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A CENTURY OF SERVICE TO THE NATION

Volume 29

Number 7

Thirty-fourth National Convention of Agricultural Engineers and National Seminar

Utilization of Modern Technologies in Agricultural Engineering for Sustainable Agricultural Production



Hosur Local Centre, IEI organized Thirty-fourth National Convention of Agricultural Engineers during 16-17 September 2022 at Hosur. A National Seminar was also organized on the theme **Utilization of Modern Technologies in Agricultural Engineering for Sustainable Agricultural Production**. The National Convention provided opportunities for the agricultural professionals to discuss, share and exchange views, ideas and information relevant to the application of agricultural engineering on addressing the tremendous challenges associated

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IEI Technical Webinar under the aegis of Electronics and Telecommunication Engineering Division Board

Quantum Computing

West Bengal State Centre, IEI organized a Technical Webinar on the theme **Quantum Computing** on 27 June 2022. Panellists of the webinar were Ms Munmun Chakraborty, Joint Director, CDAC, Kolkata and Mr Sanjay Kumar Choudhury, Joint Director, CDAC, Kolkata. Moderator of the webinar was Mr Chanchal Chakraborty, Vice President (Technology), Reliance Jio. The event started with the welcome address delivered by Dr Nirmal Das, Chairman, West Bengal State Centre, IEI. Dr G Ranganath, Chairman, CATE, IEI was present on the occasion and addressed the audience. Mr Ram Chandra Chakraborty, Joint Honorary Secretary, West Bengal State Centre, IEI introduced the panellists.



Ms Munmun Chakraborty

Ms Munmun Chakraborty started her presentation by mentioning that the nineteenth century as the machine age, the twentieth century as the information age and the twenty-first century the quantum age. She then narrated the evolution of computing generations starting from first generation using vacuum tubes, second generation using transistors, third generation using Integrated Circuits (IC), fourth generation using Very Large Scale Integration (VLSI) and fifth generation using Ultra Large Scale Integration (ULSI). She explained Quantum Computing as the



Mr Sanjay Kumar Choudhury

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From the President's Desk.....



Construction industry is one of the most significant industries that has remarkably contributed toward socio-economic development of the country. Concrete structures are linked to large amount of carbon emission at various stages including manufacture of materials, construction and operation. For a considerable period, this was considered unavoidable as concrete was indispensable to construction sector and intrinsically linked to human prosperity. However, in our pursuit of becoming a carbon neutral economy, we must focus on concrete structures, that minimize carbon emission over minimizing cost. Sustainable concrete is concerned with all aspects of a concrete structure throughout its' lifetime, including materials, design, construction, conservation, intervention, demolition, reuse and recycling, which will require intervention of state-of-the-art technologies in these areas.

Sustainable concrete construction is a step towards green and eco-friendly concrete construction practices to reduce global environmental problems. Instead of conventional concrete, sustainable cementing material, as recommended by the landscape designers and architects, include fly ash - a byproduct of thermal power plant. Application of recycled material like crushed glass and woodchips, also leads to lesser production and consumption of cement thereby lowering the carbon footprint. Application of permeable concrete in ground is another sustainable alternative, which allows more water infiltration in the ground and subsequent recycling of aggregate material. Self-maintaining or self-healing concrete is an engineered microbial glue, which is applied as spray and capable of repairing cracks in concrete. The use of geopolymer technology in building has greatly reduced cement consumption, cutting carbon pollution significantly. Also, to resolve concerns arising from the disposal of industrial materials by processing and repurposing them in geopolymer production, geopolymer cements are being deployed to improve structural performance by enhancing durability and compressive strength, improving resistant against acid, and structural performance under elevated temperature curing conditions.

