



# The Indian Engineer

Value what you do, do what you value - Kumar Mangalam Birla

Two roads diverged in a wood - and I took the one less traveled by. That made all the difference. - Robert Frost

NEWSLETTER OF THE ENGINEERING COUNCIL OF INDIA

Volume : 6 - Issue : 1

June, 2012

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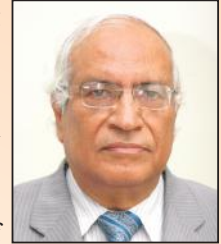
The Institute of Marine Engineers (India)

**Shri P. N. Shali**

Director

## From the Chairman's Desk

On the completion of 10 years of its service to the Engineering profession, Engineering Council of India (ECI) organized the Foundation Day on April 4, 2012. The day was celebrated with the conferment of the prestigious Award of Eminent Engineer on Dr. E. Sreedharan, the Metro man of India. Sh. K.C. Pant, former Deputy Chairman, Planning Commission, who took initiative in creating the ECI as an apex body of engineers in India and was its first Patron, presided over the Award ceremony. Justice J.S. Verma, former Chief Justice of India was the Chief Guest. The function was very well attended by engineers both from the industry and academia. Sh. Pant advised the engineers to keep themselves updated with the latest developments in their field of specializations for meeting the challenges of the open economy. He further stated that the Engineering Council of India was created as an umbrella body of engineers by professional engineering associations for dealing with the issues concerning engineering profession at the national level and promoting a world-class engineering profession and advised those all engineering associations in the country to join the Council and strengthen it for the benefit of all engineers. Justice Verma praised Dr. Sreedharan's achievements and said that the country was proud to have an outstanding engineer like him. He also stated that the engineering education needed to be reformed to produce more outstanding engineers needed by the country.



ECI, jointly with the Association of Graduate Professional Civil Engineers, India, organized a get-together with Engineer Members of Parliament (both the Lok Sabha and Raja Sabha) on May 21, 2012 at the Constitution Club of India, New Delhi. Shri Sriprakash Jaiswal, Hon'ble Union Minister of Coal was the Chief Guest. Several Members of Parliament participated. The main focus was on the long-pending Engineers' Bill. Other issues discussed included: demoralization of engineers after the Commonwealth Games, proposed amendments to the Architects Act, 1972, registration of Valuers as per the Companies Bill 2009 and Consultants for the Conservation Management Plan for Rashtrapati Bhawan and its precincts. Sh. Jaiswal and the Hon'ble Members of Parliament appreciated the need and urgency for bringing about the legislation for engineers, similar to the legislations for other professions. He emphasized that ECI and its member Associations will have to take up a campaign and make intensive efforts to generate awareness and get support from various quarters for the proposed Engineers' Bill.

Planning Commission has approved the sponsorship of a Round Table on the Reform of Engineering Education has to be organized by ECI. It is expected to be held in the next quarter.

I am happy to inform you that by now 20 member associations of the Engineering Council of India, out of total 30, have taken up the permanent membership of ECI. I hope that the others will also follow this course. This will help in strengthening ECI's functioning.

I am grateful to the members of the new Board of Governors of ECI (for the term 2012-14) which, in the 31st meeting of the BOG held on June 29, 2012, nominated me again as Chairman for the term 2012-14. I must also thank all member associations of ECI for their confidence and support so far and hope that this will continue to carry forward ECI's agenda more effectively.

  
(Uddesh Kohli)

## FORTHCOMING PROGRAMMES OF ECI

**Round Table on Reforms of Engineering Education** - sponsored by the Planning Commission, slated for September 13, 2012 at New Delhi.

**10th National Conference** slated for November 29, 2012 at New Delhi

**Executive Development programmes (EDP)** on Law for Engineers, Economics and Finance for Engineers & Communication for Engineers. Dates of these EDPs are being finalised.

**4th EDP on Project Management** will be held in February, 2013 at New Delhi

**2nd EDP on Technology Management** will be held in March, 2013 at New Delhi

### ACCE(I) Awards-2012

Nominations have been called for the ACCE (I) Awards-2012. For details visit: [www.accehq.net](http://www.accehq.net) or send a mail to [admin@accehq.net](mailto:admin@accehq.net)

### CEAI National Awards for the year 2012

Nominations have been called for the CEAI National Awards 2012. For details send a mail to Lt. Col. Arun Sharma (Retd.), Director, CEAI at [ceai.ceai@gmail.com](mailto:ceai.ceai@gmail.com)

### THINK IT OVER

Goldman Sachs counts the lack of quality education as one of the 10 factors holding India back from rapid economic growth.

"India has hardly produced any worthwhile inventions. Almost every technology we use is from abroad. The reason is the low quality and quantity of our doctoral programmes and our emphasis on rote learning," - Narayana Murthy

"None of the country's premier institutions, including Indian Institute of Science (IISc) and Indian Institutes of Technology (IITs), can match the best in the world. The research in the country is sadly losing quality even as the facilities to do research were increasing. That is one of the reasons why India's institutions are not in a better position." Prof. C.N.R. Rao.

### WORDS OF WISDOM & THOUGHT

"The strength of a nation is no longer determined by the might of its army. It comes from the quality of collective knowledge, the productivity of its working people, the creativity of its entrepreneurs, and the dedication of its professionals." **Dr. Manmohan Singh**, Prime Minister of India.

**Shri Pranab Mukherjee**, the then Union Finance Minister, "while stressing on the importance of education in promoting inclusive growth, in his keynote address at a seminar on academy-industry interface in Kolkata, also called for a **better academy-industry interface** in bridging the skill gap in high growth industry".

## From Editor's Desk



**Bold initiative taken by the Hon'ble Minister of HRD, Sh. Kapil Sibal, for reforming the admission process to engineering courses is appreciated**

Now that the dust on the common all India test for admission to IITs and NITs has settled down with IITs having agreed to have this test with some modification, suggested by them, I think the first important step towards reform of engineering education system has been taken.

