



The Indian Engineer

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Director

Message from the Chairman

Let me at the outset wish a very Happy and constructive New Year to all member associations and their members.

ECI's 16th Annual National Conference, was held at CSOI Auditorium, in New Delhi, on November 26, 2018 with AICTE as the Principal Supporting Organisation. The theme was 'Use of Emerging Technologies by Engineers for Economic Development' which also has a bearing on the present problem of employability of our young engineers, graduating from our colleges. Over 200 engineers participated. Dr. Satyapal Singh, Minister of State for Higher Education, the Chief Guest, could not come to this Conference because of some sudden urgent exigency, so he sent a video message. In his message he lauded the initiatives of AICTE-ECI, which will encourage students to find solutions to problems by using the latest technologies. This will encourage innovation, new technology and excellence, and will also help the government's 'Make in India' plan. This will also lead to self-reliance in rural India and thus increase the employment opportunities there. Professor MP Poonia, Vice Chairman AICTE, elaborated on the efforts of AICTE, ECI and CIDC to help engineering students to make contribution in the development of the country's economy. He said that AICTE is committed to improving the quality of engineering education in collaboration with the industry and make it relevant to the needs of the industry. He also talked about working together with the industry to create an infrastructure soon to run the internship program smoothly and put a system in place to monitor it. Mr. V. Ramnath, Chairman APRERA, said that there is ample opportunity for all streams of engineering there in Amravati city construction. A Paper on "The use of drones in the manufacturing industry and the possibility of employment", prepared by PWC with the help of CIDC, was also released on this occasion. A brief report on the Conference appears in this Newsletter.

As in the previous years, the Foundation day function of ECI will be held on April 4, 2019 where Eminent Engineer awards will be presented. ECI has invited nominations by January 31, 2019. I would request the member associations to forward suitable names.

The Registration of Professional Engineers by ECI jointly with the Member Associations (MAs) has now needs intensive engagement by the Member Associations. So far around 2500 Sr. PEs/PEs/APEs have been registered. This number needs to be increased manifold so that we can reach a critical mass of about 10000-15000 registrations after which the government could be approached to give statutory recognition to this registration. I would request all Member Associations, Academic Institutions, Industries etc., to make all efforts to ensure the registration of a large no. of engineers in various disciplines. They should also try to include a clause in contracts so that some percentage of engineers to be employed by contractors/ vendors/ suppliers are of PEs. ECI will provide all help in this regard.

AICTE had made internship mandatory from the session 2017-18, for their approved technical educational institutions, for which AICTE signed MOU with ECI. This programme has the potential to be a revenue earning source for the member associations who have links with the industry and can make use of these links to arrange internship training.




(Uddesh Kohli)

From the Editor's Desk



The two critical parameters for assessing the quality of scientific endeavours of a nation are research publications and patents generation. As per global indicators, India is ranked amongst the top 5 countries in terms of the research publications. However for patents, the situation is quite alarming, as India is way down in ranking. As per the annual report of 2016-17 of Controller General of Patents, Design, Trade Marks and Geographical Indications, only around 440 patents were filed out of which about one fourth only were by Indians, rest were filed by foreigners. The data of patents filing in 2014, as shown by Wikipedia on the net, clearly indicates that while China leads the list with about 9.30 lakhs, India is way down with only about 42900. These are the total numbers of applications filed. While on grant of patent, India is way down in the list. It is estimated that in 2018, China would surpass even USA in spend on R&D.

Worldwide demand for intellectual property (IP) tools reached record heights in 2017, with China driving the growth in filings for patents, trademarks, industrial designs and other IP rights that are at the heart of the global economy. Innovators across the globe filed 3.17 million patent applications in 2017, up 5.8% for an eighth straight yearly increase, according to WIPO's annual World Intellectual Property Indicators (WIPI) report. Global trademark filing activity totalled 12.39 million, while that for industrial designs reached 1.24 million.

China recorded the highest application volume for each of these IP rights as innovators and creators inside the country, as well as foreign entities, seek to protect and promote their work in one of the world's fastest-growing major economies. China's IP office received the highest number of patent applications in 2017, a record total of 1.38 million. China's IP office was followed by the offices of the United States of America (U.S.; 606,956), Japan (318,479), the Republic of Korea (204,775) and the European Patent Office (EPO; 166,585).

The top five offices accounted for 84.5% of the world total. Among these offices, China (+14.2%) and the EPO (+4.5%) saw strong growth in filings, while Japan (+0.03%) and the U.S. (+0.2%) saw negligible growth. The Republic of Korea (-1.9%) received fewer applications in 2017 than in 2016.

Germany (67,712), India (46,582), the Russian Federation (36,883), Canada (35,022) and Australia (28,906) also featured among the top 10 offices. Australia (+1.8%), Canada (+0.8%) and India (+3.4%) saw growth in filings, while Germany (-0.3%) and the Russian Federation (-11.3%) experienced a decline in filings.

