



The Indian Engineer

India conquered and dominated China culturally for 20 centuries without ever having to send a single soldier across her border—Like Hu Shih, the former Chinese Ambassador to the US
Imagination is more important than knowledge—Albert Einstein

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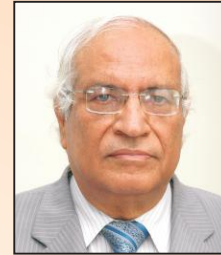
The Institute of Marine Engineers (India)

Shri P. N. Shali

Director

Message from the Chairman

13th Foundation Day of Engineering Council of India (ECI) was celebrated on April 6, 2015 where the Eminent Engineer Award was conferred on Dr. Baba Kalyani, Chairman and Managing Director, Kalyani Steel Ltd and Dr. Anil Kakodkar, distinguished nuclear engineer & scientist and former Chairman, Atomic Energy Commission, Government of India. The awards were decided by a top-level Jury under the Chairmanship of Dr Kirit S. Parikh, Chairman, Integrated Research and Action for Development (IRADe) and former, Member, Planning Commission with Dr. R.A. Mashelkar, Dr. Baldev Raj, Shri B. Muthuraman, Shri A C Wadhawan, and Shri Mahendra Raj as its distinguished members. Further details of the function are covered elsewhere in this Newsletter.



ECI organised 6th Executive Development Programme on Project Management for Engineers from April 27 to May 1, 2015 at New Delhi. The course was supported by the Ministry of Statistics and Programme Implementation and Department of Public Enterprises, Government of India. It was attended by the senior executives from both the public sector and private sector companies.

ECI had been continuously pursuing the Engineers Bill with the Ministry of HRD. I met Mr. S N Mohanty, Secretary, MHRD in April 2015 when it was understood that the Ministry was yet to take up the processing the Bill on an urgent basis. ECI organised a meeting with the Member Associations of ECI on April 28, 2015 to discuss the strategy and action plan regarding Engineers Bill. It was agreed that the need of the hour is a united effort by all. It was unanimously decided that all member associations would be represented by ECI which may take all action in this matter on their behalf and work together with IE (I) and the Engineers Action Group (EAG) as may be necessary, so that the matter of Engineers' Bill is pursued with the government with one voice. The second Open House meeting of the EAG was held on May 13, 2015 where further action plan was developed. Now that a new Secretary has joined in the Ministry of HRD, I have written to him regarding Engineers Bill and sought an appointment to discuss the matter with him.

ECI made representation to the members of an Inter-Ministerial Group constituted by the government to consider several issues relating to Council of Architecture which have close bearing on the engineering profession. This was in line with the representations made by our members CEAI, IAStructE and several other bodies.

I am happy to inform our Members that with the approval of the BOG, ECI has purchased its own office space at the 13th floor of Hemkunt Chamber, Nehru Place and moved to the new office in May 2015.


(Uddesh Kohli)

Construction Industry Development Council

CIDC - a Member Association of ECI - has started one month internship programme for the students of Vikas Institute of Engineering & Technology, Gorakhpur. The programme, which was formally inaugurated on June 1, 2015 in VIET, Gorakhpur campus, is designed to meet the specific requirements of engineering students to fill up the gap of their curriculum as well as the requirement of the construction industry. The course is focused to give the hands on training and to improve the employability of the students.

7th Executive Development Programme

ECI is organising 7th Executive Development Programme on 'Orientation Programme on Law for Engineers' during September 1-3, 2015 at Civil Services Officers Institute, Barakhamba Road, New Delhi. For details, send a mail at eci@ecindia.org, pnshali@gmail.com, director@ecindia.org, or, visit Website: www.ecindia.org

13th National Conference

ECI is organising 13th National Conference on the theme: Make In India - Role of Engineers & Technologists on November 16, 2015 at: Auditorium, India International Centre, 40 Max Muller Marg, New Delhi-110003. For details, send a mail at eci@ecindia.org, pnshali@gmail.com, director@ecindia.org, or, visit Website: www.ecindia.org

Indian Society of Agricultural Engineers-ISAE

The Centre of Excellence on Soil & Water Management, RTTC, Junagadh Agricultural University, Junagadh is going to organize a Winter School on "Implication of Climatic Change on Pedagogical Issues of Water Resources Management" during September 21 to October 11, 2015 in collaboration with ICRISAT, Hyderabad, International Water Management Institute, Anand and Central Groundwater Board, Ahmedabad. For details send a mail at ranga3711@gmail.com; ranga3711@yahoo.co.in or call: 9429115051; Fax: 0285-2671018; Tel.: 0285-2672080-90 Ext. 309, 405, 391.

