



### Chairman's Message



Friends,

Every conceivable media is discussing the global economic downturn today. The repercussions of this phenomenon are multi-fold: lay offs, winding up of organizations, restructuring etc... By sheer numbers, the most affected are the technical community, who has been working on upgrading the organizations to enjoy the benefits of emerging technologies like improvement in efficiency, saving cost, better service to customers etc. Endowed with analytical skills and modern simulation and other technology-enabled tools, the engineers and software experts can do much more

than performing well in their chosen areas. They can very well pass on the benefit of their expertise to foresee the turmoil in economic sector, through modelling and other means. Many of the engineering concepts could very well be applied to financial sector to predict the trends in horizon to a fair degree of accuracy. Some engineers-turned-managers do make use of this skill in a limited way now. But the potential is much more and IEEE with its rich techno-managerial content in its member folk could venture into this activity, for our own benefit and also of the society.

Back to IEEE India scene. A visit of Dr Rangachar Kasturi and Matt Loeb team from IEEE HQ, for the second time this year for discussions with India Council and Sections took place on 5 Nov.'08 at Trivandrum, as part of India Focus initiative of Lewis Terman, IEEE President 2008, aimed at improving the services to IEEE community in India. Here are some highlights of the recommendations put across to the team from IEEE India side and accepted by the team for the next presentation to BOD:

1. Enable Indian members and students to pay in INR
2. Corporate membership worldwide, in the form of corporate partnership
3. Tele-engineering activity, similar to Tele-medicine
4. Involving representatives from India in finalizing elements of the India Initiative
5. More incentives for completing 5/10/15 years of membership
6. Preventing massive membership drops of graduating students
7. A single IEEE outfit under HQ to handle issues referred by members and IEEE entities.
8. Enhance the reach of IEEE standards at the country level
9. More drive to National Distinguished Lecturer Programme (NDLP) and IEEE sticker scheme
10. Budgetary support to Councils

TENCON 2008 hosted by Hyderabad Section has received excellent response from participants and is poised to be another successful IEEE event in Indian soil. Congratulations to the organising team!

This year's INDICON is taking shape in IIT, Kanpur, as a major activity of UP Section and India Council in December 2008. Best wishes to Dr. S. C. Srivastava, and Dr. S. P. Das, both of IITK for the success of these events. Dr. S C Pal, Student Activities Vice Chair of India Council has graciously taken up the responsibility of conducting the M V Chauhan student paper contest, the winners of which will be honoured during INDICON. In this connection, it is our appeal to all Sections and Sub-sections to lend all support to these events by ensuring maximum participation of delegates and students.

With best wishes to the IEEE fraternity in India,

**N. T. Nair**

Chairman, IEEE India Council  
ntnair@ieee.org

Trivandrum  
11 Nov. '08

### INDICON 2008

Dear IEEE Member,

IEEE Conference and Exhibition on Control, Communication and Automation (INDICON 2008) is being organized at IIT Kanpur by IEEE Uttar Pradesh Section and IEEE India Council during 11-13 December 2008.

The details about the conference are available in the following website.

[http://www.ewh.ieee.org/r10/uttar\\_pradesh/indicon2008/](http://www.ewh.ieee.org/r10/uttar_pradesh/indicon2008/)

INDICON 2008 is a major technical event of IEEE India Council and IEEE Uttar Pradesh Section. The conference will have three tutorials and three keynote lectures by speakers from both within and outside the country. There will be technical paper presentations in various technical sessions covering a wide spectrum of topics under the theme of the conference. A special panel session on "System of Systems" by Prof. Mo Jamshidi of University of Texas at San Antonio will be held on 12th December afternoon. Attending the conference will be beneficial to the students, professionals from academic institutes as well as from industries.

On behalf of conference organizing committee, I invite you to participate in this conference. The registration details are available in the following website.

[http://www.ewh.ieee.org/r10/uttar\\_pradesh/indicon2008/registration.php](http://www.ewh.ieee.org/r10/uttar_pradesh/indicon2008/registration.php)

Proposals are also invited from interested organizations for a technical exhibition which will be organized during the conference. The details are available at the following link.

