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Volume 68 Number 5

Emerging Technologies in Steel Processing and Forming

Jharkhand State Centre of the Institution in association with Heavy Engineering Corporation Limited, Ranchi, organized a two-day National Conference on the theme "Emerging Technologies in Steel Processing and Forming" under the aegis of Interdisciplinary Coordination Committee, IEI, during April 14-15, 2018 at Ranchi. The programme started with welcome address by Mr Sanjay Sen, Chairman of the Centre, highlighting the importance of technologies in the steel sector to make it cost-effective. He mentioned that Jharkhand State Centre, IEI has also organized National Convention of Metallurgical Engineers along with National Seminar on India achieving 300 MTPA steel production by 2030. Mr Sen also thanked Mr Sisir Kumar Banerjee, President, IEI, for gracing the occasion and presiding over the programme. The Chief Guest of the inaugural function was Mr Sunil Kumar Barnwal, Principal Secretary to the Chief Minister, Government of Jharkhand, In his address, the Chief Guest mentioned that in today's scenario, steel sector is under tremendous pressure and



needs newer technologies and improved efficiencies which will boost the Indian Steel sector indices. He mentioned that Jharkhand State is fortunate enough that it holds India's first Steel Plant installed and presently more than 30% steel production is made in this state. Mr Barnwal further informed that Jharkhand by virtue of having enormous wealth of minerals is most suitable for setting up a steel plant and presently, Jharkhand is known for world class steel products manufactured by integrated steel plants like SAIL & Tata Steel. He mentioned that the Government of Jharkhand has blessed with HEC, the mother industry of India; MECON, the world class consultant in Iron & Steel Sector; NML at Jamshedpur, the research laboratory; and SAIL-RDCIS for the development of emerging technologies for steel processing and metal forming. Mr Barnwal hoped that the outcome of the Conference should help Govt. of Jharkhand and thereby Govt. of India for sustainable growth of Indian Steel Sector. Mr Sisir Kumar Banerjee, President, IEI, in his address, stressed on the importance of the interaction between academia and the industry for developing various technologies to cater to the requirement of industry. He informed that IEI having pan India institutional members from engineering colleges and industry is providing grant-in-aid for various research works for the benefit of the industry and society at large. 'The basic objective of the R&D initiative of IEI is to inculcate the culture of research in the budding engineers, so that, they can contribute to the development of the nation', opined Mr Banerjee. The President also thanked HEC for partnering with Jharkhand State Centre of IEI for organizing National

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From the President's Desk.....



The Institution of Engineers (India) will be completing 100 years of its existence in 2020 marking centenary of contribution nation's development. To celebrate this occasion, IEI has been organising various events to mark the occasion commencing

from 2015 onwards. As part of these celebrations, the Telangana State Centre of IEI will be organising an International Conference on "Recent Developments in Clean and Safe Nuclear Power Generation" from 3rd to 5th October, 2018. This Conference would highlight the present emphasis in meeting the increasing global energy needs on adopting and enhancing the role of low carbon energy technologies. The current status and emerging technologies in the domain of nuclear power generation will also be discussed during this International Conference. Senior experts from India and abroad would be sharing their expertise and experience and discuss the prospects and challenges of nuclear power generation.

Societal Engineering encapsulates the purpose and potential of engineering for development of society and the nation. The aim of Societal Engineering is to cater to the daily requirement of life with powerful, quantitative and creative problem-solving skills of engineers. Societal engineers use their engineering experience in a way that makes them passionate about improving quality of life through innovation and appreciating the challenges in the current society. A combination of specific skill sets like global awareness; systems-level thinking, understanding the innovation and entrepreneurial process from product design to deployment and effective communication are the basic foundations for achieving the goal. It is also important to understand the effect of public policies on technology innovation and advancement. The societal engineers will therefore not only need to have engineering and technological insights but also the ability to interact with people from varied backgrounds and disciplines to comprehend grass-root level issues. Therefore, engineering education and practice has to vector in these aspects to address the emerging paradigm of societal engineering and its multi-dimensional attributes.

Innovative Mechanization for Small and Marginal Farmers Under Rainfed Areas

Kerala State Centre of the Institution organized a two-day All India Seminar on the theme 'Innovative Mechanisation for Small and Marginal Farmers Under Rainfed Areas' under the aegis of Agricultural Engineering Division, IEI, during May 25-26, 2018 at Thiruvananthapuram. Mr Udaya Kumar K S. Honorary Secretary of the Centre, welcomed the guests and dignitaries. Mr N Raikumar, Chairman of the Centre, presided over the function and delivered the presidential address. Mr Justin Mohan, Director, Soil Conservation and Mission Director, State Horticultural Mission, Kerala inaugurated the Seminar and delivered his address. The dignitaries graced the inaugural session with their august presence included: Mr A M Sunil Kumar, Director of Agriculture; Dr U Jayakumaran, CEO, Agro Service Centre and Karshika Karma Sena; Dr P Selvaraj, Deputy General Manager, NABARD; and Dr Feby Varghese, Managing Director, KSIE. Dr P Selvaraj delivered the keynote address. An electronic version of Souvenir containing proceedings of the Seminar was released during the inaugural session by Mr Justin Mohan. The inaugural function was concluded with the vote of thanks proposed by Mr S Radhakrishnan, Past Chairman of the Centre. An Exhibition where a number of reputed organizations participated was also organized on this occasion. A Panel Discussion exclusively for the farmers and entrepreneurs to know the latest developments in the field of agricultural engineering was also organized which was conducted by Dr V Ganesan, Former Dean, Agricultural Engineering College, Kerala Agricultural University. A large number of technical papers on various subthemes of the Seminar, such as, Farm Power and Machinery, Irrigation and



Drainage Engineering, Food Processing and Value Addition, Soil and Water Conservation Engineering, Non-conventional Energy Sources, etc., were presented and discussed during technical sessions. Mr K Raju, Hon'ble Minister for Forests, Government of Kerala, graced the Valedictory Function as the Chief Guest. In his address, Mr Raju highligheted various problems faced by the farmers with special reference to paddy cultivating farmers. Pointing out the need of small farm mechanization in the state, Hon'ble Minister stressed the necessity of organizing such types of seminars at various places in Kerala.

Smart Grid Technology

Kota Local Centre of the Institution organized a two-day All India Seminar on the theme 'Smart Grid Technology' under the aegis of Electrical Engineering Division, IEI, during June 2-3, 2018 at Kota. Mr R R Tanwar, Chairman, Electrical Engineering Division Board, IEI, graced the occasion as the Chief Guest. Mr Tanwar thanked the organizer for choosing such an apt theme for the Seminar. He elaborated the theme and suggested to send the recommendations of the Seminar to various government bodies. Mr S Paul Majumder, General Manager, CESC, graced the Seminar as the Guestof-Honour. Mr Majumder, in his address mentioned that several projects having Smart Grid Technology were being implemented in CESC which would be discussed in the technical sessions by the engineers from CESC. The Keynote Speaker, Prof (Dr) R A Gupta, Eminent Professor, NIT Jaipur and Honorary Secretary, Rajasthan State Centre, IEI, spoke about the Smart Grid through which we need to provide 24X7 quality power from generating units to the stakeholders through transmission & distribution network in most efficient manner at low cost. He mentioned that use of IT enabled digital technology is not only a tool in hand but roles of dedicated efforts of implementing agencies are equally important. Prof Gupta cited some examples of Discoms where implementation of technology has made the grid management efficient by flattening the load curve and also providing two-way digital communications between distribution network and the customers. Mr A K Gupta, Convener of the event, stressed on the need of this kind of Seminar particularly in current scenario of Power Transmission



& Distribution Network which calls for latest technology to be adopted to make the Grid Smart for delivering quality power 24X7 to the end users, at low cost by establishing two-way communication and integration of all grid connected conventional and renewable energy generating sources. Earlier, Mr C K S Parmar, Chairman of Kota Local Centre, IEI, welcomed all the distinguished guests and dignitaries. Mr S K Calla, Council Member, IEI, presided over the function and addressed the gathering. Mr Ashish Gupta, Chairman, Rajasthan State Centre, IEI also attended the Seminar. Mr Jasamat Singh, Honorary Secretary of Kota Local Centre, IEI expressed his gratitude to the dignitaries and proposed the vote of thanks. A Souvenir containing technical papers of the Seminar was brought out and released on this occasion. A large number of papers embracing the theme of the Seminar were presented and discussed during technical sessions.

President inaugurates new Office Building at North Bengal Local Centre of IEI



Mr Sisir Kumar Banerjee, President, IEI inaugurated new Office Building of North Bengal Local Centre of the Institution at the premises of Jalpaiguri Government Engineering College, West Bengal on July 17, 2018.