Computer Society of India –CSI

CSI, Delhi Chapter will hold its 50th Golden jubilee Annual Convention during December 2-5, 2015 at the India International Center, Lodhi Road, New Delhi. As a part of the convention, CSI, Delhi Chapter is proposing to organise a seminar on Digital Life. For details send a mail at hq@csi-india.org or visit website: www.csi-india.org

Consulting Engineers Association of India-CEAI- Engineering Smart Cities'

Smart Cities is a signature project of the Hon'ble Prime Minister. With its vast experience in engineering consultancy, CEAI plans to host a seminar on 'Engineering Smart Cities', to be held during September 25-26, 2015 at Manekshaw Centre, New Delhi. The focus of the seminar would be on the planning and engineering aspects of smart cities. For details send a mail at ceai.ceai@gmail.com or visit Website: www.ceaindia.org

Think it Over

Centuries Ago

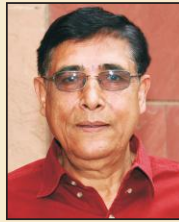
"Many of the advances in the sciences that we consider today to have been made in Europe were in fact made in India centuries ago."

—Grant Duff, Noted British Historian

There is not a crime, there is not a dodge, there is not a swindle which does not live by secrecy

—Joseph Pulitzer

From the Editor's Desk



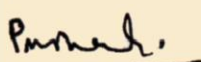
Statutory Recognition of Engineering Profession is Very Necessary to Meet the Onslaught of Council of Architects on the Profession

Engineering profession particularly, civil & structural engineering is grappling with several professional issues, which unfortunately do not get the desired attention from the powers that be. The Council of Architecture (COA) – taking the shield of the Architects Act, 1972 – has created an adverse situation for engineering companies providing architectural services. This move will deal a major blow to the civil engineering profession and their future will be at stake. Further, the building bye-laws and policies affecting civil engineers are being framed nationwide without consulting practicing civil engineers. In brief, the entire eco system of civil engineering professional practice is not at all conducive for the growth development of our country.

Association of Consulting Civil Engineers of India (ACCEI), Indian Association of Structural Engineers (IAStructE), Consulting Engineers Association of India (CEAI)- all members of Engineering Council of India (ECI) - and other professional engineers guilds organised an Open House meet of engineers on March 17, 2015 and then on May 13, 2015 New Delhi wherein these issues were discussed. ECI also attended these meetings. It also supported fully the move that the engineers have taken. During this meet Engineers Action Group (EAG) was formed to take the matter forward. EAG will work under the patronage of these associations and with time and requirement EAG shall be expanded and it will have full functional autonomy to achieve the objectives.

Inter ministerial group (IMG) constituted by the Ministry of Commerce and Industry on the Architectural Services met on June 12, 2015 to discuss inter alia the role of architects and amendments to the Architects Act 1972. While the Ministry of HRD is the nodal ministry for dealing with Architects Act, 1972 including its amendment, the Ministry of Commerce can only recommend so, if it finds it necessary for boosting export of architectural services from India. Understandably, a note on amending the Architects Act, 1972 has been prepared and furnished to Ministry of Commerce and Industry by the Council of Architecture which has proposed amendments to Architects Act 1972. In the suggested amendments COA intends to make the design, planning and supervision of buildings their domain, with the exclusion of engineers who have a major role in this area and who have been performing these activities for a long time. Obviously, this note has great implications for the engineering profession. ECI also wrote to all IMG members requesting them to include ECI in the IMG and give it an opportunity to make a presentation on behalf of the professional engineering associations.

For the last 40 years, engineers have been knocking at the door of government asking for statutory recognition of the engineering profession by enactment of 'Engineers Bill', but without any success.


(P.N. Shali)

Distinguished Engineer : Dr. Anoop Kumar Mittal

Dr. Anoop Kumar Mittal, Chairman-cum-Managing Director of National Buildings Construction Corporation Ltd (NBCC) – a schedule 'A' Navratna Company - is a visionary by trait and with more than 30 years of experience in civil engineering, consultancy and project implementation. Dr. Mittal has led majority of the path-breaking projects of significance for NBCC in the country and overseas since 1985. Dr. Mittal has contributed immensely towards the nation building by delivering impeccable and quality works in sectors like health, environment, offices and institutions, housing, transportations, power, real estate (commercial & residential), infrastructure including that of defence and para-military forces, border fencing works at Indo-Bangladesh/Pakistan borders, various developmental projects in north-east region, etc. Apart from having expertise in trenchless technology, Dr. Mittal has also a track record of demonstrating proficiency in execution of large civil construction projects that has earned NBCC a niche for itself in construction arena.