Demand for IP protection is rising faster than the rate of global economic growth, illustrating that IP-backed innovation is an increasingly critical component of competition and commercial activity," said WIPO Director General Francis Gurry. "In just a few decades, China has constructed an IP system, encouraged home-grown innovation, joined the ranks of the world's IP leaders - and is now driving worldwide growth in IP filings." Today China is fast becoming a leader in Innovations, engineering, applications in addition to already having become the manufacturing hub of the world. If India aspires to be an advanced economy, it has to rise on all the fronts such as innovations, engineering, applications as well as manufacturing. One of the major impediments in our aspiration is the lack of awareness of the developments taking place in the world. It is simply not possible for India to achieve the status of an advanced economy on the back of outdated and outmoded industrial and educational bases. Our engineers as well technical educational institutions' teachers have to resort to a sustained and continuous upgradation effort in both knowledge and skills in their area of specialisation. It is needed to be understood that adhoc upgradation is not sufficient and would not serve the purpose. The upgradation effort has to be on a continuous and sustained basis to be of any use. The procedure formulated and set up by Engineering Council of India for its 'National Register of Professional Engineers' aims to do just that.

(B R Jain)

CPD Program

Construction Industry Arbitration Council (CIAC) is the Prime Arbitral Institution in India and it focuses mainly on Construction and Related Sectors' Disputes. CIAC is organising a One day Arbitration Awareness Workshop to be held on 15th January, 2019 at Vishwakarma Pratham, Plot No. - 18, Sector - 20A, Faridabad (Near Old Railway Station), Haryana - 121001. Nominal Fee of Rs. 1000/- plus GST has been fixed for the said Workshop. For more details please visit : http://www.ecindia.org/cpd_notice_files/CPD-CIAC-Letter%2024.12.2018.pdf.

Distinguished Engineer : Dr V. Adimurthy

Dr. Adimurthy received his Ph.D. degree from IIT, Kanpur in 1973 for his work on hypersonic Low density flows over reentry bodies. Following this, Dr Adimurthy joined the Indian Space Research Organisation in March 1973, and since then, during more than four decades of his professional career, he made significant individual contributions to knowledge in the areas of aerodynamics, flight dynamics, trajectory optimization, space dynamics, space debris studies, lunar and interplanetary mission design, and multi-disciplinary design optimization. From 2011, he is Co-Editor of the Journal Acta Astronautica of the International Academy of Astronautics.



Dr. V. Adimurthy is presently ISRO Honorary Distinguished Professor. Earlier he served as Prof. Satish Dhawan Professor and Senior Advisor (interplanetary Missions) at ISRO and as Associate Director of Vikram Sarabhai Space Centre, and Dean (R&D) of the Indian Institute of Space Science and Technology, Trivandrum.

Dr. Adimurthy is the Chairman of the Mars Mission Study Team whose Report of 2011 provided the integrated conceptual design for India's Mars Orbiter Mission. Vision for future Indian solar system exploration is also formulated by

Solar System Exploration Study Team headed by Dr Adimurthy.

Dr Adimurthy is a Fellow of the Indian National Academy of Engineering and Vice-President of the Aeronautical Society of India. He is an Academician of the International Academy of Astronautics, and Senior Fellow of the Alexander von Humboldt Foundation, Germany. Dr. Adimurthy is also a Fellow of the Systems Society of India, and the Astronautical Society of India. From 1999 to 2012, Dr. Adimurthy served as the Indian Representative in the Inter Agency Space Debris Coordination Committee (IADC) and was twice the Chairman of this international forum during 2002-2003 and also in 2009-2010.

Dr Adimurthy was awarded the National Aeronautical Prize in 2005. He received the 1997 Astronautical Society of India Award. In 2007, he received the Department of Space Performance Excellence Award. Dr Adimurthy received the Padma Shri Award 2012 for his contributions to Science and Engineering. Dr Adimurthy received the IAA Laurels for Team Achievement Award 2013 for Chandrayaan-1 at the International Academy of Astronautics Meeting at Beijing. He received the Biennial ISRO Outstanding Achievement Award 2014, and Indian National Academy of Engineering Prof Jai Krishna Memorial Award 2016.

Distinguished Engineer : Dr. Mahesh Gupta

Dr. Mahesh Gupta is a first generation entrepreneur and is known worldwide for revolutionizing the water purification industry in India. He is the Founder-Chairman of Kent RO Systems Ltd., India's leading RO Water Purifier Company.



Dr. Mahesh Gupta has been a very bright student from the early childhood days and always used to excel in academics during school days.

He went on to do his Mechanical Engineering from the prestigious Indian Institute of Technology, Kanpur IIT and then he pursued his masters from Indian Institute of Petroleum, Dehradun.