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Utilization of Modern Technologies in Agricultural Engineering for Sustainable Agricultural Production

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with sustainable development in land use and environment, food chain, agriculture and amenity, energy and bio production processes. The major topic, deliberated during the National Seminar principally covered the complete and interdisciplinary range of research in engineering for agriculture and bio-system. On the occasion, Prof Dr T Arumugam, Vice Chancellor, Thiruvalluvar University, Vellore graced the inaugural function as Chief Guest. Dr P Immanuel, Joint Director of Horticulture, Directorate of Horticulture, Government of Tamilnadu and Dr G Ranganath, Chairman, Committee for Advancement of Technology and Engineering (CATE), IEI graced the function as Guests of Honour. Prof (Dr) M Nemichandrappa, Chairman, Agricultural Engineering Division Board [AGDB] IEI presided over the function and delivered the Presidential Address.

In the beginning, Prof (Dr) Ms T Menakadevi, Chairperson, Hosur Local Centre, IEI welcomed the dignitaries and the audience, highlighted the importance of National Convention and role of IEI in promoting the agricultural activities including research and new technology. Prof (Dr) J Arivudai Nambi, Immediate Past Chairman, Hosur Local Centre and Convener, 34th National Convention of Agricultural Engineers explained about the theme of the National Convention. Chief Guest of the function, Prof (Dr) T Arumugam in his address stressed on more applications of Smart Farming, utilization of Information and Electronics enabled techniques and Drone Technology for better sustainable Agricultural production and so on. Guest of Honour of the function, Dr P Immanuel in his address opined that effective transfer of technologies developed by the agricultural engineering fraternity will definitely be helpful in achieving the goal of doubling the farmers income in India and highlighted the active role of Government of India in this regard. Guest of Honour, Dr G Ranganath, Chairman CATE, IEI in his address, explained the role of CATE in encouraging the involvement of Corporate Members and engineering professionals in organizing various technical events including National Conventions, All India Seminars etc. Prof (Dr) M Nemichandrappa, Chairman, AGDB, IEI in his Presidential Address mentioned the significant and remarkable contributions made by the agricultural engineers in the area of Natural Resources Management, Farm Mechanization, Food Processing, Post Harvest Technologies and other related fields for the growth of agricultural and allied sectors. Mr P Murugesu Pandian, Honorary Secretary, Hosur Local Centre, IEI proposed the vote of thanks. A Technical Proceeding was released on the occasion containing the papers presented during the technical sessions.

On the occasion, Dr Konda Sreenivas Reddy, Principal Scientist (SWCE), ICAR-CRIDA, Hyderabad, Telangana and Dr T Guruswamy, Director, Instruction (Agricultural Engineering) were felicitated as Eminent Agricultural Engineering Personalities for their immense contribution in the field of Agricultural Engineering. The prestigious Rathindranath Tagore Memorial Lecture was delivered by Dr P V Venkitakrishnan, Former Distinguished Scientist, Director, CBPO, ISRO HQ & Prof Satish Dhawan Scientist, ISRO HQ, Bangalore and Chairman, Aerospace Engineering Division Board, IEI.

The IEI Young Engineers Award in Agricultural Engineering Division for the year 2021-22 were presented to; Dr (Ms) Kirti Jalgaonkar, Scientist, Quality Evaluation and Improvement Division, ICAR-CIRCOT, Matunga East Mumbai, Maharashtra; Dr Bikram Jyoti, Scientist, Agricultural Mechanization Division, ICAR-Central Institute of Agricultural Engineering, Bhopal and Dr Pawar Dilip Ananda, Scientist, Agro-Produce Processing Division, ICAR-Central Institute of Agricultural Engineering, Bhopal. For the year 2022-23, the recipients of the Award were; Dr Dinesha B L, Young Scientist, DST-SYST Project, Centre for Nanotechnology, Department of Processing and Food Engineering, College of Agricultural Engineering, University of Agricultural Sciences, Raichur, Karnataka; Dr Goudra Pramod Gouda,

Assistant Professor, Department of Processing and Food Engineering, CAE, UAS, Raichur, Karnataka and Dr Ranjit Vasant Powar, Assistant Professor and Head, Department of Farm Machinery and Power Engineering, Dr D Y Patil College of Agricultural Engineering and Technology, Kolhapur for their significant contribution in the field of Agricultural Engineering.

