



# The Indian Engineer

*Scientists discover the world that exists, engineers create the world that never was.*  
Theodore Von Karman - Aerospace Engineering

NEWSLETTER OF THE ENGINEERING COUNCIL OF INDIA

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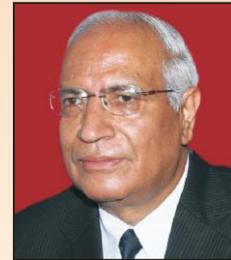
The Institute of Marine Engineers (India)

**P. N. Shali**

Director

## From the Chairman's Desk

The National Conferences of ECI have been held every year as our Flagship event. I am happy to inform you that the 8th National Conference has been scheduled on November 29, 2010 at India International Centre, New Delhi on the Theme: Sustainable Development - Role of Engineers and Technologists. The Conference will focus on critical issues concerning sustainable development and the role of engineers and technologists have to play for handling these issues.



A Conference Committee has been formed to provide overall guidance for the conference. Considering the fact that most organizations are presently concerned with such issues and expect their engineers and technologists to keep abreast with latest technologies, innovations and practices for achieving sustainable development, it is felt that the Conference will be of direct relevance to them. The Brochure has been sent to all Member Associations. I seek their support to promote the Conference and encourage larger participation, in addition to suggesting the names for eminent speakers.

As I said in the last Newsletter, the other forthcoming activities of ECI will include Workshops and Executive Development Programmes (EDPs) to impart multi-skills to engineers which will benefit of members of the Member Associations and other engineers. Suggestions from Members for these programmes as well as other activities from which the Member Associations may derive maximum benefits, are greatly welcome.

We are all concerned regarding the Engineers' Bill. I understand that the draft Engineers' Bill, which was circulated earlier by the Ministry of HRD to the various Ministries / Departments of the Government of India for comments, has been revised by the Ministry after incorporating the suggestions made by these bodies and the revised draft has now been circulated to them. The draft will be finalized by the Ministry after considering any further comments on the revised draft. ECI is constantly following up the matter with the Ministry of HRD.

(Uddesh Kohli)

**2nd Executive Development Programme for Engineers on Enhancing Competitiveness through Technology Management**, which was slated to be held during September 28-30, 2010 at New Delhi, stands postponed due to some unavoidable reasons. The new dates and the venue will be intimated in due course.

**8th National Conference** on Sustainable Development-Role of Engineers and Techno-logists will be held on November 29, 2010 at the Auditorium : India International Centre, 40, Max Muller Marg, New Delhi -110003.

For details send your mail to :  
eci@ecindia.org, pnsjali@gmail.com,  
director@ecindia.org,  
or visit www.ecindia.org

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**A two-day International Conference on Emerging Trends in International Commercial Arbitration** - December 18-19, 2010 at the Indian Habitat Centre, Lodhi Road, New Delhi.

**Construction Industry Arbitration Council (CIAC)** is organizing the conference under the patronage of Construction Industry Development Council (CIDC) - a member association of Engineering Council of India- and with the support of United Nations Commission on International Trade Law (UNCITRAL), Asian-African Legal Consultative Organisation (AALCO) and the Singapore International Arbitration Centre (SIAC) The conference will discuss many issues related to the international commercial arbitration with the objective to provide an understanding of the emerging international trends on the commercial arbitration.

For details write to :  
Dr. P. R. Swarup,  
Member Secretary, CIAC & DG, CIDC,  
817 (8th Floor), Hemkunt Chambers,  
89, Nehru Place, New Delhi-110019  
Tel: 011-41619840-41, Fax: 011 26451604  
or send a mail to mail@ciac.in.

### Think it over

Sustainable development will be impossible without the full input by the engineering profession'.

— Maurice Strong

## From Editor's Desk



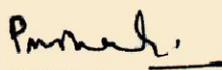
Engineering education needs to be, looked from the "user driven" or "market perspective" rather than a "discipline perspective".

The industrial revolution and developments in the field of inventions coupled with technical advancements necessitated the transition of engineering from a general phase to one of domain specific specializations. From the staid civil, mechanical and electrical engineering, today, engineering has branched into 18-20 so called specialisations. True, this may have suited till 20th century; the 21st century is not the same as the 20th century. We are in the era of integrated technology (ies)-based mega projects and products of high-end technologies. The paradigm shift in the way such projects need to be implemented and such products produced and used also requires application of knowledge and skills other than staid engineering. Today, we need an integrated approach from project conception to completion and production of goods and services. For achieving engineering marvels, we need engineers of integrated skills that may not be possible by limiting their education and training to a single discipline of engineering. Today, the feasibility of mega projects is determined inter alia in the synergy between engineering and business management. We need, therefore, multi-skilled engineer - managers and not mere domain specific engineers.

Though there is a definite trend in the world of knowledge creation and its dissemination towards convergence and indivisibility, it is not so in the case of engineering education. We need engineers who have skills to deal with matters such as: business and commerce, people and resources, environment, health and safety, legal aspects, project, logistics and procurement engineering, application of IT and communication technology in construction, the finer elements of contracts and claims, dealing with partnerships and joint ventures, knowledge of the nitty gritty of contracts apart from the changing world of technology itself and the basic engineering knowledge of civil, mechanical, electrical and metals and material engineering, etc. Besides, all engineering activities have economic and business implications. Engineers should have skills to understand these implications and deal with them. Adequate knowledge of the subjects of economics, management, statistics, etc, will enable them to tackle economic and business implications of engineering activities. So engineers should also have some basic knowledge of economics, statistics and managerial subjects.

