

## IEI Delegation participated International Seminar at The Institution of Engineers, Bangladesh



A delegation of Tripura State Centre of the Institution lead by Mr Sisir Kumar Banerjee, President of IEI visited Comilla Centre of The Institution of Engineers, Bangladesh (IEB) for participating the Joint Venture programme in International Seminar on various contemporary issues on May 5, 2018. The Seminar was mainly conducted on smart cities, cyber security,

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## Thirty-third National Convention of Production Engineers, Bhubaneswar

### Advances in Manufacturing and System Engineering

**Odisha State Centre** of the Institution organized Thirty-third National Convention of Production Engineers and National Seminar on “Advances in Manufacturing and System Engineering” during May 19-20, 2018 at Bhubaneswar. The Chief Guest of the occasion, Mr Sisir Kumar Banerjee, President, IEI, in his address, mentioned that the traditional manufacturing processes have been superseded by new dynamic and global business



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## From the President's Desk.....



This year India is the global host of World Environment Day 2018, which is being celebrated on June 5, 2018 with the theme, “Beat Plastic Pollution”. The theme urges Governments, industry, communities and individuals to come together and

explore alternatives to reduce production and excessive use of plastic that is polluting our flora and fauna and threatening our health. It is a matter of pride that The Institution of Engineers (India), in association with Ministry of Environment, Forest and Climate Change, Govt. of India, celebrated World Environment Day 2018. An exhibition was held at Vigyan Bhavan, New Delhi during June 2-5, 2018 which showcased IEI participation. I am happy to note that all State and Local Centres of the Institution celebrated this event in a befitting manner.

I have pleasure in informing you that recently Tripura State Centre of the Institution jointly with Comilla Centre of The Institution of Engineers, Bangladesh (IEB) organized an International Seminar. The sessions were on contemporary subjects of smart cities, e-governance etc.

We are happy to announce that the Institution has opened its 122nd Centre at Mizoram. The Centre was inaugurated on May 15, 2018 in a well attended function comprising engineers from academia and the government sector.

Every year IEI celebrates Engineers Day on September 15 on a contemporary theme. This year the theme for 51st Engineers Day is, “Digital Transformation: A New Industrial Revolution” where the fourth industrial revolution will be the main focus area. I request all members of the Institution to participate in the event at our Centres throughout the country.

The Thirty-third Indian Engineering Congress will be held at Udaipur during December 21-23, 2018 on the theme, “Integration of Technologies: Emerging Engineering Paradigm”. The Congress programme would include talks on significant engineering topics delivered by experts and distinguished speakers besides technical sessions. I look forward to your participation in the Congress.

## Recent Trends in Highway Planning and Pavement Design

**Dharwad Local Centre** of the Institution in collaboration with Karnataka Law Society's Vishwanathrao Deshpande Institute of Technology, Haliyal organized All India Seminar on "Recent Trends in Highway Planning and Pavement Design" under the aegis of Civil Engineering Division Board of IEI during February 23-24, 2018 at Haliyal. The Chief Guest, Mr Mazhar Javeed, Chief Engineer, Communication & Buildings (North), Dharwad, in his inaugural speech, opined that there is a paradigm shift in the road infrastructure in the country. Mr Javeed further explained that both Central and State Governments have emphasized on the up-gradation of the road infrastructure and there is more responsibility on engineers to consider the capacity enhancement & utmost care for public & traffic safety while planning the highways and pavement design. He also stressed upon the better geometric design of roads for safe transit as well as maintaining the economic growth of the nation. Dr Ramesh L Chakrasali, Honorary Secretary of the Centre in his address, focused on the significant role of engineers for development of the Nation. Earlier, Dr V V Katti, Principal, KLS-VDIT, Haliyal extended welcome to all. Prof Gangadhar Kurli, Head, Department of Civil Engineering, KLS VDIT & Convener of the programme briefed about the objectives of the

Seminar. A large number of participants were present during the function. The function was concluded with vote of thanks proposed by Mr Hiremath.



## Swachh Bharat Abhiyan – Creating and Enabling Environment

**West Bengal State Centre** of the Institution organized All India Seminar on "Swachh Bharat Abhiyan – Creating and Enabling Environment" under the aegis of Environmental Engineering Division Board of the Institution during March 7-8, 2018 at Kolkata. Hon'ble Justice Mr Pratap Kumar Ray (Retd.) Former Acting Chief Justice, High Court, Calcutta & Senior Advocate, Supreme Court of India graced the occasion as Chief Guest. Hon'ble Mr Ray

in his address threw light upon philosophy behind different laws enacted at various times. Dr Kalyan Rudra, Chairman, West Bengal Pollution Control Board was the Guest-of-Honour and drew the attention on various aspects of environmental degradation caused due to different sorts of pollutions in both rural and urban areas. Swami Suvirananda Maharaj, General Secretary, Ramakrishna Math & Ramakrishna Mission, Belur Math, Kolkata delivered

the Keynote address during the Inaugural Session of the Seminar and enumerated on various rudimental ways for maintaining the cleanliness both at rural and urban areas. Earlier, Mr K L Mallik, Chairman of the Centre welcomed the guests and dignitaries present on the occasion. Mr Avinash Singh, Organizing Secretary of the event briefed about the theme of the Seminar. The discussions on various issues of Swachh Bharat Mission, Rural Sanitation, Reduce, Recover & Recycle (3R) concept in urban areas and many other related areas took place. A large number of resource papers from eminent dignitaries were also presented.





# 51<sup>st</sup> ENGINEERS' DAY

Theme:

## “Digital Transformation: A New Industrial Revolution”

September 15 is celebrated every year in the country since 1967 as “Engineers’ Day” to commemorate the birthday of the legendary engineer Sir Mokshagundam Visvesvaraya. Sir Visvesvaraya, an eminent Indian engineer and statesman was born in a remote village of Karnataka, the State that is incidentally now the Hi-tech State of the country. Due



**Bharat Ratna Sir M Visvesvaraya**

to his outstanding contribution to the society, Government of India conferred “Bharat Ratna” on this legend in the year 1955. He was also called the precursor of economic planning in India. His learned discourse on economic planning in India, Planned Economy for India and Reconstructing India, was the first available document on the planning effort of the country and it is still held as the parent source matter for economic planners. A theme of national importance is chosen every year by the Council of the Institution and deliberated at its various State/Local Centres to educate the engineering fraternity in

general and the society in particular. This year the 51st Engineers’ Day will be celebrated all over the country and the Council of the Institution has selected the theme as “Digital Transformation: A New Industrial Revolution” to mark the occasion.

Industries around the world are now facing substantial challenges due to recent environmental, societal, economic and technological developments regarding disruptive concepts of Internet of Things, Cyber Physical Systems or Cloud based Manufacturing, which lead to the fourth stage of industrial revolution. Increased digitization which waves out traditional and conventional production concepts including mass production, batch production, continuous process flow and project is the need of the hour. The first industrial revolution utilised water and steam power for mechanizing production. During second industrial revolution, application of power was more with the objective to obtain mass production. During third industrial revolution, industrial automation was introduced, which involved vast application of Electronics and Information Technology. The fourth industrial

revolution, termed as Industry 4.0 is empowered by wide range of digital technology not only in digital realm, which involves artificial intelligence, machine learning, advanced robotics and new formation of automation, but also in physical realm including new materials like graphene, genetic advances as well as biological realm which involves sensors, Internet of Things, Block Chain and Distributed Ledgers, 3D Printing, autonomous vehicles like drones, so on and so forth.

Thus Industry 4.0 is focussed on creating intelligent products, processes and procedures that leads to ubiquitous connectivity of people, things and machines. The vision of Industry 4.0 is likely to be adopted worldwide and it might influence other initiatives and cooperative efforts. In general, there are nine key technological components that progressively make up the foundation of Industry 4.0: Autonomous robots, big data, augmented reality (AR), additive manufacturing, cloud computing, cyber security, IoT, system integration, and simulation.

On a digital platform, Industry 4.0 is applied with three mutually interconnected factors, namely

- ❖ Digitization and integration of any simple to complex technical - commercial relation,
- ❖ Digitization of products and service offers and
- ❖ New market models

All these human activities are interconnected through State-of-the-Art communication system, which include Internet of Things, Internet of Services and Internet of People.

There are three principal approaches in Industrial 4.0 concept, namely horizontal integration, vertical integration and integrated digital engineering. Horizontal integration refers to integration of different information systems, applied principally for production planning and process control. Vertical integration refers to integration of information at different hierarchical levels, which allows preventive actions to avoid any defect. Integrated digital engineering enables the collection and exchange of production data throughout the entire chain involved in product development and leads to reduction of large amount of production data accumulated throughout the life cycle.

According to India Brand Equity Foundation (IBEF), Government of India has set an ambitious target of increasing the contribution of manufacturing output to 25% of Gross Domestic Product (GDP) by 2025, from 16% currently. IoT, being one of the most important aspects of Industry 4.0 for India, is expected to capture close to 20% share in global IoT market in the next five years. According to IBEF forecast, the IoT market in India is projected to grow at a CAGR of more than 28% during 2015-2020. Government of India has taken initiatives such as Green Corridors and ‘Make in India’.

The Institution of Engineers (India) being the apex body of engineers in India is committed for holistic development of the country and believe that Digital Transformation will usher a new Industrial Revolution.

## Mizoram State Centre of IEI inaugurated



Mr Sisir Kumar Banerjee, President, IEI inaugurated the Mizoram State Centre of IEI (122nd Centre) of the Institution in Aizawl at a well attended function on May 15, 2018. The first Chairman and Honorary Secretary of the Mizoram State Centre are Prof (Dr) Rajat Gupta, Director, NIT, Mizoram and Mr K Lalsawmvela, Chief Engineer, PWD, respectively.

## Advances in Material Sciences: Biomaterials

Saravanan, Honorary Secretary of the Centre welcomed the dignitaries. Dr R Samson Ravindran, Executive Director, Mahendra Educational Institutions in his address explained about the types of biomaterials and its applications in the field of biomedical engineering. Prof Pennathur Gautam, Former Director, Centre of Biotechnology, Anna University, Chennai in his inaugural address explained about the techniques and advantages of Nanoscale investigation. The vote of thanks was proposed by Dr M Prabhu. A large number of technical papers embracing the theme were presented by the eminent personalities. The papers on polymeric nanomaterials, Med Tech Start-up from engineering perspective, nanocomposites for bone replacement applications and other allied areas were presented during the Conference.

**Salem Local Centre** of the Institution in collaboration with the Department of Biomedical Engineering, Mahindra Institute of Technology (MIT), Namakkal organized National Conference on “Advances in Material Sciences: Biomaterials” under the aegis of Chemical Engineering Division of the Institution during February 27-28, 2018 at Namakkal. Dr M Prabhu, Head, Department of Biomedical Engineering, MIT, Namakkal & Organizing Secretary of the event delivered the introductory speech. Mr S R



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e-governance and other areas. Md. Tajul Islam, MP of Comilla and Chairman, Parliamentary Standing Committee to Ministry of Power, Energy & Mineral Resources graced the occasion as Chief Guest and Maj Gen (Dr) Mostafuzur Rahman, Director General, Directorate of General Drug Administration (DGDA) was present as Guest-of-Honour. On this occasion, Dr Mohammad Mahfuzul Islam, Vice Chancellor, Canadian University of Bangladesh, Dr Umma Hany, Head, Department of Electrical & Electronic Engineering,

Bangladesh Army International University of Science & Technology, Mr Nirmalya Kar & Mr Suman Deb, Assistant Professors, Department of Computer Science & Engineering, National Institute of Technology, Agartala were present for delivering the lectures. Mr Md. Abdus Sabur, President, IEB, Mr Khondaker Manjur Morshed, Honorary General Secretary of IEB, Mr Tapan Lodh, Chairman & Mr Tapas Bhattacharya, Honorary Secretary of Tripura State Centre also graced the occasion as Special Guests.

## Advances in Manufacturing and System Engineering

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model forcing traditional approach to change, which leads to integration with global chain of resources. He further stated that as a result of this digital transformation, there is a paradigm shift in manufacturing and system engineering, which include ubiquitous manufacturing, cloud based manufacturing, collaborative and grid manufacturing, block chain technology and so on. Dr Seeram Satyanarayana, Chairman of Production Engineering Division Board of the Institution in his address explained different aspects of fourth industrial revolution and the application of multitasking machineries with high precision and accuracy. He further emphasized on necessity of skilled manpower with multi-facets of engineering knowledge. Three Eminent Engineering personalities, namely, Mr Nalini Ranjan Mohanty, Former Chairman, Hindustan Aeronautics Ltd., Bangalore; Dr K Ramesh Kumar, Scientist 'G', Project Director (Brahmos), BrahMos Aerospace, DRDL, Hyderabad and Mr Ansuman Das, Former Chairman-cum-Managing Director, National Aluminium Company Ltd., Bhubaneswar were felicitated for their contributions in the field of Production Engineering. The IEI Young Engineers Award for the year 2018 in Production Engineering was presented to Dr Vijaya Kumar Manupati, Assistant Professor, National Institute of Technology Warangal and Dr Joy Prakash Misra, Assistant Professor, National Institute of Technology Kurukshetra. The prestigious F W Taylor Memorial Lecture was delivered by Prof Arabinda Tripathy, Former Professor from Indian Institute of Management Ahmedabad. He explained

the principles of Taylorism including motion and time study, industrial engineering, motivation through financial incentive, overall perspective of scientific management etc. Another prestigious G C Sen Memorial Lecture was delivered by Prof Ajay Kumar Chattopadhyay, Former Professor, Department of Mechanical Engineering, Indian Institute of Technology Kharagpur. He highlighted different aspects of cutting tools, which include flank wear vs machining time, cutting velocities vs tool life, requirement of chemical stability of machine tools, coating constituents and many other allied areas. Earlier, Prof P K Parhi, Chairman of the Centre welcomed the august gathering. A Panel Discussion chaired by Dr Seeram Satyanarayana on the topic 'Production Engineering for the Future' was also organized. Dr D K Tripathy, Chairman of Committee for Advancement of Technology & Engineering, IEI, briefed different manufacturing aspects including function of composites, advanced manufacturing processes, high speed machining etc. On this auspicious occasion, Prof Damodar Acharya, former Director of IIT Kharagpur was present. The State-of-the-Art Lecture was delivered by Mr Sibasis Maity, Managing Director, Central Tool Room & Training Centre (CTTC), Bhubaneswar on "Industry 4.0". During the program, Dr S K Kar, Head (QC), CTTC, Bhubaneswar delivered lecture on "The Emerging Era of Digital Manufacturing". Prof K K Rout, Honorary Secretary of the Centre proposed the vote of thanks. Papers on various sub-themes were presented & discussed during technical sessions.



