which, through streaming video, can place conference presentations, technical seminars, and other items of general interest directly on your desktop. We also have plans to launch a new, online member directory to help our members get in touch, and stay in touch with each other.

With all of that, I thank you for maintaining your membership in IEEE this year and hopefully in the future. I also urge you to recommend IEEE to your colleagues and co-workers. Please direct your colleagues to <http://www.ieee.org/join> to become a part of the IEEE Network. Remind them that if they join between now and 15 August 2006, they can join for just one-half the normal dues rate.

This is your organization. Help us to grow it and to keep it as vital and vibrant in the future as it has been in the past. Thank you for your participation in the 2006 Membership Drive.

Very truly yours,

Michael Lightner, Ph. D.
President and CEO, IEEE

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Contd...

IEEE R10 Website Contest

Indian students have done it again

First place: VESIT, Mumbai (They were the first last year not only in R10 but in Inter-regional contest as well)

Second: IITB, Bombay

Third : VIIT - Pune.

Hearty Congratulations to the three teams from Bombay Section.

[Reported by R. Muralidharan, former IC Chair]

IEEE ALL INDIA STUDENT CONGRESS 2006

AISC 2006

IEEE-Delhi section is hosting the 2006 IEEE All India Student Congress, AISC 2006, at Delhi during 29-30 June 2006.

Theme:

**SYNERGISE... CREATE... CELEBRATE
ENGINEERING**

Major Activities

- Section Presentations
- Group discussions on topics concerning student IEEE members across India.
- Leadership workshop by an eminent personality
- Team-building activities and
- Cultural programs

Contact for <http://www.aisc2006.com/tpp.php>

Registration: razafaiz@gmail.com

Website: <http://www.aisc2006.com/aif.php>
www.aisc2006.com

IEEE Region 10 Students Congress will be held at Beijing, China from 13 to 16th July 2006

For details: <http://www.r10sc2006.org>

- *'We choose our joys and sorrows long before we experience them'* - Brandi B
- *'Success is not a doorway, it's a staircase'* - Dottie Walters
- *'Never let your memories be greater than your dreams'* - Doug Ivester
- *'As long as you think the problem is out there, that very thought is the problem'* - Stephen Covey

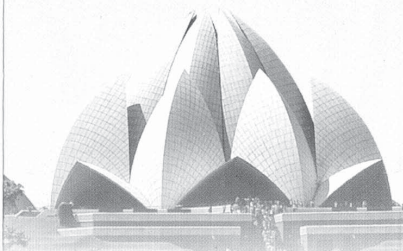
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IEEE INDICON 2006 15-17 September 2006

India Habitat Center, Lodhi Road, New Delhi 110 003, India



IEEE DELHI SECTION
and
IEEE INDIA COUNCIL



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About the Conference

IEEE India Council has been holding an Annual Conference and Exhibition (ACE) at different locations in India. From 2004, ACE is renamed as IEEE INDICON. IEEE Kharagpur Section organized IEEE INDICON 2004 and IEEE Madras Section organized IEEE INDICON 2005, an International Conference and Exhibition under the aegis of IEEE India Council. IEEE INDICON 2006 is to be organized by IEEE Delhi Section. The venue of the conference, to be held on 15-16-17 September 2006, is India Habitat Center, Lodhi Road, New Delhi, the capital city of India. As in the past, the Conference will provide a forum for scientists, educators, students and practicing engineers to meet and exchange ideas and explore new avenues of research, cooperation, and knowledge sharing. Apart from the presentation of contributed papers reviewed by a renowned panel of reviewers, INDICON 2006 will also feature tutorials, exhibitions and invited talks by pioneers in various fields.

Theme of the Conference

The conference will focus on "Emerging Trends in ICT (Information and Communications Technology)"

Call for Papers

Original contributions reporting results of research and development are solicited on topics covered under the broad areas of Communication Systems, Fiber Optics and Optical Communication, Mobile Technologies, Biomedical Systems, Signal Processing, Computer Communication Networks, Pervasive Computing, Grid Computing, Computational Intelligence and Robotics, Software Engineering, Nano-technology, and Geographic Information Systems. The papers can also cover areas like IT Security, Cyber Crime, Risk Management, Ethics in Corporates, Standards, IT in Agriculture, ICT and Social Development, Electronic Document Management, Outsourcing and Offshoring Trends. Prospective authors are requested to submit abstract of their papers in not more than 3 pages or 1500 words. Upon acceptance, full paper, not exceeding six pages, prepared in the two-column IEEE format, which will be made available at the conference website, must be submitted. All queries, abstract and papers must be submitted in electronic form to dbdsood@hotmail.com. The abstract and the paper should contain e-mail addresses, postal addresses, photographs and qualifications and affiliations of the author(s). Accepted papers will be published in the proceedings of the conference, provided at least one of

the authors registers, attends and presents the paper. The organizing committee is in the process of getting approval to get all accepted papers published in IEEE Explore.

Important Dates

Submission of abstract: Extended to May 31, 2006

Intimation of acceptance: Extended to June 30, 2006

Submission of final paper: July 31, 2006

Last date for Registration (for at least one author to ensure publication): August 31, 2006

Registration Fee	Indian Delegates	Foreign Delegates
IEEE Members	INR 2000	USD 200
Non-members	INR 3000	USD 300
Students (IEEE Members)	INR 500	USD 50
Students (non-members)	INR 1000	USD 100

Fee includes Lunch, two-time Tea / Coffee & Cookies, besides Tutorial / Conference materials.