During the technical session, Dr S Manivannan, Principal Scientist (SWCE), Indian Institute of Soil and Water Conservation, Research Centre, Udhagamandalam, Tamilnadu delivered Keynote Address on the topic 'Water harvesting Technologies for Water Security and Climate Adaptation'. Dr V Krishamoorthy, Associated Professor (Horticulture), Department of Fruit Science, Horticultural College and Research Institute for Women, Tamilnadu Agricultural University, Tiruchirappalli delivered State of the Art Lecture on the topic 'Ultra-high Density Planting in Mango and Guava'. Also papers were presented on; Improving Nutritional and Functional Properties of Pearl Millet Pasta; Technologically Advanced Plant Protection Equipment for Precise Agricultural Pesticide Application; Post-harvest Handling and Primary Processing Practices of Horticultural Produce; Metropolis Farm – A Farm of City Farmers; Renewable Energy Engineering – Biomass Utilization; De-Petal Turbine for Efficient Energy Harnessing; Agricultural Process and Biosystem Engineering – Food Processing and Packaging; Role of Renewable Fuels in Weeding Operation; Application of Modern Technologies for Organic Farming in Sustainable Agriculture; Post-harvest Technology and Methods for the Handling of Fresh Produce; Techno-economics of Baling Paddy Straw; Emerging Technologies in Smart Farming; Simulation of Cumulative Infiltration Depth using Hydrus – 1D Model; Utilization of Fluorescent Biosensors for Sensitive Detection of Aflatoxin in Agricultural Products; Comparison of Pine Needles and Lantana Camara Biochar Briquettes; Horticultural Machineries; Development and Evaluation of Unmanned Paddy Transplanter; Waste Water Utilization for Production of Electricity using Microbial Fuel Cell; Organic and Inorganic Agriculture and so on.

During the Valedictory Function, Dr S Manivannan, Principal Scientist (SWCE), Indian Institute of Soil and Water Conservation, Research Centre, Udhagamandalam, Tamilnadu graced the occasion as Chief Guest

Recommendations that emanated from the National Convention are as follows.

The modern technologies in agricultural engineering for sustainable agricultural production be utilized in a meaningful way; Looking forward towards digital transformation in Agriculture, implementation of emerging technologies need to be accelerated, which includes machinery system engineering, renewable energy engineering, agricultural information technology and electronics, and drone technology; With the objective to optimize the performance and parameters of modern technology, more research and development are required in alternate analysis and applications of big data, design and simulation, particularly for cost-effective agricultural and biosystem management; To sustain agricultural development, applications of biomechanics and biosensors need to be addressed with ecofriendly material in a cost-effective manner; Advanced agricultural cultivation and production technology should be applied for agricultural engineering practices in an effective manners, which include Artificial Intelligence, Drone Technology, Robotics, GPS technology, Aerial Vehicles, etc; Agricultural processing and biosystem engineering need to be introduced by the implementation of post-harvest technologies, food processing and packaging, modeling and simulation, and other technologies as feasible alternatives that need to be explored further; Renewable energy engineering should be applied as the substitute to traditional agricultural technologies.

Green Building Concept and Its Application in Smart Cities

Kanchepuram Local Centre, IEI organized All India Seminar on the theme **Green Building Concept and Its Application in Smart Cities** during 20-21 May 2022 at Kanchepuram under the aegis of Civil Engineering Division Board [CVDB]. Green Building, by virtue of its design and construction, reduces or create positive impact on climates and natural environment. It



uses less energy, water and natural resources, creates less waste and is healthier compared to conventional building. Advantages of green building construction are low maintenance and operational cost, energy efficiency, enhanced indoor environment quality, water efficiency, better health, material efficiency, better environment and reduced strain on local resources. Green architecture can help to decrease the use of natural resources, fuels and it helps to improve water and material efficiencies, improve air quality within and outside the structures. Thus, a sustainable or green building is an outcome of a design philosophy which holistically focuses on increasing the efficiency of the resources used, namely energy, water and materials, while reducing building impacts on human health and environment during the building lifecycle through better sitting, design and construction.