Engineering Council of India (ECI) initiated a discussion in the country in August, 2006 with organizing the first national convention on seamless engineering education for better employability of engineers at Kolkata. After that, seven more national conventions were held on this theme - 7th national convention was held in January, 2012 at Vadodra. Besides, a national conference and a national workshop were also held on the related themes in November 2008 at New Delhi and in March, 2009 at Madurai Tamil Nadu respectively.

Among the consensus recommendations that emerged from these programmes was a recommendation that there should be one common entrance test for admission to all engineering colleges in the country; and this test should also assess the aptitude for engineering. Well, it is heartening to note that with the initiative taken by the Hon'ble Minister of HRD, **Sh. Kapil Sibal**, a step in that direction has been taken. It is also heartening to note that a few of the colleges from private sector are also considering to join this all India common test for admission to their colleges. As a matter of need, engineering colleges in all the states should consider joining this new system, early the better.

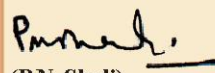
There are other recommendations that have emerged from the above cited programmes of ECI which include, more practical engineering education, during - the - course project-based industrial training, six months internship with an industrial unit after the course, case study-based text books for engineering, making engineering faculty jobs attractive, initiating exchange programme between the faculty and industry and making it mandatory, opening up the faculty jobs for practising engineers for meeting the gap in the availability of faculty, ensuring faculty training and its monitoring, intervention of the ruling dispensation for getting quality infrastructure in position at many private sector engineering colleges, setting up of a standing institutional mechanism on industry-academia interface inter alia for keeping engineering education system on desired lines. There are some more forward looking recommendations.

*ECI is now organizing a Round Table in September, 2012 to take forward the discussion on the reform of engineering education system to its conclusion. The Round Table is sponsored by the Planning Commission*

There is also a consensus among engineers that the profession needs to be regulated on the lines of other professions such as, medical, legal, chartered accountants, etc., which are regulated. This will give engineers a legal status as professionals, which they do not have at present, apart from ensuring ethical engineering practice for the benefit of Indian society. Again, on the initiative of **Sh. Kapil Sibal**, Hon'ble Minister of HRD, a consensus draft of Engineers Bill was circulated by the Ministry of HRD to concerned ministries / departments of the Government of India twice for soliciting their comments, which have since been received. The draft is at its final stage of being submitted to the Cabinet for approval. I hope that the draft Bill will get approval from the Cabinet at the earliest. ECI is following up this important matter almost on a regular basis with the Ministry.

India needs engineers who want to be engineers because they like and love to be engineers. Indian cannot afford engineers who just pass out with the sole purpose of hopping on to non engineering jobs later with adding qualifications of social sciences or because the new economy is offering them big money for the jobs which can be handled by an ordinary graduates. We need to ensure that this should not happen even if it needs intervention of the competent authority, it will be a forward looking and right step.

In conclusion, I think that we have got to take more such bold policy steps for making engineering education system such as would meet demand of the Industry and also of the R&D sector. We may expect therefore some more bold initiatives coming from the Ministry of HRD in the near future as well.

  
(P.N. Shali)

## Eminent Indian Engineer : Sh. H. M. Nerurkar



Sh. H. M. Nerurkar, Managing Director, Tata Steel - a man of steel - is an executive with multifaceted experience ranging from project execution, manufacturing, quality control, supply chain, marketing. His motivational leadership is unique and beyond compare. He instills confidence in his subordinates and mentors and coaches them to reach excellence. He has a natural flair for nurturing and cultivating innovation and out of box thinking. His business acumen in identifying new business opportunities for accelerated growth is commendable. A family man at heart, his personal life is governed by strong family values.

Sh. H. M. Nerurkar joined Tata Steel in February, 1982 and has worked over 20 years in the areas of Quality Control (Chief Metallurgist), Steel and Primary Mills, Marketing, Supply Chain, Projects, etc., before rising to the level of Vice President (Flat Products) in November 2002. He was appointed as the Vice President (Kalinganagar Project) in November 2004; and in September 2007 he took over as the Chief Operating Officer (Steel). He joined the Tata Steel Board as Executive Director in April 2009; and on 10th October 2009 he took over as the Managing Director of Tata Steel in charge of its India and South East Asia operations.

### Board Memberships

Some of the important ones among these include: Chairman Tata Steel (Thailand) Public Co. Ltd., Chairman Nat Steel Asia Pte. Ltd., Chairman Nat Steel Holdings Pte Ltd., Chairman Corus Consulting Ltd., U.K., Chairman Tata Steel Holdings Pte. Ltd, Chairman Tata Steel Global Holdings Pte. Ltd., Chairman, TRL-Krosaki Refractories Limited., Chairman Tata Steel Global Minerals Pte. Ltd., Chairman Tata Steel Global Procurement Co. Pte. Ltd., Chairman Pro Issuer Pte. Ltd., Director New Millennium Capital Corporation and Tata Steel Europe Limited.

### Positions in the Professional Bodies

These include: President Jamshedpur Kennel Club, Vice President

(Ferrous Divn.), the Indian Institute of Metals (IIM), Vice Chairman, Managing Committee of Indian Cancer Society, Jamshedpur Branch, Member CII National Committee on Steel, Member & Chairman, Internal Security Task Force of CII (Eastern Region), Member Institute for Steel Development & Growth (INSDAG), Special Invitee of All India Management Association, Member Board of Governors, Xavier Institute of Management Bhubaneswar, Member Managing Committee of Tata Steel Rural Development Society. He is also a Member on the Boards of Directors of World Steel Association, Belgium, CEDEP, France, and Chairman of the Board of Governors of XLRI Jamshedpur. He is also a Trustee of Tata Steel Sports Foundation.