Recent Advances in Electronics Design, Technologies and Applications

Bareilly Local Centre of the Institution in association with Moradabad Institute of Technology (MIT), Moradabad organized a two-day All India Seminar on the theme 'Recent Advances in Electronics Design, Technologies and Applications' under the aegis of Electronics & Telecommunication

Engineering Division, IEI during April 20-21, 2018 at Moradabad. The Seminar started welcome address delivered by Dr Pankaj Omprakash Sharma, Honorary Secretary of the Centre who presided over the Inaugural Session. Mr Satish Chandra, Superintendent of Police, Traffic, Moradabad was the Chief Guest and Mr Ambrish Kumar, RTO, Moradabad, was the Guestof-Honour. Prof A K Gupta, MIT. Chairman, Moradabad



(T.C.), highlighted various activities and field of studies of MIT. Prof (Dr) B P Singh, Director, MIT, Moradabad, elaborated the theme of the Seminar. A Souvenir was brought out on this occasion which was released by the Chief Guest, Guest-of-Honour and other dignitaries. Prof (Dr) S S Bedi, FET, MJPR University, Bareilly, delivered Keynote Address on the topic 'Recent Advances in Electronics Design, Technologies and Applications'. He briefed about the state-of-the-art presentation of the latest concepts, methods, algorithms, techniques, procedures and applications of the fascinating field of Computer Science and Engineering. Mr K B Agarwal, Past Chairman, delivered Keynote Address on the topic 'Renewable Energy: Some Aspects'. He stated that renewable energy resources (solar, wind and biomass) are the most fundamental of natural resources that should be harnessed for

the development of the country. He stressed the need for comprehensive renewable energy resources management. Dr Kshitij Shingal, Associate Professor, Department of Electronics & Communication Engineering, MIT, Moradabad, gave his presentation on the topic 'Industrial Monitoring and

Controlling Using IoT'. He proposed an efficient implementation of IoT (Internet of Things) used for monitoring and controlling the home appliances via World Wide Web. He informed that home automation system uses the portable devices as an user interface which can communicate with home automation network through Internet gateway, by means of low power communication protocols like Zigbee, Wi-Fi etc. Dr Bharat Bhushan Agarwal and Dr Devendra Singh, IFTM University, Moradabad, presented their paper on the topic 'Nanotechnology:

The Future is Coming Sooner Than You Think'. They explained that enhanced abilities to understand and manipulate matter at the molecular and atomic levels promise a wave of significant new technologies over the next five decades. In this respect, they felt that dramatic breakthrough will occur in diverse areas, such as, medicine, communications, computing, energy and robotics. Papers on various aspects, including, 'GFDM: A New Waveform Candidate for 5G'; 'Brain Sensor Based Home Automation'; 'Hetnet -- Heterogeneous Network'; 'A Review on Super Accurate Global Positioning System'; 'Industrial Monitoring and Controlling Using IoT '; 'Fully Automatic Solar Grass Cutter'; 'A Mission of Smart Villages with Solar Energy'; were presented and discussed during technical sessions of the Seminar.

Strategic Innovation & Problem Solving for Engineers & Entrepreneurs

Kerala State Centre of the Institution in association with the Kerala State Council for Science, Technology and Environment (KSCSTE), Government of Kerala organized a two-day All India Seminar on the theme 'Strategic Innovation & Problem Solving for Engineers & Entrepreneurs' under the aegis of Interdisciplinary Coordination Committee of IEI during April 21-22, 2018 at Thiruvananthapuram. Mr K Muraleedharan, Hon'ble MLA, Thiruvananthapuram, in his Inaugural Address, stressed upon the need for training the budding engineers beyond their text book knowledge alone considering the practical applications and societal needs. 'The development should be based on the environmental conditions of the locality and without much destruction of the existing environment', he opined. Mr Muraleedharan urged the organizers of the Seminar to give proper training to young engineers and students by utilizing the vast treasure of experience of senior engineers. Mr N Rajkumar, Chairman of the Centre, presided over the inaugural session. In his address, Mr Rajkumar highlighted the role of IEI for moulding engineers and entrepreneurs for the development of the society and the nation. He further stated that IEI has experienced engineers in all engineering disciplines and can share their experiences to the budding engineers through this kind of Seminars. Dr P V Venkitakrishnan, Chairman, SME Thiruvananthapuram, in his address, emphasized the need for creating an innovation culture, thinking culture, attending the requirements timely and developing ideas to solve the problems arising rather than creating a crisis. Dr G Ayyappan, Chairman, AeSI, stated that innovation will modernize and



improve the living standards and also improve the society. Prof Nandan S, IEEE Kerala Section, stressed the need for a footprint as an entrepreneur and suggested to create a platform to discuss and interact on innovative ideas within a specified time period. He mentioned that necessary action should be taken to solve the problems considering different possibilities by innovation technique. Prof D S Antuvan, SSI, pointed out some essential aspects of innovation, viz. design and research, entrepreneurship, implementation skill and end use, which should be looked into and the ideas should be conceived properly, planned and executed timely. Earlier, Mr Udaya Kumar K S, Honorary Secretary of the Centre, welcomed the gathering. Mr S Radhakrishnan, Past Chairman of the Centre proposed the vote of thanks. A large number of papers from resource persons embracing the theme of the Seminar were presented and discussed during technical sessions.

Innovative Technical Education

Durgapur Local Centre of the Institution organized a two-day All India Seminar on the theme 'Innovative Technical Education' under the aegis of Interdisciplinary Coordination Committee, IEI during April 20-21, 2018 at Durgapur. The Chief Guest, Prof (Dr) Subrata Kumar Dey, Pro Vice Chancellor, MAKAUT, spoke about the present trends and future of educational states in India. He elaborated on history of engineering education & creativity and



innovation associated with the subject. He mentioned that CSIR labs were set up with the aim of self-reliant and towards a developed country. He further informed that these labs were basically for research purposes and due to demand of industry, engineering colleges like IITs and NITs were established where education and research facilities are also given for the creative students and faculty members. Prof Dey felt that students should be allowed to make models and more industry visits will give them a boost to technical education. Prof (Dr) Harish Hirani, Director, CMERI and the

Guest-of-Honour on this occasion, mentioned that we need to develop creativity by practical work and industry work. He stated that the present education scenario is greatly influenced and highly driven by technology. Prof Hirani further mentioned that the classroom is the original cultivator of true learning and the green house that nurtures talent and creativity. 'To optimize the learning experience, schools and colleges in India are vying to embrace innovative methods, installing the latest educational technology and encouraging teachers to be more creative than ever', opined Prof Hirani. He concluded by giving examples of technical education innovation, such as. audio visual supplements, flip methodology in class room, role play, peer teaching etc. The other Guest-of-Honour, Dr C T Bhunia, Director, Rahul Foundation, in his Keynote Address stressed on developing need based country specific indigenous technology rather than borrowing technology from other countries. He mentioned that technical education requires a space out of the hands of so called experts who are basically copy masters rather than innovators. 'There is a crying need to hand over education in the hands of innovators who aspire to be leaders rather than copy masters', he added. Dr P K Sinha, Principal, Durgapur Institute of Advanced Technology & Management (DIATM), deliberated on the teaching techniques which are required to be adopted for better academic conditions and for improved system. He suggested that syllabus should be revised every 3 to 5 years and students should be encouraged to do projects like robotics and solar energy generation. Dr Sinha concluded with the remark that the leveraging expanded access to technology to help students learn with the tools like solar-powered tablets, durable laptops, and permanent Internet stations are being used to make learning and teaching faster, easier, and more efficient. Earlier, Mr R K Roy, Chairman, Durgapur Local Centre, welcomed the august gathering and elaborated the theme of the Seminar. He felt that the students should endeavour to culture their own skill and for this Innovative Technical Education is the need of the hour. Mr M N Bandyopadhyay Honorary Secretary of the Centre, proposed the vote of thanks. Technical papers on various sub-themes of the Seminar were presented and discussed during technical sessions.

ENGINEERS' DAY

Theme:

"Digital Transformation: A New Industrial Revolution"



Bharat Ratna Sir M Visvesvaraya

September 15 is celebrated every year in the country since 1967 as "Engineers' Day" to commemorate birthday of the legendary engineer Sir Mokshagundam Visvesvarava. 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 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 Stateof-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 believes that Digital Transformation will usher in a new Industrial Revolution.



IEI Celebrates World Environment Day 2018



Theme: Beat Plastic Pollution

India is the global host of World Environment Day 2018. The Institution of Engineers (India) in association with the Ministry of Environment, Forest and Climate Change, Govt. of India celebrated World Environment Day 2018 on June 5, 2018. Brief reports of celebration by various Centres of IEI are reported hereunder.

STATE CENTRES

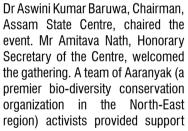
Andhra Pradesh



Prof (Dr) Kodanda P Rama Rao, Chairman of the Centre, presided over the function. The Speaker, Mr V Kiran Kumar, Director & Head and Quality Manager, CIPET, explained various methodologies for recycling of plastics and applications of recycled plastics. The initiation and

determination required from each civilian and also from the Government to right usage and disposing of the plastics was discussed in detail by Mr Kumar. Earlier, Mr D Anjaneya Sharma, Senior Technical Officer, Central Institute of Plastics Engineering & Technology (CIPET), Vijayawada, welcomed the august gathering and Mr C V Sriram, Committee Member of the Centre, introduced the speaker. Finally, formal vote of thanks was proposed by Mr M Seshagiri Rao, Honorary Secretary of the Centre.

