

## IEI Confers Honorary Fellowship to His Excellency Prof (Dr) Kaptan Singh Solanki, Hon'ble Governor of Tripura

The Institution of Engineers (India) conferred Honorary Fellowship to His Excellency Prof (Dr) Kaptan Singh Solanki, Hon'ble Governor of Tripura at Sukanta Academy Auditorium, Agartala on July 9, 2019. Dr T M Gunaraja, President, IEI handed over the Honorary Fellowship Certificate to the Hon'ble Governor of Tripura during a colourful function. Prof (Dr) Solanki, Hon'ble Governor of Tripura, in his brief speech conveyed thanks to The Institution of Engineers (India) for conferment of Honorary Fellowship of IEI to him and to the



organizers for their benevolent developmental activities for nation building. 'The relentless service of engineers for developing both the village and towns of India are very appreciable and the 21st century is the Century of Science & Technology', His Excellency opined. The Hon'ble Governor also mentioned that Engineers and Technologists are the key players for sustainable development. Other dignitaries graced this auspicious occasion with their august presence included Dr Swapan Bhaumik, Vice President, IEI; Mr Tapan Lodh and Mr T Bhattacharya, Chairman and Honorary Secretary respectively, Tripura State Centre, IEI and Maj Gen (Dr) S Bhattacharya, VSM (Retd.), Secretary & Director General, IEI.

### Important Notice

It has been observed that there are many Corporate Members of IEI whose mobile number/email id is not registered with IEI till date. Non availability of the mobile numbers and email ids precludes us not only from providing our full range of services but also from participation in the Online Election Process.

The Corporate Members whose mobile number/email id is not registered with IEI are therefore requested to kindly communicate their mobile no. and email id along with membership number to [datamemb@ieindia.org](mailto:datamemb@ieindia.org) by 10 September 2019.

For any further clarification, one may feel free to speak to us at (033)40106248/ 246/ 269/ 299.

Maj Gen (Dr) S Bhattacharya, VSM (Retd)  
Secretary and Director General

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

India presently, is on the cusp of a major transformational change as one of the fastest growing economies in the world. With a strong foundation of digital infrastructure and expanding digital access through 'Digital India' Programmes of the Government, the country is now poised for the next phase of growth — creation of tremendous economic value and empowerment of citizens leveraging the demographic dividend in a planned manner.



The Strategy for New India @75, is an attempt by the Government to collate innovation, technology, enterprise and efficient management to achieve a clean, sustained, inclusive, and formalised goal of achieving USD 4.0 trillion by 2022-23. Presiding over the 5th Governing Council meeting of NITI Aayog recently, the Hon'ble Prime Minister set a goal of USD 5 trillion economy by 2024 as an achievable narrative for the new government.

With this backdrop, in order to implement new technologies, fostering innovation and upskilling, engineers need to ensure enhanced capacity creation in the field of infrastructure, power, oil and gas, etc, which would result in the projected GDP growth. Engineers would therefore have to concentrate on evolving integrated technological solutions for successful execution of projects with an eagle eye on monitoring and controlling project duration, cost effectiveness and critical manpower scheduling. Thus, what emerges is the fact that engineers need to go beyond their core competencies and acquire allied skills in the domain of project management, financial and cost management with a sense of deep learning and motivation. It is also important to highlight the necessity for effective communication and motivation of the workforce. The Institution has embarked upon certain initiatives by way of collaboration with Project management Associates and The Institute of Cost Accountants of India to offer various courses to our Corporate Members at attractive discounts in the field of Project Management Certification Programme and Executive Diploma in 'Cost & Management Accounting for Engineers' respectively.

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## Sustainable Solutions on Road Safety

**Uttar Pradesh State Centre** of the Institution organized Two-day All India Seminar on the topic 'Sustainable Solutions on Road Safety' under the aegis of Civil Engineering Division Board of IEI during May 4-5, 2019 at Lucknow. The Seminar was inaugurated by Mr R C Barnwal, Engineer-in-Chief, Rural Roads, Public Works Department, Govt. of U P. Mr Barnwal, in his address emphasized on road safety with the data analysis within the time period 1971-2019. Mr Baranwal elaborated about the temporary and permanent measures to reduce the road accidents. The Guest-of-Honour on the occasion, Mr Ganga Phal, Additional Transport Commissioner (Road Safety & IT), Govt. of UP mentioned that majority of the accidents occur due to driver's negligence and further discussed short, medium and long term measure to minimize the accidents. Mr Phal clarified different short term measures including installation of road signs, road markings, speed



control measures and repair of damages to reduce unsafe condition on the highways. He further recommended that appropriate measure should be taken up immediately and completed within three months of identification of spots of road accidents. Mr Abdul Basit, Regional Officer, National Highway Authority of India, in his Keynote Address highlighted that black spot on the

road should be identified. Black spots are defined as a place where road accidents are historically concentrates. Earlier, Mr R K Trivedi, Chairman of the Centre welcomed the guests and dignitaries. On this occasion, Prof M Z Khan, Ex Vice Chancellor, Harcourt Butler Technological University, Kanpur, Mr A K Gupta, Ex Member, UP Public Service Commission and Retd. Engineer-in-Chief, UP PWD and Mr V B Singh, Chairman, Civil Engineering Division Board, IEI also expressed their views on the subject. Mr Prabhat Kiran Chaurasia, Honorary Secretary of the Centre proposed the vote of thanks at the end of the programme. Number of papers were presented during the technical sessions and the recommendations emanated from the thoughtful deliberations include:

- Road safety audits, which is a formal technique to access safe execution and functioning of a road project, should be made mandatory.
- Enforcement teams from transport department should be strengthened to educate and make behavioural change in public and specially drivers of commercial vehicles.
- Black spots on the roads (a stretch of about 500 mtr length in which either 5 road accidents including fatalities / grievous injuries took place during the last three calendar years or 10 fatalities during last 3 calendar years) should be identified.
- For safe operation on traffic lanes, the vertical clearance available shall be minimum of 5.5 meters. Allowing for the chances of unchecked growth and swaying of trees during wind and rains, It is recommended that all trees shall be trimmed clear up to 6.5 meters.
- Since children are most vulnerable road users, road safety awareness programs must therefore be started from childhood to make it a lifestyle. Children and students in schools and colleges must be educated about traffic rules, using standardized helmets. They can spread the awareness to use seatbelt while driving four wheelers.

## Sustainable Approach for Utilizing Industrial Wastes in Concrete Construction

**Salem Local Centre** of the Institution in association with Department of Civil Engineering, Sona College of Technology, Salem organized Two-day All India Seminar on the topic 'Sustainable Approach for Utilizing Industrial Wastes in Concrete Construction' under the aegis of Civil Engineering Division Board of IEI during April 26-27, 2019 at Salem. Dr V Karthikeyan, Principal, Thiagarajar Polytechnic College, Salem, graced the occasion as the Chief Guest. Dr Karthikeyan, in his inaugural address appreciated the organizers of the Seminar and urged the industries to find their way to dispose of industrial wastes as by-products and to save the agricultural land from becoming infertile. Earlier, Mr D Arul Selvan, Chairman of the Centre welcomed the august gathering. Further, Dr R Malathy, Professor and HoD, Department of Civil Engineering, Sona College of Technology, Salem presented a brief introduction about the Seminar and stressed upon the importance of industrial waste utilization in concrete. A colourful Souvenir was released on this occasion by the Chief Guest and other dignitaries present on dais. Mr S Loganathan, Honorary Secretary of the Centre and Organizing Secretary of the event proposed the vote of thanks at the end

of the programme. A large number of papers embracing the theme were presented and discussed during the technical sessions of the two-day Seminar.



## MoU Between IEI and IEEE

An MoU was signed between The Institution of Engineers (India) and The Institute of Electrical and Electronics Engineers (IEEE) on July 26, 2019 at IIT Bangalore. It was a significant event especially due to presence of



Presidents of both the Institutions. The IEI-IEEE Award for Engineering Excellence (2018) was conferred on Prof. Bhargab B Bhattacharya of Indian Statistical Institute for his contribution to VLSI and their bio-medical applications.

At the MoU signing ceremony, Dr T M Gunaraja, President IEI briefed on

the importance of an effective synergy with IEEE especially in the areas of development of standards, awareness on the importance of encouraging STEM [Science, Technology, Engineering and Mathematics] Education System as well as joint conduct of technical events on contemporary themes. Dr José M F Moura, President, IEEE and Philip L and Marsha Dowd University Professor, Carnegie Mellon University noted that there is a considerable potential of synergy between the organizations specially in the areas outlined by President, IEI and that he looks forward to collaborating with IEI in the future. He also appreciated the Institution's initiative to enhance the professional horizon of engineers. Maj Gen (Dr) S Bhattacharya, VSM (Retd), Secretary & Director General, IEI briefed on the activities, governance structure and objectives of IEI.

It is felt that the MoU with a globally established professional organization would provide an effective foundation and framework for co-sponsorship of activities and extend the reach of joint activities to our Corporate Members. It would also facilitate knowledge sharing and knowledge generation among members of both the Institutions.

## Rural Industrialization through Innovative Process Mechanization

Assam State Centre of the Institution organized Two-day All India Seminar on the topic 'Rural Industrialization through Innovative Process Mechanization' under the aegis of Mechanical Engineering Division Board of IEI during June 8-9, 2019 at Guwahati. Prof (Dr) Rajat Gupta, Director, NIT



Mizoram graced the function as the Chief Guest. Prof Gupta, in his speech has given a thorough vision on the theme. He highlighted the bottlenecks in rural industrialization, like poor infrastructures, poor communication, lack of capital investment, lack of skill development, absence of market etc, particularly in North East region. The Guest-of-Honour on the occasion, Mr K S Chandra, Principal Chief Mechanical Engineer, North East Frontier Railway, in his address highlighted on innovative process mechanization and role of Indian Railways in Rural Industrialization as the cheapest mode of communication. Prof (Dr) Pratap Bhanu Singh Bhadoria, Agriculture & Food Engineering Department, IIT Kharagpur in his Keynote Address showcased many successful stories of impact of Rural Technologies on improving the

livelihood of rural people which provided a tremendous encouragement to all the stakeholders of the Seminar. Earlier, Md Nuruzzaman, Honorary Secretary of the Centre and Organizing Secretary of the event welcomed the guests and dignitaries. Dr S K Kakoty, Chairman of the Centre chaired the Inaugural Session. Mr Pulak Sarmah offered formal vote of thanks at the end of the function.

