



The Indian Engineer

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Message from the Chairman

At the outset, I wish to welcome and thank the members of the new Board of Governors (BOG) for the term 2020-22 (which took over on July 10, 2020) for nominating me as the Chairman for the term 2020-22, which I humbly accepted. I am grateful to Member Associations and their representatives in the BOG for their support and confidence in me for providing continued leadership to the Council. I am sure, together, we can take ECI to



In the BOG meeting and AGM held on July 10, the major item discussed was the involvement of the Member Associations (MAs) in ECI activities. At present ECI is focusing on up 6 main areas, namely: (i) Registration of Engineers in the National Register of Professional Engineers, (ii) Continued Professional Development (CPD) of engineers through training courses, webinars etc., (iii) Follow up on Engineers' Bill, (iv) Internship of the students of the Technical Educational Institutions under the AICTE-ECI MoU, (v) National Proficiency Evaluation Test (NPET), and (vi) Affiliate Membership-ECI has made a good progress in getting educational institutions as Affiliate Members as this will expand ECI's activities in internship and academic institutions. Five task Forces were formed to involve MAs in these activities, namely, Task-1: For follow up of proposed engineer's bill, Task-2: For resolving the impact of Architect bill on consulting Civil Engineers, Task-3: For enabling various Government/ Project Authorities to introduce a preferential engagement clause for the PEs, Task-4: For evolving the strategies & their implementation for training the young engineers & engineering students and Task-5: For creating an interface platform & for interactions with Industry.

Earlier it had been agreed in the BOG meeting and 16th AGM held 2018, that the MAs should display ECI's logo in all their events, brochures and activities. It is again requested that all MAs should kindly adopt this practice so as to provide enhanced visibility to ECI. ECI shall be strong only if its members make it strong. Some of the activities such as registration of PEs, Internship programmes, CPD programs are revenue generating and can make MAs financially strong, in addition to technical strength. As regards PEs, we need to encourage preference for PEs in project/industrial activities. ECI has signed MoUs with CPWD and some other agencies to promote engagement of PEs. Communications have also been sent to all concerned Centre, State and local authorities to promote engagement of PEs and also suggested to give a place to ECI registered PEs in their procurement process.

Continued on page 2

One way is to try to include a clause in the contracts so that some percentage of engineers to be employed by contractors are of PEs, namely

“That preferential hiring would be given to engineers, registered in the National Registers of Engineering Council of India (ECI)/ Institution of Engineers (India).”

ECI’s Foundation Day Celebrations of 2020 where Eminent Engineer Awards are also presented, had to be postponed due to the impact of the Corona Pandemic. It also seems difficult to hold the National Conference this year.

Following the Supreme Court decision on the Architects Act which inter-alia allowed civil engineers to take up planning and design of buildings, etc., ECI has already taken action to inform all concerned Centre, State and local authorities, in association with the MAs. Attention has also been drawn to National Building Code specifying the competencies. ECI and its MAs are widely publicising this landmark judgment, for the benefit of the engineering fraternity.

AICTE has submitted a draft Engineers Bill to Ministry of HRD. ECI is following up on this.

I again request all MAs to join hands with ECI and make all initiatives of ECI, enumerated above, successful which will make ECI and the MAs strong. I look forward to their feedback and suggestions.


(Uddesh Kohli)

From the Editor’s desk


An area which needs to be looked into is the Development of Indian entrepreneurship. Since Independence, Indian entrepreneurship has never been allowed to develop. Till the end of eighties, we had inspector raj, thereafter our economy was thrown open to the world. Whatever fledgling efforts were made; they were simply crushed by the massive financial clouts of the foreign MNCs. A classic example was the soft drinks industry. When Coca Cola left in the seventies, a plethora of Indian brands came up, 77, Campa Cola, Thums Up, Gold Spot etc. These were any day better than Coca Cola or Pepsi. Hence, when these two giants entered India in the nineties, the first thing they did was to take over all these brands. Today not a single of these brands is in the hands of any Indian. This game plan is continuing even today also. An Indian Start-Up, as soon as it starts to become successful, it is taken over by foreigners. Free Indian enterprises have never been allowed to develop. We have to ensure that our fledgling start-ups/ entrepreneurships are allowed to nurture and grow.



