



### Chairman's Message



Dear Members,

The IT industry is staring into the *Obamanomics*, a new word coined. Job losses in USA are being reported almost every week in newspapers. In general, the wealth generating activities seemed to have slowed down considerably all over the world and USA in particular.

International Labour Organisation has said in a report 'Global Employment Trends 2009' that job cuts in 2009 alone will be in the range of 1.8 crore to

3 crore workers, and at least 5 crore "if the situation continues to deteriorate". Out of this, the projected job losses in India is 10% or in the range of 20-40 lakhs. Considering the size of our work force, this figure is not alarming. The politicians and economists are talking about new models for growth, banking, management, business and governance. Therefore the focus seems to be shifting towards intellectual and knowledge based activities from the wealth generation. While there is gloom over the world due to slowdown and recession, there are new opportunities for entrepreneurs and intellectuals apart from the challenges of facing the economic slowdown.

We are having a number of events coming up in the next few months. IEEE All India Student Branch Counselor Congress is being organized by Bangalore Section and cosponsored by India Council during 3-4 July 2009, at Bangalore. All Sections are requested to facilitate the participation of a large number of student branch counselors by way support and encouragement so that the student branches and the sections in turn derive maximum benefit from this meeting. The preparation for global event of 125<sup>th</sup> Anniversary of IEEE, to be celebrated on 29-30 August 2009, is progressing well. As part of this event IEEE Bangalore Section is also conducting its 18<sup>th</sup> Annual Symposium on Emerging Needs in Computing, Communication, Signals and Power on 29 August 2009, at Bangalore.

2009 IEEE International Conference on Vehicular Electronics and Safety is being organized by IEEE Bombay Section and cosponsored by the IEEE Intelligent Transportation Systems Society during 10-12 Nov 2009, in Pune. IEEE India Council and IEEE Madras Section are cosponsoring the World Congress on Nature and Biologically Inspired Computing (NaBIC-2009) to be held at Coimbatore, during 9-11 December 2009. The preparation for the INDICON-2009, hosted by IEEE Gujarat Section in Ahmedabad during 18-20 December 2009 is proceeding well. All are requested to contribute for the same by way of papers and participation. All Sections and IC team may consider lending full support to Gujarat Section to conduct INDICON most successfully and also lend support to the Bangalore, Bombay and Chennai Sections in the respective activities.

Dr Reilly, MIT, USA and Dr Ban of IBM are planning to visit India in July (Chennai on 12-13 July 09) on their way to East Asia. The Hindustan University, Padur, Chennai are planning to host them while they are in Chennai.

Bangalore  
01 May '09

**Kasi Rajgopal**  
Chairman, IEEE India Council  
kasi.rajgopal@ieee.org

**When you are courting a nice girl an hour seems like a second.  
When you sit on a red hot cinder a second seems like an hour.**

*That's relativity* - **Albert Einstein**

**Time goes, you say?**

**Ah No! Alas, Time stays, we go.** - **Austin Dobbs**

### Student Branch Counselor Congress

3 - 4 July 2009, Bangalore

IEEE India Council and IEEE Bangalore Section are jointly organizing IEEE All India Student Branch Counselor Congress at Bangalore. It will be one and half day's event. IEEE recognizes that the present students are the future of our country and they are the global citizens too. IEEE plays its role in different directions to shape the life of young engineers and scientist, and one such effort is to shape their life by academic and good leadership through branch counselors.

This congress mainly focuses on issues related to students and the counselor's role. That is, possible activities by branch counselors for students, role of a counselor in a new branch, financial management and sponsorship arrangement, how to manage a branch, and ethics for future professionals, etc. All the branch counselors are invited to attend this congress. The complementary breakfast, lunch, dinner and accommodation during the congress have been arranged by the organizers.