A Panel Discussion was arranged which formulated the following recommendations which can be part of a Government Policy in the Rural Industry:

- Rural Entrepreneurship is not a new concept for India. India has been one of the most ancient developed rural economies. The village self rule (Gram-Swaraj) is an Indian concept. We need to reinvent our economic prowess.
- A Time bound planning framework to highlight the potential of the Rural Industries in promoting the more efficient use of local resources like Raw materials, Technology & Labour while supporting economic development and employment in rural areas is to be prepared by the Government.
- There is a need for continuous development of rural industry products by process mechanization and growing relevant market for them.
- Accessing adequate fund for rural industries as well as leveraging private investment.
- Adequate Infrastructure development in rural areas is the key for faster development of rural industries, which include Transport, Water, Communications, Market, etc.

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# Efficiency Enhancement through Green Technology in Manufacturing

**Durgapur Local Centre** of the Institution organized Two-day All India Seminar on the topic 'Efficiency Enhancement through Green Technology in Manufacturing' under the aegis of Mechanical Engineering Division Board of I.E.I during May 10-11, 2019 at Durgapur. The Chief Guest on the occasion, Mr Sarjerao Khune, Executive Vice President, Graphite India Ltd described that 'Green Manufacturing is a formal name for an exciting new way of doing business and creating value. 'Business of all types are already involved in initiatives and innovations that are helping to foster a healthier environment, enhance their competitive edge, reduce risks, build trust, drive investment, attract customers and generate profit', he added. He further explained sustainable and green manufacturing, in line with US Department of Commerce's Sustainable Manufacturing Initiative, minimizing negative environmental impacts, conservation of energy and natural resources etc. He concluded with the inner philosophy of green technology of manufacturing, controlling pollution and norms, process improvement and impact on economics, process and cost effectiveness and the technological change brought about by Emerging Green Technologies (EGTs) which is relevant for both developed and developing countries. The Guest-of-Honour of the function, Prof C T Bhunia, Director General, Durgapur Institute of Advanced Technology & Management (DIATM) clarified that green computing and research will give an idea of green technology in manufacturing and this vision-based research is required in every steps of manufacturing process.



He gave few examples and achievements of industry. He concluded with the remarks that the manufacturing sector is the key to promoting and diffusing technological change, which in turn is a crucial driver of competitiveness and economic growth and, therefore, industrial development has great potential to achieve a number of social objectives including high rates of employment, poverty eradication, gender equality, labour standards and better access to education and health care. Earlier, Prof K C Ghanta, Chairman of the Centre, in his welcome address explained that the Seminar is expected to facilitate meaningful interaction within engineering fraternity including professionals, experts, researchers, delegates from State and Central Government organizations which leads to recommendations emanated from the event. Many eminent personalities delivered lectures during the occasion namely Dr Bireswar Majumdar, Department of Power Engineering, Jadavpur University, Kolkata on the theme 'Development of Lab Base Francis Turbine Test Ring connected to Grid'; Prof (Dr) Arindam Ghosal, Graphic Era Deemed to be University, Dehradun on 'Conventional Machining Processes'; Dr Shibendu Shekhar Roy, Professor, Department of Mechanical Engineering, NIT Durgapur on 'Industry 4.0 and Additive Manufacturing Technology'; Prof Nilotpal Bandyopadhyay, Department of Mechanical Engineering, NIT Durgapur on 'Enhancing Energy Efficiency through Renewable Energy' and so on. A large number of papers embracing the theme were presented and discussed during the technical sessions.

## Advanced Materials & their Machining

**Punjab & Chandigarh State Centre** of the Institution in association with Chandigarh Group of Colleges, Landran, Mohali organized Two-day Workshop on the topic 'Advanced Materials & their Machining' under the aegis of Mechanical Engineering Division Board of I.E.I during April 9-10, 2019 at Mohali. The Chief Guest and Keynote Speaker on the occasion, Prof (Dr) Uma Batra, Professor & Head, Department of Materials and Metallurgical Engineering, Punjab Engineering College, Chandigarh graced the occasion with her esteemed presence and evocative Inaugural Address. She spoke on 'Machining of Light Alloys: Challenges and Solutions'. She emphasised upon the research areas on Magnesium, Aluminium and



Titanium Alloys and their applications in biomedical science. She further discussed on different machining processes of biomedical materials. She also mentioned that the complex manufacturing requirements in the

present scenario need use of the advanced materials for achieving more reliable and economical products. Prof (Dr) Arindam Ghosal, Graphic Era Deemed to be University, speaking on 'Fiber Laser Machining of Al/AlO<sub>2</sub> Composite Materials' focused on the challenges and issues involved in the laser machining of different composite materials and their alloys. Dr G S Mukherjee, DRDO, Delhi, spoke on 'Polymer Composite Materials for Advanced Technological Applications' in which he focused on the logical selection of constituent materials determining the macroscopic properties of the composite materials. He also discussed on special kind of optically transparent composite materials for the development of windscreen of Light Combat Aircraft (LCA) and armour systems. Dr Tara Singh Kamal, Council Member, I.E.I and Mr Janak Raj Garg, Chairman of the Centre also graced the occasion and addressed the gathering. Recommendations of the Workshop that have emerged would get a broad picture of the multitude applications as followed:

- Aircraft and aerospace structure be constructed with minimum weight.
- Materials with minimum weight are recommended for structures for earthquake, wind and other types of random loading.
- Selection of machining conditions in metal-cutting processes should be cost effective.
- Design of control systems be optimized.

## Nano Technology and Smart Materials

**Punjab & Chandigarh State Centre** of the Institution in association with the Department of Mechanical Engineering, Chandigarh University, Mohali organized Two-day Workshop on the topic 'Nano Technology and Smart Materials' under the aegis of Mechanical Engineering Division Board of IEI during May 15-16, 2019 at Mohali. The Chief Guest and Keynote Speaker of the Workshop, Prof (Dr) Hirendra N Ghosh, Director (officiating), Institute of Nano Science and Technology, Mohali enlightened the delegates about the recent innovations in the field of Nanotechnology and their future applications. He shared his research experience and various challenges faced during development of Solar Cells, Quantum Dot Materials and Ultrafast Spectroscopic techniques. Prof (Dr) Satbir S Sehgal, Executive Director, Chandigarh University graced the occasion and addressed the august gathering. Dr Prabhat K Agnihotri, Assistant Professor, Department of Mechanical Engineering, IIT Ropar, emphasized on the role of nanotechnology in the area of polymer based nano-composites. He threw lights on the processing of the polymer based composites and critically explained how the nano reinforcement offers the high mechanical properties in comparison to micron range reinforcements. He also discussed about the



variation of elastic modulus at the interface of the reinforcement and the matrix material. Dr Dipankar Mandal, Scientist-E, Institute of Nano Science and Technology, Mohali discussed the role of nanotechnology in self-powered electronic devices. He further discussed about the piezoelectricity: conversion of mechanical to electrical energy. He also highlighted the concept of nano piezo electronics and thus nano-generators. Prof (Dr) Rupinder Singh Khalsa, Production Engineering Department, Guru Nanak Dev Engineering College, Ludhiana explained about the 3D printing of the smart materials for 4D application. Dr Harmesh Kumar Kansal, Professor & Coordinator, Deptt of Mechanical Engineering, UIET, Panjab University, Chandigarh discussed the role of nanotechnology in health care sector. He further highlighted the role of nano-robots for drug delivery on a particular location of organ. Earlier, Mr Janak Raj Garg, Chairman of the Centre welcomed the dignitaries and delegates. Prof (Dr) T S Kamal, Council Member, IEI shared the history and recent achievements of IEI in addition to his views on the theme during the program. Mr S S Mundi, Honorary Secretary of the Centre extended the vote of thanks at the end of the inaugural function.

## Workshop on Industry – Academia Interface

As a part of Centenary Celebrations of IEI, a Workshop on 'Industry-Academia Interface' was organised by Gujarat State Centre in association with Indus University, Ahmedabad on July 16, 2019 at the University Campus, Amhedabad. Mr Navinchandra B Vasoya, Past President & Council Member, IEI graced the occasion as the Chief Guest. Mr Vasoya, in his address, explained regarding Centenary Celebrations of IEI completing hundred years of journey which is embarking upon various initiatives to provide a platform for deliberation on contemporary challenges facing by the engineering profession.

Dr (Mrs) Rajul K Gajjar, Principal, Vishwakarma Government Engineering College, Ahmedabad and Mr Hemant Kumar, Head of the Department, Static Reliability, Reliance Industries Limited graced the function as Guests-of-Honor. The Guest of Honours, while addressing the gathering explained that this program will provide a platform to the participants to gain knowledge and information on skills and employability including Industry-Academia Interface. 'This workshop will also emphasize on ways and means, to improve the quality, skill and employability of



engineering graduates, and the discussions on various issues will bring out new ideas, and help in establishing new trends in identifying opportunities and challenges in professional and technical education system', they opined.

Other eminent dignitaries present during the inaugural session included Prof (Dr) M Muruganant, Executive President and Vice Chancellor, Indus University, Mr B S Patel, Council Member, IEI and Dr Anupam K Singh, Director, Institute of Technology and Engineering, Indus University, Ahmedabad. Mr B S Patel highlighted the objectives and importance of such Workshop to young engineers. Prof (Dr) M Muruganant also addressed the gathering explaining the role of Indus University to young engineers. Initially, Dr Anupam K Singh, Director, Indus University welcomed the august gathering. Mr Shyam Varghese, Honorary Secretary, Gujarat State Centre offered the formal vote of thanks at the end of the function. A large number of resource persons presented and discussed their contributions on various topics during the Workshop.

# World Environment Day 2019

Theme : Air Pollution

World Environment Day was celebrated by the Centres of the Institution all over the country on June 5, 2019. Brief accounts of the celebration as received from various Centres are reported hereunder

## STATE CENTRES

### Delhi

The Guest-of-Honour, Mr Anil Kumar Ahuja, Additional Director General, PWD Delhi mentioned that effective laws on pollution reduction have been adopted by different countries, which are not enough to defeat this powerful demon and needs conjoint governmental actions of all the countries to completely eliminate it. 'High level awareness should be spread to the common people to enhance the effort to save environment', he added. Other Guest-of-Honour on the occasion, Mr Shailendra Sharma, Engineer Member, Delhi Development Authority emphasized that pollution is



affecting our lives, so we must take individual steps and put in possible efforts to reduce its ill effects. 'We should not depend only on our government actions for some positive changes rather common people should act in individual capacity to reduce air pollution', he added. Earlier, Mr Dinesh Kumar, Chairman of the Centre welcomed the guests and dignitaries. Mr R K Yadav, Committee Member of the Centre proposed the vote of thanks at the end of the programme.