If India wants to rise and become an advanced economy, it has to have its own industrial base and might. To reach that stage, one of the main criteria is that its engineers should be well versed in the latest skills and technological developments. They should be able to churn products not produced anywhere else.

The first priority of a fresh graduating engineer is to get employed. There is no system in the Indian industry to place a person as per specialization of his interest. Further, once employed, there is no compulsion for him to keep upgrading his skill and knowledge, on a continuous and sustained basis. As a result, whatever knowledge he had, becomes outdated over a period of 5/7 years. Hence these bright talents, which could have been moulded to benefit the industry, join a pool of skilled supervisors. As a consequence, that industry suffers as its products also become outdated. Consequently, the nation suffers.

The first step, to be able to create something new /innovate, is to be aware and have knowledge of the development / advances taking place, in the world. If we are not upgraded in our knowledge of the developments which have taken place, then we would be reinventing the wheel, which would be of no use and would be a wastage of efforts and resources. ECI’s registration process has been designed just to encourage this rich talent to become active and initiate and induct them in nation building activities.


(B. R. Jain)

Engineering Council of India's News

Webinar on “Do we require an Engineer's Bill - The way forward for Engineers”

ECI conducted a webinar on “Do we require an Engineer's Bill - The way forward for Engineers” on June 20, 2020 through ZOOM. The webinar was well attended around 130 participants from the Industry as well as Member Associations of ECI.

Webinar on “Liaisoning in Construction Projects”

ECI conducted a webinar on “Liaisoning in Construction Projects” from August 10, 2020 to August 14, 2020 through ZOOM. The webinar was well attended around 43 participants from the Industry as well as Member Associations of ECI.

The same webinar on “Liaisoning in Construction Projects” will be conducted from September 08, 2020 to September 12, 2020 through ZOOM.

Webinar on “Advanced Geophysical Investigations for Infrastructure projects”

ECI is conducting a webinar on “Advanced Geophysical Investigations for Infrastructure projects” on September 18, 2020 through ZOOM. For details please visit www.ecindia.org

Webinar on “Why is the entitlement of PE important for Academicians in Engineering Institutions”

ECI is conducting a webinar jointly with CIDC on “Why is the entitlement of PE important for Academicians in Engineering Institutions” on September 25, 2020 through ZOOM. For details please visit www.ecindia.org

Webinar on “AI approaches for Medicine, with Specific Emphasis on Medical Imaging Data”

ECI is conducting a webinar on “AI approaches for Medicine, with Specific Emphasis on Medical Imaging Data” on October 5, 2020 through ZOOM. For details please visit www.ecindia.org

Registration of Professional Engineers

Introduction

Registration of Professional Engineers, Associate Professional Engineers, Student Engineers, and some other categories on a voluntary basis is going on since December 01, 2015.

Member Associations (MAs) have a major role to play as they call for applications, screen them through their set up National Committees (NCs) for respective fields/disciplines of engineering. These NC give their recommendations to the Board of Registration of Professional Engineers (BRPE) set up by ECI.

Benefits of Registering

The Registration, enhances the credibility and image of the Engineer. His/her acceptance by industry, institutions, clients and other organisations goes up when he/she mentions the fact of this registration as PE (or APE or SE) which distinguishes him/her from those who are not registered. We are informing the various government departments, public sector organisations, local authorities, industry associations regarding the National Register.

Specifically, it will result in; (i) Better credibility and possibility to make use of the branding of ECI and concerned Member Associations, as the names are being listed on the website (ii) Using the Certificate of Registration as PE in the National Register as a part of CV, and (iii) Better prospects for assignments/jobs after this is publicised to client/employer organisations.