Dr. Anoop Kumar Mittal

Specifically, Dr Mittal has been instrumental in completion of many landmark projects such as construction of 270 Cusec Raw Water Pipeline from Muradnagar (U.P.) to Sonia Vihar (New Delhi), first metro station at Seelampur in New Delhi, large value hospitals and solid waste management projects in numerous air-field towns across the country. Dr. Mittal has not only helped NBCC going upward in the ladder of success and profitability but has also re-strategised NBCC's operations in order to tap the real estate sector of the country considering the fact that there is a huge requirement of housing all across. In this regard, apart from allocating a huge amount of money for planned investment in commercial and residential real estate projects, Dr Mittal also envisions to mark NBCC's footprints in every state of the country with NBCC's credible and innovative real estate works. It is also worth mentioning that Dr. Mittal's thoughtful initiative towards partnering in government resolve to address the issues of housing backlog for the masses and the government employees has resulted in NBCC already creating a huge land bank all across the country and participating aggressively in redevelopment of government properties.

Dr. Mittal began his career in 1982 and was associated with developmental works of the prestigious Asiad 1982. After a short stint, he joined M/s Shapoorji Pallonji & Co. Ltd, a renowned civil engineering organization in the construction sector. In 1985, Dr. Mittal joined NBCC and served the company in various capacities for more than a quarter century. In 2013, he was appointed Chairman-cum-Managing Director of the Company by the Government of India. After taking charge as CMD of NBCC, Dr. Mittal chalked out a plan to make NBCC a 'Navratna' status company. This feat was accomplished by June 2014 – barely 14 months after he assumed office as Chairman in April 2013. He has also undertaken many important initiatives vis-à-vis HR, business development and operations, etc. providing fresh impetus to the company's growth. Under his astute and thoughtful leadership, NBCC has brought about sweeping changes/ formulated new policies in order to add value to the company's growth as well as the growth and welfare of its employees, many being first-time improvements. These measures include: bringing out the company's maiden and comprehensive HR Manual; streamlining systems/procedures for promotion and

making it time-bound; introduction of Electronics Performance Management System (EPMS) i.e., the online appraisal system which was implemented from 2013-14 to make the EPAR system more transparent along with storage of EPAR records, etc. To boost up employees' moral and motivation, a number of measures have also been introduced under Dr. Mittal's initiative.

Being a strong believer in functional transparency, Dr. Mittal's initiative has led to recasting of the transparency aspect of the company for better corporate governance. Dr. Mittal's innovative thought process has continuously added values to the corporate functioning in many ways. Dr. Mittal also added a new Vertical – Renovation and Face-lifting of National Heritage Buildings – in the company's business operations. Additionally, he provided a fillip to its works of redevelopment of the government properties by signing agreements with CPWD, NAWADCO, Air India and DDA for development and redevelopment of their huge properties all across the country. For exemplary work in the Swachh Bharat Abhiyan initiated by the government, Dr. Mittal was conferred the Swachh Bharat Ratna Award 2015 by the Swachh Bharat Trust and World Creativity Science Association. Under Dr. Mittal's initiatives, NBCC began incorporating maximum green features in all its new projects, such as recycling of C&D Waste, Plastic & Domestic Waste, STP, Bio-Digester Toilets, etc. Under his active guidance, NBCC volunteered proactive participation in the Government's Swachh Bharat Abhiyan, with the company building Bio-Digester Toilets at Mandir Marg, New Delhi, which was inaugurated by the Hon'ble Prime Minister of India on October 2, 2014 while launching the Government's Swachh Bharat Campaigns.

Membership of Professional Bodies

Dr. Anoop Kumar Mittal is associated with various professional bodies. He is the Executive Member, Standing Conference of Public Enterprises (SCOPE), Chairman, Real Estate Committee of Federation of Indian Chamber of Commerce & Industry (FICCI), Member, Governing Council of Thapar Institute of Engineering & Technology, Member, All India Housing Development Association (AIHDA), Life Member, Construction Industry Development Council (CIDC), Patron Member, National Real Estate Development Council (NAREDCO), and Member, Bureau of Indian Standards (BIS).

Awards and Honours

He has also won many awards and recognitions during his career. Some of these awards include. Best PSU CMD of the year, BT-Star PSU Awards 2015, PSE Persona of the Year, IPSE Awards 2014, PMA Honorary Fellowship Award 2014, CEPM, Infra Person of the Year, Real Estate Awards 2014, Achievement Award for Public Officer (Code-C), CIDC Vishwakarma Awards-2014, Udyog Rattan Award 2014, D. Phil Degree.

Hailing from a humble background and leading an impeccable and unblemished professional career till date, Dr. Mittal holds a Bachelor's degree in civil engineering from Thapar Institute of Engineering & Technology in 1982 and has been conferred "Doctor of Philosophy" (Honoris Causa) by the Chancellor, Singhanian University, by virtue of his attaining eminence in the field of civil & construction engineering. He has also attended post graduation course in the U.K.; he has undertaken training in Germany, England, France & Italy on trenchless technology, sewage treatment plant, solid waste management projects, building technology, etc. Dr. Mittal was born in Bharatpur, Rajasthan.