## Water Quality Management Strategies Determination for Streams in a River Basin

**Dharwad Local Centre** of the Institution in collaboration with Karnataka State Pollution Control Board and other Government bodies organized All India Seminar on “Water Quality Management Strategies Determination for Streams in a River Basin” under the aegis of Environmental Engineering Division Board of IEI during January 28-29, 2018 at Dharwad. Dr T V Ramachandra, Coordinator, Energy & Wetlands Research Group, Centre for Ecological Sciences, Centre for Sustainable Technologies and Center for Infrastructure, Sustainable Transportation & Urban Planning, Indian Institute of Science Bangalore graced the occasion as Chief Guest. Dr Ramachandra, in his inaugural address commented that water management related research work should be accelerated in such a way that the outcomes should be affordable for all. Mr M Narayan, Chairman of the Centre presided over the function and highlighted various issues on the relevant part of the theme. Earlier, Dr M R Patil, Co-convenor of the function delivered the welcome address. Mr C J Jagadeesha, Convener of the programme briefed about the objectives of the Seminar. On this auspicious occasion, a Souvenir consisting of the abstracts of the papers was released by the Chief Guest, Dr Ramachandra. While proposing the vote of thanks, Dr Ramesh L Chakrasali, Honorary Secretary of the Centre mentioned

about the preservation of water resources by proper conservation mechanism and the quality of water needs to be supplied keeping health issues in mind. A large number of technical papers embracing the theme of the Seminar were presented during different technical sessions.



## Making India Self Reliant in Innovative Technologies

**Jharkhand State Centre** of the Institution organized All India Seminar on “Making India Self Reliant in Innovative Technologies” under the aegis of Interdisciplinary Coordination Committee (ICC) of IEI during February 24-25, 2018 at Ranchi. The Chief Guest, Mr Aman Kumar, IPS, Superintendent of Police, Ranchi City in his address mentioned that India has been transitioning

the country. Mr Kumar further stressed on the fact that for innovation in emerging technologies, India is lagging behind the rest of the world when it comes to the quantum of innovative products and solutions primarily due to the lack of requisite expertise and talent. He also added that in 2018, technology-led innovation & entrepreneurship are expected to solve the domestic issues. The Keynote Speaker, Mr Kunal Prasad, Co-Founder & Chief Operating Officer, CropIn Technology stated that for farmers, the Internet of Things (IoT) has opened up extremely productive ways to cultivate soil and raise livestock with the use of cheap, easy-to-install sensors. The Guest-of-Honour, Mr Abhishek Budhraj, HR- Business Partner, Uber pointed out the advantages of large scale initiatives of the Government aimed at economic galvanization & inclusion, such as, Make-in-India, Digital India, Skill India etc. Earlier, Mr A K Saxena, Chairman, ICC, IEI, in his welcome address emphasized on the skill & capacity building strategies, regulatory framework, cyber security etc. in the current context of the modern technology. Mr Priyam Mitra, Co-Chairman of the function briefed on the theme and highlighted on the revenue through the convergence of emerging technologies. The program was concluded with vote of thanks proposed by Mr Abhinav Jha, Convener of the program. A large number of technical papers embracing on the theme of the Seminar presented during various technical sessions.



through various start-up based innovations and investment cycles where most of the technology innovation is venture capital investments-led in

## Six Sigma Fundamentals and Applications

**West Bengal State Centre** of the Institution in association with Department of Production Engineering, Jadavpur University, Kolkata organized All India Workshop on 'Six Sigma Fundamentals and Applications' under the aegis of Production Engineering Division Board of IEI during March 16-17,

Ray, Department of Industrial and Systems Engineering, Indian Institute of Technology (IIT) Kharagpur focused on the contextual implications of six sigma process. Prof Arunangshu Sekhar Kuar, Head, Department of Production Engineering, Jadavpur University, in his address stressed on the coordination of technology and management to achieve the defect free environment in the organization. Prof Bijan Sarkar, Department of Production Engineering, Jadavpur University & Convenor of the Seminar briefed about the background of the Seminar and described 'Different Tools and Techniques of Six Sigma' in various real life problems. He further explained different aspects of control limits, levels of tolerance, significance of different values of capability index etc. During various Technical Sessions, Prof Subhas Chandra Panja, Department of Mechanical Engineering, Jadavpur University, explained different aspects of statistical process control, which include control charts, sources of variation, errors in inference, rules of variation, Type I and Type II errors, control limits, range, and so on. Prof Ray, in his presentation on 'Present Industrial Situation and Relevance of Six Sigma' highlighted on the evaluation & dimensions of quality, quality of design, quality of manufacturing, different aspects of line centred management and so on. He further spoke on the qualitative and quantitative approach, Define-Measure-Analyse-Improve-Contro (DMAIC)



2018 at Kolkata. During the inaugural session, Prof N R Bandyopadhyay, School of Materials Science & Engineering, Indian Institute of Engineering Science & Technology, Shibpur, Howrah, in his address, explained the significance of irreversible far reaching technological revolution. He further explained about environmental mandates, technological up-gradation and advancement towards achieving zero defects. Prof Pradip Kumar

approach, modern industrial situations, measure for process capability and validation of measurements etc. Prof Jyoti Mukherjee, Department of Industrial & Systems Engineering, IIT Kharagpur while speaking on 'Six Sigma Implementation', lucidly explained the six sigma methodology, it's significance and implication in the industry. The session was concluded with vote of thanks by Mr Kashmir Lal Mallik, Chairman of the Centre.

## Hi-Tech Cultivation of Vegetables & Flowers

**Uttarakhand State Centre** of the Institution in collaboration with Horticulture Department, Govt. of Uttarkhand and ICAR – Indian Institute of Soil & Water Conservation organized All India Seminar on 'Hi-Tech Cultivation of Vegetables & Flowers' under the aegis of Agricultural Engineering Division Board of IEI during March 10-11, 2018 at Dehradun. The Seminar was inaugurated by the Chief Guest, Mr Subhod Nuiyal, Hon'ble Minister of Agriculture, Govt. of Uttarakhand. Mr Nuiyal also visited the exhibition stalls and awarded five progressive farmers of each district of Uttarakhand. Dr A K Joshi, Associate Director (R&E), Regional Horticulture Research and Training Station, Sirmour narrated that protected cultivation is useful in

combination of both biotic and abiotic stress which limits the productivity and quality of vegetables crops. Dr Nirpendra K Chauhan, Head, Centre for Aromatic Plant apprised about the importance of Stevia and Aromatic Plants. Other dignitaries present on the occasion included, Mr Narendra Singh, Council Member of the Institution, Mr R V S Chauhan, Chairman of the Centre, Dr P K Mishra, Director, ICAR – Indian Institute of Soil & Water Conservation, Mr A K Dinkar, Engineer-in-Chief, Irrigation Department, Govt. of Uttarakhand, Dr B S Negi, Additional Commissioner, Horticulture Department, Govt. of Uttarakhand, Mr J B Singh, Joint Director, National Horticulture Board etc. who highlighted about the importance of Hi-Tech Cultivation of Vegetables and Flowers. All these dignitaries emphasized on the possible improvement of genetic materials of vegetables, flower and fruit crops to protect the cultivation of vegetables. On this occasion, field visit was organized for farmers of Uttarkhand to the nearby farms at Bugawala to familiarize them in cultivation of mushrooms and flowers.



## Agro Big Data and Decision Support Systems in Agriculture

**Hosur Local Centre** of the Institution in collaboration with Department of Biotechnology, Adhiyamaan College of Engineering, Hosur organized All India Seminar on 'Agro Big Data and Decision Support Systems in Agriculture' under the aegis of Agricultural Engineering Division Board of IEI during March



19-20, 2018 at Hosur. Dr G Ranganath, Principal, Adhiyamaan College of Engineering, Hosur & Council Member of IEI graced the occasion as Chief Guest of the function. In his inaugural speech, Dr Ranganath highlighted the importance of agriculture in day-to-day life of everybody. Dr Ranganath also welcomed the farmers present and expressed their undaunted spirit to produce farm products to quench people's hunger & salute them for the same. On this auspicious occasion, the Guest-of-Honour, Dr H Vijayaraghavan, Dean, Adhiyamaan College of Agriculture and Research Institute, Hosur focused on the latest technological development that were taking place in the agriculture to help the farmers for the high production of

Agro-products. Mr P Gomathinagam, Organizing Secretary of the event, while briefing the theme, explained that the access to low-cost sensor technology, drones, climate data & forecasts, satellite information about soils, humidity is provoking a revolution with the eruption of Big Data and simulation models in Agriculture and in the Agro-food industries. 'How to double the income of the Agro products with the support of Govt. of India schemes', as highlighted by Mr Gomathinagam. Earlier, Prof N G Rameshbabu, Convener of the Seminar mentioned the importance of the topic and role of Biotechnology in Agricultural Sector. Dr V Manivasagan, Honorary Secretary of the Centre addressed the gathering. The program was concluded with vote of thanks by Dr J Arivudainambi, Chairman of the Centre. A large number of papers embracing the theme were presented and deliberated during various technical sessions of the Seminar.

## Engineering Staff College of India



Autonomous Organ of The Institution of Engineers (India)  
Old Bombay Road, Gachi Bowli, Hyderabad 500 032



### CPDPs for the Month of July 2018

Name of the Course	Scheduled Dates
❖ ISO 9001:2015 QMS - Lead Auditor Training (CQI - IRCA - UK Certified)	02 - 06
❖ Power System Grounding and System Stability	03 - 05
❖ Smart Technologies for Digital India	09 - 11
❖ Oracle 12C Database Administration	09 - 13
❖ IT Enabled Applications in Water Supply and Sewerage Projects	10 - 12
❖ Conflict Management, Decision Making and Problem Solving Skills	10 - 12
❖ Best Practices in O&M of Industrial Valves & Actuators for Heavy Industries & Power Plants	10 - 12
❖ Integrated Water Resources Management	10 - 13
❖ High Rise Buildings - Planning, Construction & Maintenance	10 - 13
❖ Certified Internal Auditor Training for Integrated Management System (IMS) (ISO 9001 QMS, ISO 14001 EMS & OHSAS 18001)	11 - 13
❖ Promoting Climate Resilient Industrial Estates	16 - 18
❖ GIS Applications in Land Use and land Cover including software applications	17 - 19
❖ Smart Grid & Smart Metering Technologies & Applications	17 - 19
❖ Materials and Supply chain Management(Including SAP-MM Module Exposure)	17 - 20
❖ Laboratory Management System Awareness & Internal Auditing (As per ISO / IEC 17025 : 2005 & NABL Requirements)	23 - 26
❖ Application of Total Station and DGPS for Projects with Field Practices	23 - 27
❖ Cyber Security & Forensic Investigation	24 - 27
❖ Testing of Civil Engineering Materials	24 - 27
❖ Operation & maintenance of Oil field equipment	24 - 27
❖ Big Data Analytics using Hadoop & R tool	30 July - 02 Aug.
❖ 3 Dimensional LASER Land Scanners for Mining and other Applications.	31 July - 03 Aug.

### CPDPs for the Month of August 2018

Name of the Course	Scheduled Dates
❖ Bio Medical Waste Management - Handling & Safe Disposal Options with New Rules 2016	01 - 03
❖ O&M, Testing of Power Transformers and HT Circuit Breakers	01 - 03
❖ Quality Management in Building Construction	06 - 10
❖ Welding and Inspection : A welder's perspective in SMAW, TIG and MIG (Practical training for welders on SMAW, TIG and MIG)	06 - 10
❖ Best Practices in O&M and Failure Analysis of Synchronous Generators including static excitation in Power Plants & process industries	06 - 10
❖ Concrete Gravity Dams - Design Analysis including Software Applications	06 - 10
❖ Mobile Application Development using Android	07 - 10
❖ Communication and Presentation Skills (Communicating Assertively)	07 - 09
❖ ISO 9001 : 2015 QMS - Transition Training (CQI-IRCA-UK Certified)	08 - 09
❖ Advance EXCEL with Macro's & VB Script	16 - 18
❖ Leakages and Water Proofing Treatment in Buildings	20 - 24
❖ Student Development Programme Nurturing Employability Skill for Enhancing Engineers Competency	20 - 22
❖ Principle and practices in lift irrigation projects - climate mitigation	21 - 23
❖ Open Access, Power Trading and Tariffs - ABT Scenario	21 - 23
❖ Linux Server( RHEL 7) Administration	27 - 31
❖ ISO 14001 : 2015 EMS - Lead Auditor Training	27 - 31
❖ Procurement Procedures - Contract Management including Quality Assurance & Control	27 - 31
❖ Intelligent Transportation System	28 - 30
❖ Design, Operation and Maintenance of Membrane based Water and Waste Water treatment for Zero discharge compliance	28 - 30
❖ Imported Coal Blending and Coal Firing Optimization	28 - 30
❖ Vibrations, Balancing, Alignment and Condition Monitoring of Rotating Equipment(Theory and Practical Orientation with Technical Visit)	28 - 31

For detailed information, please contact :

### ENGINEERING STAFF COLLEGE OF INDIA

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## World Telecommunication and Information Society Day 2018

**Theme : Enabling the Positive Use of Artificial Intelligence for All**

**World Telecommunication and Information Society Day was celebrated by the Centres of the Institution all over the country on May 17, 2018. Brief reports as received from various Centres are given hereunder.**



### STATE CENTRES

#### Andhra Pradesh

Prof Kodanda P Rama Rao, Chairman of the Centre presided over the Meeting. Mr K Jangaiah, Superintending Engineer, Kothagudem Thermal Power Station welcomed the gathering. The theme speaker, Prof K P N V Satya Sree, Department of Computer Science & Engineering, Usharama College of Engineering & Technology, Telaprolu, in her address, explained the capability of performing various tasks with the help computers, which went on growing exponentially and the power of computer systems has been developed in terms of diverse working domains with the increasing of speed. She also opined that 'Artificial Intelligence (AI)' is the act of transitioning from human thought to computerized thought processing and she continued to focus on foundations of AI, its major branches from where different technologies are been evolving to provide diverse services to the community & its application areas, including machine learning, deep learning, neural networks, perception, computer vision, speech recognition, reasoning, natural language processing and many more. Mr M Seshagiri Rao, Honorary Secretary of the Centre proposed the vote of thanks.