Unfortunately, engineering education remains confined to its discipline domains; these domains are increasing every second day with new branches getting added to the list. Illustratively speaking, presently, construction industry mostly demands civil engineers. Let us look at the question: Is an engineer with basic degree in civil engineering a construction engineer? I would say no. A construction engineer is a professional who is much more of an engineer - manager, far more multi - skilled and better equipped to deal with complex issues of construction business as such with a combined degree comprising the basic aspects of civil engineering, mechanical engineering, electrical engineering, electronics and metals and material engineering and skills detailed above. There is a case here for having an engineering degree in construction- say BE (Construction).

The suitability and hence employability of graduate engineers can be enhanced, therefore, with the creation of uniquely focused modules of engineering for meeting the unique needs of construction industry, civil aviation, ports and harbours, urban renewal, manufacturing, logistics and transportation, telecom, power generation & distribution, oil and gas exploration, development and production, heavy chemicals and petrochemicals, steel and metal production and other manufacturing sectors. There is case here for having a degree of say BE (Manufacturing) or a combined degree of engineering and management. We need to reform, therefore, our engineering education and training, placing more emphasis on preparing a wholesome personality with engineering as core knowledge. It needs to be, therefore, looked from the "user driven" or "market perspective" rather than a "discipline perspective".

  
P.N.Shali)

## Eminent Indian Engineer : Dr. Kirit S. Parikh



Dr Kirit S. Parikh, a Civil Engineer from the Gujarat University, M.Tech (Structures) from the Indian Institute of Technology, Kharagpur, Sc D in Civil Engineering and M.S. in Economics & Engineering from the MIT, USA, is an eminent engineer and at the same time an eminent economist has contributed very significantly to the development of Indian

economy in his various capacities of service rendered over a little over four decades including teaching economics. He worked on development policy issues covering subjects such as energy, fertilizer, food & agriculture, growth, equity & Poverty, technology & its assessment, water resources management, development of human resources, environment, environmental accounting and valuation, sustainable development, population and civil engineering and housing, oil pricing, apart from policy analysis with a general equilibrium model of India. His valuable contribution provided a non-governmental assessment of India's development and policy options. He has also contributed in the development of energy resources. He delivered many thought provoking memorial lectures & convocation addresses covering many subjects related to development issues such as: Role of Science & Technology in Ensuring Social Justice, India's Energy Future, Bridging Divides and Reducing Disparities-Empowering People, Role of Science & Technology in Ensuring Social Justice, India's Energy Needs- Strategic Imperatives, Implications of 123 Agreement for Indian Energy Sector, Energy and Water Nexus, Integrated Water Management and many more.

### Positions Held

**Government:** He has held many distinguished positions which included Member, Planning Commission, Member of the Energy Coordination Committee, Committee on Rural Infrastructure and the Committee on Infrastructure constituted by the Prime Minister, Chairman of the Integrated Energy Policy Committee of the Planning Commission, Member of the Economic Advisory Council (EAC) of the Prime Ministers of India (Rajiv Gandhi, V.P.Singh, Chandra Shekhar, P.V. Narasimha Rao & Atal Behari Vajpayee), Member of the National Committee for Environmental Planning & Co-ordination, the National Committee on Science and Technology and the Fuel Policy Committee. He has also served as the Chairman, Expert Group on "Low Carbon Strategy for Inclusive Growth" of the Planning Commission, Chairman, Expert Group on "A Viable and Sustainable System of Pricing of Petroleum Products" set up by the Ministry of Petroleum, Member, Indo-German Consultative Group (IGCG) and many more.

**Academic :** The academic positions that Dr. Kirit S. Parikh has held included Professor Emeritus and Founder Director Indira Gandhi Institute of Development Research (IGIDR, Fellow of the National Academy of Sciences India, Chairman Governing Council, Centre for Environment Education (CEE) Ahmedabad, Chairman, Indian National Committee (Indian NMO Committee) of the India-IIASA (International Institute for Applied Systems Analysis) Programme, President Governing Board, Gujarat Institute of Development Research (GIDR) Ahmedabad, Member Governing Council, CUTS Institute for Regulation & Competition (CIRC) and Member Advisory Council of IIT Delhi. From 1960-80, he was Professor of Economics (and sometimes Head) of the Indian Statistical Institute (ISI), New Delhi.

**Industry:** Dr. Kirit S. Parikh has also served on the Board of Directors of a number of major industrial firms and financial institutions. Among these are Indian Petrochemicals Limited, Life

Insurance Corporation, Industrial Development Bank of India and State Bank of India. Apart from these, he has been a member of numerous other boards.

**International:** From 1980-86, as Programme Leader of the Food and Agricultural Program of the International Institute for Applied Systems Analysis (IIASA), Austria, he directed a research programme involving 300 person years of efforts of more than 100 researchers from around the world. In 1997-98, when on sabbatical leave from the IGIDR where he was the Founder Director from 1986 till 2000, he was Special Economic Adviser to the Administrator, United Nations Development Programme (UNDP), New York. He also served the World Economic Forum, Davos as its Fellow. In 2003, he was made honorary life member of the International Association of Agricultural Economists. He has also served as a Member, International Advisory Group of the William and Flora Hewlett Foundation and the International Development Research Centre (IDRC).