Participation certificate will be issued to all delegates.

Conference Support

- Gold Sponsor:** INR 100,000 (the sponsor will get due publicity in the conference, proceedings, FREE full page insert, banners and posters in all halls, 2 FREE stalls to set up their exhibits, 10 FREE delegates)
- Silver Sponsor:** INR 50,000 (the sponsor will get due publicity in the conference, proceedings, FREE half page insert, banners and posters in one hall, 1 FREE stall to set up their exhibits, 5 FREE delegates)
- Bronze Sponsor:** INR 25,000 (the sponsor will get due publicity in the conference, proceedings, FREE quarter page insert, 2 FREE delegates)
- Exhibitor:** INR 10,000 (the exhibitors will get one stall to set up their exhibits)
- Venue:** **India Habitat Center, Lodhi Road, New Delhi**
- Patrons:** Mr. H L Bajaj, Member Electricity Appellate Tribunal
Dr. D P S Seth, Member Telephone Regulatory Authority of India
Prof. Surendra Prasad, IIT Delhi
Mr. F C Kohli, Tata Sons



IEEE President Michel Lightner with IEEE office-bearers from India Council and Sections during his recent visit to Delhi.



Honouring former Kerala Section Chair, E.E Rajakumar in a function on 29 Apr. '06 at Trivandrum on IEEE Kerala section getting adjudged '2004 R10 Outstanding Large Section' to R: A K Unnikrishnan, Kerala Section Chair, N T Nair, Editor, IEEE India Info, Aju Thomas Abraham, Secretary and E E Rajakumar.

NEWS SNIPPETS**India's First Mission to Moon Chandrayaan-1**

India and US signed a path breaking MoU in space research on 9 May, 2006. NASA chief, Michael Griffin and ISRO Chairman Dr. G. Madhavan Nair informed the joint plans between the two countries to involve in the lunar mission, Chandrayaan-1 in a significant way. The Mini Synthetic Aperture Radar developed by Applied Physics laboratory, John Hopkins University, and the Moon Mineralogy Mapper M3 built by Brown University and Jet Propulsion Laboratory, NASA will be carried by Chandrayaan-1. The Mini SAR is meant to detect water in the permanently shadowed areas of the lunar polar regions while the M3 will characterise and map minerals on the lunar surface. ISRO's PSLV will launch Chandrayaan-1 into a 240 km x 24,000 km earth orbit.

The collaboration would help India in mapping mysteries of the Moon, its surface, meteorological content and more. There would be an advanced knowledge about Moon's history and evolution and influence future explorations by its analysis of lunar soil.

Some highlights of the system :

- Chandrayaan-1 will be unnamed.
- Lift-off will be from Sriharikota, in early 2008.
- Lift-off weight: 1,300 kg.
- The rocket will be an advanced four-stage Polar Satellite Launch Vehicle (PSLV).
- Scientific payload: 55 kg
- Total cost of mission: Rs.386 crores
- After take-off, the spacecraft will first be placed in geostationary transfer orbit. From there, it will move to the lunar transfer trajectory and will coast for about five days.
- Then, a lunar capture manoeuvre will place the spacecraft in a 1000-km lunar polar orbit.
- The life of Chandrayaan spacecraft is estimated to be two years. It will transmit data to the deep space network near Bangalore. Data will then be relayed to National Science Data Centre which will distribute information for analysis by scientific institutions.

TECHNOLOGY SNIPPETS**Methanol Fuel Cell**

Matsushita, a division of Panasonic, has unveiled a new direct methanol fuel cell to power portable electronics. It is smaller and more powerful than comparable models developed to date: at 24 cubic inches, it is about the size of a soda can and about half the size of previous models. With an average output of 13 watts, a peak output of 20 watts, and low weight due to its reduced size (it weighs about a pound when empty), a laptop using this fuel cell is able to achieve up to 20 hours of runtime. A system showcasing the fuel cell's abilities was demonstrated at the 2006 International Consumer Electronics Show (CES) recently.

LED Lighting - The Journey Continues....

There is now more emphasis to help LEDs move gradually into mainstream lighting markets – white LEDs with very high brightness and efficacy, integrated modules and plug-and-play systems, and well-engineered white LED-based lighting products.

Among LED makers, the most extravagant claims are made by Seoul Semiconductor, who promised by the end of the year a single-die white LED producing 98 lm at 350 mA with 84 lm/W efficacy, as well as a warm-white device producing 67 lm at 57 lm/W. However, the important parameters are not the datasheet numbers provided by the LED makers, but the real numbers measured by the user when the LEDs are placed into a system.

This is one aspect of an issue which remains highly prevalent for LEDs in lighting; there is a huge disconnect between LED makers and lighting companies. There are numerous aspects to this problem, for example the lack of standards for LEDs, or the frustration experienced by lighting manufacturers in not being able to obtain a reliable and long-term supply of LEDs with consistent color properties.

Cycle times are also widely different. Like other semiconductor companies, LED makers regularly make significant improvements to the performance of their devices and may then phase out lower-performing and older devices. However, this creates problems for lighting manufacturers who have brought an LED-based design to market (with all the associated tooling and marketing costs) and want to be able to offer the same product for a number of years.

Even with all these teething problems which is customary in any new technology area, LED lights are sure to conquer the lighting arena - be it home lighting, auto headlights, camera flash The development initiatives underway world over will make this happen in recent future.

Editorial Board

Er. N.T. Nair	Editor
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IEEE India Bulletin Website:
http://www.ewh.ieee.org/r10/india_council

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