Assam





under the leadership of Mr Manas Bhattacharjee. Prof Suren Talukdar (Retd), Department of Geography, Cotton University, Guwahati, delivered a lucid and popular lecture on the theme of the day. Dr B K Talukader, SG & CEO of Aaranyak, also addressed the gathering. Mr G N Khound, Past Chairman and Mr Bhaben Kalita, Past Honorary Secretary of the Centre, attended the function. Mr Pulak Sarma, proposed the vote of thanks.

Delhi

The Chief Guest Lt Gen J S Ahluwalia, PVSM (Retd), President, Institute of Directors, presented an overview of the global situation of plastic pollution ${\sf PVSM}$



and stressed on the urgent need to save the planet earth. Mr J K Mehta, Secretary General, South Asia Forum for Energy Efficiency focused on 'Preventing Plastic Pollution'. Dr Malti Goel, Former Adviser & Scientist "G" Ministry of Science

& Technology, spoke on Government policies on plastic ban in India. A Panel Discussion on 'Strategies to Prevent Plastic Pollution' was also organized which was chaired by Mr Pradeep Chaurvedi, Council Member, IEI. Dignitaries, namely, Dr S K Singh, Member (Env. Division), Delhi State

Centre Committee, IEI; Dr V K Garg, Chairman, South Asia Forum for Energy Efficiency; Ms Neera Arora, HOD, RKAK Shelter Home, YWCA, Delhi; Dr T G Rupa, Asstt Prof, Department of Resources Management and Design Application, Lady Irwin College, New Delhi; Dr P B Rastogi Dir. (Env) SAFEE, Former Adviser, MOEF; attended the function. Earlier, Mr Praveen Kumar Singh, Honorary Secretary of the Centre, welcomed the august gathering. He also proposed the vote of thanks.

Goa

The Chief Guest, Mr L R Fernandes, Principal, Government Polytechnic Panaji, in his speech highlighted the role of India while being the host of the World Environment Day 2018 on the United Nation's theme, 'Beat Plastic Pollution'. He stressed on the mantra, 'Refuse the use of singleuse plastic'. The Keynote Speaker, Mr Abhijit Prabhudesai, Former Chief Engineer (Electrical), Dubai Airport, discussed various environmental problems affecting our life. He stressed that engineers should come forward to present viable solutions to solve various problems of the society to build a healthy environment for the present and future generations. Earlier, Mr G M N Parrikar, Chairman of the Centre, in his welcome address presented a brief history of plastics right from its accidental birth, to its growth and presently the havoc it has created to marine life and humans on the earth. Mr Deepak A Karmalkar, Honorary Secretary of the Centre, proposed the vote of thanks.

Himachal Pradesh

The Chief Guest and Keynote Speaker, Mr B D Suyal, Regional Director,

Forest Survey of India, MOEF, Govt. of India, cautioned that the most common plastic pollution is caused by polyvinyl chloride (PVC). He explained that when any food material or blood is stored in the said plastic containers, gradually



the soluble chemical gets dissolved in them causing death due to cancer and other skin diseases. He stressed on the urgency to ban the use of PVC in water pipes, food and medicine containers to save the lives of millions. Mr Suneel Grover, Council Member, IEI, cautioned the audience with the horrifying effects of plastic pollution on people, animals and marine creatures. He clarified that three simple steps will ensure brighter future for everyone on the earth viz. 'Refuse', 'Recycle' and 'Reduce' the use of plastic. Earlier, Mr Ravinder Kumar Sharma, Chairman of the Centre, welcomed the august gathering. Mr Vishwa Mohan Joshi, Honorary Secretary of the Centre, conducted the function and proposed the vote of thanks.

Jammu & Kashmir

A Seminar on the theme of the day was organized on this occasion. The Chief Guest, Mr Javaid Mustafa Mir, Hon'ble Minister for Disaster Management, Relief Rehabilitation & Reconstruction & Floriculture, Govt. of J&K, in his address narrated that we are looking for ways to stop shrinking of wetlands

and other water bodies due to garbage. In this respect, he stressed on Solid Waste Management. While concluding his speech, the Hon'ble Minister urged for formulation of a comprehensive strategy for stoppage of environmental



degradation. The Guest-of-Honour Mr Khurshid Ahmad Ganai, Chief Information Commissioner, Jammu & Kashmir, expressed his dismay over the lack of concern of the society towards the environment. Earlier, Mr Mohammad Ashraf Fazili, Chairman of the Centre, in his inaugural address, expressed his

deep gratitude to the Hon'ble Minister to have kindly consented as the Chief Guest of the function and for his gracious presence. Experts in the field presented papers and discussed various aspects embracing the theme of the day, Mr Revaz Ahmad Khan, Honorary Secretary of the Centre, proposed the vote of thanks.

Jharkhand

The Chief Guest of the programme Mr J L Mehta, Former Committee

Member, EAC, (Thermal Power & Coal Mining Projects), MoEFCC, New Delhi & Former Director (Tech.), M/s NLC, mentioned that scientific development is needed for the society and some kind of government intervention also required for educating the society to beat the plastic pollution. The



Guest-of-Honour Mr N K Tripathi, Director (Technical), Project & Planning, M/s BCCL, talked on plastic usage in corporate sector and industry and its reduction techniques. Mr G K Vaishnav, Sr. Manager (Environment), IICM, Ranchi, in his Keynote Address, discussed various root causes of plastic pollution. Mr B K Bisovee, National Chair K-12, ISHRAE Ranchi Chapter, emphasized the importance of ecological balance to keep our environment safe and workable for the mankind. The programme was co-ordinated by Mr Vishal Skaria of MECON. Earlier, Mr Shivanand Roy, welcomed the august gathering. Mr Manda Rajananda Kumar, Honorary Secretary, Jharkhand State Centre, IEI, proposed the vote of thanks.

Kerala

Mr Udaya Kumar K S, Honorary Secretary of the Centre, welcomed the



gathering and introduced the speaker. Dr Kamalakshan Kokkal, Chief Scientist & ENVIS Coordinator. Kerala State Council for Science, Technology and Environment, Government of Kerala, graced the occasion as the Guest Speaker and addressed the gathering on the

theme 'Beat Plastic Pollution'. Mr S Kumar, Past Honorary Secretary of the Centre, proposed the vote of thanks at the end of the function.

Madhya Pradesh

The Keynote Speaker, Dr Yogendra Kumar Saxena, Scientist and Govt. Analyst, Central Pollution Control Board, Indore, elaborated in detail about the entire provisions of Act and Rules to control plastic pollution. He

stressed upon the need for creating awareness among common people to avoid use of all plastic materials. He further explained that severe health hazards have been found in laboratory tests on the use of plastic utensils or disposables.



Mr P P Agarwal, Council Member IEI, stressed upon the need for strict implementation of the Act and Rules to achieve the targeted results on pollution control. Mr Rakesh Khandelwal, Technical Head, MP, Mycem Cements, explained in detail about the use of plastic wastes in cement industry and concrete roads. Earlier, Mr Sunil Joshi, Honorary Secretary of the Centre, welcomed the guests and dignitaries. Prof K K S Gautam, Past Chairman of the Centre, proposed the vote of thanks.

Uttarakhand

The function was inaugurated by Mr Narendra Singh, Council Member, IEI. Theme Speaker, Dr Rajdeep Singh, FRI Dehradun, stated that no one

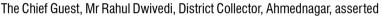


exactly knows how long plastic takes to break down, but it is believed to take hundreds or even thousands of years. 'It is not just the accumulation of plastics that harms the environment but also the fragments and toxins released during photo-decomposition that pollute

our soil and water and is a health hazardous', he added. Other dignitaries including Mr Ranveer Singh Chauhan, Chairman of the Centre, Mr A K Dinkar, Engineer-in-Chief, Irrigation Department, Govt. of Uttarakhand; Mr H K Uperti, Engineer-in-Chief PWD; and Mr S K Gupta, Managing Director, Jal Santhan, graced the occasion with their august presence and spoke about the importance of plastic free environment for survival of mankind.

LOCAL CENTRES

Ahmednagar



that our ancestors have bestowed us with plenty of natural resources using minimum of it and passed it to us and it is our duty to conserve it and pass it to the future generation. Mr Dwivedi further elaborated that plastic products are more popular and it is not possible to completely



stop its usage; however, wherever possible, we can refuse or restrict the use of plastic which is not recyclable. He appealed for collective measures to reduce plastic pollution. Earlier, Mr Avinash D Kulkarni, Chairman of the Centre, elaborating the theme, stated that plastic is non-decomposing material and it releases toxic chemicals into the soil. Mr Arvind Pargaonkar, Unit Head, L&T and Immediate Past Chairman of the Centre, also addressed the gathering about the ill effects of using plastics. Mr Ishwar Hande proposed the vote of thanks.