#### Assam

Mr Shantanu Choudhury, Organizing Secretary of the event delivered the welcome address. Mr Amitava Nath, Honorary Secretary of the Centre read out the significance of World Telecom & Information Society Day. Dr A K Baruwa, Chairman of the Centre conducted the function. On this auspicious occasion, Mr M K Yadav, Managing Director, Assam Electronics Development Corporation Ltd. and Mr B N Dhar, Principal General Manager, BSNL, Guwahati were present as Chief Guest and Keynote Speaker respectively. The eminent speakers from IIT Guwahati, Guwahati University and Assam Don Bosco University presented their papers during the technical session. Mr Diganta Barman, Senior Technical Director, National Informatics Centre was present to conduct the session. The function was concluded with the vote of thanks proposed by Mr Amitava Nath, Honorary Secretary of the Centre.

#### Bihar

Mr Ashok Kumar Sinha, Chairman of the Centre, in his welcome address, presented a brief account of history and objective of celebrating World Telecommunication & Information Society Day. Mr Sandeep Prakash, Honorary Secretary of the Centre, introduced the theme of the day. The Keynote Speaker, Mr Ramesh Kumar, Chairman, Beltron Telecom Green Energy Systems Ltd., Patna, narrated that the use of Artificial Intelligence (AI) will be visible into all sections of society within few years right from domestic applications to business applications, and will also be extensively used by the Governments for improvement in its services. Other eminent dignitaries were also present on the occasion included Dr Arun Kumar Shrivastava, Council Member, IEI, Mr Kishore Kumar, Chairman, Sustainable Development Forum, IEI, Mr Ajay Kumar Sinha, Past Chairman of the Centre and Mr Ramashish Sharma, Past Honorary Secretary of the Centre. Mr Sandeep Prakash proposed vote of thanks at the end of the programme.

#### Gujarat

Mr N B Vasoya, Immediate Past President, IEI, presided over the function and presented an insight of the role of IEI in the nation building. The Chief Guest, Mr Tapan Misra, Director, Space Application Centre, ISRO, Govt. of India while delivering his speech to the audience, encouraged the students to develop skill and become innovative. The theme speaker, Mr Neeraj Athalye, Vice President – Innovation & Digital Business, SAP India Subcontinent, in his address, explained in detail the importance of Artificial Intelligence (AI) in regular life with various examples. He further explained that Mobile Phones are the remote control for life and telecom connectivity made things alive. Mr Athalye added that AI gives the power to act & understand the feeling and connect the people, things and businesses intelligently by innovation. He opined that the importance of innovation is compulsory for survival and need based change in products to satisfy customers that is also essential. Mr Bharat Patel, Council Member, IEI and also convener of the function while explaining the theme, emphasized that the AI is global need and requires integration of Big Data, Sensors, Robotics, Satellite Images, huge storage cloud, IoT and fastest technology. Mr V K Jain, Chairman, The Institution of Electronics & Telecommunication (IETE), Ahmedabad presented a brief introduction about IETE and their contributions to the professional fraternities and students

#### Haryana

Mr D K Gupta, Former Additional Director of Technical Education, Haryana graced the occasion as Chief Guest and appreciated the Centre for organizing such important event for the interest of engineering fraternity. The Keynote Speaker, Dr (Ms) Vrinda Gupta, Associate Professor, Department of Electronics & Communication Engineering, NIT Kurukshetra, in her address focused on the potential of Artificial Intelligence (AI) and its vast application areas and also explained the benefits of using in various domains like, healthcare, education, finance, agriculture, transportation etc. Earlier, Mr Ajay Mahajan, Chairman of the Centre, welcomed the Chief Guest and other dignitaries present on the occasion. On this occasion, Mr K C Sethi, Council Member, IEI presented a brief of various technical activities of IEI towards the role of development. Mr T P Singh, Convener of the programme proposed vote of thanks.

#### Manipur

Mr N Joy Kumar Singh, Honorary Secretary of the Center welcomed the guests and dignitaries. In his address, Mr Singh focused on misusing the Artificial Intelligence (AI) in various domains. Mr N Shyamsunder Singh, speaking on the theme, focused on the need of training the young minds mainly the young engineers to support the constructive use of AI for the common benefits. Mr Kh Angou Singh, Founder Chairman of the Centre emphasized mainly on the need of integrating the fraternity of the engineers. Mr Th Joykumar Singh, Former Chief Engineer, PWD, Manipur and Mr M Lokendro Singh, Past Chairman of the Centre also deliberated on the theme. Mr K Temba Singh, Chairman of the Centre and Chief Engineer, PWD, Manipur delivered



the address on the theme. Mr A Roudrajit Moirang, Joint Honorary Secretary of the Centre proposed vote of thanks.

## Punjab & Chandigarh

Mr J R Garg, Chairman of the Centre welcomed the distinguished guests and dignitaries. The Chief Guest, Mr S K Gupta, Chief General Manager, Punjab Telecom Circle, in his speech, enumerated that in recent years, there has been significant progress in Artificial Intelligence (AI) technology, made possible by tremendous advances in contributing fields, such as big data, machine learning, computing power, storage capacity and cloud computing. 'AI-based technologies are already emerging as a key component of proactive tools and applications being used to help people lead better lives by improving healthcare, education, finance, agriculture, transportation and a wide range of other services', Mr Gupta opined. The Guest-of-Honour, Mrs Savita Gupta, Director, University Institute of Engineering & Technology, Punjab University, Chandigarh in her address, highlighted the changes that AI is bringing to the routine life and carefulness that is needed to observe while using all the gadgets that have AI built in. The key speaker, Mr Vivek Dua, ITS, General Manager, BSNL focused on the benefits and challenges of AI that is going to shape the society in the ensuing days. Mr S S Mundi, Honorary Secretary of the Centre proposed vote of thanks.



## Tamilnadu

Dr Swarna Ravindra Babu, Chairman, IETE, Chennai Centre welcomed the gathering on the occasion. Dr K M Sivakolundhu, Vice Chancellor, Indian Maritime University, Ministry of Shipping, Govt. of India, Chennai graced the occasion as Chief Guest and delivered the presidential address. On this auspicious occasion, Dr P A Manoharan, Chairman, IEEE, Madras Section was also present. Mr R Ramdoss, Honorary Secretary of the Centre, Dr S S Sridhar, Chairman, The Institution of Engineering and Technology, Chennai Network, Dr S Poonkuzhali, Chairman, Computer Society of India, Chennai Chapter and Mr S Ramachandran, Chairman, Broadcast Engineering Society, Chennai Chapter also graced the occasion. The function concluded with the vote of thanks proposed by Dr C Sheeba Joice, Honorary Secretary, IETE, Chennai Centre.



## Telangana



The Chief Guest, Mr K Ramchand, Principal General Manager, BSNL, Hyderabad, in his address, opined that telecom Industry has developed because of information technology (IT). He further stated that Artificial Intelligence (AI) can predict preventive actions on the business transaction

that is being done through online now-a-days. The Keynote Speaker, Mr K Vijaya Kumar, Solutions Engineering Group, M/s Tata Consultancy Services (TCS), Hyderabad highlighted that AI first started in Japan with robots. He further explained the availability of various digital technologies in both structured and unstructured forms. Earlier, Dr G Rameshwar Rao, Honorary Secretary of the Centre, welcomed the gathering and Mr S P Anchuri, Joint Honorary Secretary, proposed the vote of thanks. Wg Cdr V L Nanda Kumar, Past Chairman of Andhra Pradesh State Centre, presided over the function. Two Invited Talks were presented by Mr Bala Prasad Peddigari, Technology Head, TCS Ltd. and Prof G Radhakrishna, Member of the Centre. Mr B Brahma Reddy, Council Member of the Institution was also present during the program.

## Uttar Pradesh

Dr Bharat Raj Singh, Chairman of the Centre welcomed the guests and introduced the theme to the audience. The Keynote Speaker, Mrs Sunita Yadav, Manager, Hindustan Aeronautics Ltd. (HAL), Korwa Unit, speaking on the theme and while delivering her speech, she apprised that Jon McCarthy, the



founder of Artificial Intelligence (AI), defines it as intelligence exhibited by Machine and this is the Science and Engineering interface. She also focused on the enormous progress happened in the field of AI in recent past, which is possible due to drastic advancement in the field of big data, machine learning and cloud computing. Mr V B Singh, Council Member of the Institution was also present during the program. The event was conducted by Mr N K Nishad, Member of the Centre and the vote of thanks was proposed by Mr R K Trivedi, Honorary Secretary of the Centre.

## LOCAL CENTRES

### Ahmednagar

The Chief Guest, Mr Ajatshatru Somani, Principal General Manager, BSNL, Ahmednagar urged that Artificial Intelligence (AI) should not erase natural intelligence. He further explained that AI and communication are amalgamation of technology and expected that it should be used for safety and prosperity of mankind. The Keynote Speaker, Dr R S Deshpande, Principal, Shri Chhatrapati Shivaji Maharaj College of Engineering, Ahmednagar, in his speech, expressed that society should always be grateful to the great scientists for inventions in the field of science and technology. He further explained that AI is a branch of science, which deals with helping machines to find out the solutions to complex problems in a more human-like fashion. The Guest-of-Honour, Mr Datta Deogaonkar, eminent amateur astronomer, stated that it is an advance communication in wireless communication technology and appealed for popularization of ham radio. Earlier, Mr R P Waykar, Honorary Secretary of the Centre delivered the welcome address and introduced the theme. Mr Avinash D Kulkarni, Chairman of the Centre, in his presidential address expressed that tremendous developments are taking place in many fields due to AI, which is making human life more comfortable. Mr H B Thigale, Immediate Past Honorary Secretary of the Centre, extended the vote of thanks.



### Angul

The Chief Guest, Mr Raj Kishore Mishra, Executive Director (S&P Complex), National Aluminium Company Ltd. (NALCO), threw some light on the rapid technological strides in the field of Telecommunication Engineering in recent years. The Chief Speaker, Prof Rabindra Kumar Sahu, Department of Electrical and Electronics Engineering, Veer Surendra Sai University of Technology, Burla, Odisha explained about the application of Artificial Intelligence (AI) Technique in improving Power System Stability. He further discussed at length about the Optimization Techniques to design an intelligent control system for Automatic Load-Frequency Control for an interconnected Grid System. Earlier, Mr Satyabadi Mishra, Honorary Secretary of the Centre welcomed all the guests and dignitaries. Mr D Mohapatra, General Manager, CPP quoted the example of Google Assistant fixing appointment with a saloon-shop owner for the customer. On this occasion, Mr C R Swain, General Manager (Project), CPP, Mr M P Mishra, General Manager, Smelter, Mr M Dash, General Manager (O&M), Smelter and Mr S K Acharya, General Manager (Utkal-E), NALCO were also present. Mr Rajnish Kumar Gupta proposed the vote of thanks.



### Asansol

Mr K V R Raju, Chairman of the Centre, in his welcome speech, enunciated the role of Artificial Intelligence (AI) in present day's perspective and its impact on Global community. The Chief Guest, Dr Shibendu Sekhar Roy, Assistant Professor, National Institute of Technology Durgapur and Associate Dean of Alumni Affairs, enumerated that the 'Internet of Robotic Things (IoRT)' is an emerging vision that brings together pervasive sensors and objects with robotic and autonomous systems. 'The term IoRT itself coined in a report of ABI research to denote a concept where sensor data from a variety of sources are fused, processed using AI and used to control and manipulate objects in the physical world', he added. Mr Sumanta Karmakar, Assistant Professor, Department of Electronics & Communication Engineering, Asansol Engineering College introduced the theme. The Honorary Secretary of the Centre, Mr T T Lahiri proposed the formal vote of thanks.



## Bareilly

Mr Subhash Chandra Mehra, Chairman of the Centre delivered the welcome address. Dr L S Maurya, Assistant Professor, SRMS, Bareilly, speaking on theme, apprised that some of the leading technologists viz. Mr Sunder Pichai, CEO of Google, Mr Bill Gates, Gartner and NASSCOM report emphasized that computing shift takes place every decade. Mr Sovan Mohanty, Assistant Professor, SRMS, Bareilly explained that by 2035, computer will become equally intelligent to that of human being and by 2045, even more intelligent in comparison to all human being on this earth. He further stated

that the advent of machine intelligence raises social and ethical issues that may ultimately challenge human existence on the earth. Mr Sudhir Gupta, Immediate Past Honorary Secretary of the Centre explained that industry influencers, academicians and other prominent stakeholders certainly agree that big data has become a big game changer in most of the cases, if not all, types of modern industries over the last few years. Dr Pankaj Sharma, Honorary Secretary of the Centre g proposed the vote of thanks.

## Berhampur

Mr Ashutosh Patra, Chairman of the Centre, while presiding over the function, delivered the thematic address and emphasized upon sustainable development taking into consideration of environmental consequences. The Chief Guest, Mr Manoj Kumar Mallick, Assistant General Manager, BSNL, Berhampur, focused on potential of Artificial Intelligence (AI) by means of some of the pictorial illustrations. He asserted on carrying on research and development activities for further improvements and thereby to get rid of environmental disturbances. The eminent speaker, Mr Bansidhar Arukh, Joint General Manager, Airport Authority of India, Berhampur emphasized on the benefits secured by the society on account of application of AI for All. At the same time, Mr Arukh also urged to look at the indigenization of technology to suit the local conditions of the country. Mr Sanjaya Kumar Patra, Convener of the programme proposed the vote of thanks.



## Dhanbad

Mr S Ratnakar, Joint Honorary Secretary of the Centre introduced the theme of the day. Mr B P Sinha, Principal, Govt. Polytechnic, Dhanbad graced the occasion as Chief Guest. During this auspicious occasion, Dr T N Singh, former Director, CSIR-Central Institute of Mining and Fuel Research, Dhanbad, Mr H N Karmakar, Past Chairman of the Centre, Dr K K Singh, Honorary Secretary of the Centre, Dr M K Chandra, Immediate Past Honorary Secretary of the Centre, Mr S N Roy, Lecturer, Govt.

Polytechnic, Dhanbad were present. All the speakers in their speech emphasized that Artificial Intelligence (AI) is also known as the Missing Intelligence and is different from superior to Natural Intelligence as displayed by human being or animals. Dr K K Singh proposed the vote of thanks.

## Durgapur

The Chief Guest, Prof Anupam Basu, Director, Dr B C Roy Engineering College, Durgapur stated that the celebration of the day aims to help diminish the digital segregation and the huge potential of Artificial Intelligence (AI) to serve the society. He mentioned that AI is the next step of human race on automation. He further discussed about Internet of Things (IoT) and Internet of Everything (IoE). The Guest-of-Honour, Prof Tandra Pal, Department of Computer Science & Engineering, National Institute of Technology Durgapur, in her speech, narrated briefly on traditional machine learning vs deep learning,



applications of AI in health, education, assisted living, smart city, smart energy management, smart grid, water management, waste management, smart healthcare, safe city and smart traffic management. Mr Parasuram Shaw, Deputy General Manager (CHRD), SAIL-Durgapur Steel Plant also graced the occasion as Guest-of-Honour and explained that the goal of AI is to provide software based input and output. Earlier, Mr R K Roy, Chairman of the Centre, in his welcome address, stated that the purpose of celebrating the day is to create the awareness of the possibilities that the use of internet & other Information and Communication Technologies (ICT) can bring to societies and economies, as well as of ways to bridge the digital divide. Mr M N Bandyopadhyay, Honorary Secretary of the Centre proposed the vote of thanks.