The function was inaugurated by Dr P T Ravichandaran, Professor and Head, Department of Civil Engineering, SRM Institute of Science & Technology, Kattankulathur, Chennai. Dr G Shanmugasundar, Honorary Secretary, Kanchepuram Local Centre, IEI and Associate Professor & Dean, R&D, Department of Mechanical Engineering, Sri Sai Ram Institute of Technology, Chennai was present on the occasion.

During the technical sessions, Prof Ravichandran delivered his lecture on the topic 'Green Building Concept and its Application in Smart Cities'. Dr S Bhagavathi Perumal, Professor & Head, Department of Civil Engineering, Sri Sairam Engineering College, Chennai spoke on 'Impact of Green Building Sustainability in Smart Cities: An Outlook with IoT'. Dr K Yokeshwari, Professor, Department of Civil Engineering, B S Abdur Rahman Crescent Institute of Science and Technology, Chennai spoke on 'Green Building Concept and its' Application in Smart Cities'; Dr N Suganya, Assistant Professor, Department of Civil Engineering, Sri Sairam Engineering College, Chennai presented lecture on 'Green Building'; Dr G V Ramana, Assistant Professor, Department of Civil Engineering, NIT Warangal delivered presentation on virtual mode on the topic 'Bearing Capacity of Soil in Smart Cities'; Dr J Revathi, Professor, Department of Civil Engineering, B S Abdur Rahman Crescent Institute of Science and Technology, Chennai spoke on 'Application of Fiber Reinforced Concrete in Smart Cities'; Ms R Subalakshmi, Assistant Professor, Department of Civil Engineering, Sri Sairam Engineering College, Chennai delivered lecture on 'Green Buildings Concept & its Application in Smart Cities'; and Mr S Anbu, CEO, PI Infratech, Chennai discussed the topic 'Smart and Sustainable Building in Smart Cities'. The event was well attended by the professionals, academicians, students and other stakeholders.

All India Seminar under the aegis of Computer Engineering Division Board

Information Privacy

Kanchepuram Local Centre, IEI organized All India Seminar in association with Department of Computer Science and Engineering, St Joseph's Institute of Technology on the theme **Information Privacy** during June 01-02, 2022 at Chennai under the aegis of Computer Engineering Division Board [CPDB]. Privacy protection and cyber security are thought to be as interconnected.



As more and more personal information is processed and stored online, privacy protection increasingly relies on effective cyber security implementation by the organizations

to secure personal data both in transit or static condition. Moreover, the applications of pervasive computing are dramatically increasing every measure concerning towards the data collected and released. It is obvious that a user in pervasive computing environment wishes to maintain different connections with various smart devices reckless of the software restrictions and hardware specifications. Such devices and applications intend to increase the amount of personal information released to the service providers and third parties. The Seminar essentially focused on certain pertinent issues as –

Authentication: Privacy has to ensure that data being shared or communicated is not being hacked by any active or passive attackers. It has to guarantee that the user data which is being collected almost obviously will not be used maliciously or is not being processed by any unauthorized user.

Access Control: It is to grant access completely to the significant data and avoid unnecessary irrelevant data for any particular service. Access control mechanism is needed to decide whether to permit or reject an assigned unit the liberty to do a specified action. Access control method includes the tests in the field of the database, operating system, and distributed system. But pervasive systems possess unique features which let distinct access control methods.

Anonymity: Many of the applications in pervasive computing environment do not rigidly need to know the identity of the user. Anonymity provides the user with the functionality which helps the user to be known to others or remains unknown to others or to be known with different identity.