Kindly confirm your participation by email to **Dr. Debabrata Das**, Organizing Committee Chair: [ddas@iitb.ac.in](mailto:ddas@iitb.ac.in)

For accommodation please e-mail to **Dr. Sai Narayanan**: [sai.jgk@gmail.com](mailto:sai.jgk@gmail.com)

#### ENC<sup>2</sup>SP 2009

**IEEE Bangalore Section - 18<sup>th</sup> Annual Symposium on  
Emerging Needs in Computing, Communication, Signals and Power  
29 August 2009, Bangalore**

The IEEE Bangalore Section's Annual Symposium is a part of the two day event of Celebrating IEEE's 125 Years of Engineering the Future in Bangalore. The symposium is an annual research forum in the Emerging Fields of Engineering. The aim of the 18<sup>th</sup> Annual symposium is to address the emerging needs and trends for innovations in Computing, Communication, Signals and Power. ENC<sup>2</sup>SP 2009 will provide a platform for aspiring engineers, researchers, and students to discuss their findings. For CFP please visit <http://www.ewh.ieee.org/r10/bangalore/> or contact Dr. G. Sai Narayanan Email [encsp09@gmail.com](mailto:encsp09@gmail.com), [sai.jgk@gmail.com](mailto:sai.jgk@gmail.com) Phone: 09916308931

#### IEEE Code of Ethics

**We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:**

..... 5. To improve the understanding of technology, its appropriate application, and potential consequences;

### Editorial Board

Prof. V K Damodaran	- Editor
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visit: [http://www.ewh.ieee.org/r10/india\\_council](http://www.ewh.ieee.org/r10/india_council)

## From India Council Secretary



Hello Everyone,

IEEE has already published Section-wise membership strength and also requested to catch up with the un-renewed IEEE members. The half year membership is already in vogue which is valid through December, 2009. In this context, I urge all the Section Chairs and Section Membership Development Chairs to give a wide publicity

and campaign for increasing the membership specially focusing on the un-renewed members besides addressing fresh lots of new generation. I have no second thought to say that India should aim to reach the top most position amongst the Regions and Councils of IEEE with regard to membership development because we certainly have the required potential and momentum to achieve this. In fact this could be a valuable gift rendered by India Council to IEEE for its 125th Anniversary Celebration. For enhancing the membership all the Sections may give vivid description of not only the IEEE benefits at large viz. the core benefits towards knowledge, community and profession, but also the add-on-benefits extended by the IEEE which include the additional membership viz. Societies, Standards and WIE.

Dr Kasturi Rangachar, the 2008 President of IEEE Computer Society is once again visiting India in the capacity of Chairman of IEEE India Ad hoc Committee set up by Dr. Lewis Terman, the 2008 IEEE President, in order to identify and attend the needs of IEEE members in India. Dr Kasturi and his team are visiting in the month of May/June, 2009 and in this regard any suggestion from your side to this Ad hoc Committee (in order to keep the Indian IEEE flag flying high) may be sent to Shri N T Nair, Immediate Past Chair, India Council at [ntnair@gmail.com](mailto:ntnair@gmail.com)

With all the Best Wishes,

With Best Regards,  
**K RAMAKRISHNA**  
 Secretary

Email: [kramakrishna@ieee.org](mailto:kramakrishna@ieee.org)

## Tech News

### Hubble Space Telescope Final Servicing Mission

The Space Shuttle, *Atlantis*, is on a new mission to visit the NASA/ESA Hubble Space Telescope and carry out the fifth and final servicing mission. The replacement and repair of several instruments will see Hubble equipped to continue its program of discovery well into the next decade. The combination of Hubble's powerful suite of instruments and its position far above the effects of Earth's atmosphere has consistently produced outstanding scientific results for nineteen years. This success is due to both the robust initial design of the spacecraft and the remarkable series of servicing missions that have kept the complex operating platform functioning and up to date.

Astronauts from NASA and ESA visited Hubble in 1993, 1997, 1999 and 2002, carrying out a whole series of repairs and upgrades on each occasion. During the forthcoming Servicing Mission 4 (SM4) astronauts will make five spacewalks to complete one last set of improvements.

The primary objective of the mission is to deliver two new instruments- the Cosmic Origins Spectrograph (COS) and the enhanced Wide Field Camera 3 (WFC3).

(Contd. 3)

## Forthcoming Events

### NaBIC'09

The World Congress on Nature and Biologically Inspired Computing (NaBIC'09) intended to address various issues with respect to building up of computers in man's image, is a 3 day platform with the theme "Nurturing Intelligent Computing Towards Advancement of Machine Intelligence". All accepted papers will appear in conference proceedings published by the IEEE Computer Society and indexed by both EI (Compendex) and ISTP. A first of its kind in India, NaBIC'09 is having Prof. Suash Deb, A. Abraham and F. Herrera as General Chairs. - NaBIC'09

Please visit (for detailed information):

<http://www.mirlabs.org/nabic09>

E mail: [nabic.system@gmail.com](mailto:nabic.system@gmail.com)

### ISWC '09

#### International Symposium on Wearable Computers

ISWC'09, the 13th annual IEEE International Symposium on Wearable Computers, is the premier forum for wearable computing and issues related to on-body and worn mobile technologies. ISWC '09 explicitly aims to broaden its scope to include cell phones and cell phone applications, as they have become the most successful wearable computers to date.