## Faridabad

Dr S V A V Prasad, Dean, Research Corporate Affairs, Lingaya's Vidyapeeth, Faridabad, while citing a practical example of positive use of Artificial Intelligence (AI), explained at length how a knife can be used positively by a Doctor to treat patients and the same knife can be used for unethical work by a criminal. Five Technical Papers embracing the theme of the event presented and discussed by Academicians and Industry Entrepreneurs. The function concluded with vote of thanks proposed by the Honorary Secretary of the Centre, Mr Sandeep Handa.



## Gorakhpur

Mr M W Beg, Chairman of the Centre welcomed the Chief Guest and other dignitaries present on the occasion. Mr S Upadhyay, Deputy General Manager, BSNL, Gorakhpur graced the function as Chief Guest and described the role of BSNL in telecommunication. Other corporate Members of the Centre also expressed their views on Artificial Intelligence (AI) and its positive use. The programme concluded with vote of thanks as proposed by Mr V K Srivastava, Honorary Secretary of the Centre.



## Jodhpur

Dr S R Vadera, Director, Defence Laboratory, Jodhpur graced the function as Chief Guest and mentioned that human interface along with common sense and real knowledge can be used effectively for communication. Prof S S Mehta, Dean, MBM Engineering College, Jodhpur graced the occasion as Guest-of-Honor and illustrated with examples the positive uses and effects of Artificial Intelligence (AI). Earlier, Prof Akhil Ranjan Garg, Honorary Secretary of the Centre delivered the welcome address. Mr G K Khare, Director, Airport Authority of India, Jodhpur presided over the function and highlighted about the usefulness of Artificial Intelligence. The programme concluded with vote of thanks by Prof Manish Kumar, Co-convener of the program.



## Kanchepuram

Mr Rajesh Kannan, Sub-Divisional Engineer, Faculty BSNL Regional Centre, graced the occasion as Chief Guest. Mr Kannan delivered an inspiring speech on overview of the evolution of telecommunication and briefly explained about the emerging techniques. He further presented a clear picture about the internship and project supported by BSNL for the benefits of student fraternity. Dr Srinivas Alavandar, Joint Honorary Secretary of the Centre welcomed the guests and dignitaries present during the function. The programme concluded with vote of thanks proposed by Ms Vetrikanimozhi, Assistant Professor, Department of Electronics & Communication Engineering, Agni College of Technology, Chennai.





## Kota

Mr C K S Parmar, Chairman of the Centre welcomed the guests and dignitaries. Mr Narendra Jain, Head, Department of Computer Science & Engineering, Govt. Polytechnic College, Kota, in his address emphasized on various areas of Artificial Intelligence (AI), its goals, creation of expert systems and to implementing human intelligence in machines, its technique and applications on gaming, natural language processing, experts systems, vision systems, speech recognition etc.



The Chief Guest, Mr A K Gupta, former Managing Director, Jaipur Vidyut Vitran Nigam Ltd. (JVNL), Jaipur expressed that most researchers agree the existence of super intelligent AI in human emotions. Mr Arvind Kulshrestha, Member of the Centre, graced the occasion as Guest-of-

Honour. The programme concluded with vote of thanks proposed by Mr Jasamat Singh, Honorary Secretary of the Centre.

## Kozhikode

The Chief Guest, Prof Abdul Gafur Mundoli, Head, Department of Computer Science & Engineering, MEA Engineering College, Perinthalmanna, Kerala delivered the theme lecture. In his speech, Dr Mundoli focused with the recent tools developed using Artificial Intelligence (AI) such as humanoid robots, Sofia, Google assistant, SIRI etc. He further discussed about the sustainable development with the help from AI in agriculture, financial and banking sectors. Earlier, Prof K P Mohandas, Chairman of the Centre, in his welcome address, introduced the topic AI and its capabilities and apprehensions of a few eminent persons on AI. The function concluded with the vote of thanks proposed by Prof Devadasan K K, Secretary, Society for Protection of Environment Kerala (SPEK).



## Madurai

The Chief Guest, Dr Karthick Seshadri, Assistant Professor, Department of Computer Science & Engineering, Thiagarajar College of Engineering, Madurai, in his address, focused on the basic understanding of Artificial Intelligence (AI). He further highlighted about the machine learning algorithms, which can be viewed as a technique to create the intelligent machines. Dr Seshadri discussed about several applications of AI in logistics, gaming, healthcare, social network, air traffic control, language processing etc. Earlier, Mr K Vijayakumar, Chairman of the Centre, in his presidential address, narrated about the importance of the day with its purpose leads to awareness on communication. Mr P Rajamani, Vice President of the Institution was also present during the occasion. The function concluded with the vote of thanks proposed by Mr R Narayanasamy.



## Meerut

Mr H S Sharma, Chief General Manager, BSNL, Uttar Pradesh Circle, Meerut and Mr Arun Kumar, Principal General Manager of BSNL graced the occasion as Chief Guest and Guest-of-Honour respectively. They highlighted the importance of Artificial Intelligence (AI) and its applications in different domain. A group of faculties from Meerut Institute of Engineering & Technology deliberated on the science & engineering of making intelligent machines especially intelligent computer program and is related to task of using computers to understand the human intelligence. Earlier, Mr S C Govil, Chairman of the Centre welcomed the guests and dignitaries. The Honorary Secretary of the Centre Mr Rajneesh Kumar conducted the program and proposed the vote of thanks.



## Muzaffarpur

Mr K M Sirvastava, General Manager (Telecommunication), BSNL, Muzaffarpur inaugurated the function and addressed the gathering on the theme. Dr J N Jha, Principal, Muzaffarpur Institute of Technology presided over the function. Earlier, Dr Shyam Sundar Mishra, Chairman of the Centre welcomed the guests & dignitaries and deliberated on the theme. Dr Sunil Kumar, Past Chairman of the Centre proposed the vote of thanks.

## North Bengal



Mr Santanu Das, Associate Professor, Department of Electrical Engineering, Jalpaiguri Govt. Engineering College, Jalpaiguri in his address highlighted about the strong and weak features of Artificial Intelligence (AI), philosophy of AI, machine learning basics etc. He further narrated that AI has been used in public services, such as health, social care, emergency services most effectively. The program was concluded by Mr G K Panda, Chairman of the Centre with vote of thanks.

## Pune

The Chief Guest, Mr Prashant Girbane, Director, Pune International Centre & Director General Designate at Mahratta Chamber of Commerce, Industries & Agriculture, Pune highlighted the background of the growth of telecommunications in our country. He further emphasized the role of telecom in the economic growth and looked forward for a bright future for the country in this field. The Theme Speaker and Guest-of-Honour, Dr Harrick M Vin, Global Head, Digitate, TCS, in his speech elaborated many applications including Driverless Car, Customer tracking at mall, memory capability of devices and how these all are developed in customized way based on local conditions. 'The impact of the development could be debatable, as it may have negative occurrence, but going forward with positives that it brings we need to find solutions further', he added. Earlier, Prof G S Mundada, Chairman of the Centre welcomed the guests and dignitaries present during the occasion. Mr Jagdish Chaudhari, Member, IEEE, proposed the vote of thanks.



## Saurashtra

Mr N R Kalaria, Honorary Secretary of the Centre and Dr A S Pandya, Principal, A V Prakash Technical Institute (AVPTI), Rajkot welcomed the gathering. The Chief Guest, Mr Ashok Kumar Upadhyay, Principal General Manager, Telecom District (BSNL), in his address, highlighted about the necessity of Artificial Intelligence (AI) in the Telecom field. Prof Nilesh Gambhava, Department of Computer Engineering, Darshan Institute of Engineering & Technology Rajkot, described on the theme. The faculty members from Department of Computer Engineering, Shree Amrutlal Veerpal Parekh Technical Institute (AVPTI), Rajkot described the necessity of AI in the current context of telecommunication. Mr Manilal Kalariya, Head, Department of Computer Engineering, AVPTI proposed vote of thanks.

## Visakhapatnam

Prof M S Prasada Babu, Vice Principal, A U Engineering College, Andhra University, graced the occasion as Chief Guest. He emphasized on various aspects of robotics, expert systems, machine learning, building Artificial Intelligence (AI) system, probabilistic planning, functional programming, object programming, imperative programming etc. are subfield of AI. Prof K Venkatasubbaiah, Council Member of the Institution graced the function as Guest-of-Honour and in his address, he highlighted about the activities of IEI nationally and globally throughout the year. Earlier, Prof D V R Koti Reddy, Honorary Secretary, IETE, Visakhapatnam Chapter welcomed the gathering. Prof Rajendar from IETE proposed the vote of thanks.



# One Day Seminars/Workshops conducted by various Centres of IEI

## STATE CENTRES

### Gujarat

Gujarat State Centre of the Institution in association with Water Management Forum (WMF) of IEI and Water Resources Department, Govt. of Gujarat organized One day Workshop on 'Save Water & Economic use of Water' under the aegis of Civil Engineering Division, IEI on May 26, 2018 at Ahmedabad. Resource persons namely, Mr M P Raval, Chairman, WMF of IEI, Dr D K Doabaria, Assistant Professor, Water & Land Management Institute, Anand and Mr N B Patel, Former Superintending Engineer, Sardar Sarovar Narmada Nigam Ltd., Govt. of Gujarat graced the occasion and addressed the gathering.



### Tripura

Tripura State Centre of the Institution organized in association with Rural Development Forum (RDF) of IEI and Rural Development Department (RDD), Govt. of Tripura organize One day Seminar on 'Appropriate Technology for Sustainable Rural Development' on May 4, 2018 at Agartala. Mr Tathagata Roy, Hon'ble Governor of Tripura graced the occasion as Chief Guest and inaugurated the Seminar. Mr Sisir Kumar Banerjee, President, IEI, Mr L K Gupta, Principal Secretary from RDD and Mr S P Datta, Chairman of RDF, IEI graced the occasion as Special Guests and addressed the gathering.



### Uttar Pradesh

Uttar Pradesh State Centre of the Institution in association with Indian Society of Agricultural Engineers (ISAE), Lucknow Chapter organized One day Seminar on 'Engineering Interventions for Enhancing Profitability of Sugarcane Farmers' under the aegis of Agricultural Engineering Division of IEI on February 4, 2018 at Lucknow. The Chief Guest on the occasion was Dr A D Pathak, Director, ICAR - Indian Institute of Sugarcane Research, Lucknow. Dr S R Singh, Former Vice Chancellor, Rajendra Agricultural University, Pusa, Bihar, Dr Bachchan Singh, Former Dean, College of Technology, G B Pant University, Pantnagar, and Dr Bangali Baboo, Former Director, Indian Council of Agricultural Research graced the occasion as Guests-of-Honour.



### West Bengal

West Bengal State Centre of the Institution organized One day Seminar on 'Quality Concern in Indian Mineral Industry – The Changing Perspective' under the aegis of Mining Engineering Division of IEI on May 9, 2018 at



Kolkata. Eminent Speakers addressed the gathering on the occasion included, Mr Rajesh Bhushan, General Manager (Marketing & Sales), Coal India Limited, Mr Anupam Lahiri, Director, Coal Controller's Organization (CCO), Ministry of Coal, Govt. of India, Dr Sujoy Majumder and Mr Kingshuk Mukhopadhyay, Officers on Special Duty in CCO.

## LOCAL CENTRES

### Durgapur

Durgapur Local Centre of the Institution organized the following events:-

- One day Seminar on 'Sustainable Development in Manufacturing Process' under the aegis of Production Engineering Division of IEI on May 3, 2018 at Durgapur. Mr S G Khune, Executive Vice President, Graphite India Ltd., Durgapur graced the occasion as Chief Guest. Mr D Sinha, Managing Director, Durgapur Projects Ltd., Dr P K Sinha, Principal, Durgapur Institute of Advanced Technology and Management (DIATM), Durgapur, Prof N Banerjee and Prof B Halder from National Institute of Technology (NIT) Durgapur graced the function as Guests-of-Honour.



- One day Seminar on 'Manufacturing Process and Impact on Environment' under the aegis of Environmental Engineering Division of IEI on May 4, 2018 at Durgapur. Dr C T Bhunia, Former Director, NIT Arunachal Pradesh graced the occasion as Chief Guest. Dr P K Chatterjee, Chief Scientist, CSIR-Central Mechanical Engineering Research Institute, Durgapur, Dr P K Sinha, Principal, DIATM, Durgapur and Dr A K Das, Dean of Academic, DIATM attended the function as Guests-of-Honour. On this occasion, Dr Bikash Ghoshal, Head, Department of Mechanical Engineering, DIATM was present as a Guest Speaker.



### Erode

Erode Local Centre of the Institution in association with the Department of Electronics & Communication Engineering, Sengunthar Engineering College (SEC) organized One day Workshop on 'Concepts and Challenges of Arduino based Internet of Things for System Design' under the aegis of Electronics & Telecommunication Engineering Division of IEI on March 27, 2018 at Erode. Mr A Athif Shah, Chairman & Managing Director, ABE Semiconductor, Chennai attended the programme as Chief Guest and addressed the gathering. Other dignitaries present included Dr P Rameshkumar, Dean (R&D), Department of Electronics & Communication Engineering, SEC and Dr C Venkatesh, Principal, SEC and Honorary Secretary of the Centre.





## Jamshedpur

Jamshedpur Local Centre of the Institution organized One day Seminar on 'Enhancing Gear Box Reliability for Mechanical Engineers' under the aegis of Mechanical Engineering Division of IEI on May 30, 2018 at Jamshedpur. Mr Rajesh Mishra, Chief, SSTG, Tata Steel graced the occasion as Chief Guest and delivered the inaugural address. Mr P D Mundhra, Chief Executive Officer, Tayo Rolls also addressed the gathering.



## Kancheipuram

Kancheipuram Local Centre of the Institution in association with the Department of Mechanical Engineering, Jeppiaar SRR Engineering College, Putur organized One day Workshop on 'Solar System Design and Installation' on March 27, 2018 at Kancheipuram under the aegis of Mechanical Engineering Division of IEI. Dignitaries present on the occasion included, Mr V Janarthanan, Senior Faculty and Dr Sumathi, Head of the Department of Mechanical Engineering, Jeppiaar SRR Engineering College, Dr Raj Kumar, SSN College of Engineering and Mr S Ramamoorthy, Honorary Secretary of the Centre.