Speaker of the event, Dr J Dafni Rose, Head, Computer Science and Engineering, St Joseph's Institute of Technology in her address stated that information privacy has the ability to avoid attacks on the networks using security tools. Mr Ragul Chandran, Cyber Security Specialist, Special Zee Technology, Chennai delivered lecture on Cyber Kill Chain Model, Cryptanalysis and Computer Security and Cyber Threats and Security. Dr K S Arikumar, St Joseph's Institute of Technology, Chennai delivered lecture on necessity of understanding privacy, issues in privacy, analysis of system vulnerabilities and risk exposure. Ms Poorvaja Bhaskaran, Sella India Software Services, Chennai spoke on cyber threat intelligence, data analytics in cyber world, advanced data breaches and detecting and avoiding security breaches. Earlier, Dr G Sanmugasundar, Honorary Secretary, Kanchepuram Local Centre, IEI welcomed the gathering. Prof (Dr) D Elango, Chairman, Kanchepuram Local Centre, IEI addressed the august audience and also spoke during the valedictory function.

Emerging Trends for Air Pollution Mitigation

Bokaro Steel City Local Centre of the Institution organised Technical Webinar on the theme **Emerging Trends for Air Pollution Mitigation** on 29 May 2022 under the aegis of Environmental Engineering Division Board, IEI. Mr Anand Wankhede, Regional Manager, West Zone, Device Earth and Mr



Mr Anand Wankhede

Amarsinh Jadhav, Director(Operations), M/s JClean Weather Tech Private Limited graced the webinar as panelists. The session was moderated by Mr Nitesh Ranjan, Assistant General Manager, Environment Division, SAIL, Bokaro Steel Plant. The programme was started with the welcome address, delivered by Mr Navin Prakash Srivastava, Chairman, Bokaro Steel City

Local Centre, IEI. In his address, Mr Srivastava suggested taking care of mitigation of air pollution in the industries, towns and homes. Dr G Ranganath, Chairman, CATE, IEI in his address, appreciated the efforts taken by the



Mr Amarsinh Jadhav

host Centre. Mr Anup Kumar Mishra, Chairman, Pollution Control Board while addressing the participants and spoke about the stringent rules and regulation imposed by the Government of India for mitigation of air pollution as such all out efforts to be made towards its implementation.

Mr Anand Wankhede, in his address stated that Device Earth is first to utilize pulsed RF energy commercially for mitigating air pollution and opined that pure skies accelerate the clearance of certain pollutants in the air. Mr Amarsinh Jadhav, said that in the year 2020, M/s JClean Weather Tech Private Limited has been recognized by Department of Science and Technology, Government of India for its first patent technology AIORN 1000 negative ion generator to fight against the COVID pandemic. Moderator of the event, Mr Nitesh Ranjan, presented the paper of Mr A H Ansari and at the end of the session, summed up the proceedings of deliberation. Vote of thanks was proposed by Mr Sunil Kumar, Honorary Secretary, Bokaro Steel City Local Centre, IEI.



Mr Nitesh Ranjan

Quantum Computing

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new possible solutions at the atomic and subatomic levels in the field to cater the need of future computing. She then elaborated the development of Quantum Mechanics through the works of Max Plank, Albert Einstein, Ernest Rutherford and Niels Bohr, explained wave-particle duality propounded by Louis De Broglie and narrated the (time-dependent) equation of motion of wave-particle expressed by the Schrodinger Equation which established that the wave behaviour of the particle admitted the superposition. She explained the difference between classical computing and quantum computing. She narrated the concept of qubit (quantum bit) and expressed that a single qubit can be forced into a superposition of the two states denoted by the addition of the state vectors. She stated the concept of interference of waves and concluded that Young's double-slit experiment gave definitive proof of the wave character of light and an interference pattern was obtained by the superposition of light from two slits. She explained Superposition using the Schrodinger cat and concluded that qubit is the superposition of both the states 0 and 1 simultaneously multiplied with some probability amplitudes. She elaborated on the concept of Entanglement which is the ability of quantum systems to exhibit correlations between states within a superposition and mentioned that we could entangle the two qubits such that the measurement of one qubit was always correlated to the measurement of the other qubit. The speaker further defined Quantum Computing as a computing paradigm that exploited quantum mechanical properties like Superposition, Entanglement, and Interference etc. of matter in order to do calculations. She explained the technologies behind quantum computing like superconducting loops, trapped ions, silicon quantum dots, topological qubits, diamond vacancies etc. She discussed commercial quantum computers from IBM and D-Wave and mentioned quantum computing programming languages like qasm, Qiskit (IBM), Cirq (Google), Forest/pyqil (Rigetti), Q# (Microsoft), Ocean (D-Wave). She then talked about quantum circuit consisting of data (known as Qubits), operation (quantum logic gates) and results (for measurements).