National Registers

There are separate National Registers for (i) Professional Engineer (P.E), (ii) Associate Professional Engineer (APE), (iii) Apprentice/Graduate Engineers (ApE), (iv) Junior Apprentice Engineer (JrApE), (v) Student Engineer (SE) and (vi) Diploma/B.Voc Student Engineer (DiSE). There are separate National Registers under each category for different engineering fields/disciplines: Construction, Consulting, IT, Computers/Telecom/Civil/Electrical/Mechanical/ Chemical/Mining/Metallurgy/ Industrial/ Aeronautical Engineering, etc. The details and Criteria for registration under each category, Disciplines and Code of Ethics which the applicant has to sign, are given on the website www.ecindia.org.

Categories and Fee

Initial registration fee is Rs. 3000 for PE, Rs. 2000 for APE, App. E & Jr. App. E and Rs. 1000 for SE plus applicable GST. And for other categories, the fee is Rs. 2000. plus the applicable GST. The fee structure is subject to change in future. The registration is subject to renewal after 5 years.

Continuous Professional Development (CPD)

Each PE/APE is expected to meet minimum CPD requirement before being considered for registration

or renewal of registration. Nature of the programmes constituting CPD activities and credit hours to be earned are given on the web site www.ecindia.org. It is the aggregate of credit hours earned in 5-years that will determine as to whether a PE has secured at least 250 credit hours within his/her five years' registration validity period or not, for re—registration. MAs have a major role in organizing the CPD programmes for respective disciplines.

Member's News

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

JSSATE , ACCE(I), Bengaluru centre & RAMCO Cements organising a National Webinar on “SOIL -STRUCTURE INTERACTION AND FOUNDATION ANALYSIS: THEORY AND APPLICATIONS” on July 13, 2020.

For further details please visit: <https://www.acce.in/soil-structure-interaction-and-foundation-analysis-theory-and-applications/>

JSSATE,ACCE(I), Bengaluru centre & RAMCO Cements organising a National Webinar on “HYDRAULIC MODEL STUDIES IN COASTAL ENGINEERING DEVELOPMENT PROJECTS” on July 4, 2020.

For further details please visit: <https://www.acce.in/hydraulic-model-studies-in-coastal-engineering-development-projects/>

ACCE (I) has taken the lead in grouping all Civil Engineers together for fighting the injustice being planned against the community. ACCE (I) has formed a Task Force with able Engineer members from across the country.

For further details please visit: <http://www.acce.in/task-force-for-protection-of-civil-engineers-rights-and-interests/>

Consultancy Development Centre (CDC)

CDC organized a webinar on Seven Quality Control Tools on July 17, 2020. For further details please mail to jayasurya.tsi1997@gmail.com.

CDC organized a webinar on Implementation of QMS – ISO 9001:2015 on July 24, 2020. For further details please mail to jayasurya.tsi1997@gmail.com.

CDC organized a webinar on Implementation of EMS –

ISO 14001:2015 on July 31, 2020. For further details please mail to jayasurya.tsi1997@gmail.com.

CDC organized a webinar on Internal Audit on QMS/ EMS as per ISO 19011:2018 on August 07, 2020. For further details please mail to jaya-surya.tsi1997@gmail.com.

CDC organized a webinar on Risk Identification, Analysis, Mitigation Plan & Review on August 14, 2020. For further details please mail to jaya-surya.tsi1997@gmail.com.

CDC organized a webinar on Lab Management System for NABL Accreditation under ISO/IEC 17025:2017 on August 21, 2020. For further details please mail to jayasurya.tsi1997@gmail.com.

Construction Industry Development Council (CIDC)

CIDC has become certified “Approved Funded Training Partner” of National Skill Development Corporation (NSDC) for the financial year 2020-21.