News from the Member Associations

Association of Consulting Civil Engineers (India) - ACCE (I)

ACCE (I) jointly with the Indian Association of Structural Engineers (IAStructE) and Consulting Engineers Association of India (CEAI)- all members of Engineering Council of India and other engineering professional bodies' organised the 2nd Open House Meet of Engineers on May 13, 2015 at New Delhi. ECI participated in this meet. Many state level professional engineering associations and individuals attended the meet. Many far reaching decisions were taken in the meet to promote interests of engineers.

Consulting Engineers Association of India-CEAI

CEAI organised an Advance Course on Steel Design -2 during June 26-27, 2015 at Mumbai. The course was very well attended and appreciated by the participants. CEAI successfully organized three training courses on "Practical Use of FIDIC Conditions of Contracts" in April 2015. Two in-house programmes were organized for M/s Andritz India PvtLtd at Faridabad and the other at Bhopal. CEAI organized in-house programme for DFCCIL engineers in Delhi. In all, about 130 engineers were trained. Mr Bogdan Oprea, the FIDIC accredited trainer, conducted the training. CEAI is organizing an open-house training course by **seveon** "FIDIC Conditions of Contract for EPC/ Turnkey



Projects" on July 27-28, 2015 at PHD Chamber of Commerce, New Delhi. This aims at providing a broad insight into project contracting strategy. For details send a mail at ceai.ceai@gmail.com, or visit Website: www.ceaindia.org

Construction Industry Development Council of India-CIDC

Executive Development Programmes on PPPs in roads and highways covering six basic courses are being conducted by the UNECEP, an organization formed jointly by United Nations Economic Commission for Europe and CIDC-a leading organisation involved in PPPs in India. The courses have been designed on the guidelines provided by the UN. The first course started in April, 2015 and the second will be held in August, 2015. These programmes are for middle level executives of all the stakeholder organisations involved in PPPs based on the UN recommended curriculum. CIDC was established to help promote efficient methods, technology, management and skill development in order to develop and implement world class projects within least time and at least cost. This is being organised in the background of plans of the Government of India for the infrastructure sector of India. The plans incorporate infusions of substantial private-sector contributions to enable PPP projects assume vital significance



and importance. UN has targeted the development of specific systems and procedures to be followed by member countries in such projects. CIDC has entered into a MoU with Teerthanker Mahaveer University (TMU), Moradabad (U.P) to offer the Bachelor of Vocation (B.VOC) programme for the Construction sector with following specialization: Building Construction. Roads & Highways Construction. Water Proofing & Construction Chemical Application, Operation & Maintenance of Construction Equipment, Application of Trenchless Technology, Construction Project Management, and Building Maintenance. The eligibility condition for admission to a B.Voc programme is 10+2 or equivalent in any stream. The University Grants Commission (UGC) has launched this scheme on skill development - based higher technical education as part of college/university education leading to Bachelor of Vocation (B.Voc) Degree with multiple exits such as Diploma/Advanced Diploma under the National Skills Qualification Framework (NSQF). The aim of the programme is to create more job-ready employees/entrepreneurs by imparting them skills and education leading to creation of a rich resource pool of skilled human resources.

Indian Association of Structural Engineers - IAStructE

IAStructE is organizing a two day Seminar on "Challenges in Earthquake Resistant Design of Buildings & Structures" on September 4-5, 2015 at New Delhi. In the past years, IAStructE organized successfully two Seminars on Earthquake Resistant Design of Structures and Retrofitting of Structures (2005 & 2006). Since then, significant advancement in engineering has taken place. Revised Codes & Standards are being published by IRC, IRS & BIS and the world over, incorporating the latest state-of-the-art knowledge. In light of that and in the wake of recent earthquake in Nepal in which many lives were lost and valuable property was destroyed, IAStructE has decided to conduct yet another seminar to continue the discussion on the modalities and methodologies being developed to plan, design, construct and retrofit structures in earthquake prone areas. For details, send a mail at iastructe@gmail.com, or, visit Website: iastructe.co.in. IASEs organised a technical lecture on the subject "Top Down Construction" on April 23, 2015 at New Delhi. Shri H L Chawla, senior civil engineer delivered the lecture. It was very well attended.