Alwar

The Chief Guest Mr O P Gupta, Regional Officer, Rajasthan State Pollution



Control Board, Alwar, highlighted the importance of clean environment and mentioned that if people of the country are keeping the pollution of the nature within a limit, it may not be hazardous to the human beings.

The Keynote Speaker, Dr M P S Chandrawat, Environment Expert, shared his views on the theme and emphasized on growing much greenery to get pollution free environment to leave comfortably and safely. Mr K L Sharma, Past Chairman of the Centre graced the occasion as the Guestof-Honour. Earlier, Mr M L Yadav, Chairman of the Centre, welcomed the august gathering and highlighted the significance of observing the day. Mr Avdhesh Kumar Mishra, General Manager, Roca Bathroom Product Pvt. Ltd. M.I.A. Alwar elaborated the theme of the day. Mr Devi Singh proposed the vote of thanks.

Ananthapuram

Prof M L S Deva Kumar, Department of Mechanical Engineering, JNTUA Anantapuram, stressed on the need to address various issues like wastage and losses of food, increasing global warming, deforestation, pollution.



industrialization, etc in order to control the negative impact of environmental changes. He further mentioned that the celebration focuses on carbon neutrality, forest management, managing greenhouse effect, promoting biofuels production, use of hydro-

power to produce electricity, use of solar system, mangroves restoration, etc for preservation of environment. Earlier, Prof K Hema Chandra Reddy, Past Chairman of the Centre, welcomed the gathering. Lt. S Sharada, Head, Chemical Engineering Department, JNTUA, proposed the vote of thanks.

Bareilly



environment in the current situation and ban usage of plastic. Mr S K Vaish, Principal, Government Polytechnic, C B Bareilly informed that each year, nearly 8 million tons of plastic waste enters the oceans. Mr K B Agarwal. Past Chairman of



the Centre speaking on the theme, urged everyone to consider how they can make changes in their everyday lives to reduce the heavy burden of plastic pollution. Earlier, Mr S C Mehra, Chairman of the Centre, delivered the welcome address. Mr S K Gupta, Immediate Past Honorary Secretary of the Centre, conducted the function. Dr Pankaj Omprakash Sharma, Honorary Secretary of the Centre, proposed the vote of thanks.

Belagavi

Prof (Ms) Bharati V Chiniwalar, Chairperson of the Centre, presided over the function while Mr S M Masuti, Honorary Secretary of the Centre, welcomed



the guests and dignitaries. The Keynote Speaker Dr Praveen Ghorpade, Assistant Professor mentioned that hot food items in the plastic bag will be converting into poison due to chemical reaction leading to many complications in health. Dr Ghorpade urged to avoid

plastic container & bags and suggested that factories producing plastic bags should think about alternate solution in place of plastic. Mr Amrut Charantimath spoke about taking care of the environment by planting trees. Dr B Venkatesh, Joint Honorary Secretary of the Centre, proposed the vote of thanks.

Berhampur

Mr Ashutosh Patra, Chairman of the Centre, welcomed the gathering and

presided over the function. The Chief Guest, Mr Subash Chandra Maharana, Chairman, Berhampur Development Authority, Berhampur, stressed upon the need to keep the environment clean and green and maintain good hygiene in a collaborative way. The Guest-



of-Honour Mr Surya Narayan Dhar, Principal, UCP Engineering School

explained what engineers can contribute towards elimination of this alarming situation without shattering the environment. The Chief Speaker Mr Asish Kumar Behera, Divisional Forest Officer, Berhampur, highlighted various methods and ways of sustainable developments without compromising the environmental consequences. He also called for in-depth-analysis and sharing of experiences of engineers to combat the challenge 'Beat the Plastics'. Mr Rajani Kanta Patra, Past Honorary Secretary of the Centre, proposed the vote of thanks.

Bokaro Steel City

The Chief Guest, Mr B P Singh, General Manager (Mechanical), SAIL, Bokaro Steel Plant, emphasized on the reduction of use of plastics in day-to-day life. Mr R V Singh, General Manager (HRD), SAIL, Bokaro Steel



Plant, stressed upon boycotting the use of plastic items to save the environment from its detrimental effects for future generation. Earlier, Mr A C Goyal, Chairman of the Centre, in his welcome address explained the importance of the

day and stressed on the protection of the environment. Mr N P Srivastava, Assistant General Manager (Environment Control), SAIL, Bokaro Steel Plant in his presentation elaborated on various aspects of plastic pollution to safeguard the environment. Mr Y N Singh, Honorary Secretary of the Centre, deliberated on various ways to reduce plastic pollution. He also proposed the vote of thanks.

Coimbatore

Dr M Senthilkumar, Honorary Secretary of the Centre, welcomed the gathering and presided over the function. He also introduced the Chief Guest to the audience. Mr S Ramasubramanian, Conservator of Forests (Working Plan), Coimbatore,



graced the occasion as the Chief Guest and delivered lecture on the theme of the day 'Beat Plastic Pollution. Dr M Senthilkumar, proposed the vote of thanks.

Dharwad

The Chief Guest Mr P M Kulkarni, Director, Bhageerath, NGO, Mysuru, in



his address, stressed on creating awareness about the adverse effects of use of plastic. He explained various technical aspects of plastic, such as, plastic contents, composition, processing procedure etc., and mentioned about the possible health hazards. He suggested for minimum

use of plastic to beat the plastic pollution. Mr S M Venkareddy Narayana, Chairman of the Centre, in his presidential address, stated that regulations have been framed to minimize or avoid the use of plastic and gazette notification has also come. Earlier, Mr A K Kulkarni welcomed the guests and dignitaries. Prof (Dr) Ramesh L Chakrasali, Honorary Secretary of the Centre, while proposing the vote thanks, appealed to minimize the use of plastic.

Durgapur

Mr R K Roy, Chairman of the Centre, welcomed the august gathering. Dignitaries, namely, Dr B Ruj, Senior Principal Scientist, Environment

Group, CSIR-CMERI, Durgapur; Dr Rajnarayan Saha of NIT Durgapur and Mr Anjan Fouzdar, Environmental Engineers, W B Pollution Control Board, Durgapur,



graced the occasion as the Guests-of-Honour. Dr B Ruj talked about the environmental effects of plastics and their proper disposal. Dr Rajnarayan Saha stated that more stress should be given on bio-degradable materials for packaging and other applications. Mr Anjan Fouzdar explained the laws and new PWM Rule 2016. Earlier, Mr M N Bandyopadhyay, Honorary Secretary of the Centre, introduced the speakers and elaborated the theme of the day. He also proposed the vote of thanks.

Faridabad

The Chief Guest Dr Dinesh Kumar, Vice Chancellor, YMMCA, urged that it is the duty of each one of us to ensure that the quest for material prosperity does not compromise our environment. The Guest-of-Honour Mr J P



Malhotra, President, DLF Industries Association, stressed that let us pledge to make sensible use of plastic and relying on reusable products only as much as we can. Earlier, Mr Subhash Chander,

Chairman of the Centre, explained that while plastics have many uses, we have become over reliant on single use or disposable plastics. Ms Charu Smitha Malhotra, CEO, TAP DC, deliberated that it is the high time that we realize the use of plastics is really hazardous and we should take a pledge to give up plastics. Ms B K Sister Poonam, Brahmakumari, stressed on cleaning the mindset of the people to keep the environment clean. The Guest Speaker from Singapore, Ms Kim Underhill suggested some methods to avoid the use of plastics. Mr Sandeep Handa, Honorary Secretary of the Centre highlighted the ill effects of using plastics. Mr K K Narula proposed the vote of thanks.

Ghaziabad

Dr H S Sharma, Chairman of the Centre, in his welcome address highlighted the importance of environment in everybody's life and in the economic

development of the society. The Chief Guest Dr C L Verma, Former Director, Grade Scientist, CBRI Roorkee, explained the present state of environment and its fast deteriorating rate. He mentioned 4Rs- Rethink, Reduce, Reuse and Recycle for saving environment



and argued to curtail the use of plastics. The Guest-of-Honour, Mr Vijendra Vikramaditya, Former Chief Engineer, UP Jal Nigam, dealt at length the problem of plastic pollution and urged to use alternatives by utilizing agricultural waste items, jute etc. Dr S C Gupta, Honorary Secretary of the Centre, proposed the vote of thanks.

Gwalior

Expert Speaker Ms Chhavi Saxena graced the occasion and urged to restrict the use of plastic in normal day to day activities. She mentioned that the



theme of the World Environment Day 2018 is a call to action for all of us to come together to combat one of the great environmental challenges of our time. Mr R K Khetan, mentioned that we have to abolish the use of single-use plastic in the world. Mr

Vinay Kumar Shukla stated that time has come for every individual to join the campaign to end single-use plastic and protect the environment. Mr P K Jain also suggested to reduce the use of plastics.