## Tiruchirappalli

Tiruchirappalli Local Centre of the Institution organized One day Seminar on 'Highlights of Energy Auditing in Electrical and Thermal Utilities (HEALTH)' under the aegis of Mechanical Engineering Division of IEI on March 14, 2018 at EGS Pillay Engineering College (EGSPEC), Nagapattinam, Tamilnadu. Dr S Sambath, Assistant Executive Engineer, Tamilnadu Electricity Board, Mannargudi graced the occasion and addressed the gathering. Other dignitaries spoke on the occasion included Dr S Krishnamohan, Dean, Department of Mechanical Engineering, EGS Pillay Engineering College, Nagapattinam, Dr N Sendhil kumar, Assistant Professor, NIT Puducherry, Dr S Chokalingam, Associate Professor, Department of Mechanical Engineering, Dr R Rangarajan, Associate Professor, Department of Mechanical Engineering, Prof K Senthilkannan, from Department of Physics, of EGS Pillay Engineering College.



## Udaipur

Udaipur Local Centre of the Institution organized the following events:-

- One day Seminar on 'Smart Vehicle Parking' under the aegis of Civil Engineering Division of IEI on April 7, 2018 at Udaipur. Mr Arun Vyas, Additional Chief Engineer, Nagar Nigam Udaipur, Govt. of Rajasthan graced the occasion as Chief Guest. Dr L L Dhakar, Former Director (Extension), RCA, Udaipur, Mr R K Chatur, Former Chief



Engineer, Irrigation, Govt. of Rajasthan, Mr S K Shrimali, Senior Town Planner, Udaipur, Govt. of Rajasthan and Mr Prasoon Chaturvedi, Deputy Town Planner, Smart City, Udaipur were Guests-of-Honour in the function.

- One day Seminar on 'Technology to Mitigate Fire' under the aegis of Interdisciplinary Coordination Committee of IEI on May 4, 2018 at Udaipur. Mr Vijay Prakash Joshi, Corporate Head, Safety & General Manager, Vedanta - Hindustan Zinc Ltd., Udaipur graced the occasion as Chief Guest. Mr K S Shaktawat, Senior Trainer of Fire & Safety, Visvesvaraya Fire & Safety, Industrial Training Institute (ITI), Udaipur delivered the keynote address. Guests Speakers on the occasion were Mr Balchandra Patidar, Safety Officer, Hindustan Zinc Ltd., Mr Shivraj Meena, Fire Tindal/ Deputy FO, Nagar Nigam, Udaipur, Mr Anurodh Prashant, Chief Executive Officer, Vijay Lakshmi Technomen, Udaipur and Mr Abhisekh Devliya, Trainer & Faculty of Fire and Safety, Visvesvaraya Fire & Safety, ITI, Udaipur.



## Visakhapatnam

Visakhapatnam Local Centre of the Institution organized the following events:-

- One day Workshop in association with Vizag Steel Plant, Visakhapatnam organized on 'Valves and Pump Maintenance & Safety Aspects' under the aegis of Mechanical Engineering Division of IEI on March 28, 2018 at Visakhapatnam. Mr B B R Vardhanam, Deputy General Manager (Training), Vizag Steel Plant addressed the gathering as Chief Guest. Resource persons namely, Mr Srinivasa Rao, Senior Manager (Co & CCP), Mr K V Surya Narayana (L&H), Mr G Raghu Naik, Deputy Manager (Co & CCP) and Mr B V Swamy, Assistant Manager (TPP), Vizag Steel Plant delivered lectures embracing the theme of the Workshop.



- One day Workshop in association with Vizag Steel Plant, organized on 'Operation and Maintenance of Uninterrupted Power Supply' under the aegis of Electrical Engineering Division of IEI on May 5, 2018 at Visakhapatnam. Mr A Boobathy, Assistant General Manager (Training), Vizag Steel Plant graced the occasion as Chief Guest and addressed the gathering.



- One day Workshop in association with Vizag Steel Plant, organized on 'Maintenance of Pipelines' under the aegis of Mechanical Engineering Division of IEI on May 30, 2018 at Visakhapatnam. Mr A Boobathy, Assistant General Manager (Training), Vizag Steel Plant, Visakhapatnam graced the occasion as Chief Guest and addressed the gathering.

# NEWS-IN-BRIEF

The following is a brief account of Technical Activities organised by various Centres of the Institution

## STATE CENTRES

### Andhra Pradesh

- 'Er Medarametla Lingeswara Rao 10th Endowment Lecture' delivered by Dr G V KSV Prasad, Principal, Usha Rama College of Engineering, Telaprolu on May 12, 2018.
- Celebrated 216th Birthday of 'Sir Arthur Thomas Cotton' on May 15, 2018.
- Celebrated 'Water Resources Day 2018' on May 21, 2018.

### Chhattisgarh

- Lecture on 'Climate and Health Effects of Regional Nuclear War' delivered by Dr Piyush Kanti Pandey, Principal, Bhilai Institute of Technology, Raipur on March 24, 2018.

### Delhi

- Celebrated National Safety Week 2018 on 'Reinforce Positive Behaviour at the Workplace to Achieve Safety & Health Goals' on March 10, 2018.
- Organized Workshop on 'Safety during Working in Confined Space' on March 17, 2018.
- Organized 34th Maj Gen Harkirat Singh Memorial Lecture on 'Strategizing the Outcomes: Large-Scale Public Sector Infrastructure' delivered by Lt. Gen (Retd.) Suresh Sharma, PVSM, AVSM, Former Engineer-in-Chief, Indian Army and Director General, BRC on April 7, 2018.

### Jharkhand

- Celebrated 'National Technology Day 2018' on May 11, 2018.

### Karnataka

- Celebrated 'Earth Day' on May 3, 2018.

### Madhya Pradesh

- Organized Workshop on 'Rehabilitation of Building & use of Construction Chemicals' on May 19, 2018.

### Punjab & Chandigarh

- Organized Workshop on 'Mathematical Modeling using Petri Net & Optimization of Systems' on April 20, 2018.

### Telangana

- Observed 'World Earth Day – 2018' on April 22, 2018.
- 'Er Koka Krishna Mohan Rao 28th Endowment Lecture' on 'Hydro Systems Engineering and Management' delivered by Prof P Sreenivasulu, Former Professor, NIT Warangal and Adjunct Professor, Vasavi College of Engineering, Hyderabad on April 23, 2018.
- Organized Workshop on 'Strengthening of EC Activities and Way Forward

by Improving EC Measures in SME/ ULBs/ Agriculture/ Industries which are not covered under PAT' on April 24, 2018.

- Organized Summit on 'Architectural Aerodynamics' on April 26, 2018.
- Celebrated 216th Birthday of 'Sir Arthur Thomas Cotton' on May 15, 2018.
- Organized Workshop on 'Rejuvenation of Krishna River' on May 22, 2018.
- Lecture on 'Conservation of Petroleum Products' delivered by Mr B Rajesh Naik, Deputy Director, Sub Regional Office, Petroleum Conservation Research Association, Hyderabad on May 24, 2018.

### Tripura

- Celebrated 'National Technology Day – 2018' on February 28, 2018.

### West Bengal

- Observed 'National Technology Day – 2018' on the theme 'Science and Technology for a Sustainable Future' on May 11, 2018.

## LOCAL CENTRES

### Ahmednagar

- Lecture on 'Intellectual Property (IP) & IP Management' delivered by Mr Bharatbhushan Bhagwat, Govt. Registered Valuer and Certified IP Valuer and Past Honorary Secretary of the Centre on March 23, 2018.
- Celebrated 'National Technology Day – 2018' on May 11, 2018.
- Organized 'Engineers Interactive Meet' for proposed Biopic of Sir M Visvesvaraya – Soch Engineer Ki: Visvesvaraya' on May 24, 2018.

### Ananthapuram

- Celebrated 'Sir Arthur Thomas Cotton Birthday' on May 15, 2018.
- Celebrated 'Water Resources Day' on May 31, 2018.

### Bhimavaram

- Celebrated 'World Water Day 2018' on March 22, 2018.
- Lecture on 'Coal to Power' delivered by Mr Y Surya Prakash, Manager, National Thermal Power Corporation, Visakhapatnam on March 27, 2018.
- Seminar on 'Advanced Developments in Surveying' on the eve of National Survey Day on April 10, 2018.
- Seminar on 'Management of Land and Water Resources & Adverse Scenarios to be raised in the Highly Deltaic Plain Godavari' on the eve of Worlds Earth Day in association with Andhra Pradesh State Centre of the Institution on April 22, 2018.

### Coimbatore

- Seminar on 'Technology and Trends in Industrial Textiles' on April 13, 2018.

### Durgapur

- Technical Visit to Indian Oil Corporation Ltd. (IOCL), Rajbandh and



organized an Interaction & Lecture Session between the Head of the Project of IOCL with the Members of the Centre on April 28, 2018

- Celebrated 'National Technology Day 2018' on May 11, 2018.

#### Gwalior

- Celebrated 'National Technology Day – 2018' on May 11, 2018.

#### Kalpakkam

- Lecture on 'Design Aspects of EOT Crane' delivered by Mr S Arumugam, SO/F, Indira Gandhi Centre for Atomic Research, Kalpakkam on May 21, 2015.

#### Madurai

- Lecture on 'Disaster Management in Coconut Palm at Farm Level' delivered by Mr Bharathi Karupppiah, Certified SAP Consultant and Practicing Agriculturist on April 21, 2018.
- Lecture on 'Contemporary Dentistry' delivered by Dr J Kannaperuman on May 12, 2018.

#### Meerut

- Lecture on 'Arsenic Problem' delivered by Dr S C Prasad on May 20, 2018.

#### Mysore

- Celebrated 'World Water Day – 2018' on March 22, 2018.

#### Rourkela

- Celebrated 'National Technology Day 2018' on May 11, 2018.

#### Tiruchirappalli

- Lecture on 'Embedded Systems and Robotics – Research at the University of North Carolina, Charlotte' delivered by Prof James M Conrad, Associate Chair, Department of Electrical & Computer Engineering, University of North Carolina, Charlotte, USA on January 8, 2018.
- Lecture on 'NDE Methods' delivered by Mr N Dhanasekar, NDT Consultant & Visiting Faculty, Tiruchirappalli on March 6, 2018.
- Lecture on 'RLA & INSITU Metallography' delivered by Mr D Devanand,

Deputy Manager, Plant Laboratories, Bharat Heavy Electricals Limited, Tiruchirappalli on March 8, 2018.

- Lecture on 'Graphics & Animation' delivered by Mr M Rameshbabu, Senior Faculty, Ozone Technologies on March 13, 2018.
- Lecture on 'Laser Processing for Materials' delivered by Dr B Shanmugarajan, Senior Manager, Welding Research Institute, Bharat Heavy Electricals Ltd. (BHEL), Tiruchirappalli on March 16, 2018.
- Lecture on 'Management in Thirukural' delivered by Mr N Rajasekaran, Deputy General Manager, Unit 2, BHEL, Trichy on March 20, 2018.
- Organized Mega Technical Project Expo'18 on 'Energy Conservation' on March 25, 2018.
- Lecture on 'IOT Application in Agriculture' delivered by Mr J Arun Pandian, Assistant Professor & Research Scholar, Department of Computer Science & Engineering, MAM College of Engineering & Technology, Tiruchirappalli on March 27, 2018.
- Lecture on 'Experiences in Cold Wire Addition in the Pipe Welding' delivered by Mr G Balakrishnan, Corporate Member of the Centre on March 30, 2018.

#### Tirunelveli

- Organised Workshop on 'Contemporary Research Avenues in EDGE Computing' on March 3, 2018.

#### Tirupati

- Demonstration on 'Total Station Surveying' on February 17, 2018.
- Organized 'Anokshya Technical Programme' during March 10-11, 2018.
- Technical Symposium on 'E-Blaze - 2k18' during March 14-15, 2018.
- Observed 'World Customer Rights Day – 2018' on March 15, 2018.
- Organized 'Technical Quiz Programme' during March 22-23, 2018.

#### Visakhapatnam

- Celebrated 'National Technology Day 2018' on May 11, 2018.
- Celebrated 216th Birthday of 'Sir Arthur Thomas Cotton' on May 15, 2018.

## Integrating Climate Change Adaptation into Environmental Impact Assessment

**Kanchepuram Local Centre** of the Institution in collaboration with the Department of Civil Engineering, Jerusalem College of Engineering, Chennai, organized All India Workshop on "Integrating Climate Change Adaptation into Environmental Impact Assessment" under the aegis of Environmental Engineering Division Board of IEI during January 29-30, 2018 at Chennai. Dr R Venkatesan, Chairman of the Centre presided over the function. The Chief Guest, Dr K Palanivelu, Director, Center for Climate Change & Adaptation, Anna University, Chennai, in his speech, highlighted about the climate

change trends and the innovation in current research on pollutant emission. He further stressed that the probable challenges associated with the researches related to climate change have to be resolved. Earlier, Prof N S Elangovan, Head, Department of Civil

Engineering, Jerusalem College of Engineering (JCE), Chennai welcomed the guests and dignitaries. On this occasion, Mr M Sivakumar, Scientist 'D', Central Ground Water Board delivered the lecture on "Climate Change: Impact on Water". A large number of participants were present in the event. The function was concluded with vote of thanks proposed by Dr S Anne Ligeria, Dean (Academics), JCE, Chennai. Various eminent personalities delivered the lectures during different technical sessions.