### Positions held in the Past

Chairman, Hooghly Met Coke & Power Co. Ltd. and Gopalpur Special Economic Zone Ltd., Director - Tata Ryerson Ltd., Dhamra Port Company Ltd., Jajpur Cluster Development Ltd., Chairman, Centennial Steel Co. Ltd. Mumbai.

### Awards & Recognitions

National Metallurgist (Ferrous Metallurgy) in 1987, Visveswaraya Award 1988, SAIL Gold Medal in 1989, Steel 80s Award in 1990, SMS Demag Excellence Award in 2002, Tata Gold Medal in 2004, CEO with HR Orientation Award by Asia's Best Employer, Brand Awards in 2010 and also an Award by Star News. He has been honored with Melvin Jones Fellowship Award from Lions Club International, and CEO of the Year Award-2011 by the Indian Institute of Materials Management (IIMM). In 2012, he has been conferred with Honorary Degree of Doctorate by KIIT University, Bhubaneswar and Maxell Foundation. Maharashtra Excellence Award was conferred on him by the Chief Minister, Maharashtra on 6th May 2012.

Sh. Nerurkar holds B. Tech. in Metallurgical Engineering from the College of Engineering, Pune. He was born at Mumbai, Maharashtra on October 20, 1948. He had his early schooling in Balmohan Vidya Mandir, Mumbai. His hobbies include making friends, reading technical magazines and long walking.

## Awards

On 25th June 2012, Inter-continental Consultants and Technocrats Pvt. Ltd. bagged the prestigious "International Star for Leadership in Quality Award" in the Platinum Category at the Business Initiative Directions (B.I.D) International Quality Convention - Paris 2012 at a glittering ceremony at the Paris Concorde La Fayette Convention Hall. The award was received by Sh. K. K. Kapila, CMD, ICT Pvt. Ltd., former Member BOG, ECI. This award is presented to an organization which is a symbol of commitment to Quality, Leadership, Technology and Innovation. The award was presented by Sh. José E. Prieto, President and CEO of B.I.D, Madrid, Spain. While presenting the award, Sh. Prieto complimented Sh. Kapila for his deep commitment to quality and leadership. In the year 2011, ICT Pvt. Ltd. had the unique honour of bagging B.I.D's "International Arch of Europe Award" in the Gold Category.



This award is additional embodiment of successful achievements of Sh. Kapila creating higher benchmarks for the industry.

Dr Baldev Raj, former Director, Indira Gandhi Atomic Research Centre, Kalpakam and Member BOG, Engineering Council of India received 10th Indian Nuclear Society Homi Bhabha Lifetime Achievement Award for the year 2010, H.J Bhabha Gold Medal and Memorial Award by Indian Science Congress, 2012, J.C. Bose fellowship award of D S T, Honorary Professor of Sichuan University, Chengdu, China, Honorary Fellow of the Australian Institute of High Energetic Materials, Erudite Visiting Professor of Mahatma Gandhi University, Kottayam, Kerala, Distinguished Visiting Professor at IIT, Bombay, Mumbai, Distinguished Visiting Professor at IIT, Kharagpur, and Distinguished Nayudamma Memorial lecture, C S I R.

*Our Congratulations*



It is a matter of immense pleasure and pride that Sh. K. K. Kapila, CMD, ICT Pvt Ltd, has been conferred the "Achievement Award for Industry Doyen" on 10th March 2012. The prestigious award - a trophy alongwith a certificate, was presented by Sh. Virbhadra Singh, Hon'ble Union Minister of Micro, Small and Medium Enterprises at a glittering award ceremony held at India Habitat Centre, New Delhi.

## Appointments

Dr. Uddesh Kohli has been reelected unanimously as the Chairman of the Engineering Council of India (ECI) for the term 2012-14 by the BOG, ECI at its 31st meeting held on June 29, 2012 at New Delhi.

Dr. R. Murugesan has been appointed the President and Dr. S. Basil Gnanappa as the Executive Secretary of the Indian Society for Technical Education.

*Our Congratulations*

## Get-together with Hon'ble Engineer Members of Parliament

A get-together was organized jointly by the ECI and the Association of Graduate Professional Civil Engineers, India on May 21, 2012 on issues facing engineering profession. Shri Sriprakash Jaiswal, Hon'ble Union Minister of Coal was the Chief Guest. Several MPs participated in the get-together. The issues raised included : Regulation of the Engineering Profession & the Engineers Bill, Demoralization of Engineers after Commonwealth Games, Suggested Amendments to the Architects Act, 1972, Registration of Valuers as Per the New Companies Bill 2009 and Consultants for the



Conservation Management Plan for Rashtrapati Bhawan and its Precincts. While presenting his welcome address, Chairman, ECI Dr Uddesh Kohli stated that the get-together is for meeting our Hon'ble Engineer MPs and to appraise them about the issues that the engineering

profession is facing and seek their guidance and help for the resolution of these issues. The Hon'ble MPs are the competent public representatives to make laws. It is, therefore, our firm belief that the Hon'ble Engineer MPs will be in a position to facilitate speedy resolution of the aforesaid issues that engineers are confronted with today. Legal position of engineers' vis-à-vis Architects was presented by Sh. Avinash D. Shirode, Consulting Engineer, Nashik and Past President Association of Consulting Civil Engineers of India- a member association of ECI. He stated that engineers had been doing the planning, designing, supervision and construction work as their normal vocation since the



beginning of organized building construction activity. The planning and designing competence of engineers was unquestionable since centuries. The Gujarat earthquake had brought home the importance of the roll of engineers in



planning and designing where investigation of damaged structures after earthquake had revealed that buildings and various parts thereof like cantilevered staircase, funny and fancy shapes had been planned solely from aesthetic point of view with total disregard to planning from earthquake resistance design requirements. Though the aesthetics and artistic beauty is desirable, safety, stability and durability is a must. The planning for aesthetics and artistic beauty cannot be at the cost of safety and stability of the structure itself. Sh P.N. Shali, Director, Engineering Council of India presented the issue on Registration of Valuers as Per the New Companies Bill 2009. Some MPs also addressed the get-together and supported the view that the engineering profession in India needed to be regulated for making engineers accountable to the society. They assured all help in getting the issues raised resolved at the earliest possible. Sh. A. Rahman, President APGCEs-India also addressed the get-together and stated that the Hon'ble Engineer MP's, by supporting the passing of Engineer's Bill, and in the resolution of the other aforesaid issues, will



render a great service to the engineering fraternity. They will always be remembered by the generations of engineers for being their torch bearer in achieving the rightful role for engineers in India. Shri Ajit

Fauzdar and Shri Sanjay Singh of the APGCEs- India also addressed the get-together.