**Other Positions:** Dr. Parikh has served as the editor of India Development Reports. He had been president of the Indian Econometric Society and Gujarat Economic Association. He is on the governing board of many development research Institutes in India. He has also been Chairman of some of these.

**Publications:** Dr. Parikh has authored and co-authored more than 25 books in the areas of planning, water resource management, appropriate technology for housing, optimum requirement for fertilizers, energy systems, national and international food policies, trade policies, general equilibrium modeling and natural resources accounting. He has also published numerous articles.

**Awards/Honours/Recognitions:** Dr. Parikh was awarded Padma Bushan by the President of India in March 2009. He received Vikram Sarabhai Award for Outstanding Research in Systems Analysis and Management Sciences in August 1978, Dr. M. Visvesvaraya Memorial Award for 1999 by the Engineers' Foundation, Kolhapur in September, 1999, Nayudamma Award for contribution to the welfare of mankind through developments in the fields of Economics & Energy in February 2005 and the Distinguished Alumnus Award by the Indian Institute of Technology (IIT), Kharagpur in September, 2007. He was honoured with the Fellowship of the National Academy of Sciences India, Honorary Life Membership of the International Association of Agricultural Economists - an honour given on an average to two persons a year in the world, Fellowship of the World Economic Forum, Davos, Switzerland and many more. the recognition: AS a matter of recognition, Dr Parikh was felicitated as one of the engineering personalities by the Indian Engineering Congress in December 2006. He was recognised as the most distinguished and illustrious alumni of the decade from India by the Massachusetts Institute of Technology (MIT) USA in September, 2007.

Presently, Dr Parikh is the Chairman, Integrated Research and Action for Development (IRADe)-a hub for Integrated Policy Research and Development that accounts for the political economy of the society and effectiveness of governance and a 'think tank' that works with 'action tanks'.

### Understanding Engineers

What is the difference between mechanical engineers and civil engineers? Mechanical engineers build weapons and civil engineers build targets. Normal people believe that if it ain't broke, don't fix it. Engineers believe that if it ain't broke, it doesn't have enough features yet.

## View Points

**Bureau of Indian Standards should have an engineer or a technocrat as the head and not a Bureaucrat - L. Pughazhnanthy, Past President, Indian Institute of Metals, & Executive Director ILZDA**



"Standardization", which assures products quality and ensures consumer protection as well as customer satisfaction is a technical activity. We come across in our everyday life non-standard products like food items, edible oils, batteries, auto components, electrical parts, cooking utensils, domestic appliances etc., which do not last for long but also pose serious safety and health concerns. Therefore, standardization is a must in our own interest. Over the years the interest of the Indian industry in standardization has come down drastically. Industry representatives not only avoid coming to the Committee Meetings in Bureau of Indian Standards (BIS) - an apex body in India for standardization - but also do not even respond to drafts, amendments etc., sent to them periodically. Such a premier body like BIS should have as its head an engineer or a technocrat so that the spirit of standardization can be revived and the original interest or momentum can be brought back. Presently, the Indian Government always appoints a civil servant as the head of BIS and the interest in standardization has, therefore, decreased day-by-day. Civil servants, it is well known, have other priorities, leave alone standardization. It is high time that the Union Government arrests this trend by an early intervention. Engineering Council of India can initiate the wake up call.



**India's failure to become full member of the Washington Accord a great set back - Air Cmde Raghbir Singh (Retd)**

India's failure to become full member of the Washington Accord which standardises engineering education at international level is a great set back for our education regulators especially so powerful on home front-AICTE & National Board of Accreditation Our regulators have first to address the real issues confronting technical education within our country. There is urgent need to standardizing syllabus, delivery & evaluation system of engineering education in various universities. The Ministry of Human Resource Development (HRD) must appoint a committee of experts to find out the real reasons why India's request for full membership of the Washington Accord has been turned down. After all, our engineers have been doing so well all over the world.

**Overall engineering impact in India will not be made anyway by the graduate engineers - Sunil K. Shalia, Petroleum Engineer -Doha**



Thanks, Mr P.N.Shali for including me in your e-mailing list for ECI's newsletters- The Indian Engineer, which I am receiving regularly when published. I have read your editorials of March, 2010 and June, 2010 issues with interest. I found them both thought provoking. I am, however, of the opinion that it is okay that the young engineers from India are gobbled up by the software industry (which is cold at the moment). Actually, this engineering training only helps these kids to prosper in the software industry. The government of India should be thankful to the US for providing employment opportunities in this sector. Anyway, in order for the industry to retain these graduates in their respective branches in India then they need to create employment opportunities in their own industry with competitive incentives. Overall engineering impact in India will not be made anyway by these graduate engineers. You have pointed out correctly that India needs more institutions which offer higher education like MS and PhD. Therefore a lot of high caliber students who want to pursue higher education go to USA or other countries. India can either lure these guys back from the US or create the education centers of international quality at home. Besides, open up the sector to director FI. the Engineering Council of India is doing an excellent work, particularly related to facilitating putting in place the regulatory authority and bringing on the Indian statue the Engineers Act.