Jamshedpur

Mr Avneesh Gupta, Chairman of the Centre, welcomed the Chief Guest, Keynote Speaker and other dignitaries. The Chief Guest Mr Srikant Kumar Pati, Chief Environment Management, Tata Steel, Jamshedpur, mentioned how we can make changes in our everyday life to reduce the heavy burden

of plastic pollution. The Keynote Speaker, Mr Gaurav Ananad, Chief, Environment & Sustainability, JUSCO, Jamshedpur, stated that used plastic has become a big problem all over the world. He narrated how plastic and its by-



products are littering our city, ocean and waterways and also contributing to health problems to human and animals. Prof (Dr) Anil Kumar Choudhary, Honorary Secretary of the Centre, proposed the vote of thanks.

Kadana

The Speaker on the occasion, Dr T Kiran Kumar, Associate Professor, Civil Engineering Department, KSRM College of Engineering, Kadapa, in his address, briefed about the derivation of the plastic and its composition.



He explained at length that plastic materials dumped into the earth prevent the production of nutrients in the soil, because the fertility of the soil is reduced and affects the agriculture sector. 'Not only human health, it dangerously affects other

animal life and alters the environment (air, water and soil) sustainability causing hazardous pollution' opined Dr Kumar.

Kanvakumari

Mr G Siva Subramanian, Chairman of the Centre, presided over the function and explained how we have become over reliant on single use or disposable plastics which affect the environment severely. Dr R Sivakami,

Professor, Veltech Engineering College, Chennai, in her Keynote Address highlighted how the plastic waste disposals are affecting the environment. She explained the way to avoid plastic material in the day-to-day life with alternate



sources. Earlier, Mr V Muthum Perumal delivered the welcome address and introduced the Chief Guest. Dr S Arumuga Perumal, explained how condemned electronics goods are also affecting the environment along with plastics. Mr V Sivathanu Pillai, Honorary Secretary of the Centre, proposed the vote of thanks.

Kolhapur

Expert lecture was delivered by Dr S B Vhanbatte, Textile and Engineering Institute, Ichalkaranji on the theme 'Beat Plastic Pollution'. Dr Vhanbatte, in



his lecture, reviewed various causes and effects of plastic pollution. He suggested many remedial measures to overcome plastic pollution. Dr M B Chougule explained the role of IEI in technical development of institutes and individuals. Dignitaries present

included, Prof R A Charate, Principal; Mr Sanjay Khot, Committee Member of the Centre; Mr Kiran Jadhav, Chairman; Prof R G Patil, Principal; Mr Shirish Dakare, Academic Dean; and Mr M D Jadhav Polytechnic Chairman. Mr Manoj N Chavan, Honorary Secretary of the Centre, proposed the vote of thanks.

Kollam

The Guest-of-Honour Prof (Dr) Thankamony (Retd), Department of Environmental Engineering, College of Engineering, Thiruvananthapuram (CET), in her inaugural address advised the young generation to



cultivate a culture that minimizes use of plastics. She further called upon students and faculties to take the lead to create awareness among the people on plastic pollution and to put into practice the slogan 'Reduce, Reuse and Recycle.' Earlier, Dr Manoj Narayanan, Head, BT&BCE, in his welcome address stressed the need of a healthy and stable environment for the survival of living organisms in particular and Mother Earth in general. Dr S Suresh Babu Principal, SBCE, in his presidential address, highlighted various types of pollution caused by plastics and suggested to reduce the use of plastics. Mr K Sivadasan, Honorary Secretary of the Centre, highlighted the need to bring down greenhouse gas emission. Ms Shamnamol G K proposed the vote of thanks at the end of the function.

Kota

Mr C K S Parmar, Chairman of the Centre, IEI, presided over the function. The Chief Guest, Prof Anil K Mathur, Head, Department of Environment



Engineering, Rajasthan Technical University, Kota, suggested to make sensible use of plastic and relying on reusable products. He mentioned that it is a global issue and needs to be solved globally by the involvement of all the countries

worldwide. The Guest-of-Honour Mr Anil Kapoor, Chief Conservator of Forest, Kota stressed on protecting the environment and mentioned that forest areas should be developed and more trees should be planted. The Keynote Speaker Mr Rajat Prakash Singhal, Environmental & Sustainability Consultant suggested to reduce the use of plastic. He also suggested some measures for preventing micro-plastic pollution. Mr Jasamat Singh, Honorary Secretary of the Centre, proposed the vote of thanks.

Ludhiana

Brig Mastinder Singh, Chairman of the Centre, in his inaugural address, mentioned that plastics have slowly made deep inroads into our daily lives and handling plastic waste is a big problem. Dr Arvind Dhingra, Faculty from

GNDEC, Ludhiana, in his lecture, suggested to use cloth bag instead of plastic. He further stated that if we cannot reuse it, we should refuse it. Dr Dhingra concluded his lecture exhorting participants to pledge to reduce plastic usage to make earth a better place. Mr S S Grewal,



Director, Student Affairs, CT University, mentioned that plastic pollution has reached an alarming level and needs to be controlled urgently. Dr Harsh Sadawarti, Pro Vice Chancellor, CT University, stressed on creating more awareness programme about the ill effects of plastics. Mr Gurpreet Singh Walia, Honorary Secretary of the Centre, proposed the vote of thanks.

Mangalore

Dr Shrikanth Jahagirdar, Professor, Nagesh Karajigi Orchid College of Engineering, Solapur and Dr Guru Munavalli, Professor, Walchand College of Engineering, Sangli, delivered lectures on the theme of the day. Both the dignitaries mentioned that plastic has become an integral part of



human life and it is very difficult to ban it completely because of its advantages. They suggested several ways to reduce the plastic usage, such as, using jute bags, avoiding pet bottles, carrying drinking water in stainless steel/copper bottles,

avoiding plastic cups for drinking tea/coffee/beverages etc. Earlier, Dr S Shrihari, Past Chairman of the Centre, welcomed the guests and introduced the speakers. Prof G R Rai, Past Chairman of the Centre, presided over the

function. Dr Sunil B Malegola, Honorary Secretary of the Centre, conducted the programme and proposed the vote of thanks.

Mysore

Mr B V Ravindra Nath, Honorary Secretary of the Centre, welcomed the Chief Guest and other dignitaries. Mr B S Ramesh, President, ISHRAE, Mysore introduced the Chief Guest to the audience. The Chief Guest Mr



Shreekanth Bhat, President, Koti Vraksha Pratistana, Mysore, in his address, stressed on the need of voluntarily stop of single-use plastic, which is organic polymers of high molecular mass and often contains other substances. 'It is harmful for all living animals and takes nearly

1000 years to fully disintegrate', he added. Mr Bhat further advised for using shopping bags for marketing, non-plastic packing for food, refilling water bottle and urged to save the mother earth from plastic nuisance, by discontinuing its use.

North Bengal

Mr Asim Mahapatra, Honorary Secretary of the Centre, briefly described

the theme and suggested different ideas to reduce plastic pollution. Dignitaries, namely, Mr N C Sadhukhan, Mr Utpal Kumar Mondal, Mr Santanu Das, Mr P K Saha, Mr Subrata Bhattacharya, Mr



Goutam Bairagi, Mr Nimai Mukhopadhyay, graced the occasion with their august presence and shared their views on the theme of the day. Mr G K Panda, Chairman of the Centre proposed the vote of thanks.

Palghat



Guest Speaker Dr A V Hema Nalini, Professor, Department of Civil Engineering, NSS College of Engineering, Palakkad explained that the theme of the day urges governments, industry,



communities and individuals to come together and explore sustainable alternatives and urgently reduce the production and excessive use of single-use plastic polluting oceans, damaging marine life and threatening human health. She mentioned that plastic pollution has now become an epidemic. Mr K Unnikrishnan, Joint Honorary Secretary of the Centre, proposed the vote of thanks.

Rourkela

The Speaker Mr P C Dash, Deputy General Manager, Environmental Engineering Department, Rourkela Steel Plant, while speaking on the theme presented a brief history of plastic, its evolution and usability. He elaborated



on how plastic has permeated every facet of human life. He discussed about plastic waste management and how it can be recycled and used in a productive way. To reduce plastic pollution, Mr Dash suggested several ways to live with less plastic

in daily life, such as, bring down shopping bag, carry reusable water bottle, bring own cup, pack lunch in reusable containers, etc. He urged that if you cannot reuse plastic refuse the same. Mr Harjit S Kanvel, Joint Honorary Secretary of the Centre, proposed the vote of thanks.

Srikakulam

G Venkata Rao, Srikakulam, graced the occasion as the Chief Gust and addressed the gathering on the theme 'Beat Plastic Pollution'. Prof (Dr) Govinda Raju Matha, Honorary Secretary of the Centre, presided over the function.



Tirupati

Mr P Krishnaiah, Past Chairman of the Centre, graced the occasion as the Chief Guest and inaugurated the function. Mr Krishnaiah, in his address. explained the ill effects of plastics causing environmental pollution. Mr Balu,



Corporate Member, IEI, explained the importance of 'Save our Planet Mission 2030'. A Tree Plantation programme was organized on this occasion. Mr S Vijayabhaskar, Honorary Secretary of the Centre. proposed the vote of thanks.

Tiruchirappalli

The Speaker Dr S Anandan, Professor & Head, Department of Chemistry.