Dr. Mahesh Gupta began his early career in 1978 with the prestigious Indian Oil Corporation Ltd. In 1988, he bid goodbye to the oil sector giant, with a mission to save the precious petroleum products, and ventured into the business of manufacturing oil conservation equipment. This business was based entirely on his home grown innovations



Dr. Gupta then launched India's first domestic RO water purifier and started the company from a scratch. Competing with the leading national & international

brands, he brought Kent RO Systems Ltd., to a leading position commanding a market share of about 40% in RO water purifier segment.

It is well known fact that 70% of diseases to mankind are because of impure water. To tackle this challenge Dr. Gupta invented the Mineral RO and millions of people have advantaged from this technology and have been able to protect their family from the fatal water borne diseases.

In recognition of his contribution to the water purification industry, he is known as the PURE WATER MAN of India. Dr. Gupta has also been conferred upon by an Honorary Doctorate degree by Sri Sri University Orissa, for his contribution in providing safe and healthy drinking water in Rural and Urban areas.



Dr. Gupta's contributions as well as innovations have been widely applauded by the media. He has received innumerable awards and accolades from the national and international

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ECI News

17th Foundation Day of ECI

ECI is organising its 17th Foundation Day as Eminent Engineers' Award Function on April 04, 2019 at Mirza Ghalib Hall, SCOPE Convention Centre, SCOPE Complex, New Delhi. It is proposed to give Eminent Engineer's Award 2019 to two eminent persons with engineering background who have contributed significantly to any of the fields of engineering profession, one in the Industry category and the second in Research and Consultancy category. The last date for receiving the nominations is 31st January, 2019.

10th EDP

ECI is conducting an Executive Development Program on "Project Management for Engineers" in mid of July 2019 at New Delhi.

16th National Conference

The Conference was inaugurated by the ceremonious lighting of lamp by Prof. M. P. Poonia, Vice-Chairman, All India Council for Technical Education, Mr. V. Ramnath, Chairperson, Andhra Pradesh Real Estate Regulatory Authority, Dr. Uddesh Kohli, Chairman, Engineering Council of India, Mr. Mahendra Raj, Vice Chairman, Engineering Council of India, Dr. P. S. Rana, Chairman, CIDC and Dr. P. R. Swarup, Member Secretary, Engineering Council of India. Dr. Uddesh Kohli, in his welcome address, reiterated the commitment of ECI to improve the status of Engineering fraternity and the role of ECI and its member organisations to professionalise the engineering stream and provide the right impetus through adoption of new technologies to faces the challenges in India and abroad. After the address of Dr P.S. Rana, Dr Poonia, in his address as Guest of Honour, conveyed that AICTE is well aware of the requirements of frequent upgradation of the curriculum and as such have made arrangements for their upgradation every four years. He also advised providing customized Internship, so that the young engineers are clear with the fundamental concepts, practical training and become job ready and the problem of employment is solved. He appreciated the initiatives and support of ECI and CIDC to develop the eco system for practical training through internship with Industry, continuous upgradation of faculty through CPD programs etc. Mr Ramnath, in his Guest of Honour address, appreciated the visionary leadership of Hon'ble Chief Minister of Andhra Pradesh through upliftment of real estate sector in the State and creation of ultra-modern facilities in the Amaravati. He reiterated the role of APRERA. He congratulated ECI & CIDC for making efforts to create a conducive environment & ecosystem for professionalism in Engineers will grow. He called upon all State RERAs to Andhra Pradesh, for harmonizing operating systems of RERAs of all States.



Dr. Satya Pal Singh, Hon'ble Minister of State for HRD was the Chief Guest for the Conference but he could not attend the Conference due to some

exigencies. He, through a video message, lauded the initiative of Chhatra Vishwakarma Awards by AICTE and ECI to encourage the students to apply new technologies and provide solutions for the existing problems. It will lead to innovation, upgradation of technologies, opportunities to take up entrepreneurship, support 'Make in India' Initiative and self-sufficiency in rural areas and create employment opportunities there.



Unveiling of an ECI-PwC Report on "Employment flying with drones in construction industry" was presented by Price Waterhouse Coopers (PWC), a global leader in professional services, in association with Construction Industry Development Council (CIDC) and ECI. The report, which is the precursor to the role and application of drone technology, was unveiled by Prof. M. P. Poonia, Vice Chairman, AICTE and other dignitaries on the dais.

Dr. P. R. Swarup in his thanks address, suggested that a National Board may be formed to monitor the progress of the implementation of internship programs. Further he suggested that a Working Group be formed to facilitate actual implementations. Vice Chairman, AICTE agreed with the suggestions and assured of further actions at the end of AICTE.