CIDC is organizing a webinar on Construction Site Management General Works Supervision on August 01, 2020 through zoom. For details please visit: http://www.cidc.in/support/pdf/Webinar_brochure_%20MMUT.pdf

CIDC is Organising a Construction Webinar Series on the various topics i.e. Introduction to Health and Safety in Construction, Introduction to Construction Quality Management, Introduction to Construction Productivity, Introduction to Surveying for Construction Applications, Introduction to Cost Estimation & Quantity Surveying, Construction Project Management, Introduction Construction Contracts, Introduction to Design Engineering, Introduction to Trenchless

Dispute Resolution in Construction Industry, Introduction to Business Communications, Health and Safety in Welding and Allied Processes, Quality Management in Construction Projects, Managing Workers to Enhance Productivity, Drone Applications for construction Projects, Activity Based Costing for Construction, CPM Scheduling for Construction, Construction Contract Administration, Design and Build Projects, Smart Cities - Development and Management, Introduction to Construction Chemicals, Construction Equipment Management, Construction Site Management - Camp Operations, Composite Structures, Mediation and Conciliation Process, Introduction to Technical Communications, Construction Project Safety Management, Quality Management through Construction Inspection, Managing Equipment to Enhance Productivity, Construction Quantity Surveying, Introduction to Cost Engineering, Developing Work Breakdown Structures, Financial Elements of Contract, Engineering Design Planning and Management, Building Information Modeling, Construction Waste & Demolition Materials, Estimating in Heavy Construction, Construction Site Management - Field Operations, Cut & Cover Metro Structures, Arbitration Process & Communication in Construction from August 01, 2020 to September 30, 2020. For further details please visit: <http://www.cidc.in/support/pdf/CWS.pdf>.

Indian Association of Structural Engineers (IAStructE)

IAStructE is organizing a Webinar on “WIND ENGINEERING FOR LONG-SPAN BRIDGES by Dr. Suresh Kumar, Principal / VP – Global Wind Engineering Consultant, RWDI on 05 August 2020 at 11:00 AM to 01:00 PM. through zoom webinar. The link for registration is: https://zoom.us/webinar/register/WN_cFwWi-EVSMOaPIrgLhLp3A

IAStructE organised following webinars from April, 2020 to June, 2020 through Zoom:

The Webinar on “Lessons Learned from Bridge Bearing Failures” by Mr Alok Bhowmick, President IAStructE and Managing Director, B&S Engineering Consultants Pvt Ltd organized on 13th April 2020 in association with The Faculty of Technology, CEPT University

The Webinar on “Reinforced Soil Walls: Time to Analyze & Review” by Mr Rajiv Goel, Managing Director, Earthcon Systems (I) Pvt Ltd organized on 13th April 2020 in association with The Faculty of Technology, CEPT University.

The Live Facebook Session on “Challenges Being Faced for Design of Industrial Structures and Way-Forward” by Mr Bhavin Shah, GC member IAStructE and CEO, VMS organized on 27th April 2020.

Structural Health Monitoring Using Piezo Electric Transducers” by Dr Naveet Kaur, Scientist, CSIR-CRRI organized on 04 May 2020.

Understanding Ethics and it’s Role in Engineering Profession” by Mr Manoj Mittal, Immediate Past President IAStructE and Independent Director POWERGRID organized on 11th May 2020

Simplified / Detailed Vulnerability Assessment of Life-line Buildings and Seismic Retrofit Strategies” by Dr Ajay Chourasia, Sr. Principal Scientist, CSIR-CBRI organized on 23rd May 2020

IAStructE – CEPT Student Chapter organized the Webinar on Explorations with Gridshells by Mr Anand Shah, Master ITECH (University of Stuttgart) on 16th May 2020

Innovation and Creativity in Structural Design by Prof V R Shah, Former, Head (Struct. Design), CEPT University on 21st June 2020

Bridge Engineering - Recent Advances by Prof Mahesh Tandon, Past President IAStructE and MD, Tandon Consultants Pvt Ltd on 22nd June 2020.

Earth Retaining Structures in Bridge and Highway Projects by Mr Rajiv Ahuja, Independent Consultant (Highway & Bridges) and GC Member, IAStructE on 28th June 2020.