National Institute of Technology, Tiruchirappalli, discussed the ill effects of plastics and how it polluted environment severely. He mentioned that it is compulsory to protect the environment from plastic

ials. He further mentioned that although recycling can reduce plastic pollution to some extent (only a few types of plastics can be recycled), however a lot of energy and water is required for the recycling process. Dr Anandan suggested few ways which can prevent plastic pollution.

Visakhapatnam

Prof (Dr) T A D Surya Rao graced the occasion as the Chief Guest. Prof Surva Rao, in his address explained how plastic is playing major role in our daily life, disadvantages of plastic usage and how to beat the plastic pollution. Speakers, Dr Raj



Gopal, Principal, Gokul Institute of Technology & Science and Dr Venkata Rao, Prinncipal, Gokul MBA College motivated students through their lectures on how to reduce the use of plastics. Dr Raj Gopal presided over the function.

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 **September 30, 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

NEWS-IN-BRIEF

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

STATE CENTRES

Andhra Pradesh

Workshop on 'Challenges to Engineers for Development of New Andhra Pradesh' on the eve of 117th Birthday of Padmabhushan Dr K L Rao on July 15, 2018.

Bihar

Lecture on 'Recent Advances in Formwork & Scaffolding for Concrete Structures' delivered by Prof (Dr) K N Jha, Associate Professor, Indian Institute of Technology Delhi on July 13, 2018.

Karnataka

Er B R Manickam Memorial Lecture on 'Development of Bangalore Cantonment' delivered by Ms Yashaswini Sharma, Chief Architect, Esthetic Architects, Bengaluru on July 10, 2018.

Madhya Pradesh

Workshop on 'Building Material Testing for Public Buildings' on July 28, 2018.

Tamilnadu

Lecture on 'Lean Project Management: Best Practices to Establish Reliable & Predictable Schedules in Construction Projects' delivered by Mr Tony Jacob, Director & Principal Consultant, Constask Management Solutions LLP, Chennai on July 18, 2018.

Lecture on 'Legal Awareness for Engineers' delivered by Mr D Kumar, Committee Member of the Centre, on July 25, 2018.

Telangana

Seminar on 'Science and Technology for a Sustainable Future' on the occasion of National Technology Day on May 11, 2018.

Celebrated '5th Telangana Engineers' Day; in commemoration of 141st Birthday Celebrations of Nawab Ali Nawaz Jung Bahadur on July 11, 2018.

Organized Er A P Ranganatha Swamy Twenty-first Endowment Lecture on the topic 'Ethical Perspective of Engineers' Role in Society – A Focus on Civil Engineers' delivered by Prof P Sreenivasa Sarma, Former Vice Principal and Former HOD & Professor, Department of Civil Engineering, CBIT, Hyderabad on July 27, 2018.

LOCAL CENTRES

Ahmednagar

Lecture on 'CNC Machines and Advanced Spindle Tooling' delivered by Mr Bharatbhushan Bhagwat, Director, Atul Enterprises and Past Honorary Secretary of the Centre on July 13, 2018.

Ananthapuram

Organized 'Awareness Programme on IEI' during July 4-5, 2018.

Anpara

Celebrated 'World Telecommunication & Information Society Day 2018' on May 17, 2018.

Gwalior

Faculty Development Programme on 'Academic Leadership and Learner Oriented Teaching Methodologies' during June 23-24, 2018.

Lecture on 'Water Quality: Automated Variable Filtration (AVF)' delivered by Mr Vinay Kumar Shukla on July 15, 2018.

Meerui

Lecture on 'Seven Basic Tools of Quality' delivered by Mr Saadat Ali on July 15, 2018.

Mysore

Celebrated 'Foundation Day' of the Centre on May 26, 2018.

Saurashtra

Seminar on 'Creating a Game in Unity Engine' on June 23, 2018.

Lecture on 'Innovation in Concrete Technology' delivered by Mr B V Harsoda, Consulting Engineer, Deputy Executive Engineer (Retd), R&B Department, Govt. of Gujarat on July 21, 2018.

Tiruchirappalli

Lecture on 'Sir Visvesvaraya – An Excellent Statesman and Eminent Engineer' delivered Mr S Manivannan, Deputy Engineer, BHEL on April 3, 2018.

Lecture on 'Knowledge Graphs and Applications' delivered by Dr S R Balasundaram, Professor and Head, Department of Computer Applications, National Institute of Technology Tiruchirappalli on April 10, 2018.

Lecture on 'Industry 4.0' delivered by Ms P Shanmugapriya Durga, Senior Manager, IT Solutions & Services / Engineering (FB), BHEL, Tiruchirappalli on April 17, 2018.

Lecture on 'Remote Sensing and GIS Application in Ground Water Assessment and Management' delivered by Dr S Saravanan, Associate Professor, Civil Engineering Department, National Institute of Technology Tiruchirappalli on April 18, 2018.

Lecture on 'Nano Fluid Preparation, Characterization and Application' delivered by Mr Muruganandam, Associate Professor, Department of Mechanical Engineering, St Joseph's College of Engineering & Technology on April 24, 2018.

Lecture on 'Basic of Optimization Techniques in Engineering' delivered by Mr H Mohit C S, Research Scholar, National Institute of Technology Tiruchirappalli on May 2, 2018.

Lecture on 'Research Avenues in Biometrics' delivered by Dr (Ms) G Annapoorani, Assistant Professor, University College of Engineering, BIT Campus, Anna University, Trichy on May 8, 2018.

Celebrated 'World Telecommunication and Information Society Day' on May 15, 2018.

Lecture on 'Evolutionary Optimization Algorithms and its Solution to Economic Dispatch Problem' delivered by Mr S Praveen Kumar, Assistant Professor, Mahaveer Institute of Science & Technology, Hyderabad on May 22, 2018.

NEWS-IN-BRIEF

Lecture on 'Blockchain Technology for Manufacturing' delivered by Mr Dharun Kasilingam, Research Scholar, Department of Management Studies, National Institute of Technology Tiruchirappalli on May 22, 2018.

Lecture on 'Latest Legal Developments in IT Field' delivered by Mr T S Balaji, Senior Manager, Law/Human Resources Management, BHEL, Tiruchirappalli on June 12, 2018.

Lecture on 'Robotic System Design' delivered by Mr M Vijayakumar, Associate Professor, EEE Department, EGS Pillay Engineering College (Autonomous), Nagapattinam on June 26, 2018.

Lecture on 'Transmission Line Protection using PMUs' delivered by Dr P Raja, Associate Professor, Department of Electrical Engineering, National Institute of Technology Tiruchirappalli on July 3, 2018.

Lecture on 'Social Network Analysis' delivered by Ms R Kavitha, Assistant Professor, Department of Computer Science & Engineering & Information Technology, University College of Engineering, Tiruchirapalli on July 10, 2018.

Lecture on 'Solar Power Generation' delivered by Mr Arun Kumar Rebero, Director, M/s Contura Solar Pvt Ltd on July 17, 2018.

Lecture on 'Welding Fabrication Codes & Standards' delivered by Mr S Singaravelu, Former AGM, Welding Technology Centre & Tool Engineering, BHEL, Tiruchirappalli on July 24, 2018.

Lecture on Environmental Friendly Power Plant' delivered by Mr A Leelavinothan, Former AGM, BHEL on July 31, 2018.

Tiruvallur

Lecture on 'IEI TVLC B2B Knowledge Transfer – 1801' delivered by Dr D P Kothari, Former Director, Indian Institute of Technology Delhi on July 3, 2018

Visakhapatnam

Organized One day Programme on 'Word Processing' on July 13, 2018.

Celebrated117th Birthday of Padmabhushan Dr K L Rao on July 19, 2018.

OVERSEAS CHAPTERS

Qatar

Seminar on 'Risk and Insurance in Construction Projects' on July 20, 2018.

49[™] All India Student Design Competition - 2018

The National Design and Research Forum (NDRF) of The Institution of Engineers (India) has been formed to promote Design and Research in various branches of engineering.

NDRF handles, on behalf of IEI, the schemes relating to the National Design Awards and the All India Student Design Competitions. As part of this, NDRF conducts annually national level design competition for students. The competition is intended to give students an opportunity to exhibit their individual engineering skills and talents and earn recognition, while promoting engineering design and research.

In keeping with this, NDRF is happy to announce 49th All India Student Design Competition - 2018. The competition is open to students studying in final/pre-final year leading to BE / B.Tech / ME / MTech /MS or equivalent courses in engineering or have passed section 'A' Examinations of the IEI.

Entries are invited in the following disciplines from the student community. The Last date for receiving entries is 10 September 2018.

- Aerospace Engineering Agricultural Engineering Architectural Engineering Chemical Engineering Civil Engineering Computer Engineering Electronics & Telecommunication Engineering Electrical Engineering Environmental Engineering Marine Engineering
- Mechanical Engineering
 Metallurgical and Materials Engineering
 Mining Engineering
 Textile Engineering
 Production Engineering

For more information, contact National Design and Research Forum, The Institution of Engineers (India), # 3, Dr. B. R. Ambedkar Veedhi, Bangalore 560 001.