**Integrate Science with Engineering - Prof. Ajoy K. Ghatak**

Prof. Ghatak, Professor Emeritus of IIT, Delhi, while addressing the first batch of undergraduate engineering students of the Delhi Technological University, Delhi stated that physics is the mother of science and foundation of and technology. It has become more relevant in the knowledge economy. As advances are made in the area of Smart materials - VLSI design and chip manufacturing, optoelectronics communications, nano sensors, and nano scale devices, etc. It has become important and necessary that India's budding engineers understand the value of integration of knowledge of physics with engineering so as to scale new frontiers of innovative and improved products for the world market. Prof. Ghatak stressed that it is important for the engineering students to have a passion for research so that they succeed in developing new products and technologies.

## News Corner

### Engineers Day Celebrated

Sir Mokshagundam Visvesvaraya, the first and pre-eminent engineer, whose birth day falls on 15 September every year which is celebrated as Engineer's Day in India in his memory. In recognition of his monumental services towards national development and for the cause of engineering, the government of India honoured him with the country's highest civilian honour, the Bharat Ratna, in 1955. 15 September, 2010 was celebrated as the Engineers' Day throughout the country. Many seminars, conferences and workshops were organized in various technical issues on the day at various places in the country. Engineering Council of India and the professional bodies of engineers also celebrated the day.



### A new local Centre of the IEI-Maharashtra State Centre at Solapur opened

A new local centre of IEI Maharashtra State Centre was opened at Solapur, Maharashtra at a launch function held on August 22, 2010 at Hutatma Smruti Mandir, Park Chowk, Solapur. Shri. Madan Lal, President, the Institution of Engineers (India) inaugurated the centre and Hon'ble Ms. Pranititai Shinde, MLA, Solapur was the Chief Guest. Rear Admiral K.O. Thakare, Immediate Past President, IEI, presided over the function. Shri. R.P. Gupta, Past President, IEI(I), Cdr. A.K. Poothia, IN (Retd.), DG, ESCI, Hyderabad and Major General R.K. Sanan (Retd.), SDG, IEI were the Guests of Honour.

*Contd. on Page 5 (Bottom)*

## News from the Member Associations

### Association of Consulting Civil Engineers (India)

The A3C'10 - ACCE(I) Awards Convention & Consultants Colloquium - 2010 will be held during October 22-23, 2010 at the National Academy of Construction (NAC), Hyderabad. It is here that ACCE(I) has played, and continues to play, vital role as a catalyst, 2010 is the year when ACCE(I) celebrates its Silver Jubilee and its journey over the past 25 years has been extremely impressive and filled with many achievements. On this momentous occasion, to commemorate its arrival at this nodal point, traversing through the ups & downs of the construction industry, ACCE (I) is organizing this exclusive event. For details visit [www.accehq.net](http://www.accehq.net).

### Broadcast Engineering Society (India) -BES (I)

BES EXPO 2011 is being organized during 24th, 25th & 26th February, 2011 at the Pragati Maidan, New Delhi. A number of workshops have been organized on the Selection & Effective Use of Consultants at Lucknow, Hyderabad, Chennai, Jaipur, Patna, Ahmedabad, Bangalore, Pune, Delhi & Chandigarh during the year 2010.

### Consultancy Development Centre (CDC)

CDC is an autonomous institution of Department of Scientific & Industrial Research (DSIR), Ministry of Science and Technology, Government of India, established in 1986. CDC's mission is to improve business climate and promote consultancy profession through capacity building. Its vision is to be a knowledge centre for professional services and its main objective is to promote and develop the consultancy profession in the country. It, as a centre for promoting and developing consultancy in India, offers a vast range of services to clients and consultants. It has made significant strides in emphasizing the need for effective use of consultancy services in various Central/ State Govt. Ministries/ Departments.

### Construction Industry Development Council (CIDC) - 3rd CIDC Vishwakarma Awards Announced

The 3rd CIDC Vishwakarma Awards will be given on the occasion of the Annual Day of the construction Industry Development Council to be held on 7th March 2011 at New Delhi. Please visit <http://www.cidc.in/cidcnew/vishwakarma2nd-1.html> for details including the detailed guidelines, background note, categories of awards, prescribed nomination form, etc. Nomination for all the categories is welcome. For any clarifications/seeking additional information, please write to: [cidc@cidc.in](mailto:cidc@cidc.in).

### Consulting Engineers Association of India (CEAI)

FIDIC Conference on "Managing Innovation - the Way forward" was organised during September 19-22, 2010 at New Delhi. Chairman, ECI attended and addressed the delegates. A large body of delegates from all over the country and abroad attend the conference.

*Contd. from Page 4... (News Corner)*

### 'Marine Machinery' - Book Released

"A book releasing function was held at hotel Savera, Chennai after a seminar at the Marine Engineering & Technical Forum 2010. The immediate past President of the Institute of Marine Engineers (India), Shri K. Chidambaram released the book "Marine Machinery" written by Mr. T. B. Srinivasan. Capt. Bhardwaj, Vice Chancellor AMET University received the first copy. The meeting was attended by over 120 guests."