# IEI DIARY



## Aerospace Engineering Division

One Day Seminar on **"Additive Manufacturing Technologies for Aerospace Applications"**  
Hyderabad, July 15, 2018  
The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana [☎ : 040-233114969; e-mail: telanganasc@ieiindia.org; website: www.ieitsc.org]

All India Seminar on **"Engineering Insight into Design and Testing of Aircraft Engine Components"**  
Bangalore, September 18-19, 2018  
The Honorary Secretary, IEI, Karnataka State Centre, 3, Dr B R Ambedkar Veedhi, Bangalore 560001 [☎ : (080) 22264698; Telefax: (080) 22256191; e-mail: karnatakasc@ieiindia.org; website: www.ieiksc.org]

Thirty-second National Convention of Aerospace Engineers on **"Advances in Aerospace Sciences and Technologies"**  
Ranchi, October 27-28, 2018  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Ranchi 834002 [☎ : (0651) 2491344; web: ieijsc.org; e-mail: jharkhandsc@ieiindia.org]

## Agricultural Engineering Division

All India Seminar on **"Qualitative and Quantitative Improvements in Farm Products through Innovative Technology"**  
Berhampur, July 19-20, 2018  
The Honorary Secretary, IEI, Berhampur Local Centre, C/o The Executive Engineer, Quality Control Division, Courtpetta, Dist Ganjam, Berhampur 760004 [e-mail : berhampurlc@ieiindia.org]

Thirty-second National Convention of Agricultural Engineers on **"Agricultural Engineering for the Sustainable Rural and Agriculture Development in India"**  
Kota, August 18-19, 2018  
The Honorary Secretary, IEI, Kota Local Centre, Near E S I Hospital, Jhalawar Road, Kota 324 005 [☎ : 0744-2428250/9461655704; e-mail: kotalc@ieiindia.org]

Thirty-third National Convention of Agricultural Engineers on **"Commercial Crops Processing and Value Addition"**  
Agartala, August 10-11, 2019  
The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Near Tripura Housing Board, P. O. Kunjaban, PB No 139, Agartala 799 006 [☎ : 0381-2304700; Fax: 0381-2304700; e-mail: tripurasc@ieiindia.org]

International Conference on **"Role of Agricultural Engineering towards Global Food Security"**  
Bangalore, April 11-13, 2019  
The Honorary Secretary, IEI, Karnataka State Centre, 3, Dr B R Ambedkar Veedhi, Bangalore 560001 [☎ : (080) 22264698; Telefax: (080) 22256191; e-mail: karnatakasc@ieiindia.org; website: www.ieiksc.org]

## Architectural Engineering Division

All India Seminar on **"Application of RERA in Society"**  
Goa, August 18-19, 2018  
The Honorary Secretary, IEI Goa State Centre, D Type Quarters, D-8-1 Government Polytechnic Campus Altinho Panaji Goa 403 001 [☎ : 0832-2434686; e-mail: goasc@ieiindia.org]

All India Seminar on **"Architectural Engineering for First Track Constructions"**  
Nashik, September 09-10, 2018  
The Honorary Secretary, IEI, Nashik Local Centre, PWD Campus, Bharat Ratna Sir Visvesvaraya Marg, Nashik 422 002 [☎ : 0253-2317701/2582500; e-mail: nashiklc@ieiindia.org]

International Conference on **"Architectural Innovations: Engineering, Technology and Materials"**  
Jaipur, November 10-12, 2018  
The Honorary Secretary, IEI, Rajasthan State Centre, Gandhi Nagar, Tonk Road, Jaipur 302 015 [☎ : 0141-2706327/2700413; Fax: 0141-2700413; e-mail: rajasthansc@ieiindia.org]

Thirty-fourth National Convention of Architectural Engineers on **"Architectural Engineering for Socio-economic Development"**  
Mangalore, November 24-25, 2018  
The Honorary Secretary, IEI, Mangalore Local Centre, 2nd Floor Opal Complex, Opp Bejai Church Bejai, Mangalore 575 004; [☎ : 0824-2400112; e-mail: mangalorelc@ieiindia.org]

## Chemical Engineering Division

All India Seminar on **"Recent Trends in Chemical Engineering and Biotechnology in Mitigation of Global Warming"**  
Kolkata, August 17-18, 2018  
The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700 020 [☎ : 033-22238914; Fax: 033-22233140; e-mail: wbsc@ieiindia.org]

All India Seminar on **"Waste Management For Sustainable Development"**  
Berhampur, August 17-18, 2018  
The Honorary Secretary, IEI, Berhampur Local Centre, C/o The Executive Engineer, Quality Control Division, Courtpetta, Dist Ganjam, Berhampur 760004 [e-mail : berhampurlc@ieiindia.org]

All India Seminar on **"Innovation and Entrepreneurial Opportunities in Advance Biotechnology"**  
Hosur, September 07-08, 2018  
The Honorary Secretary, IEI, Hosur Local Centre, 69 Kamaraj Nagar, Kumudapall, Near Adhiyamaan College of Engineering, Hosur 635109, Tamilnadu [e-mail: hosurlc@ieiindia.org]

Thirty-fourth National Convention of Chemical Engineers on **"Bio-degradable Materials and Bio-technology for Environmental Protection in Chemical and Pharmaceutical Industries"**  
Chennai, October 26-27, 2018  
The Honorary Secretary, IEI, Tamilnadu State Centre, 19 Swami Sivananda Salai, Chepauk, Chennai 600005 [☎ : (044) 25360614/64998729; e-mail: tnscc@ieiindia.org]

## Civil Engineering Division

Workshop on **"Disaster: Its Preparedness, Mitigation and Capacity Building"**  
Agartala, July 07, 2018  
The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Near Tripura Housing Board, PO : Kunjaban, PB No. 139, Agartala 799006, Telefax : 0381-2304700 [email : tripurasc@ieiindia.org]

Workshop on **"Latest Provisions for Life and Fire Safety in NBC – 2016"**  
New Delhi, July 07, 2018  
The Honorary Secretary, IEI, Delhi State Centre, Engineers Bhawan, Bahadur Shah Zafar Marg, New Delhi 110002 [☎ : (011) 23379052/23379948; Fax: (011) 23370489; e-mail: delhisc@ieiindia.org]

All India Seminar on **"Application of EPC Contract in Highways : Opportunities and Challenges"**  
Ranchi, July 21-22, 2018  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Ranchi 834002 [☎ : (0651) 2491344; web: ieijsc.org; e-mail: jharkhandsc@ieiindia.org]

One Day Seminar on **"Alternatives to the Cement, Natural Sand and Aggregates in Modern Construction Practices"**  
Erode, July 23, 2018  
The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieiindia.org]

All India Seminar on **"Recent Developments in Concrete Composites"**  
Hyderabad, August 24-25, 2018  
The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana [☎ : 040-233114969; e-mail: telanganasc@ieiindia.org; website: www.ieitsc.org]

Workshop on **"Revisions of National Building Code – 2016"**  
Madurai, August 25, 2018  
The Honorary Secretary, IEI, Madurai Local Centre, Er T M Jambulingam Bhavan, No. 1, Vivekananda Nagar, 120 Feet Road, Surveyor Colony, K Pudur, Madurai 625007 [☎ : 0452-4373067; e-mail: madurailc@ieiindia.org]

All India Seminar on **"Concrete and Steel Structures – Care for their Health and Longevity"**  
Bokaro, August 25-26, 2018  
The Honorary Secretary, IEI, Bokaro Steel City Local Centre, Abhiyanta Bhavan, Sector 5A, Bokaro Steel City 827006 [☎ : (06542) 267227 / 288972; e-mail: bokarolc@ieiindia.org]

All India Seminar on **"Reuse and Recycle of Wastewater"**  
Erode, August 30-31, 2018  
The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieiindia.org]

## Computer Engineering Division

One Day Workshop on **"Machine Learning Using Python"**  
Kanchepuram, July 04, 2018  
The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [e-mail: kanchepuramlc@ieiindia.org]





### One Day Workshop on “Deep Learning & Its Engineering Applications”

Kanchepuram, July 13, 2018

The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [e-mail: kanchepuramlc@ieindia.org]

### One Day Seminar on “Cost Effective Solutions for Selection of Cloud Services Using Multi-Criteria Decision-Making Model”

Erode, July 25, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

### One Day Workshop on “Wireless Sensor Networks”

Chandigarh, August 17, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Madhya Marg, Sector 19-A, Chandigarh 160019 [☎: (0172) 2775418; Fax: (0172)2540133; e-mail: pcsc@ieindia.org]

### All India Seminar on “Cyber Physical Systems for Digital India and Sustainable Development”

Dehradun, September 06-07, 2018

The Honorary Secretary, IEI, Uttarakhand State Centre, P.O. Clement Town, Delhi-Saharanpur Road, Near ISBT Flyover, Dehradun 248002 [Telefax: (0135) 2641190; e-mail: uttarakhandsc@ieindia.org; website: www.ieiuksc.org]

### All India Seminar on “Big Data Security and Privacy – A Challenge to Business Intelligence”

Kolkata, September 07-08, 2018

The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [☎: (033)22238914; Fax: (033) 22233140; e-mail: wbsc@ieindia.org]

### All India Seminar on “Human Re-Engineering”

Ghaziabad, September 28-29, 2018

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15 Shopping Complex, ALTT Centre, Rajnagar, Ghaziabad 201002 [☎: 0120-2728699/2702673; e-mail: ghaziabadlc@ieindia.org]

### All India Seminar on “Internet of Things (IoT) – Standards and Protocols”

Bangalore, October 09-10, 2018

The Honorary Secretary, IEI, Karnataka State Centre, 3, Dr B R Ambedkar Veedhi, Bangalore 560001 [☎: (080) 22264698; Telefax: (080) 22256191; e-mail: karnatakasc@ieindia.org; website: www.ieiksc.org]

### All India Seminar on “Recent Trends in Image Processing for AI Implementation”

Chandigarh, October 22-23, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Madhya Marg, Sector 19-A, Chandigarh 160019 [☎: (0172) 2775418; Fax: (0172)2540133; e-mail: pcsc@ieindia.org]

### Thirty-third National Convention of Computer Engineers on “Computer Cognitions and Intelligent Systems”

Ghaziabad, February 15-16, 2019

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15 Shopping Complex, ALTT Centre, Rajnagar, Ghaziabad 201002 [☎: 0120-2728699/2702673; e-mail: ghaziabadlc@ieindia.org]

## Electrical Engineering Division

### All India Workshop on “Embedded System for Real-Time Power Electronics Applications”

Kanchepuram, July 20-21, 2018

The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [e-mail: kanchepuramlc@ieindia.org]

### One Day Seminar on “Evolution of Fuel Cell Technology in Autonomous Vehicles using Internet of Vehicles (IoV)”

Salem, July 27, 2018

The Honorary Secretary, IEI, Salem Local Centre, 3rd Floor, SPC Bhawan, No.104/7, Manivannan Street, Opp to Salem New Bus Stand, Salem 636004, Tamilnadu [☎: (0427) 2332544; e-mail: salemc@ieindia.org]

### All India Seminar on “Renewable Energy for Sustainable Development”

Ghaziabad, July 27-28, 2018

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15 Shopping Complex, ALTT Centre, Raj Nagar, Ghaziabad 201002 [☎: 0120-2702673; e-mail: ghaziabadlc@ieindia.org]

### One Day Workshop on “Designing of Embedded Systems using Arduino”

Salem, August 17, 2018

The Honorary Secretary, IEI, Salem Local Centre, 3rd Floor, SPC Bhawan, No.104/7, Manivannan Street, Opp to Salem New Bus Stand, Salem 636004, Tamilnadu [☎: (0427) 2332544; e-mail: salemc@ieindia.org]

### All India Seminar on “Energy Management and Audit”

Vallabh Vidyanagar, September 23-24, 2018

The Honorary Secretary, IEI, Gujarat State Centre, Bhaikaka Bhavan, Law College Road, Ahmedabad 380 006 [☎: 079-26400811; Fax: 079-26561825; e-mail: gujaratsc@ieindia.org]

### International Conference on “Recent Developments in Clean and Safe Nuclear Power Generation”

Hyderabad, October 03-05, 2018

The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana [☎: 040-233114969; e-mail: telanganasc@ieindia.org; website: www.ieitsc.org]

### Thirty-fourth National Convention of Electrical Engineers on “Recent Advancement in High Voltage Direct Current (HVDC) Transmission”

Agartala, November 16-17, 2018

The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Near Tripura Housing Board, PO : Kunjaban, PB No. 139, Agartala 799006, Telefax : 0381-2304700 [email : tripurasc@ieindia.org]

### All India Seminar on “Renewable Energy Technologies: Perspectives and Challenges”

Chandigarh, November 16-17, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [☎: 0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

### All India Workshop on “Application of Power Electronics in Electrical Systems”

Chandigarh, January 15-16, 2019

The Honorary Secretary, IEI, Punjab & Chandigarh

State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [☎: 0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

## Electronics & Telecom. Engg. Division

### One Day Workshop on “PCB Design, Fabrication and Assembly”

Kanchepuram, July 18, 2018

The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [e-mail: kanchepuramlc@ieindia.org]

### All India Workshop on “Internet of Things through Long-term Evolution Network”

Kanchepuram, July 23-24, 2018

The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [e-mail: kanchepuramlc@ieindia.org]

### One Day Seminar on “Wavelet Video Processing Technology”

Erode, August 14, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

### All India Workshop on “Advance Wireless Communication and Its Implications”

Chandigarh, September 10-14, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [☎: 0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

### All India Workshop on “Machine Learning for Intelligent Image Processing”

Chennai, September 27-28, 2018

The Honorary Secretary, IEI, Tamilnadu State Centre., 19 Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: (044) 25360614/64998729; e-mail: tnsc@ieindia.org]

### All India Seminar on “Role of Embedded System in Wireless Sensor Networks”

Chandigarh, October 12-13, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [☎: 0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

### Thirty-fourth National Convention of Electronics & Telecommunication Engineers on “Intelligent Telecommunication Networks for Sustainable Growth”

Ghaziabad, October 21-22, 2018

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15 Shopping Complex, ALTT Centre, Rajnagar, Ghaziabad 201002 [☎: 0120-2728699/2702673; e-mail: ghaziabadlc@ieindia.org]

### Thirty-fifth National Convention of Electronics & Telecommunication Engineers on “Mechatronics: Bridge between Technologies”

Pune, November 23-24, 2019

The Honorary Secretary, IEI, Pune Local Centre, Abhiyanta Bhavan, 1332, J M Road, Shivajinagar, Pune 411005, Maharashtra [☎: 020-25533376 / 25520239 / 25530150; e-mail: punelc@ieindia.org]

## Environmental Engineering Division

### One Day Seminar on “Environmental Pollution and Management”

Aurangabad, August 08, 2018



The Honorary Secretary, IEI, Aurangabad Local Centre, Railway Station Road, Osmanpura, Aurangabad 431005 [Fax : (0240) 2325621; e-mail : aurangabadlc@ieindia.org]

### Thirty-fourth National Convention of Environmental Engineers on “Environmental Pollution and Climate Change”

New Delhi, August 10-11, 2018

The Honorary Secretary, IEI, Delhi State Centre, Engineers Bhawan, Bahadur Shah Zafar Marg, New Delhi 110002 [☎: (011) 23379052/23379948; Fax: (011) 23370489; e-mail: delhisc@ieindia.org]

### All India Seminar on “Advanced Techniques for Sustainable Solid Waste Management for Green India”

Erode, October 4-5, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

### All India Seminar on “Sources of Planet Energy, Environmental & Disaster Science: Climate Disturbances & its Global Impact”