Ph: 080-22264336; E-mail: ndrf@ieindia.org or visit NDRF website at www.ndrf.res.in

One Day Seminars/Workshops conducted by various Centres of IEI

STATE CENTRES

Telangana

Telangana State Centre of the Institution in association with AeSI, Hyderabad Branch, organized a One Day Seminar on the topic 'Additive Manufacturing Technologies for Aerospace Applications' on the eve of 117th Birthday Celebration



of Padmabhushan Dr K L Rao under the aegis of Aerospace Engineering Division, IEI on July 15, 2018 at Hyderabad. Capt S N Reddy, Secretary and CEO, Telangana State Aviation Academy, graced the occasion as the Chief Guest and inaugurated the Seminar. Prof B Ravi, Professor, IIT Bombay, Mumbai delivered Keynote Address and Prof. S Surya Kumar, IIT, Hyderabad delivered invited talk.

Tripura

Tripura State Centre of the Institution in association with National Institute of Technology Agartala, organized a One Day Seminar on the topic 'Ground



Improvement Techniques' under the aegis of Civil Engineering Division, IEI on April 30, 2018 at Agartala. Prof (Dr) G L Sivakumar Babu, Professor, Civil Engineering Department, Indian Institute of Science

Bengaluru and President, Indian Geochemical Society, graced the occasion as the Chief Guest. A number of resource papers were presented and discussed during the technical sessions of the Seminar.

West Bengal

West Bengal State Centre of the Institution in association with Dr M N Dastur School of Materials Science and Engineering (MNDSMSE), IIEST-Shibpur organized a One-day Seminar on the theme 'Green Polymer Composite

and its Applications' under the aegis of Metallurgical and Materials Engineering Division, IEI on July 25, 2018 at Shibpur, Howrah. Prof Dipankar Chattopadhyay, Department of Polymer Science and Technology, University of Calcutta,



graced the occasion as the Keynote Speaker. Other dignitaries present in the Seminar included Prof B C Mitra, Former Director-NIRJAFT and Visiting Professor, IIEST-Shibpur; Mr S K Roy, Managing Director, Amersil-Ketex, Kharagpur; Prof (Dr) N R Bandyopadhyay, Head, MNDSMSE, IIEST & Former Chairman, MMDB, IEI; Dr Prosenjit Saha, Assistant Professor, MNDSMSE, IIEST-Shibpur; Dr Arijit Sinha, Assistant Professor, MNDSMSE, IIEST-Shibpur and Mr Rajib Bhattacharya, Department of Jute and Fibre Technology, University of Calcutta.

LOCAL CENTRES

Jabalpur



Jabalpur Local Centre of the Institution organized a One Day Seminar on the topic 'Energy for All — Special Emphasis on Renewable Energy Integration, Protection and Saubhagya

Yojna' under the aegis of Electrical Engineering Division, IEI on June 24, 2018 at Jabalpur. Lt General Milan Naidu, PVSM, AVSM, YSM, Former Vice-Chief of Army Staff, graced the occasion as the Chief Guest and inaugurated the Seminar. Mr S K Gupta, Chief Engineer (Retd.), Indian Railways; Mr R A Sharma, M P Power Transmission Company Limited, Jabalpur and Prof (Dr) Shailja Shukla, Head, Department of Computer Science and Engineering, Jabalpur Engineering College, Jabalpur, were the Guests-of-Honour. Dr Buplab Paul, Principal, Shri Ram Institute of Technology, Jabalpur delivered the Keynote Address.

Kanchepuram

Kanchepuram Local
Centre of the Institution in
association with Department
of Computer Science
and Engineering (CSE),
JEPPIAAR SRR Engineering
College, Chennai, organized
a One-day Workshop on
the topic 'Machine Learning



using Python' under the aegis of Computer Engineering Division, IEI on July 4, 2018 at Chennai. Dr T Sasikala, Principal, Dr J Nithyashri, Associate Professor and Dr A Ezil Sam Leni, Professor and Head, Department of Computer Science and Engineering, JEPPIAAR SRR Engineering College, Chennai graced the occasion and delivered Inaugural Address, Presidential Address and Welcome Address respectively. Mr Praveen Kumar Rajendran, Consultant, Cognizant Technology Solutions, Chennai, delivered the Keynote Address.



Kanchepuram Local Centre of the Institution jointly with the Department of Mechanical Engineering, JEPPIAAR SRR Engineering College, Padur organized a One Day Workshop on the topic 'Computational Fluid Dynamics' under the aegis

of Mechanical Engineering Division, IEI on July 12, 2018 at Padur, Chennai. Dr T Sasikala, Principal, JEPPIAAR SRR Engineering College, inaugurated the Workshop and addressed the gathering. Dr R Senthil Kumar, Mr V Janarthanan and Mr K Arul delivered lectures during the Workshop.

Kanchepuram Local
Centre of the Institution
in collaboration with the
Department of Information
Technology, Agni College of
Technology (ACT), Chennai,
organized a One Day
Workshop on the topic 'Deep



Learning and its Engineering Applications' under the aegis of Computer Engineering Division, IEI on July 13, 2018 at Chennai. Mr Sabaresan V, Assistant Professor, Information Technology, ACT, welcomed the gathering. Dr R S Kumar, Principal, ACT, delivered the Presidential Address. Dr Srinivasan Alavandar, Dean Academics, ACT, felicitated the gathering.



Kanchepuram Local Centre of the Institution jointly with SRM Institute of Science and Technology, Kattankulathur Campus organized a One Day Workshop on the topic 'PCB Design. Fabrication and Assembly' under the aegis

of Electronic & Telecommunication Engineering Division, IEI on July 18, 2018 at Kattankulathur, Chennai. Dr R Venkatesan, Chairman of the Center, inaugurated the Workshop. Other dignitaries present on the occasion included Dr T Rama Rao, Head, Department of Electronics and Communication Engineering and Dr S Dhanalakshmi, Faculty Advisor SRM Institute of Science & Technology, Kattankulathur, Chennai.

South Gujarat

South Gujarat Local Centre of the Institution in association with the Civil Engineering Department, Dr S & S S Ghandhy Government College, Surat organized a One Day Seminar on the topic 'Application of Modeling Tools and Techniques in Civil Engineering' under the aegis of Civil Engineering

Division, IEI on July 16, 2018 at Surat. Seminar consists of five technical sessions followed by hands on session on Hydraulic Software.

Visakhapatnam

Visakhapatnam Local Centre of the Institution in association with Rashtriya Ispat Nigam Limited (RINL), Vizag Steel Plant, Vishakapatnam, organized



a One Day Workshop on the topic 'Arc Welding Safety Operating Procedures' under the aegis of Mechanical Engineering Division. IEI on July 18. 2018 at Visakhapatnam. Mr C Tirkey, Assistant General Manager (Training), Vizag Steel Plant, Visakhapatnam,

graced the occasion as the Chief Guest and addressed the gathering.

National Design Awards - 2018

The National Design and Research Forum (NDRF) of The Institution of Engineers (India) has been formed to promote Design and Research in various branches of engineering, NDRF handles, on behalf of IEI, the schemes relating to the National Design Awards and the All India Student Design Competitions. As you would be aware, with a view of promoting and advancing Engineering Design activity in the Country, NDRF identifies and recognises each year those who have been making outstanding contributions in the field of Engineering Design by giving each year. In keeping with this, NDRF is happy to announce nominations for National Design Awards - 2018.

Entries are invited in the following National Design Awards:

- · National Design Award
- · Architectural Engineering Design Award
- Environmental Engineering Design Award
- Mechanical Engineering Design Award
- Mining Engineering Design Award
- Prestressed Concrete Design Award
- Suman Sharma Award

The Last date for receiving entries is 31 October 2018.

For more information, contact National Design and Research Forum, The Institution of Engineers (India), # 3, Dr. B. R. Ambedkar Veedhi, Bangalore - 560 001. Ph: 080-22264336; E-mail: ndrf@ieindia.org or visit NDRF website at www.ndrf.res.in

Emerging Technologies in Steel Processing and Forming

Contd. from page 1

Conference on such an important topic. Mr Baneriee also congratulated Jharkhand State Centre for organizing such a big event at Ranchi, Mr Aviiit Ghosh, Chairman-cum-Managing Director, Heavy Engineering Corporation Limited, in his address thanked the organiser for choosing an apt theme for the Conference as there are emerging technologies in iron and steel sector which needs to be head started for betterment of overall iron and steel industry in India. He mentioned that HEC is working on various steel processing techniques which are being used for the supply of products to defence sector. Mr Ghosh informed that HEC along with NIFFT has formed a joint venture training organisation to cater to the working professionals on welding, steel processing & metal forming. Prof P P Chattopadhyay, Director, NIFFT, stressed that one of the key avenues in the road to revival of the Indian economy is the 'Make in India' initiative that was launched with the primary goal of making India a global manufacturing hub. He opined that this concept supports innovation and makes possible sustainable

development in the country by imbibing state-of-the-art technologies and maintaining high-quality manufacturing standards while minimising environmental and ecological impact. Mr V V Lurve of CNIITMASH, Russia. spoke about the participative collaboration of Russia in building HEC which is a great step and the relation is still continuing. He mentioned that India is having great potential for improving various cost cutting & efficiency indices in Indian iron and steel industry. Mr Lurye informed that one of the major trends in the state-of-the-art industry including engineering industry and metallurgy lies in introduction of power saving technologies and reduction of consumed power resources. The Conference CD prepared for the delegates was released by the President, IEI and the Chief Guest during the programme. Delegates from Russia & Czech Republic and from HEC, MECON, L&T, SAIL-RDCIS, NIFFT, BIT-Mesra etc. participated in the Conference. The programme concluded with vote of thanks proposed by Mr Manda Rajananda Kumar, Honorary Secretary of the Centre.