### Computer Society of India (CSI)

CSI entered into an agreement on Sep 3rd, 2010, with eWIT, a society that stands for empowering women in IT and is registered under Tamil Nadu Societies Registration Act with its registered office at Chennai. It is the intention of CSI to facilitate learning and career enhancement for students, faculty and IT professionals while eWIT specifically focuses on women working in IT, thereby increasing the share and sustainability of women in IT/ITES industry. The overall objective of promoting IT as a profession is accomplished by both parties pursuing their mutual objective. Collaborative working between the two parties augurs well for the target community and this MOU aims at such synergization. The MOU provides for exchange and sharing of information & publications, mutual invitation and participation in each other's events, joint organization of events and collaborative development of Research & Education activities. Further details on eWIT can be obtained from [www.ewit.co.in](http://www.ewit.co.in).

### Indian Association of Structural Engineers (IAStructE)

Continuing with the programme of organizing a series of lectures on topics of current interest to Structural Engineers, IAStructE organized a technical lecture on the subject: "Vibration Isolation" on August 26, 2010 at New Delhi. The lecture was delivered by Dr K G Bhatia. It was very well attended.

### Indian Society for Trenchless Technology (INDSTT)

For the past fourteen years INDSTT-established to work for the technical advancement of trenchless technology- has been making relentless efforts in popularizing the trenchless technology in India and has been able to achieve enormous recognition and respect for its technology promotional efforts, success rate of which has been phenomenal. Engineers and decision-makers are now well aware of this technology as a practical alternative to open cut method and are convincingly inclined to adopt this technology to its optimal level. Today, the Society has signed MOUs with various industry organizations both national as well as international. Prominent of them are MoUs with IIT Bombay, IKT, Germany, ICC, SAARC CIC, Louisiana Tech University, US apart from others. Since its inception, the Society has taken several programmes for creating awareness amongst potential user departments for the adoption of trenchless technology in India. It also runs executive development programmes. For further information visit [www.indstt.org](http://www.indstt.org) or send a mail on [indstt@indstt.org](mailto:indstt@indstt.org).

### International Council of Consultants (ICC)

The complexities and ever changing nature of today's business environment necessitates constant evolution and up gradation of one's knowledge repository. While there is no match for experiential learning, one needs to keep abreast of emerging technologies and good practices to improve one's productivity on the project and

### 26th National Convention of Mechanical Engineers - IE(I) Maharashtra State Centre

The Institution of Engineers (India), Maharashtra State Centre in association with Sandip Foundation's, Sandip Institute of Technology and Research Centre, Nashik, organised the 26th National Convention of Mechanical Engineers on "Recent Advances in CAD / CAM for Industrial Applications" at Nashik on September 18 - 19, 2010. The convention offered a unique opportunity to the members of mechanical engineering fraternity to hear from experts about the latest developments in CAD/CAM for industrial applications on the following sub-themes : design of automotive components, design of structures, application for design of pressure vessels, impact of CAM on productivity & quality, environmental-related risk mitigation in CAM, solution for manufacturing complexity and 3D design solution & applications.

overall work. ICC conducts regularly Executive Development Programmes under delegated authority of the CIDC which are delivered on a continual learning philosophy and are ideal for working executives and entrepreneurs who are hard pressed for time and find it difficult to enroll in regular long duration programmes. For details mail your query to: [cidc@cidc.in](mailto:cidc@cidc.in), [cidc.edp@gmail.com](mailto:cidc.edp@gmail.com) or [www.iccindia.org/europe\\_edp.htm](http://www.iccindia.org/europe_edp.htm).

#### **Indian Concrete Institute**

Asian Conference on Concrete- ACECON 2010 will be held with the support of many important organizations and professionals from the construction sector during December 5-9, 2010 at the Indian Institute of Technology Madras, Chennai, India. The event promises to be a major gathering of researchers, practising engineers, construction consultants, suppliers and contractors. About 20 leading experts from around the world are expected to present keynote papers. Visit for further updates: [www.ici-acecon.com](http://www.ici-acecon.com).

#### **Indian Geotechnical Society (IGS)**

IGS has taken up the Permanent membership of Engineering Council of India.

*Our Congratulations*

#### **Indian Institution of Industrial Engineering (IIIE)**

The IIIE has instituted many Honors and Awards for various achievements and outstanding contributions to the IE profession for members, non-members, chapters and other bodies. All Honors and Awards are conferred by the IIIE National Council at its National Convention. The 52nd National Convention of Industrial Engineers & National Seminar on Pillars of Prosperity : Energy, Economy & Environment- POPEEE, 2010, jointly Organised by: IIIE Bhilai Chapter & the Department of Industrial Engineering, Bhilai Steel Plant, are slated to be held during November 26-28, 2010 in Bhilai Niwas, Civic Center, Bhilai (C.G). For details send your query to : [1@vsnl.com](mailto:1@vsnl.com), [iiiestudents@gmail.com](mailto:iiiestudents@gmail.com) or visit [www.iiie-india.com](http://www.iiie-india.com)

#### **Institution of Mechanical Engineers (India)-IME (I)**

The Institution awards prizes/medals for the best paper published or the best paper presented at the Annual Convention as follows: Rai Bahadur G.M. Modi Gold Medal, Institution's Gold Medal, Khan Bahadur Framroze D. Mehta Bronze Medal, Akola Centre Cash Prize, Ahmedabad Centre Cash prize. For details and nomination procedure, etc, send your query to the institute on: [info@imeindia.in](mailto:info@imeindia.in). IME (I) has collaborated with many prestigious institutions around the world for excellence in engineering education; and continues with this work.