For the first time, ISWC'09 will publish adjunct proceedings which will include the late breaking results, video papers, demonstrations, and design papers of selected workshops. ISWC'09 will be held from September 4-7, 2009 in Linz (Austria), Tutorial/Workshops: September 4, Doctoral Colloquium September 4, Main Conference September 5-7, 2009. All details or for subscription to the ISWC 2009. Alert Ticker: [www.iswc.net](http://www.iswc.net) or [info@iswc.net](mailto:info@iswc.net)

## IEEE Conference on Technologies for Humanitarian Challenges

28, August 2009 Lalit Ashok Hotel, Bangalore

Theme: *Technology, Humanity and Sustainability: IEEE's Focus on India*

Tentative Speakers:

Dr. Lewis M. Terman, 2008 Past President, IEEE

Dr. Richard Gowen, President, IEEE Foundation

Sponsored by:

IEEE Foundation, IEEE India Council, and IEEE Humanitarian Technology Network

Conference website: <http://ewh.ieee.org/r10/gujarat/htccon/>

Send your manuscript and registration form to: [ieeehct@daiict.ac.in](mailto:ieeehct@daiict.ac.in)

## TENCON 2009

### Emerging Technologies for Sustainable Development

23-26 November 2009, Singapore

Submission Deadline for Full Paper: 1 June 2009

Submit your paper at <http://www.tencon2009.org/>

Enquiry: Email: [info@tencon2009.org](mailto:info@tencon2009.org)

**If the facts don't fit the theory, change the facts - Albert Einstein**

## INDIA AND CHINA EYE 20,000 MW SOLAR EACH BY 2020

*Reports from New Delhi and Beijing are worth comparing, to see how each will Achieve this 10 fold growth in just 10 years! Adapted from The Hindu and Xinhua Economic News*

**NEW DELHI:** The Union Government has finalized the draft for the National Solar Mission. It aims to make India a global leader in solar energy and envisages an installed solar generation capacity of 20,000 MW by 2020, of 100,000 MW by 2030 and of 200,000 MW by 2050.

The total expected funding from the government for the 30-year period will run to Rs. 850,000 million to Rs. 1,050,000 million. The requirement during the current Five Year Plan is estimated to be Rs. 50,000 M to Rs. 60,000 M. It will rise to between Rs. 120,000 M and Rs. 150,000 M during the 12th Five Year Plan.

Implementation will be in three phases. The first phase of solar deployment (2009-2012) will aim to achieve rapid scaling-up to drive down costs. It will spur domestic manufacturing through the consolidation and expansion of on-going projects for urban, rural and off-grid applications. This will involve the promotion of commercial-scale solar utility plants, mandated installation of solar rooftop or on-site photo-voltaic applications in buildings and establishments of government and public sector undertakings. The target is 100 MW installed capacity here.

The Mission will encourage the use of solar applications to meet day-time peaking power requirement that is now met through diesel generation. Further expansion of solar lighting systems through market initiatives including micro-financing, in the rural and urban sectors, is expected to provide access to lighting for three million households by 2012.

In this phase, the Mission will make it mandatory for all functional buildings such as hospitals, hotels, guest houses and nursing homes to install solar water heaters. Residential complexes with a minimum plot area of 500 sq m will also be included.

In the second phase, to be implemented between 2012 and 2017, the Mission will focus on the commercial deployment of solar thermal power plants. This will involve storage options, and the promotion of solar lighting and heating systems on a large scale in market mode. This will be without subsidies but could include micro-financing options.

Finally, between 2017 and 2020, the target is to achieve tariff parity with conventional grid power and achieve an installed capacity of 20 GW by 2020. The installation of one million rooftop systems with an average capacity of 3 kilowatts (kW) by the same year is also envisaged.

The proposed strategy of the Mission should help achieve significant reduction in the cost of solar power and create a robust infrastructure for it.

**BEIJING:** China's solar PV installed capacity will likely reach 10,000-20,000 MW by 2020 with the implementation of its solar photovoltaic (PV) roof plan and other supportive measures - China Securities Journal quoted Wang Zhongying, head of the Renewable Energy Development Center of the Energy Research Institute (ERI).