### Karnataka

The Speaker on the occasion, Dr A N Yellappa Reddy, Former Secretary, Department of Ecology & Environment, Government of Karnataka stated that there are many successful initiatives for clean air and reduction of greenhouse gas emissions, such as phasing out coal-fired power plants and promoting less polluting industry, transport and domestic fuels. 'With investments in renewable energy sources outstripping those in fossil fuels every year, the rise of clean energy is helping globally', he opined. Dr Reddy further pointed out to improve the air quality, we must know our enemy. 'Deaths and illnesses from air pollution are caused by tiny particles that penetrate our lungs', he added. Dr A S Kodanda Pani, Urban Planner & Civic Analyst, Convener of the event enlightened about celebration of this day which provides us with an opportunity to broaden the basis for a valued opinion and responsible conduct by individuals, enterprises and communities in preserving and enhancing the environment. Earlier, Mr Jasmal Singh, Chairman of the Centre welcomed the Speaker and other dignitaries present on the occasion.



### Kerala

The Theme Speaker on the occasion, Dr K R S Krishnan, Technical Advisor, Sri Chithra Thirunal Institute of Medical Science & Technology (SCTIMST), Thiruvananthapuram deliberated that air pollution is the contamination of indoor or outdoor environment by chemical, physical and biological agents that lowers the natural characteristics of the atmosphere. 'The harmful effects of air pollution include stroke, heart disease, respiratory illness, and

lung cancer', the Speaker opined. Dr Krishnan further clarified that the global climate change also has an effect on the quality of ambient as well as indoor air pollution and children, elderly & outside workers are disproportionately vulnerable to it. 'The air pollution is manifested as increase in health related problems, global warming, acid rain and depletion of ozone layer', he opined. Earlier, Mr N



Rajkumar, Immediate Past Chairman of the Centre introduced the Speaker. Mr Asok Kumar K, Honorary Secretary of the Centre proposed the vote of thanks.

### Manipur

The Theme Speaker of the function, Dr N Premananda Singh, Assistant Professor, Civil Engineering Department, MIT Manipur explained about the causes, effects, and possible solutions of air pollution so that we can make a judicious decision for Earth's future. He further elaborated that vehicle exhaust fumes, fossil fuel-based power plants, exhaust from industrial plants and factories, construction and agricultural activities etc. are the causes of air pollution leading to global warming and health hazards. To combat the negative impact, he suggested taking up of certain measures such as switching to a hybrid vehicle that runs on fully electric power, less energy consumption, recycling of old materials instead of dumping them into the environment. Earlier, Mr Haobijam Linthoinganbi Chanu welcomed the august gathering. Mr N Shyamsundar Singh, Chairman of the Centre, in his presidential address briefly highlighted the negative impacts of environmental pollution to our day-to-day life. He further emphasized on the current issue namely, the scarcity of water due to distortion in the hydrological cycle as a result of negative impact of climate change. Mr A Roudrajit Moirang, Honorary Secretary of the Centre proposed the vote of thanks at the end of the inaugural session.



### Tamilnadu

The Chief Guest of the function, Dr S Selvan, Additional Chief Environmental Engineer, Tamilnadu Pollution Control Board, Chennai, in his address explained that the air pollution is very simple and common phenomenon in day-to-day life of human being. He explained that presence of particles in air in excess to the limit or concentration cause ill health. Dr Selvam informed the gathering that in United Kingdom, the death due to air pollution is higher than death due to cancer. 'Air quality varies and depends



upon geography, distance from sea, dilution of particles due to wind, etc.', he added. He further opined that carbon dioxide and methane gases are great cause of concern and create global warming. Earlier, Mr R Ramdoss, Chairman of the Centre welcomed the gathering and introduced the Chief Guest. Mr P Gomathi Nayagam, Honorary Secretary of the Centre proposed the vote of thanks at the end of the programme.

### West Bengal

The Chief Guest on the occasion, Mr B B Singh, Chairman-cum-Managing Director, MSTC Limited spoke on various aspects of air pollution and its impact on our life. He dealt with air pollution caused by vehicles, air conditioning & refrigeration, various types of waste dumping and their impacts on everyday life.



He further mentioned how MSTC is diversifying in recycling business. The Keynote Speaker, Dr Anupam Debsarkar, Associate Professor of Environmental Engineering Division, Department of Civil Engineering, Jadavpur University, initiated the discussion with health effects due to air pollution. Very systematically he presented the picture of air quality standards and then moved to effects because of the exposure to PM2.5, Ozone, and household air pollution. He further emphasized on burden of diseases from air pollution. Earlier, Mr Sandip Kumar Deb, Chairman of the Center delivered the welcome address and chaired the programme. Mr Kalipada Das, Honorary Secretary of the Centre proposed the vote of thanks.

## LOCAL CENTRES

### Aligarh

The Chief Guest of the function, Prof Badrul Hasan Khan, Dean, Faculty of Engineering & Technology, Aligarh Muslim University (AMU), mentioned the efforts made by Govt. of India regarding conserving the natural water bodies and avoiding disposal of large amount of plastic waste into sea, oceans etc. He reiterated the importance of rivers and appealed to the authorities for maintaining the water bodies clean and free from all types of pollution. The Guest-of-Honour, Prof M M



Sufyan Beg, Principal, Zakir Hussain College of Engineering & Technology and Professor, Department of Computer Engineering, Aligarh Muslim University deliberated on the excessive use of plastics and uncontrolled disposal of the same onto the land and water bodies that poses a major threat to the environment. Prof Nadeem Khalil, Professor, Department of Civil Engineering, AMU, Aligarh, highlighted the importance of nature, oceans and forests in absorbing greenhouse gases like carbon dioxide and methane. Earlier, Dr Gyan Prakash, Chairman of the host Centre delivered the welcome address. Dr (Ms) Salma Shaheen, Honorary Secretary of the Centre proposed the vote of thanks.

### Angul

The Chief Guest on the occasion, Mr M P Mishra, Executive Director, (S & P) NALCO emphasized on the ecological balance for sustainable development and indicated about the changing perception of the society towards industry and its impact on the environment. He raised concern about nature's fury in the form of cyclonic storms etc due to environmental degradation and called upon the engineering fraternity to devise suitable technology, re-use and re-cycle wastes for environmental protection. The Guest-of-Honour, Dr Anup Mallick, Environmental Scientist, State Pollution Control Board, Angul,



Odisha, presented a vivid description of various aspects of air pollution and discussed about the remedial measures. Mr Y Pattanaik, Vice President, Odisha Works, Nava Bharat Ventures Limited also graced the occasion as another Guest-of-Honour. Dr Sandip Mishra, Principal Scientist, Institute of Life Sciences, Bhubaneswar, in his keynote address made a presentation on the impact of air pollution on human health. He also threw light on various research works going on in India and abroad relating to diseases caused by air pollution. Mr Satyabadi Mishra, Honorary Secretary of the Centre welcomed the august gathering. Mr P K Padhy, Immediate Past Honorary Secretary of the Centre proposed the vote of thanks.

### Anpara

The Chief Guest on the occasion, Mr Manoj Kumar Sachan, General Manager, Anpara D Thermal Project, Anpara explained that the menace of air pollution across the globe is a matter of great concern, but through



creating general awareness among the common people about hazards of using too much plastic-made objects in our day-to-day life and leaning to other eco-friendly alternatives, we can beat this challenge. Other dignitaries present in the function were Mr Ram Janam Yadav, Manager, NCL, Kakari Project as Guest-of-Honour, Mr Amitabh Kumar, Senior Engineer, BHEL, Shaktinagar, Mr Vikas Srivastava, Anpra Thermal Project and Mr Saman Yadav, NCL, Bina Project.

### Brahmapur

The Chief Guest on the occasion, Mr Ashish Kumar Behera, Divisional Forest Officer, Brahmapur narrated about the causes of Air Pollution and its



consequential effects on human being and others also. He briefed regarding Govt. strategies for implementation of various acts to prevent Air Pollution. Mr Ashutosh Patra, Former Joint Director of Agriculture, Govt. of Odisha, the Guest-of-Honour, briefed

a few technical data on the theme with some displays regarding Air Pollution. He also explained in detail, how to secure a desired level of control over the natural resources. Earlier, Mr Surendra Kumar Panigrahi, Honorary Secretary of the Centre welcomed the august gathering. Dr Arun Kumar Padhi, Chairman presided over the function. The Honorary Secretary also proposed the vote of thanks at the end of the programme.

### Coimbatore

Dr Balaji Kannan, Associate Professor, Soil & Water Conservation Engineering, Tamilnadu Agricultural University (TNAU), Coimbatore graced the occasion as the Chief Guest and delivered on the theme. Dr B Shridar, Dean (Agrl. Engineering), Agricultural Engineering College and Research Institute, Tamilnadu Agricultural University, Coimbatore delivered the Presidential Address.



Earlier, Dr P R Natarajan, Chairman of the Centre and Council Member, IEI welcomed the august gathering. Dr M Balakrishnan, Associate Professor, TNAU and Committee Member of the Centre introduced the Chief Guest. Dr H Ram Mohan, Honorary Secretary of the Centre proposed the vote of thanks.

### Durgapur

The Chief Guest on the occasion, Mr P K Pradhan, Executive Director (P & A), SAIL, Durgapur Steel Plant mentioned that we always receive a lot from the environment but in return, nothing can be delivered to the environment except pollution. He further highlighted the issues related to waste management and stated that sustainable waste management solutions are the need of the day to reduce the pollution to great extent. He shared his experience of pollution and

waste management and expressed his concern for teamwork among various agencies like R&D, Industry, Academia, NGO, Pollution Board for establishing certain joint activities for better future. The Guest-of-Honor and Keynote Speaker of the function, Dr Dipankar Saha, Former Additional Director, Central Pollution Control Board, India, mentioned that we are Guests to the Earth, hence we should not in demanding mode rather we have to avail the resources available without making their misuses or making any negative approach. Earlier, Prof (Dr) K C Ghanta, Chairman of the Centre and Council Member, IEI welcomed the guests and dignitaries. Mr M K Biswal, Honorary Secretary of the Centre proposed the vote of thanks.