#### **Institute of Urban Transport (India)**

Institute of Urban Transport was set up in 1997 with the objectives of promoting and coordinating urban transport in the country. The institute is managing the affairs of National Urban Transport Information Centre (NUTIC) of the Ministry of Urban Development, which has been set up to compile data on urban transport in scientifically designed formats and maintain it methodically. A library of books and magazines on urban transport has also been set up in the NUTIC. Metro Rail Asia 2010 - an only considered the best executive conference for India's metro industry- is being organised during October 25-27, 2010 in hotel Shangri-La, Ashok Road, New Delhi. The event is endorsed by the Institute of Urban Transport. The event will provide an opportunity for a high-value networking and knowledge-sharing with over 250 key Indian metro authorities, operators and partners over 3 activity-packed days! The institute is organizing Annual Urban Mobility Conference 2010 on December 3, 2010. The event is proposed to be a gathering of researchers from institutions and professionals across the country to discuss various research activities undertaken during the recent past. Papers are invited for a Research Symposium to be organised as a part of the event. ([www.iutindia.org](http://www.iutindia.org))

#### **The Institution of Civil Engineers (India)-ICE(I)**

ICE (I) participated in the Asian Civil Engineering Coordinating Council (ACECC) viz 19th Executive Committee Meeting (ECM) held in Sydney during August 7-8, 2010. It also participated in the 5th Civil Engineering Conference of the Asian Region (CECAR) held during August 7-12, 2010 at the same venue and presented 11 papers in the conference on different civil engineering subjects related to the theme of the conference. It nominated "Delhi Metro Rail Corporation Ltd (DMRC)" for "Outstanding Civil Engineering Project Award of ACECC" which was bagged by DMRC. The award was given to Dr. E. Sreedharan, M.D, DMRC on the occasion of Engineers Day celebrated by the ICE on September 15 at New Delhi.

#### **The Institution of Electronics and Telecommunication Engineers (IETE)**

IETE has been sponsoring Research Fellowships for suitable projects of interest to IETE as part of R&D efforts. Researchers pursuing Ph.D programmes at institutions of higher learning in India are encouraged to participate. So far three research projects under this scheme have been completed, leading to the award of Ph.D degrees to the researchers. This year under this scheme Ms. Preeti Sharma has completed her Ph.D programme at IIT Delhi and her thesis entitled, "Studies on Micromachined Structure for RF Applications" are available in IETE HQ Library for reference. IETE students and prospective researchers are welcome to familiarise themselves with the completed research projects under the IETE Research Fellowship scheme, copies of Ph.D thesis of these projects are available at IETE HQ Library located at 2, Lodhi Road, New Delhi. The annual technical convention on the theme: "Making IT & Telecom Green challenges and Road Ahead", was organised during September 25-26, 2010 at Stein Auditorium, Indian Habitat Centre, New Delhi-110003

#### **The Institute of Marine Engineers (India) (IMEI)**

The calander of programmes released by the IMEI for October, 2010 included the 7th International Conference on High-Performance Marine Vehicles. Programmes held during October 11 - 15, 2010 at Melbourne, Florida, USA, the international conference on Systems Engineering in Ship and Offshore Design slated for October 21- 22, 2010 at Bath, UK, GB, SNAME 2010 Annual Meeting and Expo slated for November 3 - 5, 2010 at Bellevue, Washington, USA (visit for details [www.snameexpo.com/2010](http://www.snameexpo.com/2010)), Ausmarine Expo 2010 at Perth Convention Exhibition Centre, Western Australia, AU slated for November 23 - 25, 2010 at Perth, Australia and the Expo INMEX CHINA slated for December 8 - 10, 2010 at Guangzhou, China (visit [www.maritimeshows.com/china](http://www.maritimeshows.com/china) for details). Steps have been taken to revive the earlier initiative in forming a federation of the three maritime professional organisations, namely the Institute of Marine Engineers (India), the Company of Master Mariners of India and the Institution of Naval Architects.

#### **The Aeronautical Society of India (ASI)**

The Aeronautical Society of India has been conferring annually national awards in recognition and appreciation of outstanding contributions and achievements made in the field of aeronautics and aerospace sciences. The nominations for the annual awards-2010 have been solicited. The ASI also invites entries for the annual essay competitions: HAL Essay Competition-2010, sponsored by the Hindustan Aeronautics Limited and the PHL Essay Competition - 2010, sponsored by the Pawan Hans Helicopter Limited. The last date for receiving the nominations/entries is 30 October 30, 2010. For further queries send your query to : [aerosoc@bol.net.in](mailto:aerosoc@bol.net.in) or visit [www.aerosocietyindia.com](http://www.aerosocietyindia.com).

#### **The Indian Institute of Metals (IIM)**

A technical talk was delivered Dr. A K Srivastava, Scientist, National Physical Laboratory, New Delhi, on the subject "Nanostructured

Materials: Synthesis, Characterization, Properties and Applications on 28th August 2010 at the Board Room of IIM DC. It was very well attended. Prof. S. Ranganathan, Senior Homi Bhabha Fellow & Distinguished Professor, Department of Material Engineering, IISc., Bangalore and Past President of the Indian Institute of Metals delivered a lecture on the Crucible Steel from India on September 24, 2010 at New Delhi. The lecture was very well attended. The AGM of the institute was held at Kolkata on July 27, 2010 at which the new national council was elected. The 48th NMD & 64th Annual Technical Meeting will be held during November 14-16, 2010 at the National Science Seminar Complex, Indian Institute of Science, Bangalore.