Technical Session 1 was Chaired by Prof V K Srivastava, President, Indian Institute of Chemical Engineers and Co-chaired by Er. S. Ratnavel, National President, Association of Consulting Civil Engineers. The first speaker Mr Neeraj Benjamin presented a paper on Blockchain Technology which is one of key emerging technologies globally. He emphasized that it would fast replace the existing way of information storage and retrievals (internet), and would be a game changer. The second speaker, on Aquifer Recharge Technology, Mr Raj Kumar Jani gave presentation on Bhungroo which is DST (GoI) endorsed rainwater management solution. Through filtered injection method Bhungroo harnesses erratic monsoon water to meet water scarcity in dry seasons, an innovative water conservation through aquifer recharge technology). It works on following principles ASR (i.e. Aquifer Storage & Retrieval), VR (Vertical Drainage) and MARR (Managed Aquifer Recharge & Recovery). The next presentation was on Erection of Aquifer Storage by Prof. Ranjan Kumar, HOD (Civil) Echelon Institute of Technology. The main emphasis was on aquifer mapping and ground water management. Central Ground Water Board (CGWB) implemented Aquifer mapping program in Punjab in four phases. Crack identification, ground water recharge, ground water exploitation, aquifer management. He highlighted the case study of Ludhiana district in Punjab. Aquifer mapping helps in providing drinking water security, improved irrigational facility and ground water sustainability thus this new emerging technology should be applied for bridging the gap between demand and supply of water and conservation of water as well especially in rural areas of India and to make them self sufficient. Mr Amit Singh, Director (Smart Cities) PwC gave an overview about the application of drone technology in India

in various sectors. Application of drones will drastically change the employment scenario, it will create new jobs for drone operators, technicians, surveyors, back end and front end technology in agriculture, training etc and contribute extensively to infrastructure development through roadways, railways, bridges, hospitals, ports, highways etc. Er S Ratnavel presented the paper on Impact of technology transformation and preparedness for sustainable development - Futuristic Perspective. Forecasting of technology will help in assessing intended impact, unintended impact, future planning, and adaptation by providing useful data, and in turn help the society prepare itself better. The 2nd Session was chaired by Shri J S Saluja, Life Fellow & Ex-National Vice President, Indian Institution of Plant Engineers. The first presentation on Use of Crop Residues for Economic Development of Farmers and to Ensure Environmental Safety by given by Dr. Indra Mani Mishra, President Indian Society of Agricultural Engineers. He highlighted the role of Engineering in Agriculture Residue management. It includes generation, availability of crop residue in the country and impacts of crop residue burning. The challenges and alternatives in crop residue management. The presentation, based on Artificial Intelligence and Machine Learning, AI Techniques like Artificial neural networks, Genetic programming, Evolutionary polynomial regression, Learning system model, Training and testing, Performance, Algorithms, Machine learning structure, Learning techniques, was made by Dr. Vivek Singh Verma, Professor, Ajay Kumar Garg Engineering College, Ghaziabad. In future, machine learning will play an important role in daily life. Possible areas of further research include Autonomous robots in industrial, service or field applications and Cyber security to protect computers, networks, programs, and data from attack, unauthorized access, change, or destruction. Mr. Devashish Ganguli's, National Head (Sales), Havells India Ltd., presentation included a discourse on Smartness Beyond Connectivity in

Street Lighting. Sensors, networks, Artificial intelligence, Robotics, digital manufacturing, Nanomaterials, 3D-Printing, Augmented reality, Machine Learning and Big Data are rewriting the rules in Lighting Industry. Prof. Ashiv Shah, Prof. & Head, TIFAC-Centre of Relevance & Excellence in Industrial Automation & Robotics, Ajay Kumar Garg Engineering College, Ghaziabad, gave a presentation on Advancement in Manufacturing Using Robotics Methodologies. The Indian manufacturing arena, as the 4th world's largest, in the coming decades, would increase demand for robotic solutions and trained/skilled manpower in advance technologies such as Industrial Robotics, Cloud Robotics, IoT etc. to ensure successful transition of existing industries to become ready to face global challenge. The 3rd Session was Chaired by Mr. Chandu Sambasiva Rao, Member, Andhra Pradesh Real Estate Regulatory Authority (APRERA) and Co-chaired by Mr. Ajit Kumar Mishra, Chief Project Manager, Dedicated Freight Corridor Corporation of India Ltd, Ministry of Railways. The first presentation was on the Use of Emerging Technologies by Engineers, made by Mr. Saripalli Suryanarayana. Mr. Ajit Kumar Mishra, Chief Project Manager, Dedicated Freight Corridor Corporation of India Ltd., (Govt. of India, Ministry of Railways) gave his presentation on 'Leveraging Technological Advancement to Augment Rail Infrastructure in India'. The next presentation was by Er. P.K. Mishra, Department of Civil Engg, Mewar University. It was titled 'Delivering Differently: Emerging Technologies in Construction Industry. Thereafter Prof. Er. O.P. Gupta VSM gave his presentation on 'Emerging Technology is Engineers Oriented, Employable & Economical in Development'.