### Faridabad

During the occasion, Dr Pradeep Kumar Dimri, Associate Professor, YMCA University of Science and Technology, Faridabad in his speech deliberated that due to the lack of sufficient resources and improper knowledge it comes



to the effect of environmental pollution, climate change and global warming. Dr Sarita Sachdeva, Professor, Biotechnology, Manav Rachna International Institute of Research and

Studies (MRIU) mentioned the precipitation of heavy particles and also stated that there is no quality check on heavy metals in vegetables and milk which is hazardous for human beings. Dr S V A V Prasad, Dean (Academic Affairs), Lingaya's University deliberated that the air pollution is caused by the presence of toxic substances in the atmosphere mainly produced by human to ensure comfort. Earlier, Mr Sandeep Handa, Honorary Secretary of the Centre, in his opening address stated that our continual exposure to air pollutants is responsible for the deterioration of human health. 'Air Pollution is indeed a significant risk factor for human health conditions, causing allergies, respiratory and cardiovascular diseases and lung diseases', he added.

### Gorakhpur

The Chief Guest and Keynote Speaker of the function, Prof (Dr) D K Singh, former HOD (Environmental Sciences & Bio-technology), Deen Dayal Upadhyay University, Gorakhpur described the deteriorating condition of environment resulting in increase in earth's temperature as well as of atmosphere, shrinking trend of glaciers and increase in sea level. He showed through Power Point Presentation the actual position (30-20 years back and present) of glaciers at



Poles and at Himalayas. Dr P K Chaudhary, Professor & Dean, Mechanical Engineering Department, BIT, GIDA Gorakhpur graced the occasion as the Special Guest and addressed the august gathering. Earlier, Mr M W Beg, Chairman of the Centre delivered the welcome address. Mr V K Srivastava, Honorary Secretary of the Centre proposed the vote of thanks.

### Indore

Mr Alok Dave, President, Association of Industries, M P graced the occasion as the Chief Guest and addressed the gathering. The theme speaker of the function, Dr O K Wagela, Senior Scientist & Lab Head, Madhya Pradesh Pollution Control Board, Indore, in his speech shared the details of action plans for controlling air pollution in the city. 'Various measures are being taken by the Govt agencies to reduce the pollution levels including control

over the diesel commercial vehicles of over more than fifteen years, introduction of CNG, LPG and battery-operated vehicles', he added. He stressed upon the need for growing more and more trees as it is the only solution to address the air pollution. Earlier, Prof (Dr) Ms Shilpa Tripathi, Chairperson of the Centre welcomed the august gathering and expressed the concern over increase in air pollution due to industries and vehicles. Dr Rakesh Saxena, Director, Shri G S Institute of Technology and Science, Indore, in his Presidential Address informed about the innovative work done by SGSITS for waste management. Mr Deepak S Shah, Honorary Secretary of the Centre proposed the vote of thanks.

### Kota

Mr Prem Das, Executive Director & Resident Head, DCM Shriram Ltd graced the occasion as the Chief Guest and addressed the gathering. Mr Govind Ram Mittal, founder President, Small Scale Industries Association, Kota graced the occasion as the Guest-of-Honour. Mr Amit Juyal, Regional Officer,



Rajasthan Pollution Control Board acted as the Convener of the function. Earlier, Mr Anand Bardava, Chairman of the Centre welcomed the august gathering and presided over the function. Mr Vinod Kumar Jaitly, Senior Vice President & Factory Head, Shriram Rayons, Kota, Mr P C Srinivasan, General Manager (Technical), Chambal Fertilisers and Chemicals Ltd, Mr Kapil Sharma, Chief Technical Officer - Kappa Internet Service Pvt. Ltd., Dr. D D Chaturvedi, Additional General Manager (E&S), DCM and Dr Vinod Jangid, Assistant Professor, Pulmonary Diseases, Medical College, Kota also spoke on the occasion. Mr Amit Juyal, Regional Officer, Rajasthan State Pollution Control Board extended the vote of thanks at the end of the programme.

### Ludhiana

Dr N K Khullar, Professor, PAU delivered an expert lecture. Dr Khullar, in his presentation, highlighted about various statistics for air pollution by various pollutants. He further outlined as to how this pollution could be controlled. Earlier, Mr Rup Lal Mahajan, Chairman of the Centre and Council Member, IEI, in his address



stressed upon prevention of all kinds of environmental pollutions. Mr Surjit Singh, Honorary Secretary of the Centre proposed the vote of thanks at the end of the function.

### Muzaffarpur

The Chief Guest on the occasion, Dr Ramesh Kumar Jha, Chief Scientist cum Professor of Forestry, Dr Rajendra Prasad Central Agricultural University, Pusa, Bihar remarked that plantation of trees should be



made which grow fast. Air pollution is a significant risk factor for health conditions causing allergies, respiratory problems and cardio-vascular diseases due to lung infection. The Guest-of-Honour, Mr V N Sahu, Past Chairman of the Centre urged that pollution control instruments should be made essential for the industrial units. 'Factories should be established at distant places from the populated zone', he opined. Dr Jagadanand Jha, Principal, Muzaffarpur Institute of Technology Muzaffarpur, in his presidential speech explained that air pollution causes production of toxic substances in the atmosphere mainly due to human activities namely use of chemicals and



petrochemicals, deforestation etc. Dr Anjani Kumar Mishra, Chairman of the Centre, in his welcome address narrated that air pollution is of great concern to scientists to protect human being, plants and animals in our planet. Mr Narendra Kumar Jha, Honorary Secretary of the Centre proposed the vote of thanks.

### Nagpur

The Chief Guest of the function, Mr Kaustav Chatterjee, Founder, Green Vigil Foundation, a reputed NGO in Nagpur and Brand Ambassador of Nagpur for Swachh Bharat Mission, in his Keynote Address covered the role, responsibilities and importance of NGOs in Environment Protection. He further explained various initiatives undertaken by his NGO in Nagpur city for encouraging the citizens to use artificial tanks during Ganesh Immersion, saving of trees during road construction, using treated sewage for fire hydrants deployed in Bhandewadi MSW dump yard, energy savings on full moon day etc. Mr S S Doifode, President of Sinchan Sahayog spoke on the importance of environmental protection. Earlier, Dr R L Shrivastava, Chairman of the Centre and Council Member, IEE welcomed the Chief Guest and other dignitaries present on the occasion. Dr M S Kadu, Honorary Secretary proposed the vote of thanks.



### North Bengal

The Theme Speaker on the occasion, Dr Soupayan Mitra, Associate Professor, Mechanical Engineering Department, Jalpaiguri Govt. Engineering College, in his speech stated that air pollution is a mix of particles and gases that can reach at a harmful concentrations both outside and inside and its effects can range from higher disease risks to rising temperatures. He further explained that air pollution occurs when harmful or



excessive quantities of substances including gases, particles, and biological molecules are introduced into Earth's atmosphere. 'Both human activity and natural processes can generate air pollution;', Mr Mitra opined. Mr Santanu Das, Honorary Secretary of the Centre proposed the vote of thanks at the end of the programme.

### Roorkee

The Chief Guest, Dr Balasubramaniun Kandswami, Director, Hightech Concrete Private Ltd., in his speech dealt with the problems in construction, practices, quality of materials and the relevant impact on service life of structure. He linked sustainability to the environmental protection. The Guest-of-Honour, Dr Bikash Mohanty, Professor Emeritus, Department of Chemical Engineering, IIT Roorkee emphasized upon the environment and water pollution and its effects on our day-to-day life. Earlier, Prof (Dr) Achal Kumar Mittal, Chairman of the Centre delivered the welcome address. Dr M A Iqbal, Honorary Secretary of the Centre introduced the Guest-of-Honour. Dr R S Chimote, Chief Scientist & AcSIR Academy Professor, Fire Research Laboratory, CSIR-CBRI Roorkee highlighted the importance of the day and proposed the vote of thanks at the end of the programme.



### Saurashtra

The Theme Speaker on the occasion, Prof (Dr) Archana Sharma, Senior Assistant Professor, Department of Environment Science & Engineering, Marwadi Education Foundation, Rajkot informed about the effects on health

of people by air pollution and presented details by which air pollution is to be reduced. Mr Riddhiben Kuri, Senior Scientific Officer, Gujarat Pollution Control Board, Govt. of Gujarat highlighted the steps taken for reduction of air pollution and explained its effects on environment. Earlier, Dr A S Pandya, Chairman of the Centre welcomed guests and dignitaries. Mr R K Babaria, Honorary Secretary of the Centre proposed the vote of thanks at the end of the function.



### Tiruchirappalli

Mr N Senthil Kumar, COO and Partner, Global Lab and Consultancy Services, Salem graced the occasion as the Theme Speaker and addressed on the topic of the day 'Air Pollution'. He also spoke about the objectives of celebrating the day. Mr D Harsha, Past Chairman, Dr N Kumaresan Chairman and Mr A Anand, Honorary Secretary of the Centre also graced the occasion with their august presence.



### Tirunelveli

Dr M Angelina Thanga Ajisha, Professor, Civil Engineering, Francis Xavier Engineering College, Tirunelveli graced the occasion as Resource Person and delivered lecture on the theme. Dr S Baburengarajan and Dr R Velayutham, Chairman and Honorary Secretary of the Centre respectively also graced the occasion with their august presence and spoke on the occasion.



### Varanasi

The Chief Speaker of the function, Prof P K Mishra, Head and Coordinator, MCIIE Hall, Department of Chemical Engineering, Indian Institute of Technology (Banaras Hindu University), Varanasi, speaking on 'Particle Pollution: The Invisible Killer' highlighted that there are two sources of particulate materials, first is natural particulate which includes organic particles from volcanoes, dust storm, forest and grassland fires, living vegetation and sea spray and second is Anthropogenic particulates which originates from burning fossil fuels, incinerating wastes and smelting of metals. 'The impact of particulate matter on health is premature death, asthma attack, chronic bronchitis, cancer, cardiovascular disease, diabetes and restricted activities, Particulate pollution may not be visible', he added. Other Speaker on the occasion, Prof Devendra Mohan, Department of Civil Engineering, Indian Institute of Technology (Banaras Hindu University) Varanasi, speaking on 'Air Pollution Control using the concept of Industrial Symbiosis' mentioned that air pollution has become one of the biggest problems in the present era and has serious impacts on macro (global), meso-(regional) as well as micro-(local) scales. 'Ozone layer depletion, global warming leading to climate change, acid rain, urban heat island effect etc. are some of the manifestations of air pollution at different scales', he opined. Earlier, Prof S N Upadhyay, Chairman of the Centre welcomed the Speakers and other dignitaries. Mr Santosh Kumar, Honorary Secretary of the Centre proposed the vote of thanks at the end of the programme.