Indian Institute of Chemical Engineers - IICChE

IICChE proposes to organise Industry'.Schemcon-2015 on the theme "Sustainable Development for Better Tomorrow" during September 12-13, 2015 at the Department of Chemical Engineering, MIT Academy of Engineering, Pune, Maharashtra. The Guwahati Regional Centre of IICChE proposes to organise Chemcon-2015 on the theme 'Chemical Engineering - From Laboratory to Industry in collaboration with Department of Chemical Engineering, Indian Institute of Technology, Guwahati, during December 27-30, 2015 at Guwahati. For further details of these programmes send a mail at iichehq@vsnl.com or visit www.iiche.org.in. IICChE and IChemE, UK have been jointly promoting a biennial students' exchange programme since 2007. As part of the programme this year, three under-graduate student members of the IICChE will be making a short trip to Birmingham and other areas of

England during November 2-6, 2015. The students will undertake university tours, industrial tours and attend IChemE Annual Awards Dinner. The process of the final selection of the students is underway.

Indian Building Concrete-IBC

IBC Awards for Excellence -2013-14 were conferred during IBC's 20th Annual Convention held in June, 2015.

Indian Institute of Bridge Engineers - IIBE

IIBE is organising an international Seminar on 'New Construction Materials, Techniques and Designs in Bridge, Tunnel and Road Construction', for infrastructure development in accessible borders areas during Sept. 11-12, 2015 at Zorawar Auditorium Manekshaw centre New Delhi. For details send a mail at iibe_dsc1@yahoo.co.in, lalgraf@yahoo.co.in.

Indian Concrete Institute-ICI

ICI organized one - day national seminar on "Emerging Fast Track Techniques in Building and Infrastructure Projects" on June 28, 2015 at Ananda Inn, Puducherry. It was very well attended and appreciated by the participants. 27th Biennial National Conference of the Concrete Institute of Australia-Concrete 2015 in conjunction with the 69th RILEM Week Conference is being organised from August 30 to September 2, 2015 in Melbourne, Australia. A Workshop on Innovation in Enabling Works, Formwork, Scaffolding Systems will be held during September 11-12, 2015 at New Delhi. An International Conference of Suppliers to Construction Chemical Industry of India is proposed to be held on 25-26th September 2015 at The Lalit, Sahar Airport Road, Mumbai. ICI-ACECON 2015- the 4th Asian Conference on 'Advancement in Structural Concrete' is proposed to be held during October 8-10, 2015 at Science City, Kolkata. For details of all these forth coming events, send a mail at ici4@airtelmail.in, secgenici@airtelmail.in or visit <http://www.indianconcreteinstitute.org>.

ICI invites nominations for ICI Awards 2015 under the following categories: Outstanding Concrete Structure, Outstanding Pre-stressed Concrete Structure in the Country, Innovative Application of Special Concretes, and Dr. A. Ramakrishna Award for the Best Project with Precast Concrete in India. For details send a mail at ici4@airtelmail.in, or, visit Website

Indian Society for Non Destructive Testing-ISNT

An International Symposium on Non-Destructive Testing in Civil Engineering (NDT-CE) is proposed to be held during September 15-17 at Berlin, Germany. National NDE Seminar -2015, an important annual event of the ISNT, provides highly stimulating and interactive platform for all the NDE professionals' right from students to experts, equipment manufacturers, third party inspection agencies and service providers to explore and exchange latest ideas and advancements in the field of NDE. For details of these programmes, send a mail at isntheadoffice@gmail.com, or, visit website: <http://www.isnt.org.in>

Indian Society of Agricultural Engineers- ISAE

A National level essay competition on the subject 'Farming as my Profession' was organized by the National Academy of

Agricultural Sciences (NAAS), New Delhi as part of its Silver Jubilee celebrations. Postgraduate students of State Agricultural Universities, Indian Council of Agricultural



Research (ICAR) and other institutions from all over country participated in the event. The essay written by Shri Mayur Parsottambhai Chandegara, student from the College of Food Processing Technology & Bio- Energy, Anand Agricultural University, Anand was adjudged the best among 80 essays received from 42 universities of India. A gold medal and certificate was given to Shri Chandegara by the Chief Guest Dr. M.S. Swaminathan, Father of Green Revolution. The essay will also be published in NAAS newsletter. Shri Chandegara, an agricultural engineering graduate is presently pursuing M.Tech (Food Processing Technology) at Anand Agricultural University, Anand. Shri Chandegara has emphasized on



contribution of youth in the Indian farming in his essay and the effective participation of youth in agricultural and related fields. He also highlighted the tendency of the youth to be more attracted

towards engineering and medical courses for higher education instead of the agricultural related professional courses which are the back bone of the Indian economy and its rural populace. In his essay, he has identified innovative ideas for attracting and mobilizing youth in farming through various programmes throughout India. The AGM of ISAE, Gujarat Chapter was held on May 30, 2015 at Junagadh to discuss the activities, election of the new executive council, accounts and other points of the chapter.