Finally, Mr Chandu Sambasiva Rao, Member, Andhra Pradesh Real Estate Regulatory Authority, gave his presentation on Construction City, AP. Mr. Rao gave overview of the Construction City Project and welcomed all the stakeholders to come to Amaravati, the new Capital city of Andhra Pradesh.

News from Member Associations

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

ACCE(I) honors individuals and/or Organizations, for achieving excellence in various domains of Civil Engineering by presenting the ANNUAL ACCE(I) AWARDS. These awards have been instituted for recognizing excellence in the field of Civil Engineering. Nominations are invited and details are hosted at website: www.acce.in

ACCE(I), Mysore Centre is organising the Two day national seminar on 'Recent Advances in Civil Engineering' RACE-19 under the theme 'Engineering the Infra' at MBCT Auditorium, Mysuru on 18th and 19th January 2019. For details contact ACCE(I).

The Aeronautical Society of India (AeSI)

- AeSI, Bengaluru Branch is organising National Aerolympics-2019 on 18 - 20 January, 2019 at Bengaluru.
- AeSI, Hyderabad Branch is organising National AGM on 27 - 28 January, 2019 at Hyderabad.
- AeSI, Chandigarh Branch conducted National Seminar on "Repair, Overhaul, Maintenance and Upgrade of Aircraft" from 14 - 17 December, 2018.

- AeSI, Sunabeda Branch conducted program on "Advancement in Aero Engine - Indian Perspective" on December 01, 2018.
- AeSI, Nagpur Branch conducted "School Outreach Program, Quiz & poster making competition" on November 24, 2018.
- AeSI, Kolkata Branch conducted "School contact program" on November 18, 2018.
- AeSI, Goa Branch conducted program on "School Outreach Program" on November 14, 2018.

Details from the website of AeSI.

Construction Industry Development Council (CIDC)

Induction Program for Engineers of Haryana Housing Board was held at CIDC's Corporate Training Centre at Faridabad from 22nd October to 03rd November, 2018.





With a focus to upgrade its own experts, CIDC conducted Training of Trainers Program for CIDC staff at VKP, Faridabad from 3rd Dec. to 08th December, 2018 where experts

from different CIDC centres were invited to guide and provide latest information on construction techniques.



Internship Programs



As per the ECI - AICTE agreement CIDC regularly conducts Industrial Internship programs of different durations. Six months' internship program where 1-month orientation at

Corporate Training Centre, Vishwakarma Pratham Faridabad followed by 5 months practical training on site with various Construction Companies. In the month of December, 14 students from C V Raman College of Engineering, Orissa, were trained under this program.

The students are being given hands on training at the centre and would soon be leaving for on-site training with different construction companies.



M/s. Kent RO Ltd.

Kent RO, the leading water, air, and vegetables purifying company is offering exciting career opportunities to young engineering graduates and diploma holders, who are looking for a very challenging but rewarding career in emerging areas of technology. Presently they are looking for 2000 fresh engineers to be placed at various locations.

To ensure that only the best join this elite force, Kent RO ltd, has joined hands with Engineering Council of India and Construction Industry Development Council, to conduct a robust selection process through the National Proficiency Evaluation Test, followed by Internship under ongoing AICTE- ECI Internship program. Details can be had from <http://www.ecindia.org/Internship/KentRO%20Ad.pdf>

M/s. Team Universal Ltd

Team Universal Limited in collaboration with Chinese origin company M/s. FURIEN INDIA, engaged in Industrial construction is offering exciting career opportunities to young engineering graduates and diploma holders, skilled workers

who are looking for a very challenging but rewarding career in emerging areas of Construction in the states of Tamilnadu, Maharashtra & Uttar Pradesh.

To ensure that only the best join this elite force, M/s Team Universal Ltd has joined hands with Engineering Council of India and Construction Industry Development Council, to conduct a robust selection process through the National Proficiency Evaluation Test, followed by Internship under ongoing AICTE- ECI Internship program. Selected applicants shall be appointed as Executives in the above states of the Country in their Construction department. Details from <http://www.ecindia.org/Internship/2KentRO-Team%20Universal%20Lts%20Ad.pdf>

Consulting Engineers Association of India (CEAI)