# News-in-Brief

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

## STATE CENTRES

### Andhra Pradesh

Celebrated 'World Environment Day 2019' on June 5, 2019.

Celebrated '118th Birthday of Padmabhushan Dr K L Rao' on July 15, 2019.

### Assam

Seminar on 'Rural Industrialization through Innovative Process Mechanization' during June 8-9, 2019.

### Bihar

Seminar on 'Patna Metro: Inception and Planning' on July 7, 2019.

### Chhattisgarh

Celebrated 'Seventeenth Foundation Day' and 'World Telecommunication and Information Society Day' on May 29, 2019.

### Delhi

Celebrated 'World Telecommunication and Information Society Day 2019' on June 11, 2019.

Organized 26th Dr S P Luthra Memorial Lecture delivered by Dr G S Yadava, Former Head, ITMMEC, IIT Delhi on July 27, 2019.

### Karnataka

Fifth Er B R Manickam Memorial Lecture on 'Design of Public Buildings in Bangalore' delivered by Prof B S Jagadeesh Chandra, Professor of Architecture, Dayanand Sagar College of Architecture, Bengaluru on June 26, 2019.

Lecture on 'Industry 4.0' on the occasion of National Technology Day 2019 delivered by Dr A N Yellappa Reddy, Former Secretary, Department of Ecology & Environment, Government of Karnataka on July 5, 2019.

Lecture on 'Structural Stability of Buildings' delivered by Mr Radhesh, Director, Bharath Engineering, Innovation, Design & Consultancy, Bangalore on July 11, 2019.

### Kerala

Lecture on 'Environmental Initiatives in China' delivered by Dr S N Murthy, Retd. Scientist, Central Tuber Crops Research Institute, Trivandrum on June 12, 2019.

Lecture on 'Evolution of a Unique Extended Aeration ETP at Amrita University, Coimbatore' delivered by Dr N Narayana Pillai, Professor Emirates, Amrita School of Engineering, Amrita Viswa Vidyapeedham, Coimbatore on June 19, 2019.

Lecture on 'Standardization for National Growth' delivered by Mr K R Mohan Ananthanarayanan, Former Head & DGM Quality (Mechanical), VSSC on June 26, 2019.

Workshop on 'Chemical Safety and Sustainable Development Goals' on July 10, 2019.

Lecture on 'The Man Landing-50 Years Ago' delivered by Mr Jasper Lal, Group Head (Retd), Vikram Sarabhai Space Centre, Thiruvananthapuram on July 17, 2019.

Lecture on 'The Great Housing Conundrum' delivered by Mr A Kasturi Rangan, Former Chief Town Planner, Kerala on July 24, 2019.

Lecture on 'Reverse Logistic Network for Used Refrigerators' delivered by Mr Aneesh S on July 31, 2019.

### Madhya Pradesh

Workshop on 'Prevention of Leakage/ Seepage/Dampness in Buildings and Mass Plantation in Madhya Pradesh State Centre Premises' on July 14, 2019.

### Tamilnadu

Organized Panel Discussion on 'Challenges to Indian Industry in Implementing Industry 4.0' on May 30, 2019.

### Uttar Pradesh

Lecture on 'Construction of Underground Tunnel in Lucknow Metro - An Overview' delivered by Mr P Ananthakumar, Project Engineer, Geodata India Pvt. Ltd on July 19, 2019.

Lecture on 'Rainwater Harvesting – Need of the Hour' delivered by Mr Pratik Ranjan Chaurasia, Ex HoD & Chief Engineer, Minor Irrigation Department UP and Ex. Director, Ground Water Department UP on July 26, 2019.

### West Bengal

Celebrated '166th Birthday Celebration of Sir R N Mookerjee' the founder President, IET on June 23, 2019.

## LOCAL CENTRES

### Agra

Celebrated 'World Environment Day 2019' on June 9, 2019.

### Ahmednagar

Lecture on 'Intellectual Property Rights' delivered by Dr Dadasaheb Karanjule, Lecturer in Mechanical Engineering, Government Polytechnic, Ahmednagar on July 12, 2019.

### Coimbatore

Lecture on 'Smart Grid in TANGEDCO' delivered by Dr D Manoharan, Former Chief Engineer, Tamilnadu Electricity Board, Coimbatore on July 15, 2019.

### Durgapur

Lecture on 'The Visions of Dr A P J Abdul Kalam' delivered by Dr Kalyan Kumar Mistry, Principal Scientist, CSIR, Durgapur on July 27, 2019.

### Kanyakumari

Conducted an IoT Implant Training Course on 'Emerging Technologies' during June 24-29, 2019.

### Kolhapur

Celebrated 'World Telecommunication and Information Society Day 2019' on May 17, 2019.

Seminar on 'Career Opportunities in Engineering Education and Centralized Admissions Process 2019' on June 2, 2019.

Celebrated 'World Environment Day 2019' on June 5, 2019.

#### **Kota**

Technical Paper Meeting on 'Kota City Development for Traffic, Drainage, Water Flooding, Water storage in some part of city parking' on July 26, 2019.

#### **Ludhiana**

Celebrated 'World Telecommunication and Information Society Day 2019' on May 17, 2019.

#### **Meerut**

Lecture on 'Supply Chain Management' delivered by Dr S A Rizvi, Workshop Superintendent, University Polytechnic, JMI, New Delhi on June 30, 2019.

#### **Mysore**

Organized Discussion and Technical Paper Meeting on 'Drinking Water Crisis' on June 25, 2019.

#### **North Bengal**

Lecture on 'Assessment of PEI of MSW Management System using LCA Methodology' delivered by Mr Samir Das, Assistant Professor, Department of Civil Engineering, Jalpaiguri Government Engineering College, Jalpaiguri on July 24, 2019.

#### **Palghat**

Lecture on 'Electrical Safety and Department of Electrical Inspectorate' delivered by Mr Noufal P, Assistant Electrical Inspector, Office of the Electrical Inspector, Department of Electrical Inspectorate Govt. of Kerala, Palakkad on July 17, 2019.

#### **Rourkela**

Lecture on 'How to Select Right Water Purifier for Your Home' delivered by Mr S S Pradhan, HOD, Water Management Department (Retd), Rourkela Steel Plant on July 1, 2019.

Lecture on 'Societal Application Based Product Development for a Better Smart City Vision' delivered by Dr Santos Kumar Das, Assistant Professor, Department of Electronics and Communication Engineering, NIT Rourkela on July 25, 2019.

#### **Saurashtra**

Workshop on 'Applications of Geosynthetics & Ground Improvement Techniques' during July 5-6, 2019.

#### **Tiruchirappalli**

Lecture on 'Psychological Studies in Engineering' delivered by Mr V Stracey George, Assistant Professor CARE Group of Institutions, Tiruchirappalli on June 18, 2019.

Lecture on 'Biomimetic Aircraft: Engineering in Nature's Style' delivered by Mr S Arunvinthan, Research Scholar of Aerospace Engineering, SASTRA Deemed University, Thanjavur on July 2, 2019.

Lecture on 'An Insight into Ear Biometric Recognition Techniques' delivered by Dr R Sowmyalakshmi, Assistant Professor, Department of ECE, University College of Engineering (BIT campus), Tiruchirappalli on July 9, 2019.

Lecture on 'Microstructure Simulation - Equal Channel Angular Pressing using DEFORM 3D' delivered by Dr S Ramesh Kumar, Assistant Professor

Research, School of Mechanical Engineering, SASTRA Deemed University Thanjavur on July 16, 2019.

Lecture on 'MIMO Pre-coding in 4G and 5G Wireless Technologies' delivered by Dr Priya SBM, Former Assistant Professor, J.J.College of Engineering & Technology, Tiruchirappalli on July 23, 2019.

#### **Tiruvallur**

Lecture on 'Engineers Employability Enhancement' delivered by Dr P S Kumar, Founder, 360 Transformation, Managing Director, Smarttess on July 9, 2019.

Organized 'IEI TVLC KOOGL 2019, Searching for Innovator' on July 25, 2019.

#### **Trichur**

Conducted Interactive Session on 'Cost Effective Technology for Building Construction and Life Projects' on July 13, 2019.

#### **Varanasi**

Organized Prof B B Bansal Memorial Lecture on April 19, 2019.

Technical Paper Meeting on 'Power System Reforms' on April 24, 2019.

Lecture on 'Vaastu – Its Utility in Modern Architecture in India' delivered by Mr Sharad C Asthana, Architectural Engineer, Former Honorary Secretary of the Centre on April 28, 2019.

Celebrated 'World Telecommunication & Information Society Day 2019' on May 22, 2019.

Lecture on 'Is Nanotechnology; the future of Thermal Engineering' delivered by Prof P Ghosh, Professor, Department of Mechanical Engineering, Indian Institute of Technology (Banaras Hindu University) Varanasi on May 26, 2019.

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

*Contd. from page 1*

I had the privilege last month to interact with Prof Jose M F Moura, President, IEEE and Philip L. and Marsha Dowd University Professor, Electrical and Computer Engineering, Carnegie Mellon University, on the occasion of signing a MoU at Bengaluru, between IEI and IEEE. This MoU seeks to achieve mutual benefits for the members of both the Institution with the idea to encourage STEM education, achieve synergy in various multidisciplinary areas, joint conduct of technical programmes on contemporary themes and collaboration on development of standards.

We are close to entering our Centenary Year and I look forward for your participation in large numbers in various events at our State and Local Centres, which would go a long way to enrich the Proceedings.

I wish you and your family a very Happy Independence day.

Jai Hind.

## One Day Seminars/Workshops Conducted by Various Centres of IEI

### STATE CENTRES

#### Telangana

Telangana State Centre of the Institution organized One Day Seminar on the topic 'Role of Engineers in Agriculture for Doubling the Farmers Income' under the aegis of Agricultural Engineering Division Board of IEI on May 27, 2019 at Hyderabad. Mr Somesh Kumar, Special Secretary to Government, Irrigation & CAD Department and Dr V Praveen Rao, Vice Chancellor, PJTASAU graced the occasion as the Chief Guest and Guest-of-Honor and addressed the august gathering.



#### West Bengal

West Bengal State Centre of the Institution organized One Day Seminar on the topic 'Technological Challenges in Mass Coal Production System' under the aegis of Mining Engineering Division Board of IEI on July 27, 2019 at Kolkata. Mr Avijit Mallik, General Manager, Jhanjra Coal Mine Project Eastern Coalfields Limited graced the occasion as the Chief Guest and addressed the gathering.