## Letters to the Editor

Dear Shri Shali,

I am pleasantly surprised to receive first time your News letter of March 2012 and complement your body for such informative paper. I also whole heartedly support your endeavor in getting for engineers a statutory council at par with other 13 professional Councils, which I must say, has gone long enough. In the course of my service with the GOI, I have strongly justified a statutory council for engineers for placing engineering profession also under a legal framework. While agreeing with you on the statement made in your editorial in connection with CPWD's EOI in respect of Conservation Management Plan for President's Estate that, "such projects require coordinated contributions of specialized skills from several disciplines", I wish to counter "mostly of engineering and architectural inputs as well". The work under reference requiring preparation of a Master Plan demands planning skill of a high order for which an Architect or a Conservation Architect is trained for. The respective professional bodies should concentrate on their specialised field and refrain from belittling others' role.

With my best wishes,

Yours etc,

**Ravi Kakar**  
Ex CA CPWD / Consultant

Dear Shri Shali,

Please point out to the respected reader that : You have not "belittled" any other professional's role in your editorial. You have only stated that even conservation is a multidisciplinary activity in which engineers do play a role. A number of Engineering Organizations employ architects, planners, conservationists, landscape architects etc on their role. Why should such an organization be denied the opportunity to make an offer. The PIL filed against this restrictive short listing criteria was accepted & CPWD had changed it & thrown it open to other disciplines and organization with experience of conservation, planning etc.

Best Wishes,

**Mahendra Raj**

CMD, Mahendraraj Consultants Pvt. Ltd. &  
Vice Chairman, Engineering Council of India

Dear Dr. Shali,

Read Er. Mahender Raj's, a leading and eminent structural engineer consultant of India and Vice Chairman, Engineering Council of India, for whom I have immense respect as one of the most competitive professionals, response to my mail and acknowledge that "conservation" is a multidisciplinary activity. I however wish to put the record straight by saying that the work envisaged to be done

*Contd. page 7...*

## News from the Member Associations

### Association of Consulting Civil Engineers (India), ACCE (I)

Nominations have been called for the ACCE(I) Awards-2012. There are about 19 awards in different categories to be given. Nominations are invited from Consulting Engineers, Designers, Planners, Contracting Construction Agencies, Computer Software Developers and Authors. Work completed in the given categories of the Awards during the last three years are to be submitted on or before 31st July 2012 in a prescribed proforma, which can be down loaded from website [www.accehq.net](http://www.accehq.net). For details visit: [www.accehq.net](http://www.accehq.net) or send a mail to [admin@accehq.net](mailto:admin@accehq.net). These awards will be presented during the ACCE Awards Convention to be held on October 2012.

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

BES has announced two awards. The first is Mukul N. Trivedi Award, instituted by Mr. N.K. Trivedi, former Engineer-in-Chief, All India Radio, in the memory of his son, late Mr. Mukul N. Trivedi, who passed away in 2001 and is for Rs. 2000. This award is to be given for the best technical innovation in the engineering field of All India Radio and Doordarshan in every calendar year. The second is Dr. Vassumal Hazarimal Merani Award, instituted by Shri C.V. Merani, a life fellow of BES (I) in the memory of his father late Dr. Vasumal Hazarimal Merani. This award shall be given for the best technical innovative work in the field of digital technology related to broadcasting. Notification for electing the Executive Committee for the term 2012-14 has been issued.

### Computer Society of India (CSI)

A one day Workshop on "Cloud Computing : New ways of IT Services" was organized jointly by CSI-Division-IV (Communications) & Silicon Student Branch, Silicon Institute of Technology, Bhubaneswar on 09.05.2012 at Bhubaneswar. An initiative was taken to revive the CSI Durgapur Chapter of Region II. The revived chapter organized one-day workshop in association with the Division III (Applications) on Application of IT in Core Industry using CAD on April 29, 2012. CSI Mumbai Chapter celebrated a fellowship evening on 17th April 2012 at MIG Cricket Club, Bandra (E) in Mumbai. Two lectures were organized on this occasion - one on the Art of the Possible - Practical Applications (live demo) of Gesture Based and Thought Computing? and the other on Super Computing - the Cutting Edge of Computing. CSI Cochin Chapter in association with IEEE CS conducted a two-day day workshop on Android Bootcamp Training at Cochin on May 4th & 5th, 2012. This was a hands-on training for designing and building mobile applications using Android open-source platform which explained the philosophy of developing for Android through its main application development building blocks and their interaction with one another. **A seminar on web technologies was organized on April 21, 2012 for the students of BE 2/4 CSE with the objectives to motivate the students to work on the mini projects and to comprehend the importance of the mini project work in placements and internship programmes.** For more details on these programmes visit <http://www.csi-india.org>