- CEAI is organising a series of six Lectures on 'Engineer & the Society' at India International Centre, New Delhi. The Lectures are being held every month and will continue till January 2019. The Sixth Lecture in the series on the theme "New Energy Resources" will be held on 12th January 2019 at 18:30 hrs at Seminar Hall I & II, Kamladevi Complex, India International Centre, Lodhi Road, New Delhi.
- The Fifth Lecture of the series was on the theme "Management of Air Pollution & Solid Waste in Indian Cities" and was held on 11th December 2018 at Seminar Hall II & III, Kamladevi Complex, India International Centre, New Delhi.
- The Fourth Lecture of the series was on the theme of "High Speed Rail Travel in India" and was held in India International Centre, New Delhi on 24th November 2018.
- The third lecture of the series was on the theme of "Interlinking of Rivers & Management of Water Resources" and was held in India International Centre, New Delhi on 10th October 2018.
- The second lecture of the series was on the theme of "Art of Tall Buildings" and was held in India International Centre, New Delhi on 20th Sep 2018.
- CEAI jointly with Bureau of Indian Standards (BIS) and IIT-Guwahati, is organizing a two-day Workshop on 'National Building Code of India 2016 and Recently Revised Seismic Codes - Impact on Design, Construction & Safety of Built Structures' on 11th & 12th January 2019 at IIT Guwahati. CEAI, IIT-G and BIS aim to bring together civil & structural consultants, architects, academicians, builders and developers, urban planners, policy makers and associated government agencies to discuss the impact of the newly released revised codes structural design of buildings. The exclusive two-day workshop will witness presentations by some of the stalwarts in the industry and the code makers themselves. For more details please visit our website: <https://ceai.org.in/>
- CEAI jointly with ICE, UK organised the Brunel International Lecture on "Transportation Infrastructure and Interdisciplinary Interfaces on Complex Mega Projects" on Saturday 17th November 2018 at the PHD Chamber of Commerce and Industry, New Delhi.

- CEAI organised a webinar presentation on "Long Span Bridges - State of the Art" on 12th November 2018.
- Mr S V S Prasad, Associate Vice President - Electrical in the Technology Organisation of Tata Consulting Engineers Ltd. at Bengaluru, presented on "Electric Vehicles Economy" on 17th December 2018.

Indian Association of Structural Engineers (IAStructE)

A Technical Lecture by Mr. R. K. Gupta, Managing Director, and Bridgecon India on the topic "Design and Construction of Extra-Dosed Bridges" was organized on 22nd November 2018 at CDC, India Habitat Centre, Lodhi Road, New Delhi.

A Technical Lecture by Mr Amrit Kumar, Associate - Geotechnical, AECOM India Pvt Ltd on the topic "Pile Foundations- Design concepts and Standard practices for Jetty Structures Case Study: IWT Terminal at Varanasi" at 5 PM on Thursday, 27th December 2018 at Consultancy Development Centre, India Habitat Centre, Lodhi Road, New Delhi. There is no registration fee for attending the lecture; however, registration is necessary.

Details from IAStructE.

Indian Concrete Institute (ICI)

ICI organised Innovative World of Conference in Bengaluru on September 19, 2018 on the following themes "Technologies for Housing Infrastructure, "Challenges and Solutions for Developing Smart Cities", "Technologies for Mega-Projects", "Special Concrete for Irrigation Structures including for Emergency Repairs", "Sustainability in Housing & Infrastructure Projects", "Reengineering of Infrastructure" & "Innovative Materials for Better Construction".

Details from ICI.

Indian Geotechnical Society (IGS)

- 1) Goa Engineering College (GEC) in collaboration with Indian Geotechnical society (IGS), Goa chapter recently organized its annual flagship event, Dr. Victor de Mello Goa lecture, delivered by his son Dr. Luiz Guilherme de Mello from Sao Paolo, Brazil on 15th October on "Some case studies with lessons to learn from Dam Engineering"



Dr. Luiz de Mello inaugurating the event

- 2) Indian Geotechnical Society, Ludhiana chapter in association of Department of Civil Engineering, Guru Nanak Dev Engineering College, Ludhiana organized a 2-day National Conference on Sustainable Waste Management through Design from November 2-3, 2018.



A view of the Seminar

- 3) IGS-Bangalore Chapter and Department of Civil Engineering, Indian Institute of Science, Bangalore has

organized Indian Geotechnical Conference (IGC-2018) during 13-15 December, 2018. Visit conference website: www.igc.2018.com

- 4) IGS-Silchar Chapter and National Institute of Technology, Silchar is organizing 7th Indian Young Geotechnical Engineers Conference (7IYGEC) during 15-16 March 2019. For more details please visit @ www.nits.ac.in

For more details please contact IGS.