Lucknow, October 27-28, 2018

The Honorary Secretary, IEI, Uttar Pradesh State Centre, Engineers Bhawan River, Bank Colony Lucknow 226 018 [Telefax: (0522) 2625322; e-mail: upsc@ieindia.org, website: www.ieiup.org.in]

### Marine Engineering Division

### Thirty-second National Convention of Marine Engineers on “Indian Maritime Sector – An Ocean of Opportunities”

Chennai, August 16-18, 2018

The Honorary Secretary, IEI, Tamilnadu State Centre, 19 Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: (044) 25360614/64998729; e-mail: tnscc@ieindia.org]

### International Conference on “Marine Engineering and Ocean Technology – Digital Ocean”

Kanchipuram, January 30-February 01, 2019

The Honorary Secretary, IEI, Kanchipuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [e-mail: kanchipuramlc@ieindia.org]

### Mechanical Engineering Division

### One Day Workshop on “Computational Fluid Dynamics”

Kanchipuram, July 12, 2018

The Honorary Secretary, IEI, Kanchipuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [e-mail: kanchipuramlc@ieindia.org]

### All India Seminar on “Applications of Light Weight Materials and Characterisation in Automobile Industry”

Kanchipuram, August 10-11, 2018

The Honorary Secretary, IEI, Kanchipuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [e-mail: kanchipuramlc@ieindia.org]

### One Day Seminar on “Recent Trends in Condition Monitoring of Rotating Equipment in Steel, Mines and Power”

Durgapur, August 19, 2018

The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, ‘B’ Zone, Durgapur 713205 [Telefax : 0343-2564770; e-mail : ieidurgapurlc@ieindia.org]

### Thirty-fourth National Convention of Mechanical Engineers on “Mechanical Engineering and Emerging Challenges for Manufacturing”

Delhi, September 07-08, 2018

The Honorary Secretary, IEI, Delhi State Centre, Engineers Bhawan, Bahadur Shah Zafar Marg, New Delhi 110002 [☎: (011) 23379052/23379948; Fax: (011) 23370489; e-mail: delhisc@ieindia.org]

### All India Seminar on “Emerging Trends in Mechanical Materials in Engineering”

Bangalore, September 11-12, 2018

The Honorary Secretary, IEI, Karnataka State Centre, 3, Dr B R Ambedkar Veedhi, Bangalore 560001 [☎: (080) 22264698; Telefax: (080) 22256191; e-mail: karnatakasc@ieindia.org; website: www.ieiksc.org]

### All India Workshop on “Micro-machining”

Chandigarh, September 18-19, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [☎: 0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

### All India Seminar on “Optimization Techniques in Mechanical Engineering”

Chandigarh, October 04-05, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [☎: 0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

### Thirty-fifth National Convention of Mechanical Engineers, on “Exploring Trends and Developments in Automobile Engineering”

Hosur, September 13-14, 2019

The Honorary Secretary, IEI, Hosur Local Centre, No.69, Kamaraj Nagar, Kumudapall, Near Adhiyamaan College of Engineering, Tamilnadu, Hosur 635109 [e-mail: hosurlc@ieindia.org]

### Thirty-sixth National Convention of Mechanical Engineers, on “Innovations in Thermal Science and Engineering”

Agartala, September 05-06, 2020

The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Near Tripura Housing Board, P. O. Kunjaban, PB No 139, Agartala 799 006 [☎: 0381-2304700; Fax: 0381-2304700; e-mail: tripurasc@ieindia.org]

### Metallurgical & Materials Engg. Division

### All India Seminar on “Advances in Metallurgy and Manufacturing Processes”

Hyderabad, July 13-14, 2018

The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana [☎ : 040-233114969; e-mail: telanganasc@ieindia.org; website: www.ieitsc.org]

### One Day Seminar on “Green Polymer Composite and its Applications”

Kolkata, July 25, 2018

The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [☎: (033)22238914; Fax: (033) 22233140; e-mail: wbssc@ieindia.org]

### Thirty-second National Convention of Metallurgical & Materials Engineers on “Major Advances and Sustainable Developments in Materials and Metallurgical Engineering”

Jamshedpur, January 17-19, 2019

The Honorary Secretary, IEI, Jamshedpur Local Centre, Subarnarekha Link Sakchi, Jamshedpur 831 001 [☎: 0657-2234316; Fax: 0657-2230159; e-mail: jamshedpurc@ieindia.org]

### International Conference of Metallurgical & Materials Engineers on “Synthesis, Characterization and Application of Nanomaterials (SCAN)”

Kolkata, November 01-03, 2019

The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [☎: (033)22238914; Fax: (033) 22233140; e-mail: wbssc@ieindia.org]

### Mining Engineering Division

### All India Seminar on “Technological Advancement and Emerging Mining Methods”

Dhanbad, August 24-25, 2018

The Honorary Secretary, IEI, Dhanbad Local Centre, Veena Engineers’ Building, Golf Ground, Dhanbad 826001 [e-mail: dhanbadlc@ieindia.org]

### Thirtieth National Convention of Mining Engineers on “Trends and Developments in Mining Industry for Encouraging Investment”

Hosur, December 07-08, 2018

The Honorary Secretary, IEI, Hosur Local Centre, No.69, Kamaraj Nagar, Kumudapall, Near Adhiyamaan College of Engineering, Tamilnadu, Hosur 635109 [e-mail: hosurlc@ieindia.org]

### Textile Engineering Division

### One Day Seminar on “Non-woven and its Applications”

Salem, July 20, 2018

The Honorary Secretary, IEI, Salem Local Centre, 3rd Floor, SPC Bhawan, No.104/7, Manivannan Street, Opp to Salem New Bus Stand, Salem 636004, Tamilnadu [☎: (0427) 2332544; e-mail: salemlc@ieindia.org]

### All India Seminar on “Quality Evaluation Methods for Textiles”

Kolhapur, July 27-28, 2018

The Honorary Secretary, IEI, Kolhapur Local Centre, C/O Executive Engineer Minor Irrigation Division Sinchan Bhavan Tarabai Park, Kolhapur 416 003 [Mobile : 9422625485; e-mail: kolhapurc@ieindia.org]

### Interdisciplinary Coordination Committee

### International Conference on “Emerging Technologies for Sustainable and Intelligent Technologies for HVAC & R Systems”

Kolkata, July 27-28, 2018

The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [☎: (033)22238914; Fax: (033) 22233140; e-mail: wbssc@ieindia.org]

### National Languages Promotional Comm.

### All India Seminar on “Harit Evam Swachh Urja Ka Nirman Ke Upyog”

Lucknow, August 25-26, 2018

The Honorary Secretary, IEI, Uttar Pradesh State Centre, Engineers Bhawan River, Bank Colony Lucknow 226 018 [Telefax: (0522) 2625322; e-mail: upsc@ieindia.org, website: www.ieiup.org.in]



# The Institution of Engineers (India)

## REVISED PROCEDURE FOR CONDUCT OF ELECTION

(Approved by the Council at its 689th meeting held at Ahmedabad, on 02-03 April, 2016 and amended at its 690th Meeting held at Durgapur on 26 Jun 2016 and at its 691st Meeting held on 24-25 Sep 2016 at Haridwar)

1. The procedure of appointment of BOS, election of Convener, issuance of election notice, seeking of nominations, obtaining consent of the nominees, finalization of the list of contestants for respective election and finalization of the Bio data of contesting candidates remains unchanged.
  2. The proposer shall submit along with his nomination any of the acceptable identity proof document, i.e., PAN Card or Driving License or Photo ID Card issued by State / Central Govt. bearing signature or Photo ID Card of the IEI bearing signature or first page of passport bearing signature duly self attested.
  3. The personalized ballots for the election shall be printed as Optical Readable with encrypted bar code. The ballot shall have pre-printed detachable identification slip with particulars of individual voter including address with space for signature, e-mail and mobile number of the voter. The ballot shall be sent in window envelope along with the following (specification of envelopes are placed at **Appendix 1A**). A sample of ballot is also attached at **Appendix 1B**.
    - (i) Instruction to voters
    - (ii) Ballot paper with identity slip
    - (iii) One small envelope with the name of Division printed rubber stamped on it for return of ballot. (Name of Division is to be printed for Division elections only)
    - (iv) One self-addressed large envelope identical for all Divisions, to accommodate the smaller one containing the ballot paper, detached identity slip of the voter and self-signed photocopy of specified document, (see 5 below) attached to the smaller envelope externally.
    - (v) Bio data of candidates, if applicable [see (23) below].
    - (vi) In case elections to the Council from State Centre under Regulation 26 is held along with elections to the Divisions, then the other envelope in which the ballot for Council seat is to be returned, should have COUNCIL prominently marked on the ballot envelope, in which the ballot for Council seat is to be returned. This envelope shall not be opened along with the envelopes containing ballot papers of the Division seats.
  4. The Corporate members on the roll of the Institution as on 31 Mar of the year in which elections are due shall form the electorate college for the elections which will be prepared and supplied by the HQ IEI to the respective Centres. Those Corporate members can exercise their voting right in any of the following modes:
    - a) Either through paper Ballot which shall be issued to the Corporate members by speed post or registered post.
    - b) Or by electronic system in which the log in credentials for online voting shall be issued to the Voters who are electronically reachable by mobile / e-mail. However, log in credentials for online voting shall be sent through e-mail only to the Corporate Members residing abroad in addition to the paper Ballot.
- A provision for test scanning of ballots based on standard random sampling method with sample size 3% of ballots to be printed needs to be adhered to. As such 3% of the ballots have to be mandatorily test scanned (for each Divisions / Council Seat separately) by BOS prior to despatch for ensuring accurate alignment of printed ballots. Software will not allow election window to open without this test scanning. The envelope containing ballot papers etc shall be despatched to eligible voters on their recorded address by speed post or registered post and record of all such despatch shall be maintained. In case of large number of such envelopes, posting be done from multiple post offices in the city.
5. The voter would be required to attach any of the identity proof document (PAN Card or Driving License or Photo ID Card issued by State / Central Govt. bearing signature or Photo ID Card of the IEI bearing signature or first page of passport bearing signature) and self attest it. In case the name in the specified document is written differently from the identity slip e.g (SURENDRA KUMAR BHAGAT Vis-a-Vis S K BHAGAT), a certificate that both names belong to same person is to be provided on the photocopy by the voter. The signature on the photocopy shall be compared with the signature on the identity slip during scrutiny.
  6. The envelope containing closed ballot envelope, identity slip and signed photo copy of specified document shall be returned to the BOS by post in a pre-printed Business Reply Envelope issued to the Voters by the Headquarters/Centre as the case may be for which the postage shall be paid by the Headquarters/Centre.
  7. The ballot shall be returnable in not less than 45 days from the last date of posting the ballot to voters. Duplicate ballots shall be issued against written request whenever received by convener of BOS and shall be sent on recorded addresses of the voter by speed post or registered post. Record of such issues shall be maintained. It should be duly marked as "DUPLICATE" on detachable identity slip.
  8. The postal ballot shall be returnable by the Voters by post only to the designated post box or post bag or to the Centre's address printed on the reply envelope and not by any other mode. The BOS will make appropriate arrangement for proper receipt of the ballots received at the Centre's office. Use of stationery other than the stationery officially supplied by the BOS shall invalidate the same.

9. The BOS shall authorize two or more of themselves to collect envelopes containing ballots from the post office (if Post Box /Post Bag is used). The envelopes containing the ballots should be dated and numbered serially. The envelopes shall remain unopened as they are received and a record of the ballots collected each day shall be maintained. The envelopes containing voting papers returned as undelivered (collected from the Post Office, if applicable) shall also be numbered separately and a record kept. The final collection shall be made immediately after the last date and time specified for return of the ballots. The envelopes received at Centre or in the Post Box / Post Bag after closing date and the time would not be counted under any circumstances.

10. The envelope shall be lodged each day in a ballot drop box which shall be housed in a room under lock and key and shall not be accessible to any one other than the BOS and shall not be removed from the said room under any plea whatsoever and shall be in the custody of BOS. Before dropping any ballot in the ballot drop box, it shall be locked and sealed in presence of the BOS after ascertaining that it is empty. The envelopes containing the ballots should be dropped into the box through the drop slit which shall be sealed under the signature of member of BOS each time after envelopes are dropped.

11. The BOS shall, after expiry of the said 45 days and on the day designated for counting votes, open the ballot box and arrange to scrutinize the voting papers with the assistance of other Corporate Members and / or the employees as may be approved by them. Scrutiny of ballots and counting of votes shall be supervised by at least three members of BOS.

#### **Scrutiny of Ballots:**

12. The BOS shall inform the candidates about date of counting of votes and shall permit the candidate or a Corporate Member as his representative duly authorized in writing to be present during counting of votes. The counting time shall be suitably finalized so as to account for the manual scrutiny of documentary proofs of voters.

13. For scrutiny, outer envelope shall be opened and inner envelope together with the identity slip of the voter and signed photo copy of specified document as mentioned in paragraph 5 above shall be sorted division-wise, rejecting all such envelopes which are found to be irregular or defaced, tampered with or found to be interfered with unwarrantably or obliterated in any way or where the signature on the identity slip does not tally with signature on the photo copy of the specified document, or is illegible or correcting fluid has been used, to make corrections.

14. Total number of smaller envelopes shall be compared with the record of collection from the post office or received at the Centre. Any discrepancy shall be recorded and sorted out to the satisfaction of the BOS before opening smaller envelopes.

15. The identity slip and signed photocopy of the voter shall then be detached and separated out. Envelopes, containing the ballot paper would be opened division wise / council wise and the ballot papers scrutinized for any irregularity or tampering and only the valid ballots shall be scanned for counting.

16. Manual counting of votes is not permissible. Counting of the ballot division-wise shall be done through scanning. The computer connected to the scanner and loaded with the special software shall give count of votes secured by each contestant. In unlikely event of two or more ballots from the same voter, the system will reject all votes of such voter and the detail of such voter, without details of the votes cast, shall be available. During the process of mediation, the total number of ballots scanned should tally with total of number of counted ballots displayed on computer. In case of discrepancy, if any, all ballot papers should be checked by physical count and rescanned, if necessary. There is no provision of manual entry of votes in the scanned data. The result of paper ballot shall be uploaded by the BOS by using their individual log-in ID and password to the specified election site. A specified minimum number of members of BOS would needed to log-in through their individual password in succession to upload the data.

The BOS can access the BOS Control Panel software only after they log-in with their membership number as log-in ID and a password. This password shall be made available to them by the Administrator. Before the first log-in, they will be required to change their password. BOS members have to create their own password and have to keep it strictly confidential.