### Consulting Engineers Association of India (CEAI)

In recognition of the major role played by engineering consultancy in the process of development and also to recognize and promote excellence in the engineering consultancy profession, CEAI has instituted National Awards for Excellence in Engineering Consultancy Services. Nominations are invited for the CEAI National Awards for the year 2012: a) National Awards for Excellence in Engineering Consultancy Services for Organisations. b) Achievement Awards for individuals (i) Excellence in Consultancy (ii) Young Consultant Award (upto the age of 35 years) (iii) Woman Consultant Award of the year. The last date for receipt of the entries is August 31, 2012. For details send a mail to: Lt. Col Arun Sharma, (Retd.) Director, CEAI at [ceai.ceai@gmail.com](mailto:ceai.ceai@gmail.com). After coming out from engineering colleges, the young engineers join consultancy

profession, but do not have any knowledge of various activities performed by consultants. The senior engineers in most of the companies are too busy to provide introductory course to the young engineers. In view of this, CEAI is organizing Introductory eight-days training course on "Consultancy Services for Projects" for young engineers working in the consultancy profession. The course is proposed to be conducted end July 2012 or beginning August 2012 at CEAI Bhawan, Plot No 2, Pocket 9, Sector B, Vasant Kunj, New Delhi. For details, send a mail to Col Arun Sharma, (Retd), Director, CEAI at [ceai.ceai@gmail.com](mailto:ceai.ceai@gmail.com). CEAI organized a national seminar on "Rural Infrastructure - Need & Issues at New Delhi on April 27, 2012. It was very well attended.

### Construction Industry Development Council (CIDC)

Federation of Indian Chambers of Commerce and Industry (FICCI) and the Asian Development Bank (ADB) jointly organized in partnership with the Construction Industry Development Council (CIDC) and the Indian Infrastructure, a Seminar on Construction Industry : Accelerating Infrastructure Development in India on 4 June 2012 at Federation House, Tansen Marg, New Delhi. Sh R Gopalan, Secretary, Department of Economic Affairs, Ministry of Finance, Government of India addressed the semina. Among keynote speakers included Dr P.R. Swarup, DG, CIDC, Sh Juan Miranda, Director General - South Asia Department, Asian Development Bank, Dr J N Singh, Member (Finance), National Highways Authority of India (NHAI), Sh B.D. Mundhra, Chairman & Managing Director Simplex Infrastructure Ltd., Sh B Seenaiiah, Managing Director, BSCPL Infrastructure Limited and Sh Alwyn Keith Bowden, President and CEO, Essar Projects. The seminar provided a platform to elicit stake holder's views and suggested suitable measures to enhance delivery potential of the Indian construction industry and improve contractor's performance. It also deliberated on critical issues and constraints like shortage of technical manpower, inadequate contracting capacity, etc. that affected the performance of contractors/developers and led to considerable delays in the implementation of construction projects. The policymakers, regulatory authorities, government officials, academicians, contractors, consultants, infrastructure developers, technology providers, funding agencies, financial institutions, infrastructure domain experts and others having interest in the construction sector and infrastructure development attended the seminar.

### Indian National Academy of Engineering (INAE)

The year 2012 is the silver jubilee year of INAE. Various events have been planned to commemorate the silver jubilee of the institute. One of the important events planned is an International conference being organized in collaboration with National Innovation Council (NIC), India, International Council of Academies of Engineering and Technological Sciences (CAETS) and Confederation of Indian Industry (CII). on "Towards a Better Innovation Ecosystem" scheduled on September 20-21, 2012 at India International Centre, New Delhi. It is aimed at providing a platform for exchange of ideas and collaboration among various stakeholders. These cross-cultural exchanges will stimulate and add value to our views on innovation. These collaborations could be in the form of industry- academia exchanges, bilateral exchange forums or through facilitating linkages at the grassroots level. The conference schedule and the speakers for each session have been finalized. Details of the conference can be viewed at <http://betterinnovationecosystem.in>. In addition, a small poster cum picture exhibition of 8-10 innovations in India is being planned during the two-day conference. The Seventh Symposium on National Frontiers of Engineering (NatFOE-7) which is an annual flagship event of INAE, is being organized during October 12-14, 2012 at Indian Institute of Technology, Guwahati. INAE - ATSE Workshop on Solar Thermal and Solar Photo Voltaic Technologies is being held in Australia during October 15-19, 2012; where leading experts from India and Australia will join together and conduct detailed deliberations on the complete spectrum of Solar Energy with

the aim of building a roadmap for faster penetration of these technologies in India and Australia. For details on all programmes of INAE, visit website: <http://www.inae.org> or send a mail to : [inaehq@inae.org](mailto:inaehq@inae.org).

#### **Indian Institute of Chemical Engineers**

A Students' CHEMCON (Schemcon)-2012, Which acts as a source of encouragement and self-confidence to young minds and, therefore, is considered as the most fertile ground for generation of original and creative ideas, will be organized on the theme "Energy Efficient Technologies for Green Environment" by the Student Chapter during September 21-22, 2012 at the Department of Chemical Engineering, BITS, Pilani. A seminar cum workshop on "Water and Energy: Sustainability and Security for Future Needs (WAVE 2012)" is being organized by D.J. Sanghvi College of Engineering in a association with the Indian Institute of Chemical Engineers - Mumbai Regional Centre and Indian Desalination Association during September 27-28, 2012 at Mumbai. For details, send a mail to [info.indaiiche@gmail.com](mailto:info.indaiiche@gmail.com).

#### **Indian Building Congress (IBC)**

IBC jointly with the Engineering Projects (India) Ltd. organized a "Mid Term Session & Seminar" on "Pre-Engineered Buildings & Innovative Techniques in Construction Industry" on 25th & 26th May 2012 at Kolkata. It was very well attended both by the industry and academia.