The Guest-of-Honour was Mr D V Pichamuthu, Council Member, MNDB, IEI. Other

eminent speakers include Mr Kalyan Kumar Hazra, Manager-operation & EHS, Joy Mining Services India Limited, Mr Anupam Bagchi, AVP/Head of EHS-Mines and Minerals, HINDALCO Industries Limited, Prof (Dr) Netai Chandra Dey, Department of Mining Engineering, IEST, Shibpur and so on.

### LOCAL CENTRES

#### Anpara

Anpara Local Centre of the Institution organized One Day Workshop on the topic 'Fire Prevention and Protection' under the aegis of Civil Engineering Division Board of IEI on June 29, 2019 at Anpara. Mr Deepak Kumar, Chief Engineer, Anpara Thermal Power Station (ATPS) and Mr Amarnath Pandey, Chief Engineer, NCL Khadiya Project Shaktinagar graced the function as the Chief Guest and Guest-of-Honour respectively and addressed the august gathering. Among other dignitaries present included Mr Mayank Mangalik, Senior Engineer, ATPS and Mr Manoj Kumar Sachan, General Manager, DTPS Anpara Thermal Power Project.



#### Gwalior

Gwalior Local Centre of the Institution organized One Day Workshop on the topic 'Robotic Mining' under the aegis of Mining Engineering Division Board of IEI on July 14, 2019 at Gwalior. Mr P P Agrawal, former Council Member, IEI graced the occasion as the Chief Guest and addressed the gathering. Mr P Y Khanvilkar was the Keynote



Speaker of the function.

## Jharkhand State Centre celebrates its 58th Foundation Day



Jharkhand State Centre of the Institution celebrated its 58th Foundation Day on July 21, 2019. Dignitaries graced the auspicious occasion with their august presence included Padma Bhushan Mr Kariya Munda, Past Deputy Speaker (Lok Sabha), Mr Sanjay Seth, Member of Parliament, Ranchi, Prof (Dr) A K Lohar, Scientist, CMERI, Durgapur and Dr T M Gunaraja, President, IEI.

## Rural Industrialization through Innovative Process Mechanization

*Contd. from page 3*

- Research work in the Rural Industrialization should be translated into real world applications through promoting collaboration between Research Institutions and Industries through the use of Pilot Projects/ Demonstrations.
- Greater awareness of rural industry and its products should be built up among primary producers, public and consumers through knowledge transfer, advisory, sustainable business models, public procurement, consumer awareness campaigns, product labeling initiatives, etc.
- A network comprised of representatives of commercial entities operating with rural industrial products and relevant public bodies to inform future development of the rural industrial products is to be established.
- A greater coherence among all the sectors of Rural Industry has to be promoted to ensure a coordinated approach so that the full range of benefits of Rural Economy – from climate change to exodus of rural manpower and rural development – can be realized.
- These actions can only be progressed by cooperation and collaboration between the public service, industries and the research institutes.
- Assam has significant strengths and comparative advantages in the rural economy because of presence of wide range of traditional rural industrial products as well as a growing research capacity. The Government of Assam may adopt a proper Action Plan to emerge as a national leader for Rural Industrialization.

# National Design Awards - 2019

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 2019**.

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](mailto:ndrf@ieindia.org) or visit NDRF website at [www.ndrf.res.in](http://www.ndrf.res.in)

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 - 2019.



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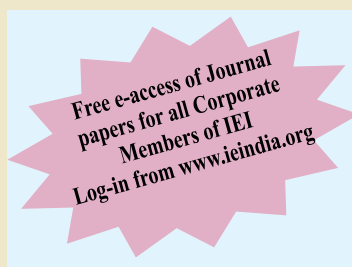
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# IEI DIARY



## Aerospace Engineering Division

All India Seminar on “**Bluff Body Aerodynamics**”  
Kolkata, September 06-07, 2019  
The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [☎: (033)22238914; Fax: (033) 22233140; e-mail: wbsc@ieindia.org]

All India Seminar on “**Issues and Challenges in Aviation Industry**”  
Jaipur, September 21-22, 2019  
The Honorary Secretary, IEI, Rajasthan State Centre, Gandhi Nagar, Tonk Road, Jaipur 302015 [☎: (0141) 2706327; Telefax: (0141) 2700413; e-mail: rajasthansc@ieindia.org]

One Day Seminar on “**Emerging Technologies in Aerospace Engineering**”  
Tiruchirapalli, September 27, 2019  
The Honorary Secretary, IEI, Tiruchirapalli Local Centre, BHEL Main Office Road, Tiruchirapalli 620014 [☎: (0431) 2554285; Fax: 0431-2520383/2520775; e-mail: tiruchirapallilc@ieindia.org]

Thirty-third National Convention of Aerospace Engineers on “**Emerging Technologies in Aerospace Structures, Materials and Propulsion System**”  
Pune, November 16-17, 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]

Thirty-fourth National Convention of Aerospace Engineers on “**Advances in Aerospace Engineering**”  
Kanpur, November 9-10, 2020  
The Honorary Secretary, IEI, Kanpur Local Centre, Engineers Bhawan, HBTI East Campus, Nawabganj, Kanpur 208002 [Telefax: (0512) 2560034; e-mail: kanpurlc@ieindia.org]

## Agricultural Engineering Division

National Conference on “**Smart Village and Agriculture**”  
Bengaluru, February 07-08, 2020  
The Honorary Secretary, IEI, Karnataka State Centre, No. 3, Dr. B R Ambedkar Veedhi, Bangalore 560001 [☎: (080) 22264698; Telefax: 080-22256191; e-mail: karnatakasc@ieindia.org; www.ieiksc.org]

## Architectural Engineering Division

All India Seminar on “**Architecture for Sustainable Development**”  
Raipur, September 14-15, 2019  
The Honorary Secretary, IEI, Chhattisgarh State Centre, National Institute of Technology Campus, G E Road, Raipur 492010 [☎: (0771) 2254625; e-mail: chattisgarhsc@ieindia.org; website: www.ieicg.org]

International Conference on “**Architectural Innovations: Engineering, Technology and Materials**”  
Jaipur, November 27-29, 2019  
The Honorary Secretary, IEI, Rajasthan State Centre, Gandhi Nagar, Tonk Road, Jaipur 302015 [☎: (0141) 2706327; Telefax: (0141) 2700413; e-mail: rajasthansc@ieindia.org]

## Chemical Engineering Division

Thirty-fifth National Convention of Chemical Engineers on “**The Food-Energy-Water (FEW) Nexus- Challenges for Chemical Engineers**”  
Guwahati, September 06-07, 2019  
The Honorary Secretary, IEI, Assam State Centre, Panbazar Overbridge, East Lane, Guwahati 781001 [☎: (0361) 2548742; Fax: (0361) 2630368; e-mail: assamsc@ieindia.org; website: ieiasc.org]

All India Seminar on “**Natural Gas-Fuel for Future**”  
Ranchi, September 13-14, 2019  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Doranda, Ranchi 834002 [☎: (0651) 2491344; e-mail: jharkhandsc@ieindia.org; website: www.ieijsc.org]

All India Seminar on “**Recent Developments in Technological Options for Resource Recovery in Chemical Process Industry**”  
Hyderabad, September 26-27, 2019  
The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004 [☎: (040) 23314969; e-mail: telanganasc@ieindia.org; website: ieitsc.org]

All India Seminar on “**Chemical and Biochemical Process Intensifications**”  
Kolkata, October 25-26, 2019  
The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [☎: (033) 22238914; Fax: (033) 22233140; e-mail: wbsc@ieindia.org]

International Conference on “**Technologies for Manufacturing Less Polluting and Green Crackers**”

Madurai, July 02-03, 2020  
The Honorary Secretary, IEI, Madurai Local Centre, Er T M Jambulingam Bhavan, No. 1, Vivekananda Nagar, 120 Feet Road, Surveyor Colony, K Pudur, Madurai 625007 [☎: 0452 4373067; e-mail: madurailc@ieindia.org]

Thirty-sixth National Convention of Chemical Engineers on “**Frontier Technologies for 21st Centuries Process Industries**”  
Durgapur, September 11-12, 2020  
The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B-Zone, Durgapur 713205 [Telefax: (0343) 2564770; e-mail: durgapurlc@gmail.com; website : ieidurgapurlc.org]

## Civil Engineering Division

Thirty-fifth National Convention of Civil Engineers on “**Restoration and Maintenance of Structures and Water Bodies for Sustainability**”,  
Ahmedabad, September 01-02, 2019  
The Honorary Secretary, IEI, Gujarat State Centre, Bhaikaka Bhavan, Near Law Garden, Law College Road, Ahmedabad 380006 [☎: (079) 2640 0811; Telefax: (079) 2656 1825; e-mail: gujaratcsc@ieindia.org; website: www.ieigujarat.org]

All India Seminar on “**Digital Technologies in Surveying and Mapping**”  
Hyderabad, October 15-16, 2019  
The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004 [☎: (040) 23314969; e-mail: telanganasc@ieindia.org; website: www.ieitsc.org]

International Conference on “**Building the Disaster Resilient Society in BIMSTEC Countries: Roll of Nations**”  
Agartala, February 28-March 01, 2020  
The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Near Tripura Housing Board, P.O.: Kunjaban, PB No. 139, Agartala 799006, Telefax: 0381-2304700; e-mail: tripurasc@ieindia.org]

Thirty-sixth National Convention of Civil Engineers on “**Innovation, Mechanisation and Modern Techniques in Civil Engineering**”  
Ranchi, September 8-9, 2020  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Doranda, Ranchi 834002 [☎: (0651) 2491344; e-mail: jharkhandsc@ieindia.org; website: www.ieijsc.org]

## Computer Engineering Division

### International Conference on “Opportunities and Challenges of Blockchain Technology”

Chennai, September 14-15, 2019

The Honorary Secretary, IEI, Tamilnadu State Centre, 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: (044) 25360614 / 25369433; e-mail: tnscc@ieindia.org; website: www.ieitamilnadu.org]

### One Day Workshop on “Machine Learning Techniques using PYTROC”

Tiruchirapalli, October 05, 2019

The Honorary Secretary, IEI, Tiruchirapalli, Near Ganesa Bus Stop, BHEL Main Office Road, Opposite to 79 Building, Tiruchirapalli 620014 [☎: 0431-255 4285 / 2574022; e-mail: tiruchirapallilc@ieindia.org]