#### **Electronic Voting:**

17. (a) Computer auto generated log-in credentials for online voting shall be sent through the mobile / e-mail to the electronically reachable members as on 31 Mar of the year on the opening day of the election.
- (b) An eligible voter visiting the Institution website [www.ieindia.org](http://www.ieindia.org) will be guided to the election portal. The voter can access the voting page of the relevant election by using log-in ID and password for voting online. A system generated One Time Password shall be sent to the registered Mobile / e-mail for casting of vote electronically. The One time Password shall have a validity of fifteen minutes. Separate One time Password shall be issued for all elections. The vote cast by a voter shall be encrypted and not available to anyone. The details of the voter by his membership number shall be available in the system. The electronic voting details cannot be downloaded and vote cast is encrypted. The bio-data of the contestants will be available for voters reference in the election portal, as well. In case of voting by both Ballot and online, the voting by Ballot will be considered valid for counting.
- (c) In case a voter misplaces his password or has not received it for any reasons, he can request for computer auto-generated log-in ID and password from the HOME page of the IEI election web site which can be accessed through [www.ieindia.org](http://www.ieindia.org), which shall be sent to his mobile / e-mail.
- (d) In case of members residing abroad who have registered their e-mail id, they will be provided the log-in credentials through his e-mail only.



### Security:

18. A voter can log in using his / her password issued to him in his / her registered mobile / e-mail on the starting day of the election. However, while casting the vote, a system generated One Time Password (OTP) shall be sent to his / her registered mobile / e-mail. Voter has to use that password for casting his / her vote. The validity of the OTP shall be for fifteen minutes only or till its first successful use whichever is earlier.

19. The election Web service provider is to provide the source code under sealed cover to the Secretary and Director General for the purpose of record and safe custody. The Source Code is not to be opened and is to be kept sealed. Also a provision is to be incorporated in the software which will allow any changes whatsoever, only after simultaneous logging of two persons out of the President / The immediate Past President / Past President (depending upon their availability) and additionally the Secretary and Director General. The software is to have provision for generating an audit trail of such changes. The software is to also have feature of automatic logging out if no activity takes place for 10 minutes. After automatic logging out, re-logging by all three to access the site is to be made mandatory.

20. Voting web site shall close at 1700 hours simultaneously with the date specified for return of ballot and no voting on web can be done thereafter.

### Final Counting:

21. On uploading the count of paper ballot to voting site, the system shall integrate count of paper ballot votes and web-based votes and final result, after eliminating dual voting or duplicate paper voting by a voter, shall be available to BOS instantly. The system shall automatically invalidate all duplicate paper Ballots found. Also in case of duplicate of votes between paper Ballot and online vote, the paper Ballot will be considered for counting. The details of duplicate voting, shall be available to the BOS after mediation of the results without voting particulars. In the event of a tie, the BOS shall decide the result by toss of coin or by drawing lots, as per the existing provision.

### Bio data:

22. The Bio data of the contestant if furnished, as finalized by the BOS, shall be uploaded on the election site. This shall be available in public domain. It shall also be available for view to the voter while casting the vote on web.

23. The Bio data of the contestants shall also be published in the Centre's Newsletter. Additionally, the Bio-data as finalized by the BOS in printed sheet shall accompany the paper ballot. [Ref 3(v) above].

### Result:

24. The BOS shall print the report on the result of the voting which shall be signed by the members of the BOS present and present the report along with connected papers to the Chairman of the Centre and forward a copy of the report to the Honorary Secretary of the Centre and also to the Secretary & Director General of the Institution for necessary action.

25. The Honorary Secretary shall immediately communicate official results of the election to the Secretary & Director General. The voting papers shall be sealed and kept by the Chairman of the Centre till 30 days after the ensuing AGM of the Centre whereafter they shall be destroyed, as per the existing proviso. The identity slips, with e-mail and mobile number written therein, shall be preserved separately and sent to HQ for updating the record of the members after expiry of the retention period of election papers before destruction.

For election to Council under Bye-law 4(a)(iii) the voting papers need to be preserved till 30 days of the Institution's AGM, whereafter they shall be destroyed. The identity slips with e-mail and mobile number written therein, preserved separately, shall be sent to HQ for updating the records of the members after expiry of the retention period of election papers, before destruction, similarly details of all the web voting shall be dealt with by the Administrator.

26. The BOS shall conduct all business of election from the premises of the Centre. In no case activities of election can be carried out from premises other than the Centre.

27. The Chairman and the Honorary Secretary in the office and the Chairman-elect and Honorary Secretary-elect shall not be members of the BOS.

28. No person shall be member of BOS for more than two consecutive elections.

29. The Chairman / Honorary Secretary of the Centre, without involving himself in operational activities of the BOS, shall oversee the functioning of the BOS to ensure that the procedure is not violated inadvertently.

In case the Chairman / Honorary Secretary himself is a candidate in any of the elections being conducted at the Centres of which he is the Chairman / Honorary Secretary and candidate(s) in the election to the Council from the Division Board, he should not be involved in any of the activities relating to the election process at the Centre. In such case, the State/Local Centre Committee may resolve to authorize an appropriate available noncandidate corporate member preferably past Chairman to oversee the functioning of the BOS without involving himself in operational activities of the BOS.

30. The Chairman of the Centre shall apply well in advance to the postal authority for allotting a Post Box / Post Bag, as applicable.

31. As decided by the Council at its 691st meeting held on 24-25 Sep 2016 at Haridwar, the candidate who desires to contest in the elections of IEI shall deposit the following earnest money:

- a) Election to the Council Seat – Rs.10,000/-
- b) Election to the State Centre Committee – Rs.5,000/-
- c) Election to the Local Centre Committee – Rs.3,000/-

## Appendix 1A

### Specification of Envelopes

The details of three envelopes for procurement/manufacture and printing for conduct of the election are as below. Please ensure that dimensions of the envelopes are not changed.

#### (a) Dimensions:

Outer Window Envelope (EV1)	:	18 x 15 cm
Business Reply Envelope (EV2)	:	17 x 14 cm
Ballot Envelope (EV3)	:	16 x 13.5 cm

#### (b) Printing on Envelopes:

##### EV1 : Window Envelope (craft / thick paper)

1. The address on the ballot identity slip visible from window shall act as address of addressees.
2. Senders Address on the left bottom

“Convener”

Board of Scrutineers

The Institution of Engineers (India)

..... Centre

##### EV2 : Business Reply Envelope (White Paper)

Postage shall be paid by addressee	No postage required if posted in India	The Convener Board of Scrutineers Post Box No..... .....Post Office
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##### EV3 : Ballot Envelope (Blue Paper)

Print or Rubber Stamp, **Division Name** and “**BALLOT ONLY**”, nothing else should be written / printed on this envelope. In case of election to the COUNCIL, print / rubber stamp word ‘COUNCIL’.

<b>BALLOT ONLY</b>  <b>DIVISION NAME</b>
--

## Appendix 1B

### Sample Ballot:

- (i) A sample of the ballot is placed below. It contains the instructions to the voters on the reverse of the ballot.
- (ii) The Ballot paper has to be printed on perfect pre-cut stationery of the specified size (11.69” X 5”), on a paper to ensure proper/accurate scanning.
- (iii) The Ballot shall be pre-printed with instructions for voters and cut mark for the identity slip, in a press, before the ballots are printed by BOS in the laser printer.

### INSTRUCTIONS FOR VOTERS

1. Tear the Identity Slip from the Ballot at the perforated mark provided.
2. Fill-in or correct the E-mail address and Mobile number and sign the Identity Slip.
3. Make a photocopy of any of the identity proof document (PAN Card bearing signature or Driving License bearing signature or Photo ID Card issued by State/Central Govt. bearing signature or Photo ID Card of the IEI bearing signature or first page of passport bearing signature) and self-attest it with your signature. In case your name on the relevant signature bearing Photo ID proof is written differently, please certify on the photocopy that names in the Identity Slip and relevant ID document are of the same person.
4. Darken properly the required number of square boxes by pencil, in blue ink or black ink on the Ballot. Place the Ballot in the small envelope **without folding it** and then seal the envelope.
5. Place the Identity Slip, self attested photocopy of your signature bearing ID document and small sealed envelope containing the Ballot, all three in the **Business Reply Envelope** and post it. No postal stamps need to be affixed.
6. Please **DO NOT USE** pin or staple on the ballot.



## Notification for R&D Grant-in-Aid (2018-19)

To promote appropriate technology, assist in building up design & research talents and, most importantly, to help in nurturing potential R&D venture amongst engineering students pursuing Diploma/UG/PG/Ph. D courses, The Institution of Engineers (India) had instituted the R&D Grant-in-Aid program way back in 2001.

Like every year, the Institution invites applications for the session 2017-2018 for funding industry-oriented R&D projects and research initiatives aimed at improving the life-style of common people from engineering students pursuing Diploma/UG/PG/Ph. D courses. The application form and guidelines are available in our website <https://www.ieindia.org>. The projects should be carried out under the guidance of faculty members who are Corporate Members (AMIE/MIE/FIE) of IEI. Membership criteria for students are as follows:

Project Category	Student/Applicant Membership
1. Diploma	Not mandatory. Membership of Student Chapter is desirable
2. UG (BE/B. Tech/AMIE/Equivalent)	Preferably 'Student Member' (SMIE)
3. PG (ME/M. Tech/Equivalent)	Should be 'Corporate Member'
4. Ph. D	Should be 'Corporate Member'

The soft copy of the duly filled-up applications (in editable format), as per the given proforma, should be sent through email to [research@ieindia.org](mailto:research@ieindia.org) and one printed copy of the same, duly sealed and signed should reach the following address:

Director (Technical)  
The Institution of Engineers (India)  
8 Gokhale Road, Kolkata 700 020

Applications received in format other than that available on our website will not be accepted. Application should be forwarded through the Guide, Head of the Department or Head of the Institution. Please note that preference will be given to project proposals received from Institutions who are members of The Institution of Engineers (India). Kindly go through the guidelines (visit link <https://www.ieindia.org/webui/IEI-Activities.aspx#RnD-Initiative>) carefully before filling up the application.

The grant is not intended for the faculty members who have access to other avenues of research funding. Proposals received will be scrutinized and the recipients of R&D Grant will be informed accordingly.

## TWENTY-SIXTH IEI CONVOCATION AND TECHNICIANS'/STUDENTS' CONVENTION

Ranchi, November 03-04, 2018

**Theme: Challenges and Opportunities in Sustainable Development**

### Sub-themes:

Technical papers are invited on following sub-themes:

- Advanced Manufacturing Creation for Sustainability
- Sustainable Design and Innovation in Product Development
- Sustainable Transport Infrastructure
- Renewable Energy and its Impact on Environment

With this in focus, papers are invited from Technician/Senior Technician members, students of polytechnics and engineering colleges for presentation in the All India Technicians'/Students' Convention to be held on November 03, 2018 at Ranchi, Jharkhand. The papers shall be on innovative ideas, design, prototype and technology development, case studies, survey details augmenting innovations, etc. pertaining to the theme so as to reach at Jharkhand State Centre latest by September 25, 2018.

Organized by: **The Institution of Engineers (India)**  
Hosted by: **Jharkhand State Centre**

### For further information, please contact :

The Organising Secretary (Convocation 2018)  
The Institution of Engineers (India)  
Jharkhand State Centre  
Engineer Bhawan, Nepal Kothi Campus  
Doranda, Ranchi 834002, Jharkhand  
Phone : 9431392111  
E-mail: [ieiconvocation2018@gmail.com](mailto:ieiconvocation2018@gmail.com)

## IVRS at IEI HQ

For General Enquiry,  
please dial IVRS No. (033) 4015 5400  
Contact for queries related to  
Examination : [exams@ieindia.org](mailto:exams@ieindia.org)  
Membership and change of address :  
[membership@ieindia.org](mailto:membership@ieindia.org)

## IEI Industry Excellence Award 2018 Request for Participation

The IEI Industry Excellence Award has been instituted to recognize industry leaders for their innovation, excellence in engineering operations and thereby, to lead their industry in competitive manner. The benchmarks created by the industries in India have included productivity, quality, safety and performance assurance thereby giving India the rightful place in the global markets. Realizing that such industries can provide the leadership to a large number of other industries in the country, it has been considered appropriate by the IEI Council to institute the IEI Industry Excellence Awards in the year 2008.

Applications in specified format (visit link: <https://www.ieindia.org/webui/IEI-Activities.aspx#industry-excellence-award>) are invited from prospective applicants for IEI Industry Excellence Award 2018. The last date of receipt of application for the Award 2018 is **August 31, 2018**. Interested applicants are requested to send their applications (5 hard copies & 1 soft copy in CD) to the below mentioned address.

The Director [Technical]  
The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700 020



# 33<sup>rd</sup> INDIAN ENGINEERING CONGRESS

Udaipur, December 21-23, 2018

Theme:

**Integration of Technologies: Emerging Engineering Paradigm**

Organized by: **The Institution of Engineers (India)**

Hosted by: **Udaipur Local Centre**

Contact : Organising Secretary, 33rd Indian Engineering Congress, The Institution of Engineers (India), Udaipur Local Centre  
128 Hiran Magri, Sector 11, Near Seva Charitable Hospital, Udaipur 313002  
E-mail: [udaipurloc@ieiindia.org](mailto:udaipurloc@ieiindia.org)

## IEI AWARDS

The Steel Authority of India Ltd (SAIL) had instituted two Awards, namely, SAIL AWARD and DR M VISVESVARAYA AWARD to be given away every year during the Indian Engineering Congress to author/s of the articles adjudged best on selected topics. The topics for the year 2018 are given hereunder.

### SAIL AWARD

**'Emerging Trends in Slag Management in Steel Industry'**

### DR M VISVESVARAYA AWARD

**'Managing the Logistics Cost to Reduce the Cost of Crude Steel Production'**

The Coal India Ltd (CIL) had instituted an Award to perpetuate the memory of Late J G Kumaramangalam, its first Chairman to be awarded every year during the Indian Engineering Congress to author/s of the articles adjudged best on a selected topic. The topic for the year 2018 is given below.

### COAL INDIA (J G KUMARAMANGALAM MEMORIAL) AWARD

**'A Realistic Glimpse into India's Energy Security in Foreseeable Future. Can Renewable Alternatives Really Push Aside Coal from its High Energy Pedestal ?'**

Intending contributors are requested to submit their articles (visit <https://www.ieindia.org/webui/IEI-Publication.aspx> for guidelines) in quadruplicate to Director (Technical), The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700 020 by **July 31, 2018**.



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## Superannuation from IEI



Mr Parthasarathi Saha, an employee of the Institution HQ will be superannuated from the services of IEI on June 30, 2018. He joined the Institution on July 1, 1985 and rendered his services to the Institution for a period of 33 years.

IEI wishes Mr Parthasarathi Saha and his family a happy and healthy life in future.

# IEI NEWS

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