IBC has been making continued efforts to promote interface between various disciplines related to built environment on one hand and construction industry and the government on the other. It has aimed at improved system of administration, planning, design, construction and maintenance of built environment. An initiative has been taken by the IBC, as per the Skill Development Initiative' scheme launched by the Ministry of Labour, Government of India, for training construction workforce on-site under different skill categories. As a first step in this direction, IBC has initiated 'on-site training' in the category of Asstt. Shutter Carpenter & Scaffolder, Asstt. Bar Bender, Asstt. Mason, Asstt. Plumber and Electrician Level-I at MES site, Delhi Cantt, CPWD site at Dev Nagar and PWD site Mandoli. More than 350 workers have been trained and tested by an independent testing agency appointed by the Directorate General of Employment & Training (DGE & T) based on modular employable skills (MES). Out of 350 trainees, the certificates of 131 candidates, who hailed from Bihar, Orissa, West Bengal, UP, Jharkhand, Punjab, Delhi, MP, Tripura, Chhattisgarh, etc., have already been received; the result of rest of the workers is awaited.

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

The prestigious 34th IGS Annual Lecture 2012 shall be delivered by Professor B.R. Srinivasa Murthy, Professor Emeritus, IISc, Bangalore at IGC-2012, being held during December 13-15 at New Delhi. The IGS-Ferroc Terzaghi Oration will be delivered by Prof. Kerry Rowe on 5th Oct' 2012 in Delhi. IGC-2012 and Terzaghi Oration, both prestigious events in IGS calendar, are being organized by the IGS Delhi Chapter. Further, under the recent MOU between IGS and Korean Geotechnical Society (KGS), IGS is planning to have a one day workshop on "Urban Geotechnical Engineering" during IGC-12 at Delhi.

#### **Indian Institute of Marine Engineers (I) (IIMEI)**

The WMTC - a world maritime technology conference & exhibition 2012 - was organised during May 29-June 1, 2012 at Saint Petersburg, Russia. It was very well attended including by many delegates from India.

#### **Indian Institution of Plant Engineers (IIPE)**

IIPE-Delhi & AMMP Division held its AGM for the year 2011-12 on May 12, 2012 at HQ Tech Group, EME, 10 Station Road, Delhi Cantt. The 22nd Advance Maintenance Management Programme (AMMP)

with SAIL, Bhilai was held during June 15-18, 2012 at Bhilai, MP. It was very well attended. The theme of the programme was "Business Excellence through Asset Management and Maintenance Assurance System.

#### **Indian Concrete Institute (ICI)**

ICI and the Asian Concrete Federation, in association with the American Society of Civil Engineers and SINTEF of Norway organized an international seminar on "Green Technologies for Sustainable Concrete Construction" during April 13-14, 2012 at New Delhi. The seminar dealt with the issues such as sustainability of concrete by deliberating on sustainability of materials, durability, design and standards on sustainability. It was addressed through invited talks by the experts from Japan, US, China, Korea, Vietnam, Indonesia, Norway, Switzerland and India. The professionals connected with concrete industry including from academia attended the seminar and exchanged information of the practices followed in their countries for the construction of concrete structures. ICI is organizing the Concrete Congress (Ukieri, 2013), which will bring together global experts and providers of materials, design, techniques and innovations, on innovations in concrete construction during March 5-8, 2013 at Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab. The distinguished persons from world - over, who have made outstanding contributions in the area of science & technology, design and construction related to cement and concrete, will be honoured at the congress. For details visit [www.ukiericoncretecongress.com](http://www.ukiericoncretecongress.com)

#### **Indian Society of Agricultural Engineers (ISAE)**

The new executive committee headed by Dr. Mayande as President started its activities from April 2012. The visibility of the society has grown beyond the national boundaries; and many overseas engineers are likely to join ISAE. The experience of overseas engineers will help the institution inter alia for improving the rating of ISAE's publication with quality papers, agricultural engineering education and over all improvement in our R&D. **A farm machine has been developed indigenously at CIAE by Sh Jitender Malik from village Seenkh, district Panipat, Haryana. It is a self-propelled platform for harvesting of fruits and pruning of trees. This is the single most important machine required in mechanization of horticulture: and it is one of the very good examples of reverse engineering in agriculture. It will also be highly useful for crop residue management through rapid composting in the field.**

#### **Indian Society for Technical Education (ISTE)**

INominations are invited from the ISTE student members of all Government, Aided and Unaided Institutions for the various ISTE Students Awards 2012. Details regarding each Award are being sent to the Heads of Institutions separately. For details visit Website: [www.isteonline.in](http://www.isteonline.in) or send a mail to [istedhq@vsnl.net](mailto:istedhq@vsnl.net). The 15th ISTE Annual Students Convention will be held at Sou. Sushila Danchand Godawat Charitabel Trust's Group of Institutions, Kolhapur (Maharashtra) during October 12-13, 2012. The theme, sub-themes and other details will be decided in consultation with the host institutions the brochure containing detailed information about the various activities/events to be organized during the conventions will be circulated by the host institutions for information of all concerned.

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

A workshop on Institutional Framework for Institute of Urban Transport was held during April 26 - 27, 2012 at ASCI, Hyderabad. It was very well attended by both the industry and the academia. A training programme on Non-Motorized Transport - a component of the Sustainable Urban Transport Project - an initiative of the Ministry of Urban Development, World Bank, Global Environment Facility, and United Nations Development Programme to improve the provision of non-motorized transport infrastructure and services in line with the National Urban Transport Policy - was held during May 23-25, 2012 at New Delhi. It was also very well attended.

### **Institution of Automobile Engineers (India) (IAEsI)**

The main motto of Institution of Automobile Engineers ( India ) - an apex professional body for automotive professionals - is to provide quality life, career and enlightenment for the workforce of automotive industry through quality education and associated activities. Therefore, the Institution is vouched to provide avenues for quality education in automobile engineering with innovative approach for the aspirants. Being an ISO 9001:2008 certified Institution, it keeps abreast with the latest developments in quality by actively participating in automotive education and allied activities of the Quality Council of India (QCI), Automotive Research Association of India (ARAI) and the Engineering Council of India (ECI). Various programmes are being formulated as per its set objectives for developing the competent workforce for the fast growing automotive sector of the Indian economy.