#### The Indian Institute of Electronics and Electrical Engineers (IEEE)

International conference with the theme: Information Security for South Africa (ISSA) was held during August 2-4, 2010 at Johannesburg, South Africa, which focused on all aspects of information security and invited participation across the information security spectrum. The international conference on Applications of Electromagnetism and Student Innovation Competition Awards (AEM2C) was held during August 11-13, 2010 at Taipei, Taiwan, which provided a unified and unique international forum for the Applications of Electromagnetism and Innovation Competition to exchange ideas in the area of electromagnetic, including: EM wave propagation, microwave measurement system, mobile phone design and more. The international conference on Multimedia, Information

Technology and its Applications (MITA2010) was held during August 23-25, 2010 at Kathmandu, Nepal, which focused on multimedia systems, multimedia information systems, embedded systems, image/video/sound processing, graphical visualization and modeling, and more.

#### Indian Institute of Plant Engineers (IIPE)

A National Seminar on Resource Optimisation is being organised on May 2011 at New Delhi

#### Indian Institute of Chemical Engineers

The Mumbai Regional Centre & the Students Chapter, IICChE organised a paper presentation competition on 'Energy: Sustainable Development, Role of Chemical Engineers' on August 26, 2010 at Navi Mumbai. The Calcutta Regional Centre, IICChE hosted a technical lecture session on 'Worst LPG Disaster in Mexico City - A Case Study' On September 4, 2010 at Kolkata. The lecture was followed by an interactive session which was Chaired by Shri Mohit Ranjan Das, Vice-Chairman, Calcutta Regional Centre, IICChE. Under the Students Exchange Programme between the IICChE & the Institution of Chemical Engineers (IChemE), UK- started in 2008- four student members of the IChemE attended IICChE's annual students' programme Schemcon on September 24 -25 2010 at Guntur, Andhra Pradesh. The UK students also participated in other academic activities during September 22 - 27, 2010. The students from India will visit UK under the same exchange programme during October- November, 2010.

### Awards



Dr Sanak Misra, Immediate Past President of the Indian Institute of Metals and CEO, Greenfield Projects India ArcelorMittal India Ltd. received the prestigious "Distinguished Merit Alumni Award", from the Department of Materials Science & Engineering of the University of Illinois, USA on April 23, 2010.

*Our congratulations*

Outstanding Civil Engineering Project Award of the Asian Civil Engineering Coordinating Council (ACECC) was bagged by the DMRC. The award was given to Dr. E. Sreedharan, M.D, DMRC on the occasion of Engineers Day celebrated by the ICE on September 15 at New Delhi.



*Our congratulations*

### Obituary

An era in India's nuclear history has come to a close with the passing away of **Homi Nusserwanji Sethna** on September 5, 2010 in Mumbai after a prolonged lung ailment. He was 87 years of age. Homi Nusserwanji Sethna was a chemical engineer, former Atomic Energy Commission Chairman and one of the guiding lights behind India's first nuclear test. Those who worked with Sethna recall that he was a taskmaster, an extreme disciplinarian and a stickler for cleanliness who could be extremely brusque at times. The discipline, not surprisingly, was most visible on the days he helped India conduct its first nuclear test in 1974 at Pokhran. ECI conveys its heartfelt condolence to his family and prays for eternal peace to his departed soul.



**Dr P.L. Agrawal**, former President, IIM & Chairman SAIL passed away on September 1, 2010 at Udaipur, Rajasthan. During his long association with the IIM, he played a pioneering role in enhancing the institutes image, particularly in respect of Iron & Steel industry in India. He was a member of the selection committee for the National Metallurgist's Day Awards as a nominee of the Ministry of Steel, Government of India from 1998-2009. ECI conveys its heartfelt condolence to his family and prays for eternal peace to his departed soul.

**Shri V. R. Subramanian**, former Executive Director, India Lead Zinc Development Association and Chairman IIM, Delhi Chapter passed away on 17 August 2010 at Bangalore. He leaves behind his wife, son and daughters. A physicist-turned metallurgist, Shri Subramanian began his career in Indian Oxygen Ltd till 1978 when he took over the leadership of ILZDA. He not only gave stable and dynamic leadership but also made immense contributions towards the growth of the Indian steel and non-ferrous metals sectors in general and lead-zinc industry in particular. He was associated with various professional bodies like the Indian Institute of Metals, Indian Institute of Welding, Powder Metallurgy Association of India, Institute of Standards Engineers, American Society of Metals etc. Shri Subramanian received the Life Time Achievement Award from the Indian Institute of Welding. Mr. Subramanian was also made the Honorary Member of the Indian Institute of Metals during 2006-07 in view of his very significant contributions to the Indian metals industry and for playing a crucial role in national standardization activities, particularly related to the lead-zinc industry. ECI conveys its heart felt condolence to his family and prays for eternal peace to his departed soul.