Indian Society for Technical Education-ISTE

As a regular annual feature, forty four national annual conventions and seventeen students' convention of ISTE have been held so far in the different states. The major impact of these conventions is instrumental in providing an opportunity for the teachers, educational planners and administrators, students and all other stakeholders who are involved in the field of technical education to get together and share their views and to contribute to the development of technical education system. Consequent upon the decision taken during the 105th meeting of ISTE National Executive Council held at Goa on March 28, 2015, the HVMP's College of Engineering & Technology, Amravati (Maharashtra) has been awarded to host the 45th ISTE National Annual Convention to be held during December, 2015. Kings College of Engineering, Punalkulam, District, Pudukottai (Tamil Nadu) has been awarded to host the 18th ISTE Annual Students Convention to be held during September/October, 2015. ISTE, is organizing its 1st Indian Engineering Dean Council (IEDC) Global Summit- 2015 on "Engineering Education - Current Scenario & Future Prospects" during July 31 to August 1, 2015 at GRT GRAND, Convention Centre, T. Nagar, Chennai. For details send a mail at istedhq@vsnl.net, or visit Website: <http://www.isteonline.in>.

The Mining Engineers' Association of India-MEAI

The 1st All India Mine Managers Meet was organized during May 8-9, 2015 at Hyderabad which sought to develop requisite knowledge and managerial competence to face not only new challenges but also enable managers and mining engineers achieve their full potential and be counted among the best in the world. This mega event attracted a wide participation from mining fraternity from India & abroad. The high-impact meet had star speakers, experts, thought leaders and social scientists from the mining companies, manufacturers and suppliers, regulatory bodies, administrative bodies, academics, etc., who discussed in-depth issues/challenges currently impeding mining industry and suggested solutions to these issues. During this meet, MEAI gave 'Outstanding Leadership Awards' to the eminent mining engineers for their meritorious contribution to the mining Industry which included Sri N.K. Nanda, Director (Technical), NMDC Ltd., Sri Akhilesh Joshi, Chief Executive Officer and Whole-time Director, Hindustan Zinc Limited - Zinc Industry, Sri D. Acharya, CMD, Uranium Corporation India limited, Sri D. Surendra Mohan, CMD, Neyveli. Lignite Corp. Ltd, Sri N. Kumar, Director (Technical), Coal India Ltd and many more. The AGM of MEAI was held on June 20, 2015 at Jaipur. MEAI presents every year awards instituted by organizations/individuals during its AGMs. Accordingly, MEAI presented these awards in the Jaipur AGM this year.

The Institute of Marine Engineers (India)-IMEI

IMEI is organising INMEX and SMM where 'South Asia's Maritime Buyers and Sellers Meet' during September 23-25, 2015 at Bombay Exhibition Centre, Mumbai. This event is being organised with the support of Ministry of Shipping, Government of India. About 7000 delegates and 500 local and international exhibitors are expected to attend the event. A dedicated conference hosted by the Industry leaders and marine experts is also being organised as a part of the event. For details send a mail at hgs@imare.in or visit www.imare.in. The Visakhapatnam Branch of IMEI is organising Global Maritime Seminar 2015 on 'Challenges in Ship Building for Revival of Shipping & Emergence of Offshore/Sub-Sea Technologies with Special Reference to Environmental Protection' during July 16-18, 2015 at Visakhapatnam. For details send a mail at hgs@imare.in or visit www.imare.in.

The Indian Institute of Metals-IIM

A technical talk delivered by Dr Arvind Bharti, Director Cluster Co-ordination, Defence Research & Development Organisation (DRDO) HQ, Ministry of Defence on the 'Current and Futuristic Materials for Defence Systems' was organised at the Delhi Chapter of IIM on May 16, 2015. Dr Bharti focused on various activities of DRDO in a vast spectrum of technologies to serve the operational requirements and indigenisation of different weapon systems required for Indian defence forces. He highlighted various technological challenges in DRDO's 46 labs (naval systems and materials, life sciences, electronics and communication systems, microelectronic devices and computational systems, missiles and strategic systems, armaments and combat engineering systems and aeronautical systems) and the role of development of new materials for



extreme weather conditions as well as for specific weapon requirements. He briefly mentioned about many specific materials like envelop material for aerostat with different strengths, parachute



fabrics, high strength low weight composite fabric, assorted textiles, material for improved propulsion technology, self-healing and self-diagnosis material, nano-material for aerospace, material for aero gas turbines, super alloys, fibers for composites, stealth materials, material for smart actuation, material for magnets, material for IR domes, grapheme and nano-materials, nano-fluids, lightweight materials for various structural applications, technical ceramics and advanced composite materials, microwave tube materials, etc. Shri S C Suri, Chairman IIM Delhi Chapter welcomed the speaker. The talk was attended by about 50 IIM DC members and others. The 63rd AGM of Delhi Chapter of IIM was held on June 20, 2015 at the chapter premises inter alia to elect a new executive committee of the chapter for the year 2015-16.