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

The 63rd AGM of ASI along with a seminar on Thermo Physics and Heat Transfer, which was scheduled to be held on April 26-27 2012 at Thiruvananthapuram, Kerala and was postponed due to some technical reasons, was held along with the seminar in June, 2012.

### **The Institute of Electrical and Electronics Engineers, Inc. (IEEE)**

IEEE Vehicle Power and Propulsion Conference (VPPC) 2012, sponsored by the Power Electronics Society - PEL and the Vehicular Technology Society - VT, will be held during October 9-12, 2012 at Seoul, Korea. It will cover subjects such as HEV, BEV, FCEV and Plug-In EV System Design, Automotive Actuator and Electric Machinery, Power Converter for Automotive Applications, Motor Drives for Vehicle Applications, Energy and Power Management for xEVs, Charging System including Interface Couplers, Smart Grid and Electrical Infrastructure, Intelligent Vehicle for Safety (included V2V), Telematics (included V2I), Imbedded System for Vehicle and Electromagnetic Co. For details send a mail to: [secretariat@vppc2012.org](mailto:secretariat@vppc2012.org).

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

The 50th National Metallurgists' Day (NMD) and the 66th Annual Technical Meeting (ATM) is scheduled to be held during November 14-16, 2012 at Jamshedpur. The IIM Chapters Conclave is also being held at Jamshedpur on the eve of the NMD and ATM. An International conference on Resurgent India- Vision 2020 in Metals & Minerals Sector is being organized as a part of the 9th International Exhibition-MMMM 2012 during September 27-30, 2012 at the Pragati Maidan, New Delhi. IIM, DC organized a seminar on Nano Technology, which basically involves manipulation of atoms, molecules and materials to

*Contd. from page 4...*

though the EOI in respect of Conservation Management Plan for President's Estate involves preparing a conservation master plan with little or no rehabilitation/restoration work, thus a predominantly a planning job. The Issue of whether a composite firm can bid for architectural work, let's leave the Courts to adjudicate on in line with the prevailing Law which forbids Public Ltd. Companies to present themselves as Architects. Having worked in a multidisciplinary organization almost the entire professional life, I do value the co-ordinated approach in the projects but lead role should depend upon the nature of the work. As to the PIL, I am not sure if it was a PIL but it is only admitted not decided and also wonder if CPWD has changed the terms of EOI yet. There are much bigger issue before the building professionals which the Engineers and Architects need to take on, one of these the foreign Consultants merely lending their names to local small fry. I wish you speedy formation of 'Engineering Council' as then the focus of the Council, perhaps a society now, will shift from promoting the interests of the member professionals to promoting Public interest and regulating the professional conduct and ethics.

Best Wishes

**Ravi Kakar**

Ex CA CPWD / Consultant, CPWD

form structure on the scale of nano meter (billionth of a meter)), on 5th May 2012 at New Delhi. Dr. R. P Singh, eminent scientists from the Amity Institute of Nano Technology, Dr. P K Chaudhury, R&D Organization, Ministry of Defence, Dr. A K Srivastava, National Physical Laboratory and Dr. R P Sinha, Delhi Technological University presented high-quality technical papers on the subject. It was very well attended both by the industry and academia.

### **Indian Society of Non Destructive Testing (ISNT)**

ISNT was represented by a good number of delegates in the 18th World Conference on NDT held in April, 2012 at Durban, South Africa. A MOU with the International Non-Destructive Societies on topics of Science & Technology, exchange of information related to conduct of ASNT examinations, pre-conference activities for organizing the 14th APCNDT in 2013, is contemplated to be signed in due course. ISNT's training methodologies, faculty and effectiveness in conducting certification programme have been widely appreciated by ASNT. They have offered to conduct ASNT Level II examinations also in India. Apart from this, inclusion of ISNT publications in ASNT catalogue and accreditation of ISNT for ASNT Level-I & II courses are also being favorably considered by them. Practical NDT series books on Ultrasonics, Radiography, Acoustic Emission, NDT, Eddy Current Testing, and Digital Signal Processing have been authored by Dr. Baldev Raj, Dr. B Venkatraman, Sh. P Kalyanasundaram, Sh. S V Subba Rao, Dr. T Jayakumar, Dr. B P C Rao, Sh. C V Subramanian, Sh. M. Thavasimuthu and Dr. C K Mukhopadhyay, and are widely circulated among NDT community. ISNT has been entrusted with the responsibility of organizing the 14th Asia Pacific Conference on NDT (14th APCNDT) in November, 2013 at Mumbai. It will provide an excellent platform to the NDT fraternity for sharing technology, knowledge, skills and experience.

### **News Corner**

Under the new initiative of national vocational educational qualification frame work, ACITE has invited applications for registration of skill knowledge providers (SKPs) including institutions to provide competency-based skills. The vocational education programmes will be conducted in engineering institutions, polytechnics and other colleges. Visit for details of the frame work website: [www.aicte-india.org](http://www.aicte-india.org).

### **View Point**

#### **Why Indian engineering education system is not capable of producing quality engineers for the country? Dr. Sharad Chandra, an IIT alumnus**

Dr. Sharad Chandra, in a recent [www.chowk.com](http://www.chowk.com) article titled Indian Technical Recession, asks the following basic question about the quality of engineering education in India: "So why Indian engineering education system is not capable of producing quality engineers for the country?" Then the author goes on to answer his own question as follows: One of the primary answers lies in the fact that Indian education is totally focused on a "career excellence". A student is never asked to analyze, understand, and deliver an engineering project. Very often faculty also has no engineering experience. Professors may have an excellent academic background going themselves through graduation, post graduation and PhD but with a minimal exposure to industrial applications. In short, they prepare their students also for an excellent academic career expecting him/her to learn hard core engineering on the job but very often producing bankers. In all there is about 3 months spent in training during graduation. It is taken more as a break from courses as no industry will give any serious project for such a short period. Student spends his time as an observer rather than as a responsible engineer. There is nothing like putting a trainer on a real job under the supervision of an experienced engineer. By the time, s/he has finished 6 months to a year working on a real project, as any European student does, s/he will have something to her/his credit to show to a future employer.