Aerospace Engineering Division

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@ieindia.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 [26: (0651) 2491344; web: ieijsc.org; e-mail: jharkhandsc@ieindia.org]

Agricultural Engineering Division

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@ieindia.org; website: www.ieiksc.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@ieindia.org]

Architectural Engineering Division

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 [2:0141-2706327/2700413; Fax: 0141-2700413; e-mail: rajasthansc@ieindia.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; [2: 0824-2400112; e-mail: mangalorelc@ieindia.org]

Chemical Engineering Division

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, Kumudepall, Near Adhiyamaan College of Engineering, Hosur 635109, Tamilnadu [e-mail: hosurlc@ieindia.org]

All India Seminar on "Pollution Control, Cleaner Production and Chemical Security Programme – Issues & Concerns"

Ahmedabad, September 19-20, 2018

The Honorary Secretary, IEI, Gujarat State Centre, Bhaikaka Bhavan, Near Law Garden, Law College Road, Ellisbridge, Ahmedabad 380006 [☎: (079) 26400811; Telefax: (079) 26561825; e-mail: gujaratsc@ieindia.org; website: www.ieigujarat.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: tnsc@ieindia.org]

All India Seminar on "Bio-fuels, Bio-energy & Bio-economy"

Guwahati, October 29-30, 2018

The Honorary Secretary, IEI, Assam State Centre, Panbazar Overbridge, East Lane, Guwahati 781001 [2600]: 0361-2548742; Fax: (0361) 2630368; e-mail: assamsc@ieindia.org; website: www.ieiasc.org]

Civil Engineering Division

Thirty-fourth National Convention of Civil Engineers on "Recent Advances in Infrastructure Development"

Nagpur, September 08-09, 2018

The Honorary Secretary, IEI, Nagpur Local Centre, North Ambazari Road, Nagpur 440010

[2: 0712-2556231/2525617; e-mail: nagpurlc@ieindia.org, website: ieingp.org]

Computer Engineering Division

All India Seminar on "Smart Village to Smart India"

Ghaziabad, September 03-04, 2018

The Honorary Secretary, IEI, Ghaziabad Local
Centre, 15 Shopping Complex, ALTT Centre,

Rajnagar, Ghaziabad 201002 [26: 0120-2728699/2702673; e-mail: ghaziabadlc@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 JEL West

The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [28: (033)22238914; Fax: (033) 22233140; e-mail: wbsc@ieindia.org]

All India Seminar on "Machine Learning Algorithm for Bioinformatics Application"

Salem, September 21-22, 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 [Ph. 0427 2332544; e-mail: salemlc@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 Al 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 [26: 0120-2728699/2702673; e-mail: ghaziabadlc@ieindia.org]

Electrical Engineering Division

All India Seminar on "Research Challenges in Grid Integrated Solar-Wind Energy Systems"

Tuticorin, September 5-6, 2018

The Honorary Secretary, IEI, Tuticorin Local Centre, 1/27, Sacred Heart Institute of Engineering, Meelavittan Road, Tuticorin 628002 [☎: 0461-2300577; e-mail: tuticorinlc@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]

All India Seminar on "Energy Management and Audit"

Vallabh Vidyanagar, October 26-27, 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]

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]

One Day Seminar on "Robotics Monitoring of Power Systems"

Salem, January 01, 2019

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

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 [2:0172-2775418; 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

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

International Conference on "Marine Engineering and Ocean Technology – Digital Ocean"

Kanchepuram, February 15-17, 2019

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



Mechanical Engineering Division

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]

One Day Workshop on "Conveyor Belt Maintenance and Safety Aspects"

Visakhapatnam, September 24, 2018

The Honorary Secretary, IEI, Visakhapatnam Local Centre, 9-12-31/1, Beside A U Engineering Girls Hostel, Visakhapatnam 530003 [☎: 0891-2747460; e-mail: ieivisakhapatnam@ieindia.org; website: www.ieivisakhapatnam.org]

All India Seminar on "Multi Objective Optimization in Mechanical Engineering"

Kadapa, September 27-29, 2018

The Honorary Secretary, IEI, Kadapa Local Centre, APHB Colony, Prakash Nagar, Kadapa 516004 [☎: (08562) 245808; e-mail: kadapalc@ieindia.org; website: www.ieikadapa.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 [22: 0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

All India Workshop on "Micro-machining" Chandigarh, October 25-26, 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, Kumudepall, 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 & Mater. Engg. Division

Thirty-second National Convention of Metallurgical & Materials Engineers on "Advances in Engineering Materials for Sustainable Development"

Jamshedpur, January 18-19, 2019

The Honorary Secretary, IEI, Jamshedpur Local Centre, Subarnarekha Link Sakchi, Jamshedpur 831 001 [22: 0657-2234316; Fax: 0657-2230159; e-mail: jamshedpurlc@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 [28: (033)22238914; Fax: (033) 22233140; e-mail: wbsc@ieindia.org]

Mining Engineering Division

All India Workshop on "Tunnel Engineering" Roorkee, October 10-12, 2018

The Honorary Secretary, IEI, Roorkee Local Centre, Indian Institute of Technology (IIT) Campus, Roorkee 247667[\$\approxed{\approx}\$: 01332-284416, Telefax : 01332 272589; e-mail: roorkeelc@ieindia.org; website: ieirlc.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, Kumudepall, Near Adhiyamaan College of Engineering, Tamilnadu, Hosur 635109 [e-mail: hosurlc@ieindia.org]

Production Engineering Division

All India Seminar on "Major Advances and Sutainable Developments in Lubrication Domain"

Jamshedpur, September 13-14, 2018

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

Textile Engineering Division

Thirty-second National Convention of Textile Engineers on "Technology Innovations and Value Added Products in Textile Supply Chain" Coimbatore, January 04-05, 2019

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG College of Technology Campus, Peelamedu, Coimbatore 641004 [☎: 0422-2580733; e-mail: coimbatorelc@ieindia.org]

Interdisciplinary

One Day Workshop on "Expanding the Role of Women in STEM (Science, Technology, Engineering & Medicine) Field"

Ranchi, September 14, 2018

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Ranchi 834002 [26: (0651) 2491344; web: ieijsc.org; e-mail: jharkhandsc@ieindia.org]

One Day Seminar on "Solving Real World Problem using OOP"

Durgapur, September 14, 2018

The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenur, 'B' Zone, Durgapur 713205 [Telefax: 0343 2564770; e-mail: durgapurlc@ieindia.org; website: www.ieidurgapurlc.org]

One Day Seminar on "Revamping Engineering Education in India to Meet Present Challenges"

Karnal, September 28, 2018
The Honorary Secretary

The Honorary Secretary, IEI, Haryana State Centre, E-13, Ashoka Nursery, Kunjpura Road, Karnal 132001 [☎: 0184-2266176; e-mail: haryanasc@ieindia.org]

All India Seminar on "Engineering for Innovation to Product and Services"

Pune, October 07-08, 2018

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]

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 August 17, 2018.



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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

Superannuation from IEI



Mr Srijoy Kumar Bhuyan, an employee of Rourkela Local Centre of the Institution will be superannuated from the services of IEI on August 31, 2018. He joined the Institution on August 13. 1988 and rendered his services to the Institution for a period of 30 years.

IEI wishes Mr Srijoy Kumar Bhuyan and his family a happy and healthy life in future.



33rd

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: udaipurlc@ieindia.org

Cloud based E-Learning Solution – Learning Management System

Digital Learing



Section-A Study Materials

Moving towards digitization, IEI has taken a step forward for transforming the learning process for Section A (four subjects) in digital mode. The Digital Learning Content shall be made available to the prospective students of AMIE for four papers of Section A in form of "Cloud Based E-Learning Solution – Learning Management System".

- For this value addition to the learning process of AMIE Section A (to be functional w.e.f 01 September 2018), following time line has been decided:
- Prospective ST members being registered with effect from 01 September 2018 onwards shall have the facility
 of learning content in digital mode only.
- The registration fee for ST members shall be enhanced from ₹ 7050/- to ₹ 8280/- which includes access facility for 'Digital Learning Content' with validity period of two years.
- The new forms for registration for Senior Technician Membership with the new fee structure having provision for access to Digital Learning Content is available on the IEI website.



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