## A Beleaguered Species on Engineer's Day - Ranjana Tandon, Director, Tandon Consultants Pvt Ltd



September 15th is regarded as 'Engineers Day', celebrated in honour of Shri Vishveshwarya, the engineering icon of the 19th century. This year, 2010 is special because it marks the 150th birth anniversary of this Bharat Ratna awardee. And, I am sure all engineers must take pride that their profession is associated with such a towering icon, but this has not percolated down

to the layperson's consciousness and could well be a symptom of the insidious malaise that has reduced the importance of the engineering fraternity in the eyes of the general public and brought its lofty presence down to humdrum banality. The engineer (and his contributions to the environment) has always been in the public eye. From a humble abode in pre-historic times to the futuristic skyscrapers of the 21st century there is not a single structure in the built-up environment that does not owe its existence to the engineer. Ironically, the importance given to the engineer seems to be in inverse proportion to the grandeur of these achievements. The Commonwealth Games 2010 in Delhi is a case in point. There are so many visually arresting and aesthetic structures (the crowning glory atop the Jawahar Lal Stadium, the sleek, corridor on Barapula Nallah that snakes sinuously across South Delhi from its elevated height; to name a few) that have come up despite the unrealistic time-frames set. But instead of lauding his achievements the engineer has been made a convenient whipping boy for every conceivable fault from missing highly publicized deadlines to the outbreak of malaria and dengue. The barricades that have sprouted all over construction sites in Delhi with CWG 2010 splashed across them could well be hiding the burial spots of their integrity and reputation with no-one but the Rain Gods weeping copious tears for this defenseless mortal! More brickbats than bouquets come the engineer's way and when the hoopla of the Games is over, the bureaucrats and politicians will collect the accolades for their display of state-of-the-art infrastructure and may or may not implement the obvious retribution promised by the Government for all acts of commission and omission associated with the run-up to the Games. But will there be any attempt to resurrect the reputation of the engineers on whose unflinching and uncomplaining shoulders lay the burden of showcasing their expertise to the world! So successfully has the engineer bowed before the implicit blame for

any and every criticism and roadblock to development that his stoicism has been misinterpreted as his weakness and perhaps that is the reason why even the media has rushed into publicly denounce, denigrate and demean his skills and application. So much so, that the public is more aware of the leaking roofs, mounds of debris and missed deadlines than the world class achievement of infrastructure development for the CWG in what can only be called extra-ordinary circumstances. Years of being ridiculed by the Christian community drove Shakespeare's Shylock, the Jewish money-lender to speak eloquently in self-defence "If you prick us, do we not bleed? If you tickle us, do we not laugh? If you poison us, do we not die?" Is it not time for the engineers to speak out and take a collective stand that signifies the seriousness of their intent, their worth and role in society? With the catastrophic mismanagement of time and funds during the CWG, perhaps no government, current or successive may be able to garner enough mandate to host another such mega event, but for the engineers there will always be other challenges to showcase their expertise to the public at large and garner the accolades that are their just due..."Civil Engineering is the Mother of all professions" is a much vaunted phrase heard at practically every engineering forum and yet there is no adequate overall 'motherly' protection that can safeguard the interests of individuals who are important components of the engineering fraternity.....be they labourer's who fail to recompensed adequately or engineers who suffer the whip of careless implementation of their designs. While each engineering body (ECI, IE (I), CEAI, IASE, and CIDC to name a few) performs a yeoman's job for its dedicated members, it lacks the teeth (wherewithal) that come from belonging to a strong, unified fraternity that cannot be taken for granted. Regrettably the engineers have pushed themselves into a corner! There is no single authority or institution that has the mandate to represent them at any important forum. John Donne's "No man is an island entire of itself..." does not seem to be applicable to the numerous islands that have divided the engineering fraternity into ineffectual bodies that still struggle to ratify the Engineers' Bill! Are we missing the wood for the trees? Let September 15th, 2010 be the turning point when engineering fraternity pledges not to miss the wood for the trees. The glory of petty fiefdoms should not be allowed to obliterate the grandeur of the larger picture! Happy Engineers' Day

### Appointments

Dr. Dipankar Banerjee has taken over as the President and Prof. Kamanio Chattopadhyay as the Vice President of the Indian Institute of Metals. Shri SK Chaturvedi, Chairman & Managing Director, Power Grid Corporation Ltd has taken over as the President of Indian Institute of Plant Engineers. Shri C.S.Verma has taken over as the Chairman of Steel Authority of India Ltd (SAIL). Shri A.K.Srivastava has taken over as the Chairman & Managing

Director of National Aluminium Company Ltd. Shri S. Roy Choudhry has taken over as the Chairman & Managing Director of Hindustan Petroleum Corporation Ltd. Dr. A. K. Balyan has taken over as the Chairman & Managing Director of Petronet LNG Ltd. Shri S L Raina has taken over as the Director, HR of the Gas Authority of India Ltd (GAIL).

*Our Congratulations*

### Bottom Line

Three engineering students were gathered together discussing the possible designers of the human body. One said, 'It was a mechanical engineer. Just look at all the joints.' Another said, 'No, it was an electrical engineer. The nervous system has many thousands of electrical connections.' The last one said, 'No, actually it had to have been a civil engineer. Who else would run a toxic waste pipeline through a recreational area?'

### ENGINEERING COUNCIL OF INDIA

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