Role of Structural Engineers in the Society by Mr. Alok Bhowmick, President IAStructE and Managing Director, B&S Engineering Consultants Pvt Ltd on 19th July 2020

Wind Engineering for Short and Medium Span Bridges by Dr Lakshmy Parameswaran, Chief Scientist, CSIR-CRRI on 26th July 2020

Two Panel discussions were organized through Zoom webinar:

Panel Discussion on IS:1893 & IS:16700 – Codal Clauses and Issues jointly organized by IAStructE & INSTRUC T on 23rd May 2020.

Panel Discussion on Role of Structural Engineers in Post COVID-19 Scenario organized on 27th June 2020.

Indian Institution of Plant Engineers (IPE)

IPE organised 17 webinars on various topics from April 2020 to July 2020 across India. Some of the important topics were:

- Energy Conservation Measures in Industry on 15th April
- Process safety in Petro-Chemical Plant on 16th April

- Environmental Impact Assessment (EIA) processes and Procedures in Petro-Chemical plant on 28th April
- Solar power and Application on 1st May
- Overview on LEAN Manufacturing Practices on 15th May
- Computerized Maintenance on 23rd May
- Process Failure Mode Effect Analysis (PFMEA) on 13th June
- Integrated Plant Maintenance on 20th June
- Behavior based Safety in Industrial Plant on 4th July 30, 2020

IPE is organising a programme in August 2020 on Golden Jubilee year Inaugural function through video conference. Chief Guest Shri Nitin Gadkari, Hon'ble Minister for Highways Road & Transport & MSME, Govt of India and Guest of Honor ,Shri.K Pandia Rajan, Hon'ble Minister of Tamil Development, Culture & Archeology, Govt of Tamilnadu.

Indian Society for Trenchless Technology (IndSTT)

IndSTT is organizing a webinar on Essentials of Trenchless Series Part 3. For details please visit http://www.indstt.com/pdf/DDP_Flyer_free_webinar.pdf.

IndSTT is also organizing another webinar on Webinar on Developing Detailed Project Reports for Construction Contracts Employing Trenchless. For details please visit http://www.indstt.com/pdf/DDP_flyer_final.pdf

IndSTT is also organizing Training Workshop on Sub-surface Utility Engineering Detection & Mapping of Underground Utilities. For details please visit http://www.indstt.com/pdf/SUE_Brochure.pdf

International Council of Consultants (ICC)

ICC is organising EDPs. Please visit at <http://www.iccindia.org/edp.htm>

Mining Engineers' Association Of India (Meai)

MEAI is organising International Webinar on "Innovation Through Startup in Mining & Mineral Sector" Organised by Hyderabad Chapter is on 23.08.2020. [For details please visit https://meai.co.in/](https://meai.co.in/)

The Aeronautical Society Of India (AeSI)

AeSI is organising National Aerospace Conceptual Design Competition-III.

For details please visit <http://www.aerosocietyindia.in/>

AeSI has organized International Conference on Aviation Technology-Current Scenario.

For details please visit <http://aerosocietyindia.in/>

The Institute of Electrical & Electronics Engineers, Inc., India Council (IEEE)

IEEE is organising Third International Conference on Smart Systems and Inventive Technology (ICSSIT) on 20 - 22 August 2020 at Tirunelveli, India. For details visit https://conferences.ieee.org/conferences_events/

IEEE is organising 16th International Conference on Automation Science and Engineering (CASE) on 20 - 24 August 2020. For details visit https://conferences.ieee.org/conferences_events/

IEEE is organising Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM) on 20 - 23 August 2020. For details visit https://conferences.ieee.org/conferences_events/

IEEE is organising somany other International/ National Conferences at various places. For details visit https://conferences.ieee.org/conferences_events/

Institute of Marine Engineers (India) (IME)

Delhi branch of the Institute of Marine Engineers invites you to a webinar on 22nd August at 1100 hours. For details please visit <https://imare.in/delhi-news/delhi-branch-webinar-on-22nd-aug-2020.aspx>

IME is organizing various courses on line. For details please visit [https://imare.in/navi-mumbai-news/course-offered-by-ime\(i\).-nerul.aspx](https://imare.in/navi-mumbai-news/course-offered-by-ime(i).-nerul.aspx)

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