Indian Institute of Chemical Engineers (IICChE)

- SCHEMCON (Students' Chemical Engineering Congress), is an annual event organized by the Students' Chapter of Indian Institute of Chemical Engineers (IICChE), for the Chemical Engineering Students to interact, learn and gain exposure to the expanding arena of Chemical Engineering. SCHEMCON-2018's theme would be 'Green and Sustainable Chemical Engineering' and is being organized jointly by the Department of Chemical Engineering, Institute of Chemical Technology, Mumbai and the Mumbai Regional Centre, Indian Institute of Chemical Engineers. Details from IICChE.
- Vortex is the ICT's brand annual technical festival combining a wide array of fields such as Chemical Engineering, Polymers and Coatings, Dyes, Oils, Foods, Pharmacy and Pharma Technology, Biotechnology and Biological Sciences, Business, Management, Advertisement and fun general events. Now, VORTEX ICT 2018 is being organised from December 27-30, 2018 at Department of Chemical Engineering, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, Punjab.

Indian Institution of Bridge Engineers (IIBE)

Indian Institution of Bridge Engineers, Delhi State Centre supported by Border Roads Organisation organised an International Seminar on "Planning, Design and Construction of Long Span Bridges" on 01-02 Nov 2018 at Manekshaw Centre, New Delhi.

The two days seminar was inaugurated by Shri Jitender Singh, Hon'ble Minister of State for Development of North Eastern Region, PMO Office, Personnel, Public Grievances and Pensions, Dept. of Atomic Energy and Dept. of Space Shri Jitender Singh. During the seminar, an exhibition was also organised by different road construction agencies and about 30 number of stall were set up for the purpose.

Details from IIBE (DSC).

Indian Institute of Plant Engineers (IIPE)

- IIPE is organising a workshop on IEC 60849, Sound Systems for Emergency purposes and its use in Industrial environment on January 18, 2019 at IIPE Conference Hall, A-1, Chanakya CHS Ltd, Lok Bharati Complex, Marol Maroshi Road, Andheri East, Mumbai. For more details visit http://www.iipemaharashtra.org/site/eventDetail?event_id=34&mode=
- IIPE organising a case study on Introduction of Energy & Current condition, Energy conservation opportunities, Energy audit Guidelines, Industry wise Case Studies on 08-02-2019 at A-1, Chanakya CHS Ltd, Lok Bharati Complex, Marol Maroshi Road, Andheri East, Mumbai.

- IIPE is organising a workshop on EC 60849, Sound Systems for Emergency purposes and its use in Industrial Environment On 18/1/2018.
- IIPE organised a Programme on Professional Engineers Training on 21-12-2018 at IIPE Seminar Hall A-1, Chanakya CHS Ltd, Lok Bharati Complex, Marol Maroshi Road, Andheri East, Mumbai.
- IIPE is organising a presentation on ISO for Cable Manufacturers On 15-02-2019 at A-1, Chanakya CHS Ltd, Lok Bharati Complex, Marol Maroshi Road, Andheri East, Mumbai.
- IIPE is organised a seminar on "Legal Provisions for Inspection, Certification of Pressure Vessels" & "Legal Provisions for Inspection, Certification of Lifting Tools" on November 29, 2018 at Mumbai.

More details from IIPE.

Indian Society of Agricultural Engineers (ISAE)

- ISAE is organising 8th Asian Conference on Precision Agriculture at PAU, Ludhiana, Punjab.
- ISAE is organising 53rd Annual Convention of ISAE on Jan 28-30, 2019 at BHU, Varanasi.

More details from ISAE website.

Indian Society for Trenchless Technology (IndSTT)

- IndSTT organised No Dig India Show 2018 - International Conference & Exhibition on "Advancing Trenchless Standardization" on 14th & 15th December 2018 at CIDCO Exhibition Centre, Vashi, Navi Mumbai, Maharashtra, India.
- IndSTT organised Municipalika - Smart & Sustainable Cities 2018 on 19 to 21 September 2018 at Bombay Exhibition Centre, Goregaon, Mumbai, Maharashtra.

More details from IndSTT website.

Mining Engineers Association of India (MEAI)

MEAI is organising a Seminar on Mines Safety Management & Sustainable Mineral Development at Hyderabad on 20th January 2019. For more detail please visit on link: "https://img1.wsimg.com/blobby/go/a7efc9bf-c602-4e14-88dc-98b7a5ac1d6a/downloads/1csofpljk_49374.pdf"

The Institute of Marine Engineers (IME)

IME organised the 10th INMARCO 2018 India's most renowned event on Shipping and Marine Industry, International Maritime Conference & Exhibition 2018 (INMARCO) successfully on November 01-03, 2018 at Mumbai. IME is organising some DGS APPROVED COURSES at Mumbai. For more details please visit http://imare.in/news/courses_december-2018.aspx.