The predicted capacity is far higher than the government's original plan, which targeted at 1,800 MW of solar PV installed capacity by 2020.

China has announced a plan to build the country's largest solar PV project in Dunhuang, Gansu, with a primary installed capacity set at 10 MW. Bidding for the project, enterprises have offered an average power price of 1.5 yuan/kwh.

Although the price is still far higher than the 0.6 yuan/kwh price of wind-generating electricity selling to grids and the 0.3 yuan/kwh price of on-grid thermal power, it can reflect the sharp decline in the solar PV costs, said Wang.

Calculated on the basis of current solar PV cost and on-grid thermal power price, Chinese government need give one yuan of subsidy to each kWh of electricity generated from solar power. Wang also stated that Chinese government is likely to draw up more favourable measures to encourage investment in solar power project.

China announced a solar PV roof plan in March, promising to grant 20 yuan/peak watt subsidy to solar PV projects whose single installed capacity exceeds 50 kWp.

Now, China-based solar PV product makers like SunTech Power Holdings Co. Ltd. (STP.NYSE), Solarfun Power Holdings Co., Ltd. (SOLF.Nasdaq) and China Technology Development Group Corporation (CTDC.Nasdaq), suffer significant losses due to foreign market shrinkage and a big number of provisions against price drops.

energy demands could be met with renewables. Another will assist China's National Lighting Test Centre in formulating testing methods for LED lighting.

Projects in India will include the implementation of a national framework for Tradable Renewable Energy Certificates (TREC) with the Indian government agency IREDA and federal and state energy regulators. Other projects include a microfinance project with the Foundation for Development Cooperation to support renewable energy systems in Fiji, Samoa and Vanuatu.

### Tech News (Contd.)

Both instruments use advanced technology to improve Hubble's potential for discovery dramatically and enable observations of the faint light from the youngest stars and galaxies in the Universe.

[For details: [www.spacedaily.com](http://www.spacedaily.com)]

#### Asia Leads

UNEP's 2008 report says, Asia now accounts for over 70% of all the world's carbon credit projects under the CDM. India and China are leaders in the development of carbon reduction projects across the world on a voluntary basis. The trend is expected to continue.

#### 49 Low-Carbon Energy projects from REEEP

The Renewable Energy and Energy Efficiency Partnership (REEEP) has approved 49 small projects on clean energy worldwide at a total cost of • 4.7 million. Of these, nine projects will be situated in China, including support for the CRED (Centre for Renewable Energy Development) in creating a roadmap to show how 30% of China's 2030

### IEEE 125<sup>th</sup> Anniversary Celebrations

IEEE Kerala Section

13<sup>th</sup> May 2009 at the institution of Engineers Hall, Trivandrum



*Dr. D. Balakrishnan, Chairman, IEI, KSC addressing the audience.*

**L - R:** Mr. Sasi P M, Chair, IEEE Kerala Section, Mr. Rajan T. Joseph, Executive Director, C-DAC, Trivandrum, Mr. N.T Nair, Immediate Past Chair, IEEE India Council, Dr. G. Pavithran, Former Chief Engineer, KSEB.

**Not doing more than the average is what keeps the average down - William M Winan**

## 125 years of learning and Practicing



This year, one of the two crystals that created the IEEE, viz. AIEE completes 125 years of organizational existence, learning, teaching and practicing. A wealth of knowledge, both theoretical and practical, has been created by this largest professional Society in the world and most of it has been put to humanity's benefit. Professionals have grown with the ballooning of the fund of knowledge in EE areas – even extending its influence and utility in many other branches of engineering and technology as well as other fields of human affairs.

It is therefore with immense pride that the official 125 year celebration is being organised in Bangalore – one of the handful of Centres identified by IEEE HQ – by the India Council and all the outfits under its banner in India. Though coincidental, this also happens to be the India Focus year of the President, in which special efforts are going to be initiated to understand and satisfy the various needs of the IEEE members in India. The IC has rightly pointed out that it will be a golden opportunity to show that the membership in India is at its best this year. In addition, at Section levels also a number of programmes are organized – see report

on Kerala Section's initiative elsewhere.

Let a hundred flowers blossom in India this year, ending with a grand finale in Bangalore!

Regards,

Trivandrum  
10 May 2009

V K Damodaran  
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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