*(Source : Vice Chancellor, Alia University, Kolkata)*

## Recommendations of the 6th National Convention Industry - Specific Engineering Education for Better Employability of Engineers

**Engineers Bill should be brought on the statute as the Engineers Act and a statutory council of engineers set up as a consequence without further delay.** Engineering education should move out of its present engineering disciplines basis to industry-specific basis. But this should be done with caution and taking step-by-step approach. First, a few new such branches should be introduced, namely BE (Construction Engineering), BE (Hydrocarbon Engineering) and a combined five-years degree course in engineering & management. Meanwhile, the quality of engineering curricula, and syllabi should be made compatible with industry requirements; and it should provide a greater flexibility and choice of electives. Subjects on management, humanities, social sciences and information technology should be included in the engineering curricula as compulsory subjects. The earlier practice of having common subjects during the first two years of the course and engineering branch-wise education after the third year of the course should be restored. Case studies on industrial problems solved should be included in the curricula for a very clear understanding of the concepts involved. During-the-course industrial training in the third and fourth years should be project-based, which should also be assessed and credits obtained added to the total credits that a student may get from the written examination. While as the industrial training during the first and second years of the course may continue to be visits to industrial units only, as at present. There should be a mandatory six months internship with an industrial unit after the course, which should be assessed and credits thus obtained by a student should be added to her / his total credit. The final engineering degree should be awarded after this. After passing out the course, however, a provisional engineering degree can be given. The industry should be compensated or any expenditure that it may incur on this internship. This is a policy matter.



The entrance/ admission to engineering institutions should be made through an all India Common Admission test for engineers, which should also assess the aptitude for engineering in a student. It is desirable that the engineering establishments in the private sector and those of the various state governments should also come under the purview of this common admission test for engineers. Computer

simulations should also be used for laboratory practices. It will make easy for the students to understand various concepts. A greater industry-academy co-ordination- than what is happening now- is required. For this, a better academy-industry interface in bridging the skill gap in high growth industry should be setup at the earliest. This can be better done if set up in the form of a standing institutional mechanism at the national level. Close interaction of academic institutions with entrepreneurs should be mandated as a social responsibility on the part of academia. Spending of public money on higher education and research for non-performing universities / institutes should be reduced. Performing institutions should be given more financial grants as encouragement for better quality teaching and research. There should be some universities with research facilities and salaries comparable to the best in Asia. Performing teachers should also be given financial rewards (e.g. cash incentives for publications in international journals, patents filed, or for bringing any other laurels to the institutions, special remuneration package for course loads above average and so on). The faculty jobs need to be made more attractive for the right persons. The quality of teachers is the main concern even if quantity is addressed. Poorly-trained teachers could be an even bigger problem. This needs to be addressed. The CPD of the engineering faculty needs to be institutionalised. It should be mandatory for the engineering faculty to work in the industry at least for two-to-three terms of two years each during the entire service period. Like-wise it should be made mandatory for practising engineers and engineer consultants with demonstrated achievement in the consultancy to work as the engineering faculty for similar tenures. This is also a policy matter. A Graduate Aptitude Test for Engineers (GATE) or the National Proficiency Evaluation Test (NPET) should be designed & developed for each discipline of engineering separately. Employers should recruit those engineers who qualify GATE or NPET. Recruitment of engineers without the GATE score should be legally discouraged. The prestigious Indian Institutes of Technology (IITs) should mentor some lesser known or new engineering colleges for raising their standard. Inter-institute credit transfer should be permitted. Skill/knowledge-centric workshops should be organized with the industry.



### Prestigious Eminent Engineer 2012 Award conferred on Dr E. Sreedharan on the Foundation Day Celebrations of ECI held at New Delhi

Engineering Council of India (ECI) completed ten years of its service to the engineering profession on April 4, 2012. The day was celebrated as the Foundation Day of the Council; and will continue to be celebrated as such every year hereafter. On this occasion, the first prestigious Eminent Award 2012 of ECI was conferred on Dr E. Sreedharan, Principal Adviser and former MD, DMRC at a ceremony held 4, 2012 at New Delhi which was presided over by Shri K.C. Pant,



former Dy Chairman, Planning Commission and the first Patron of ECI. The Award was conferred on Dr. E. Sreedharan by the Chief Guest, Justice J.S. Verma, former Chief Justice of India. His name was selected from out of 25 high - quality nominations received from all over India including from the industry-the public sector & the private sector, public utilities, academia, etc, by a high-power jury

headed by Shri K.C. Pant with Dr Kirit S. Parikh, Chairman, Integrated Research and Action for Development (IRADE) and former Member Planning Commission, Dr. V. Krishnamurthy, Chairman, National Manufacturing Competitiveness Council (NMCC), Dr. R.A. Mashelkar, National Research Professor, National Chemical Laboratory, Pune and former Secretary, Department of Scientific and Industrial Research and DG, CISR, Shri B. Muthuraman, the then President CII & Vice Chairman, Tata Steel Ltd., Dr. P.V. Indiresan, former Director, IIT, Madras and Shri A.C. Wadhawan former Chairman & Managing Director, Hindustan Zinc Ltd, Chairman, Public Sector Enterprise Selection Board as its members .



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Published by Shri P.N. Shali, Director, Engineering Council of India for restricted circulation from Jawahar Dhatu Bhawan, New Delhi-110062  
Printed by : Maansee Printers, E-mail : [maanseeprinters@yahoo.co.in](mailto:maanseeprinters@yahoo.co.in)