### International Conference on “Next Generation Computing Technologies”

Dehradun, December 20-21, 2019

The Honorary Secretary, IEI, Dehradun State Centre, Engineers Bhawan, Near ISBT Flyover, Saharanpur Road, Dehradun 248002 [☎: 0135 2641190; Mobile: 9412056431; e-mail: uttarakhandsc@ieindia.org]

### All India Workshop on “Software Testing, Audit and Quality Assurance using Open Source Tools”

Chandigarh, January 23-24, 2020

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 “Applied Computational Intelligence and Informatics”

Jaipur, February 15-16, 2020

The Honorary Secretary, IEI, Rajasthan State Centre, Gandhi Nagar, Tonk Road, Jaipur 302015 [☎: (0141) 2706327; Telefax: (0141) 2700413; e-mail: rajasthansc@ieindia.org]

## Electrical Engineering Division

### Thirty-fifth National Convention of Electrical Engineers on “Storing Energy for a Sustainable Future: Future Energy in any Isolated World”

Chennai, November 8-9, 2019

The Honorary Secretary, IEI, Tamilnadu State Centre, 19, Swami, Sivananda Salai, Chepauk, Chennai 600005 [☎: (044) 25360614 / 25369433; e-mail: tnscc@ieindia.org; website: www.ieitamilnadu.org]

### International Conference on “Impact of Changing Energy-mix in Power Sector”

Kolkata, November 23-24, 2019

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

### All India Seminar on “Role of Smart Grid for Rural Electrification”

Bhubaneswar, December 7-8, 2019

The Honorary Secretary, IEI, Odisha State Centre, Sachivalaya Marg, Unit-IV, Bhubaneswar 751001 [☎: 0674 2390291, Telefax: 0674 2390630; e-mail: odishasc@ieindia.org]

### International Conference on “Water, Energy and Biodiversity for Sustainable Development of BIMSTEC Countries”

Dhaka, December 12-14, 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]

### All India Seminar on “Policies of Governments, Paradigms Challenges and Opportunities of Sustainable Electrical Power in India”

Hyderabad, January 11-12, 2020

The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004 [☎: (040) 23314969; e-mail: telanganasc@ieindia.org; website: ieitsc.org]

### All India Seminar on “Design of Efficient Power System by Applications of Optimization Techniques”

Chandigarh, January 15-16, 2020

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

### All India Seminar on “Load Management in Electrical Power Systems in India”

Hyderabad, February 01-02, 2020

The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004 [☎: (040) 23314969; e-mail: telanganasc@ieindia.org; website: ieitsc.org]

## Electronics & Telecom. Engineering Division

### All India Seminar on “Artificial Intelligence: An Application Perspective”

Coimbatore, September 05-06, 2019

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

### National Workshop on “Single Board Computer for Real-time Application”

South Gujarat, September 05-06, 2019

The Honorary Secretary, IEI, South Gujarat Local Centre, Mahida Bhavan, Ichchhanath,

Surat 395007 [☎: 0261-2227340; e-mail: sglc@ieindia.org]

### International Conference on “Electronics & Communications, Renewable Energy and IOT-Vision 2040”

Chandigarh, September 07-08, 2019

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

### All India Seminar on “Artificial Intelligent Systems and Emerging Technologies”

Bareilly, September 27-28, 2019

The Honorary Secretary, IEI, Bareilly Local Centre, 270, Comphor Estate Colony, Near Camphor Hospital, C B Ganj, Bareilly 243502 [Mobile: 9634953691; e-mail: bareillylc@ieindia.org]

### All India Seminar on “ARM Processor”

Bangalore, October 04-05, 2019

The Honorary Secretary, IEI, Karnataka State Centre, No. 3, Dr B R Ambedkar Veedhi, Bangalore 560001 [☎: 080-22264698; Telefax : 080 22256191; e-mail: karnatakasc@ieindia.org]

### Thirty-fifth National Convention of Electronics & Telecommunication Engineers on “Intelligent Electronics Systems for State-of-the-Art Healthcare System”

Kurukshetra, October 19-20, 2019

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

### All India Seminar on “5G and Its Scopes for Different Technologies”

Bhubaneswar, November 9-10, 2019

The Honorary Secretary, IEI, Odisha State Centre, Sachivalaya Marg, Unit-IV, Bhubaneswar 751001 [☎: 0674 2390291, Telefax: 0674 2390630; e-mail: odishasc@ieindia.org]

### All India Workshop on “Impact of Advancement in Wireless Technology (5G/6G) on Indian Society”

Chandigarh, November 25-29, 2019

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

### All India Seminar on “Energy Efficient Techniques in 5G Wireless Communication Systems”

Coimbatore, November 28-29, 2019

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

## Environmental Engineering Division

### All India Seminar on “Kerala’s Water Woes – Challenges and Mitigation”

Thiruvananthapuram, September 19-20, 2019  
The Honorary Secretary, IEI, Kerala State Centre, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram 695033 [☎: (0471) 2322991 / 2982102; Telefax : (0471) 232992; e-mail: keralasc@ieindia.org; website: www.ietvm.org]

### All India Seminar on “Solid Waste Management: An Industrial Perspective”

Bokaro Steel City, September 21-22, 2019  
The Honorary Secretary, IEI, Bokaro Steel City Local Centre, Abhiyanta Bhawan, Sector V-A, Bokaro Steel City 827006 [☎: (06542) 267227/288972; e-mail: bokarolc@ieindia.org]

### All India Seminars on “Artificial Recharge of Ground Water and its Role in Water Management”

Ranchi, November 09-10, 2019  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Doranda, Ranchi 834002 [☎: (0651) 2491344; e-mail: jharkhandsc@ieindia.org; website: www.ieijsc.org]

### International Conference on “Environmental Degradation: Key Challenges to Sustainable Development”

Hyderabad, November 22-24, 2019  
The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004 [☎: (040) 23314969; e-mail: telanganasc@ieindia.org; website: ieitsc.org]

### All India Seminar on “Sustainability on the Conversion of Coal and Hydrocarbons”

Puducherry, December 12-13, 2019  
The Honorary Secretary, IEI, Puducherry State Centre, 63 N S C Bose Salai, PWD Campus, Ground Floor, Circle - I Office, Puducherry 605001 [Mobile : 9443748471; e-mail: puducherrysc@ieindia.org]

### Thirty-sixth National Convention of Environmental Engineers on “Waste Recycling and Reuse”

Kochi, August 07-08, 2020  
The Honorary Secretary, IEI, Kochi Local Centre, Govt. Homeo Hospital Road, Near Pullepady Railway Over Bridge (East Side), P.O. Kaloore, Kochi 682017 [☎: (0484) 2403838 / 3993 e-mail: kochilc@ieindia.org; website: www.ieikochi.org]

## Mechanical Engineering Division

### Thirty-fifth National Convention of Mechanical Engineers, on “Trends and Developments in Automotive Industry”

Hosur, September 04-05, 2019  
The Honorary Secretary, IEI, Hosur Local Centre, No.69, Kamaraj Nagar, Kumudepall,

Near Adhityamaan College of Engineering, Tamilnadu, Hosur 635109 [e-mail: hosuric@ieindia.org]

### All India Seminar on “Challenges and Research Opportunities for Electrical Mobility Vehicles in India”

Coimbatore, September 26-27, 2019  
The Honorary Secretary, IEI, Coimbatore Local Centre, PSG College of Technology Campus, Peelamedu, Coimbatore 641004 [☎: (0422) 2580733; e-mail: coimbatorelc@ieindia.org]

### All India Seminar on “Tribology as Energy Saver for Mining & Heavy Industries”

Ranchi, September 28-29, 2019  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Doranda, Ranchi 834002 [☎: (0651) 2491344; e-mail: jharkhandsc@ieindia.org; website: www.ieijsc.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]

### Thirty-seventh National Convention of Mechanical Engineers on “Application of IoT and Big Data in Manufacturing and Associated Field”

Delhi, September 10-11, 2021  
The Honorary Secretary, IEI, Delhi State Centre, Engineers Bhawan, 2 Bahadurshah Zafar Marg, New Delhi 110002 [☎: (011) 23379052 / 23379948; e-mail: delhisc@ieindia.org; website: www.ieidsc.in]

### All India Seminar on “Digital Manufacturing Towards Industry 4.0”

Bangalore, October 18-19, 2019  
The Honorary Secretary, IEI, Karnataka State Centre, No. 3, Dr. B R Ambedkar Veedhi, Bangalore 560001 [☎: (080) 22264698; Telefax: (080) 22256191; e-mail: karnatakasc@ieindia.org; www.ieiksc.org]

## Metallurgical & Materials Engg. Division

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

Kolkata, November 01-02, 2019  
The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [☎: (033)22238914; Fax: (033) 22233140; e-mail: wbcs@ieindia.org]

### Thirty-third National Convention of Metallurgical & Materials Engineers on “Climate Responsive Technologies vis-a-vis Iron and Steel Production Scenario”

Durgapur, January 17-18, 2020  
The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B-Zone, Durgapur 713205 [Telefax: (0343) 2564770; e-mail: durgapurlc@gmail.com; website : ieidurgapurlc.org]

## Mining Engineering Division

### Thirty-first National Convention of Mining Engineers on “Future Strategies for Sustainable Mining”

Goa, October 04-05, 2019  
The Honorary Secretary, IEI, Goa State Centre, D Type Quarters, D-8-1, Government Polytechnic Campus, Altinho, Panaji, Goa 403001 [☎: 0832 2434686; e-mail: goasc@ieindia.org; website: www.ieigoasc.org]

### International Conference of Mining Engineers on “Mining – Present and Future : Investments, Issues and Challenges”

Hyderabad, October 23-25, 2019  
The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004 [☎: (040) 23314969; e-mail: telanganasc@ieindia.org; website: ieitsc.org]

## Production Engineering Division

### All India Seminar on “Application of Green Manufacturing Technology in Mechanical Processing”

Bangalore, September 13-14, 2019  
The Honorary Secretary, IEI, Karnataka State Centre, No. 3, Dr. B R Ambedkar Veedhi, Bangalore 560001 [☎: (080) 22264698; Telefax: (080) 22256191; e-mail: karnatakasc@ieindia.org; www.ieiksc.org]

### All India Seminar on “Recent Trends in Automation & Digital Manufacturing”

Hyderabad, September 20-21, 2019  
The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004 [☎: (040) 23314969; e-mail: telanganasc@ieindia.org; website: ieitsc.org]

### All India Workshop on “Theory and Practice of Sustainable Manufacturing”

Tiruchirappalli, September 20-21, 2019  
The Honorary Secretary, IEI, Near Ganesa Bus Stop, BHEL Main Office Road, Opposite to 79 Building, Tiruchirappalli 620014 [☎: (0431) 2554285 / 2574022; e-mail: tiruchirappallic@ieindia.org]

### All India Workshop on “Best Practices and Applications of TQM in Industry and Academia”

Bangalore, October 11-12, 2019  
The Honorary Secretary, IEI, Karnataka State Centre, No. 3, Dr. B R Ambedkar Veedhi, Bangalore 560001 [☎: (080) 22264698; Telefax: (080) 22256191; e-mail: karnatakasc@ieindia.org; www.ieiksc.org]

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# 52<sup>nd</sup> ENGINEERS' DAY

## Theme: "Engineering for Change"

September 15 is celebrated every year in the country since 1967 as "Engineers' Day" to commemorate the birthday of the legendary engineer Sir Mokshagundam Visvesvaraya. Sir Visvesvaraya, an eminent Indian engineer and statesman was born in a remote village of Karnataka, the State that is incidentally now the Hi-tech State of the country. Due 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 52nd Engineers' Day will be celebrated all over the country and the Council of the Institution has selected the theme as "Engineering for Change" to mark the occasion.