Indian Society for Technical Education (ISTE)

- GTU-ISTE sponsored one week Faculty Development Program (FDP) on "Introduction to Process Modelling and Analysis using CAD Tools", 17th to 22nd December, 2018, For details Web: www.ssasit.ac.in;

- 23rd State Annual Convention of ISTE Gujarat Section will be organised by Shree Swami Atmanand Saraswati Vidhya Sankul, Kapodra, Surat on 15-12-2018. The theme of the convention is Role of Innovation and Human Values in Engineering & Technology. For details contact : The Conveners : Prof. Hitesh Dholakiya :09510676997 & Prof. Mayur Modi : 09974750851; Email : iste@ssasit.ac.in
- 2nd International Conference on "Reaching the Unreached: A Challenge of Technological Development, November 19-20, 2018, For more details kindly refer <http://istegujarat.in/ructd2018>.
- 2nd International Conference on "Soft Computing and Mathematical Modelling", December 22-23, 2018, organised by Dept. of Applied Sciences, KIET Group of Institutions, Ghaziabad (UP). For details contact: Dr. C.M. Batra, Convener (ICSCMM-18); Mobile: 09873725677, Email : cm.batra@kiet.edu
- Three days FDP on Recent Trends in Optimization (RTIO), December 6th - 8th, 2018, organised by Mechanical Engineering Association, SRM Institute of Science & Technology, Kattankulathur, Kancheepuram (DT). For details contact: oliver.s@ktr.srmuniv.ac.in; geethapriyan.t@ktr.srmuniv.ac.in.
- 2nd International Conference on Computing and Information Systems, 28th February & 1st March, 2019, organised by Department of Information Technology, Loyola-ICAM College of Engineering and Technology, Chennai. For details contact: iccis.it@gmail.com.
- National Conference on Recent Advances in Electrical Engineering (RAEE-2019), 12th January, 2019, organised by Dept. of Electrical Engineering, Bapurao Deshmukh College of Engineering, Wardha. For details contact: bdce.raee19@gmail.com

Indian Society for Non Destructive Testing (ISNT)

ISNT, Chennai Chapter organising a workshop on NDT & E of Concrete 2019 on January 24 -25, 2019 at Chennai. For any clarification please mail on isntchennaichapter@gmail.com. NDE 2018 organised by ISNT on December 19-21, 2018 at Mumbai.

Construction Chemicals Manufacturers Association (CCMA)

CCMA organised an International Construction Chemicals Conference on "Effective Use of Construction Chemicals for Enduring Structures on September 5-6, 2018 at Mumbai. For details please visit www.ccmaindia.com.

Broadcast Engineering Society (India)

BES is organising it's 25th International Conference & Exhibition on Terrestrial and Satellite Broadcasting on "Next Gen Broadcasting in the IT World" from 17-19 January 2019 at Pragati Maidan, New Delhi. For more details, please visit: "<https://www.besindia.co.in>"

Indian Institution of Industrial Engineering (IIIE)

IIIE is organising it's 10th Convocation on January 20, 2019. For more details, please visit <https://tinyurl.com/yaz48zkd>.

Contd. from Page 3 (Distinguished Engineer : Dr. Mahesh Gupta)...

organizations. In 2013, he was awarded the IIT-K Distinguished Alumni Award for his contributions to be industry as well to the society. He has also been awarded as Asia's Most Promising Leaders and was also awarded the prestigious ET NOW Leaders of Tomorrow Award, amongst many others.



Dr. Mahesh Gupta has been very actively involved with industry bodies like ASSOCHAM, CII & PHD Chamber of Commerce. He completed his term as the President of PHD Chamber in 2016. During his tenure, he revolutionized the Chamber and brought it into

prominence through his interactions with Govt. and key administrators. His views have been widely covered by print and electronic media & many of the views have been incorporated into policies of the Govt.

After being nominated as a Swachh Bharat ambassador, by the President of India, Dr. Mahesh Gupta adapted 8 backward villages with a commitment to improve the conditions of sanitation. With the help of Art of Living rural teams, more than 1100 water purifiers have been distributed, around 225 toilets have been built, and workshops are regularly being conducted for sensitizing the local community on the importance of hygiene & sanitation.



Appointment

Shri Amitabha Ghoshal, Chief Advisor to Board of Directors, STUP Consultants Pvt Ltd, has taken over as President, CEAI, for the tenure 2019-2020. ECI and its family extend a very warm welcome and congratulations to Shri Ghoshal.

Registration in National Register of Professional Engineers

- 1) **Introduction:** Registration of Professional Engineers, Associate Professional Engineers, Student Engineers, and some other categories on a voluntary basis is going on since 1 December, 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 and its member associations.
- 2) **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.
- 3) **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)
 - (vi) Diploma/B.Voc Student Engineer (DiSE).The details and Criteria for registration under each category, Disciplines and Code of Ethics which the applicant has to sign, are given on the web site www.ecindia.org.
- 4) **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. The fee structure is subject to change in future. The registration is subject to renewal after 5 years.
- 5) **Continuous Professional Development (CPD):** All registered engineers are expected to meet the minimum CPD requirement, in their registered specialisation, 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, for each registered specialisation, 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.

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