The Institution of Electronics and Telecommunication Engineers-IETE

Skilling is the defining buzzword of the present times and has domino effect in the education and training sectors. Technology deployment for skill development can lead to lower costs, higher quality, and greater reach, while reducing the burden on physical infrastructure. IETE focused on the potential of "Impact of Technology on the Skill Development (ITSD-2015)" during its two-day 46 Mid Term Symposium held during April 11-12, 2015 at Amravati. IETE chose to deliberate on this contemporary topic as learning by doing is the new mantra for vocational education and skill development. Shri Devendra Fadnavis, Hon'ble Chief Minister of Maharashtra was the Chief Guest and in his inaugural address he highlighted that India's demographic advantage will result in national development only through meaningful skilling. IETE organised South Zonal Seminar on the theme 'Space Communication Technologies' during June 12-13, 2015 at Thiruvananthapuram, Kerala. IETE organised East Zonal Seminar on with the theme 'MIS for E-Governance & E-Commerce' to benefit common man during June 26-27 at Guwahati. Both these seminars were very well attended by both the Industry and academia.

Appointments

Dr. N.C. Patel, Vice Chancellor Anand Agricultural University, Anand, Gujarat has taken over as the President of the Indian Society of Agricultural Engineers (ISAE). Shri Ajit Sabnis has taken over as the National President and Shri Umesh B. Rao as Secretary General of the Association of Consulting Civil Engineers (India). Sri T. Victor has taken over as the President, Sri Koneru Venkateswara Rao, Secretary General and Sri A.K. Gupta, Jt. Sec. cum. treasurer of the Mining Engineers Association of India. Prof. A. Srirama Rao has taken over as the President of Indian Geotechnical Society.

Our Congratulations

Letters to the Editor

Dear Sir,

The work you are doing is landmark and is very important in order to secure the technological future of our country. I extend my full support on behalf of the student fraternity and sincerely hope that the points that came out of the 1st Students Conclave on the reform of Engineering Education for better employability of Engineers organised by the Engineering Council of India in September, 2014 at Kolkata will be heard. Please do let me know if any other assistance is required.

Regards

— **N.G. Vishak**

3rd year, Mechanical Engineering Student,
Camellia Institute of Engineering & Technology

Dear Mr Shali,

Thanks for sending me the Indian Engineer. I fully endorse the view that the engineering profession must be enacted as Practicing Profession. While engineers do become active now and then, but there has been no concerted effort that I know of. There is a need to follow it up through seminars, professional journals and media. My compliments to you for very informative news letter.

With warm regards

Yours sincerely

Mal Gen T S Sidana, AVSM, VSM
Quartermaster General's Branch
Integrated HQ of MoD (Army)

Students Corner

Corrosion Challenges in Oil Refinery and Petrochemical Industries-Venkata Tejaswi Sunkara

In the present industrial world, corrosion has become the biggest challenge that every oil refinery and petrochemical industry faces during the operation of process units. Loss of containment can lead to safety incident and hence understanding the damage mechanism and proactively monitoring the degradation rate is essential to resolve the corrosion issues. In this study various damage mechanisms existing in oil refinery and petrochemical industries like atmospheric corrosion, stress corrosion cracking, carburization of furnace coils, polythionic acid stress corrosion cracking, high temperature hydrogen attack etc., have been studied. In most of the cases we have observed that

corrosion of the material is at a higher rate in the conditions like high temperature, corrosive atmosphere and high pressures. Further this work explores the methods to detect corrosion phenomena through various non-destructive techniques (NDT's). Different methods to limit and possibly overcome the corrosion phenomena and different practices prevalent in the industry have also been studied. As a good metallurgist my primary aim is not only to develop methods to reduce corrosion but also to develop new materials which are free from all types of corrosion in wide range of service conditions.



Creating Manufacturing Jobs in India : Has Openness to Trade Really Helped?

After following inward oriented economic policies for nearly four decades, India opened up to international trade in the early 1990s. Since then, the trade integration of the Indian economy in general and the manufacturing sector in particular has increased phenomenally. Against this backdrop, working paper No. 303 of the Indian Council for Research for International Economic Relations (ICRIER) analyses the direct as well as indirect impact of trade on jobs in the Indian manufacturing sector. Using the growth

accounting approach, we find that the direct impact of trade on manufacturing jobs has been positive. However, trade induced decrease in labour demand has neutralized direct job gains to a great extent. Therefore, unlike other Asian economies, the overall employment gain from trade has been minimal. The paper argues that supply side constraints should be addressed urgently to enhance job gains from international trade. For details write to Manmeet Ahuja, Sr. Manager (Admin. & Events) at ahuja@icrier.res.in

News Kiosk

The World Accreditation Day was celebrated at a function organised by the National Accreditation Board for Certification Bodies (NABCB), jointly with NABL on June 9, 2015 at New Delhi. The theme of the function was accreditation: Supporting the Delivery of Health and Social Care" Shri Rajeev Kher, Commerce Secretary was the Chief Guest at the function. A Yoga professional certification scheme designed by Quality Council of India (QCI) was launched by the Home Minister Shri Rajnath Singh in the

valedictory function of the International Yoga Day celebrations on 22 June 2015. A new government-sponsored scheme aims to certify yoga teachers across the world. After successfully appealing for an International Day for Yoga from the United Nations, the Government has launched a voluntary certification scheme for yoga teachers to keep an eye on the booming business of wellness. The Scheme has a separate website yogacertification.qci.org.in.