[http://www.ewh.ieee.org/r10/uttar\\_pradesh/indicon2008/exhibit\\_workshop.php](http://www.ewh.ieee.org/r10/uttar_pradesh/indicon2008/exhibit_workshop.php)

Regards,  
**S. P. Das**

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### Editorial Board

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## From India Council Secretary



The UP Section is gearing up for IEEE India's annual event INDICON 2008, the IEEE Conference & Exhibition. This year the theme is "CONTROL, COMMUNICATION AND AUTOMATION". The event will be held at Indian Institute of Technology, Kanpur during 11-13 December 2008. Details are available at [http://www.ewh.ieee.org/r10/uttar\\_pradesh/indicon2008/](http://www.ewh.ieee.org/r10/uttar_pradesh/indicon2008/). The General Chair for the event is Dr. S C Srivastava and the Conference Chair

is S P Das, both of the Department of Electrical Engineering, IITK.

The MV Chauhan Student Paper Contest 2008 is also being currently conducted by the India Council, coordinated by the Student Activities Vice Chair, Dr. SC Pal. The entries are to be sent to [ieeemas@gmail.com](mailto:ieeemas@gmail.com) to reach by 21 Nov. In addition to cash prizes and certificates, the first authors of the top three papers will be invited to present their papers at INDICON 2008 at IIT Kanpur. IEEE student members and volunteers are requested to publicise this contest as widely as possible among the student community.

The visit by Dr. Rangachar Kasturi and Mr. Matt Loeb to India to validate the recommendations to the IEEE Board on the new "Focus on India" initiative was quite fruitful and well participated in person and over the web by several sections. The Kerala Section had set up a video and audio broadcast of the proceedings as well as an audio conference call facility for remote participants. Bombay, Bangalore and Hyderabad Sections interacted over the conference call.

Dr. Kasturi and Mr. Loeb will present their final recommendations to the IEEE Board on 16th Nov 2008.

The Kerala Section is celebrating 25 years of full section status. The Section was formed on 18 Nov 1983. Hearty congratulations!

Finally, let me remind all sections and other IEEE entities to report activities on time, to the IEEE Newsletter for publicizing and also to IEEE Headquarters as part of L50 reporting.

Cheers!

**K. G. Satheesh Kumar**  
Secretary, India Council, IEEE  
[k.g.kumar@ieee.org](mailto:k.g.kumar@ieee.org)

## M.V.CHAUHAN STUDENTS' PAPER CONTEST 2008

**OPEN TO** : STUDENT MEMBERS OF IEEE FROM INDIA  
**TOPIC** : ANY SUBJECT IN THE AREA OF INTEREST TO IEEE  
**LAST DATE** : 21<sup>st</sup> November 2008 (Friday)  
**PRIZES** : **FIRST** : Rs. 6000  
          : **SECOND** : Rs. 4000  
          : **THIRD** : Rs. 3000

In addition, certificate will be awarded to the authors of the selected papers. First author of the top three papers will be invited for presentation at the 2008 annual IEEE India conference (INDICON) to be held in IIT – Kanpur between 11<sup>th</sup> and 13<sup>th</sup> december 2008.

### 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 and one soft copy 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 2008"

- 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 e-mail attachments is required to be sent to [ieeemas@gmail.com](mailto:ieeemas@gmail.com)
- Travel assistance will be provided to first author of the top three prize winning papers for presentation in *IEEE INDICON 2008* to be held at IIT Kanpur.
- Original works, actually performed by the students only should be submitted.

### SUBMIT YOUR ENTRIES TO:

Dr. P. Suresh Chander Pal, Vice Chair, Student Activities,  
IEEE India Council, IEEE Madras Section Office, Room No.3, ISTE  
Professional Center, Gandhi Mandapam Rd, Chennai -600 025  
Tel: 044-24423939, Mobile: 9382328776

## India Focus Meeting at Trivandrum



Dr. Kasturi and Mr. Matt Loeb with India Council & Kerala Section Officials



**Individually, we are one drop; together we are an ocean – Ryunosuke Satoro**

## Inauguration of IEEE, OES, India Chapter

India Chapter of IEEE, Oceanic Engineering Society has been inaugurated on 25 September 2008 at National Institute of Ocean Technology (NIOT), Ministry of Earth Sciences, Govt. of India, Chennai, India. Dr. P.S. Goel, Former Secretary, Ministry of Earth Sciences and Dr. James McFarlane, President, International Submarine Engineering (ISE), Canada has inaugurated the chapter by lighting a traditional lamp along with the other dignitaries. Dr. S. Kathirola, Director, NIOT welcomed the members and other invitees. Dr. P.S. Goel delivered the inaugural address and appreciated the efforts of IEEE, OES members and office bearers. He dwelled on the importance of interaction among the Ocean Engineering Community of India. He felt that such initiative has to be encouraged by the Institutes involved in Research and Development activities in the field of Ocean Engineering. Dr. M.A. Atmanand presented the need for membership in IEEE by professionals and the vision of IEEE, OES, India Chapter and introduced the office bearers of the India Chapter. The inaugural technical lecture was delivered by Dr. James Mc Farlane. He gave a lecture on "Underwater vehicles: Past, Present and Future". Mr. B.K. Miller from South West Research Institute (SWRI), USA, presented their activities in developing various submersibles in association with ISE.