Bharat Ratna Sir M Visvesvaraya

several initiatives such as Digital India, Make in India, Start-up India and Smart Cities. Keeping in view of the rapid transformation and innovation at international level, engineers of our country should be prepared to cope-up with the changes. The complexity further increases due to environmental concerns and actions needed for sustainable development. Engineers now cannot restrict themselves to a particular discipline. Good understanding of interdisciplinary innovations, design, planning and undertaking of researches and projects on that is the need of the hour.

Renewable energy has become the key notion of all Electrical as well as Environmental engineers as we have to move away from fossil fuel to save the environment. Wind energy and solar PV energy are now finding place amidst the conventional energy supply of the nation and interconnectivity of those with the main grid is being looked into. To facilitate the mobility of the huge population of our country, 'Green transport' is required to be implemented for all mass transport system.

Therefore the theme "Engineers for Change" calls upon the engineers to be the harbinger for the change by exploring the disruptive technologies in all engineering sectors to enable India to lead the crusade of mitigation of climate change.

The theme 'Engineering for Change' is chosen for Engineer's Day 2019 celebrations to address all these aspects.

## IEI DIARY

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### All India Seminar on "Best Practices and Applications of TQM in Industry and Academia"

Bangalore, October 11-12, 2019

The Honorary Secretary, IEI, Karnataka State Centre, No. 3, Dr. B R Ambedkar Veedhi, Bangalore 560001 [☎: (080) 22264698; Telefax: (080) 22256191; e-mail: karnatakasc@ieindia.org; www.ieiksc.org]

### All India Seminar on "Innovative Production Systems"

Jaipur, November 02-03, 2019

The Honorary Secretary, IEI, Rajasthan State Centre, Gandhi Nagar, Tonk Road, Jaipur 302015 [☎: (0141) 2706327; Telefax: (0141) 2700413; e-mail: rajasthansc@ieindia.org]

### Textile Engineering Division

#### International Conference on "Innovative Approaches for the Development of Sustainable Textile Products and Processes"

Kolkata, February 09-10, 2020

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

#### Thirty-third National Convention of Textile Engineers on "Two Decades of Nanotechnology in Textile: Progress and Prospects"

Ahmedabad, February 20-21, 2020

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

### Interdisciplinary

#### All India Seminar on "Green Energy Technologies for Sustainable Environment"

Pune, October 12-13, 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]

#### International Conference on "Innovative Engineering for Smart Cities, High Speed Transport and Infrastructure"

Chennai, November 18-20, 2019

The Honorary Secretary, IEI, Tamilnadu State Centre, 19, Swami, Sivananda Salai, Chepauk, Chennai 600005 [☎: (044) 25360614 / 25369433; e-mail: tncsc@ieindia.org; website: www.ieitamilnadu.org]

#### All India Workshop on "Opportunities for Industry 4.0 Applications in Indian Industries"

Tiruchirappalli, January 03-04, 2020

The Honorary Secretary, IEI, Near Ganesa Bus Stop, BHEL Main Office Road, Opposite to 79 Building, Tiruchirappalli 620014 [☎: (0431) 2554285 / 2574022; e-mail: tiruchirappallilc@ieindia.org]

### Overseas Activities

#### Centenary International Engineering Congress on "Smart Engineering: State-of-Art Technologies in Oil & Gas and Infrastructure Development"

Doha, September 26-27, 2019

The Honorary Secretary, IEI, Qatar Overseas Chapter, P.O. Box. No. 18523, Doha, Qatar [Telefax: (+974) 4427673; e-mail: ieiqatar@ieindia.org]

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

Jaipur, November 9-10, 2019

Theme: Industry 4.0 – Transforming Industrial Productivity

### Technical papers are invited on following sub-themes :

- Process Improvement in Manufacturing Industry
- Applications of Radio Frequency Identification (RFID) Technology in the Logistics and Supply Chain Industry
- Plant Process Optimization with Internet of Things (IoT) Application
- Efficient Utilization of Industrial Process with Robotics Application
- Total Productive Maintenance (TPM) Application in Industries

With this in focus, papers are invited from Technician/Senior Technician members, students of polytechnics and engineering colleges students chapters for presentation in the All India Technicians'/Students' Convention to be held on 09 Nov 2019 at Jaipur, Rajasthan. 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 Rajasthan State Centre latest by 30 Sep 2019.

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

Hosted by: Rajasthan State Centre

### For further information, please contact :

The Organising Secretary (Convocation 2019)

The Institution of Engineers (India), Rajasthan State Centre, Gandhi Nagar, Tonk Road, Jaipur 302015, Rajasthan

Phone : (0141) 2706327; Telefax : (0141) 2700413

E-mail : ieiconvocation2019@gmail.com

## IEI Industry Excellence Award 2019 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 are invited under following categories

### (a) Engineering Manufacturing & Processing (EMP)

Category EMP-A: Organisations having turnover of Rs. 5000 cr. and above

Category EMP-B: Organisations having turnover of Rs. 1000 cr. and above but below Rs. 5000 cr.

Category EMP-C: Organisations having turnover of Rs. 500 cr. and above but below Rs. 1000 cr.

Category EMP-D: Organisations having turnover of Rs. 100 cr. and above but below Rs. 500 cr.

Category EMP-E: Organisations having turnover below Rs.100 cr.

### (b) Engineering Services and Consultancy (ESC)

Category ESC-A: Organisations having turnover of Rs.500cr. and above

Category ESC-B: Organisations having turnover of Rs.100cr. and above but below Rs.500cr.

Category ESC-C: Organisations having turnover of Rs. 25cr. and above but below Rs100cr.

Category ESC-D: Organisations having turnover below Rs. 25cr.

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 2019. The last date of receipt of application for the Award 2019 is **August 31, 2019**. Interested applicants are requested to send their applications (3 hard copies & 1 soft copy in CD/Pendrive) to the below mentioned address.

The Director (Technical)

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

## Delhi State Centre with Safety and Quality Forum Felicitates President, IEI



Delhi State Centre of the Institution jointly with Safety & Quality Forum (SQF), IEI felicitated Dr T M Gunaraja, President, IEI, on July 4, 2019. Mr O P Goel, Past President, IEI; Mr Narendra Singh, Council Member, IEI; Mr R N Rajpoot, Chairman, SQF, IEI; Mr Dinesh Kumar, Chairman of the Centre; Mr H R P Yadav, Director, HQ Cell-Delhi and other eminent dignitaries also graced the occasion with their august presence. President, during his address elaborated that the Institution is always in the forefront in bringing in, nurturing and creating awareness of technological developments in various engineering fields and provide meaningful learning platforms.

## Trichur Local Centre Felicitates President, IEI



Trichur Local Centre of the Institution felicitated Dr T M Gunaraja, President, IEI, on July 13, 2019. Dignitaries graced the auspicious occasion with their august presence included Mr K K Gopalakrishnan Nair, Chairman, Kerala State Centre; Mr V G Sankaranarayanan and Mr M N Sasidharan Achari, Chairman & Honorary Secretary respectively of Trichur Local Centre and Past Chairmen, Honorary Secretaries and Committee Members of Trichur Local Centre.



# 34<sup>th</sup> INDIAN ENGINEERING CONGRESS

Hyderabad, December 27-29, 2019

Theme:

**Societal Engineering – an Imperative for Nation Building**

Organized by:

**The Institution of Engineers (India)**

Hosted by: **Telangana State Centre**

Contact : Organising Secretary, 34th Indian Engineering Congress, The Institution of Engineers (India), Telangana State Centre  
Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004

Phone : 040-23314969; e-mail : [telanganasc@ieindia.org](mailto:telanganasc@ieindia.org); website : [www.ieitsc.org](http://www.ieitsc.org)

To Contribute Papers, please follow the link :

[https://www.ieindia.org/webui/IEI-Activities.aspx#Call\\_Papers](https://www.ieindia.org/webui/IEI-Activities.aspx#Call_Papers)

## IEI Join Hands with Various Certification Bodies to Nurture Engineers

IEI and The Institute of Cost Accountants of India have signed a MoU on 27 May 2019, Kolkata, to offer a course exclusively for engineers- “Executive Diploma in Cost & Management Accounting for Engineers”. Here is a wonderful opportunity for all corporate members of IEI to enhance knowledge in the domain of finance and understand the framework of costing, accounting system etc. in various decision making processes.

IEI also ties up with Project Management Associates (PMA), on 3 Jun 2019, at Chennai, in an exclusive collaboration to build a project mindset through Project Management education “IPMA’s level C and D Certification Programme” in the country. The program offers a golden opportunity for project professionals to acquire key knowledge and concepts in Project Management, based on the approach followed by the world’s leading authority on competence based Project, Program & Portfolio Management-International Project Management Association (IPMA)

IEI members have the exclusive facility of enrolling in the courses at a discounted fee!

For details, Corporate Members may login to their respective dashboard (<https://www.ieindia.org/WebUI/IEI-Registration.aspx>) and submit their application under Certification --> IPMA.

Please visit [www.ieindia.org](http://www.ieindia.org) under Certification for details.

For further clarification you may call at: 033-40106304 or Email at [certification@ieindia.org](mailto:certification@ieindia.org)

## IEI NEWS

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