Eminent Engineer Awards for 2015 Conferred on Dr. Baba Kalyani and Dr. Anil Kakodkar at the Foundation Day Function of Engineering Council of India held on April 6, 2015 at New Delhi

Engineering Council of India (ECI) was incorporated on April 4, 2002 under the Patronship of the then Dy Chairman, Planning Commission as an apex body of engineers at the national level by coming together of a large number of professional organizations/institutions of engineers to facilitate bringing in on the statute the Engineers Act for regulating engineering profession in India and work for its advancement in various disciplines. ECI completed thirteen years of its service to the Indian engineering profession on April 4, 2015. A function was organised to commemorate the day on April 6, 2015 this year for some technical reasons. The Chief Guest of the function was Dr. Bibek Debroy, Member NITI Aayog. Dr. Kirit Parikh, Chairman Integrated Research and Action for Development (IRADe) and former Member, Planning Commission presided over the function. Around 150 engineers and others attended the function.



As a part of the function, Eminent Engineers Award was conferred on Dr. Baba Kalyani, CMD, Bharat Forge Ltd for the industry category and on Dr. Anil Kakodkar for the Research and Consultancy category, who were selected based on the set criterion of the Award from out of the 22 very high quality nominations received for the Award by the High-Level Jury Chaired by Dr. Kirit Parikh, Chairman Integrated Research and Action for Development (IRADe) and former Member, Planning Commission with Members Dr. R.A. Mashelkar, National Research Professor National Chemical Laboratory Pune and former Secretary (S&IR) and DG (CSIR), Shri B. Muthuraman, former Vice Chairman and Managing Director, Tata Steel, Shri A C Wadhawan, Industrial & Management Consultant, former Chairman,

Public Enterprises Selection Board and CMD Hindustan Zinc Ltd, Dr. Baldev Raj, a distinguished Atomic Scientist, Director, National Institute of Advanced Studies, former Director, Indira Gandhi Centre for Atomic Research and Shri Mahendra Raj, a distinguished structural engineer and Managing Director, Mahendra Raj, Consultants Pvt Ltd-all well known and distinguished persona. Dr P.R. Swarup, DG, CIDC & Member Board of Governors, ECI proposed a vote of thanks.

In his acceptance speech, Dr Baba Kalyani, while thanking the Engineering Council of India for conferring on him the prestigious award stated that India is ready to rise and it has all ingredients in place for this. Kalyani Group has already been pursuing Make in India mission; it fully supports the Make in India Mission of our Prime Minister; and it will now focus on this mission. He further added that the regulation of engineering profession is very much required not only for the success of Make in India Mission, but also for trade in engineering services from India. Dr Kakodkar in his acceptance speech also thanked ECI for the Award. He said that we need to further strengthen our research infrastructure in the country so that we come up as a major technology producer in the world. He also agreed with Dr. Kalyani on the need for bringing in the regulation of engineering profession in the country.



Dr Uddesh Kohli, Chairman, Engineering Council of India sounded a word of urgency regarding regulation of engineering profession for ensuring the accountability of engineers to the society like the other professions such as Medical, Legal, etc, are regulated primarily for the same purpose.

Obituary



Shri A C Wadhawan, Past President, the Indian Institute of Metals (IIM), Member High-Level Jury of ECI for selecting Eminent Engineer Awardees, former CMD, Hindustan Zinc Ltd and former Chairman, Public Sector Enterprises Selection Board passed away on May 31, 2015 at New Delhi. He is survived by his wife Parvati, daughter

Junie and son-in-law, Arun Iyer. Shri Wadhawan was active to the last day in practising his profession. He was on the Board of many companies. He made a significant contribution in the development of Lead-Zinc Industry in India. ECI has lost a

committed friend, philosopher and guide. ECI conveys its heartfelt condolence to his bereaved family with prayer to God Almighty for eternal peace of the departed noble soul.



Shri S.N. Malhotra, General Manager, CIDC passed away on May 17, 2015 due to prolonged illness. He is survived by his wife, two daughters and one son. ECI conveys its condolence to his bereaved family and with a prayer to God Almighty for eternal peace of the departed soul.

ENGINEERING COUNCIL OF INDIA

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