The inaugural session was attended by representatives from research institutes like, NIOT, Indian Institute of Technology (IIT), Madras and Ocean Engineering industry. 28 IEEE members and 57 others attended the function. The meeting ended with vote of thanks by the Vice President of IEEE, OES, India Chapter, Prof. P.R.S. Pillai, Cochin University of Science and Technology, Kochi, India.

On-line registration facility to join IEEE, OES was provided at the venue for the benefit the invitees and other participants. The meeting was web-cast live, sponsored by NI Systems India.

For more information, please contact Dr. M. A. Atmanand, Chairman, IEEE OES India Chapter at [atma@niot.res.in](mailto:atma@niot.res.in) or Dr. G. A. Ramadass, Secretary, IEEE OES India Chapter at [ramadass@niot.res.in](mailto:ramadass@niot.res.in).



*Dr. S. Kathirola, Director, NIOT addressing the gathering  
Sitting Left to Right : Dr. M. A. Atmanand, Dr. Mc Farlane, Dr. P. S. Goel,  
Prof. P. R. S. Pillai*

## Technology News

### Computational Disease Analysis

Increased use of computers to create predictive models of human disease is taking place. Human disease research produces an enormous amount of data from different sources such as animal models, high throughput genetic screening of human tissue, and in vitro laboratory experiments. This data operates at different levels and scales including genes, molecules, cells, tissues and whole organs, embodying a huge amount of potentially valuable insight that current computer modelling approaches often fail to exploit properly.

Now significant advances in computer-based mathematical disease modelling of a few specific diseases, such as multiple sclerosis (MS), have been made. Also another valuable application of the model is in studying the phenomenon of addiction to drugs such as nicotine. The researchers claim that these new mathematical models will lead to better understanding of many diseases which in turn, could lead to better therapies.

### Chinese Ships to use Solar Energy

The largest Chinese shipping line COSCO is to fit their tankers with large solar-powered sails. The sails are 30 metres long, covered with solar photovoltaic panels that will provide 5 percent of the ships' electricity and will harness enough wind to reduce fuel costs by 20 to 40 percent. The sails are controlled by a computer that angles them for maximum wind and solar efficiency and it is claimed that the sails will pay for themselves within four years.

## caue 2008

### Conference on Advances in Usability Engineering

Organised by Department of Information Technology, Viswakarma Institute of IT, Kondhwa, Pune 411 048 and IEEE Computer Society of Bombay Section.

For details visit: [www.viitcaue.in](http://www.viitcaue.in)

**The less routine, the more life - Amos Bronson Alcott**



## Editorial

### The Conference Season



November-December every year is the season for technical conferences under professional banners and IEEE India too has been very active during its entire existence in bringing the best of professional knowledge to its members who attend these sessions. The announcements and reports elsewhere in this issue points to what we can have during this year's season.

With the crisis looming large globally in the financial scene, public are increasingly looking towards trends that are forecast and the advice by financial experts on 'dos and don'ts'. Interestingly, such forecasts are heavily depended upon the advances in computation as well as analysis of large volumes of data, similar to the weather forecasts. Accuracy in reality will depend more on the experience of the forecaster in the financial management. EE technologies are the walking sticks for the economists.

The current crisis showing tendency to outlast for a longer period, it is high time that competent IEEE professionals put their heads into a new exercise of data analysis on a global canvas, with the widely different economic policies of different countries which are the cause of it and watch the way how politicians are trying to solve it. It certainly is a problem of unprecedented nature and unusual outcomes are to be expected.

Regards,

Trivandrum  
11 Nov. '08

V. K. Damodaran, Editor  
vkd@ieee.org

## Every innovation begins with a thought.

ThinkLABS is an educational training and product company in the field of robotics & embedded systems incubated at SINE, IIT Mumbai. With strong R&D focus and technical backing we have reached out to over 18,000 students in 35 cities across India by providing them resources through a wide variety of development boards, sensors, robotic kits, software-based resources, basic and advanced level training sessions.

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