She explained about quantum logic gates which were similar to classical gates but their original input state could be derived from their output state uniquely that meant they must be reversible. She then narrated the operating principles of NOT or X gate, Z gate, Hadamard gate and Pauli gate under single qubit category and described the philosophy of universal quantum gates like phase flip, bit flip, phase-bit flip etc. She described the two-qubit states and narrated C-NOT gates and Bell states using C-NOT gates. She further explained the difference between product state and entangled state.

She concluded her presentation by describing the use cases in the field of Artificial Intelligence, drug discovery, system optimization, cryptography, financial services, teleportation etc.

Mr Sanjay Kumar Choudhury talked about quantum sensing. He narrated that chronic arsenic toxicity (arsenicosis) as a result of drinking arsenic-contaminated groundwater was a major environmental health hazard throughout the world, including India. He said that, not only arsenic but also lead was a major source of contamination of groundwater causing multiple diseases. He explained the classical concept of phase difference due to path difference; When LASER is passed through the contaminated liquid, it causes shift in bandgap. If the bandgap is too small then the existing equipment could not sense it for particular contamination limit; he added.

He further elaborated that in the year 1926, Schrodinger first described a special state known as Coherent State and in this particular state, the statistics of photons follow Poisson Distribution. He then elaborated the concept of shot noise where the relative fluctuations were reduced as with the reciprocal of the square root of N, called the standard quantum limit (SQL), which can be achieved by using N independent probes. This limit is also the effect of the presence of shot noise in the source and is known as the Shot Noise Limit (SNL). He further narrated that Quantum mechanics placed a fundamental limit on measurement precision, called the Heisenberg limit (HL), which constrained how the precision of parameter estimation improved as the total probing time t increased and the precision scales were no better than 1/N with the total number of probes N used in an experiment. He stated that in the coherence state of light, phase and amplitude follow Gaussian distribution resulting in a combined circular distribution whereas Heisenberg Limit depicted a squeezed state where the phase fluctuations are squeezed at the expense of amplitude fluctuations leading to a more accurate measurement of phase.

Hence, HL would be used where the shift in bandgap is too small in actual measurement, the speaker stated. He concluded his lecture mentioning that it had been experimentally proved that the sensitivity of detection with entangled photon state attained the limits defined by the Heisenberg Uncertainty Principle. Moderator of the session, Mr Chanchal Chakraborty summed up the proceedings of deliberation. Dr Raju Basak, Honorary Secretary, West Bengal State Centre, IEI proposed the vote of thanks.



Mr Chanchal Chakraborty

IEI Celebrates

55th Engineers' Day

Smart Engineering for a Better World

The 55th Engineers' Day was celebrated by the Institution all over the country on September 15, 2022 to commemorate the 162nd birth anniversary of legendary Engineer-Statesman Bharat Ratna Sir M Visvesvaraya. Brief accounts of the celebration as received from various Centres are highlighted hereunder.

STATE CENTRES

Gujarat

Gujarat State Centre, IEI observed 55th Engineers' Day in association with Water Management Forum, IEI on 15 September 2022 at Ahmedabad in hybrid mode. Mr Pravinkumar Mohanbhai Choudhari, Chairman, Gujarat State Centre, IEI welcomed the guests and delegates. Guest of Honour of the event, Mr H U Kalyani, Immediate Past Chairman, Gujarat State Centre, IEI and Chief Engineer (Saurashtra) and Additional Secretary, Water Resources Department, Government of Gujarat addressed the gathering. Chief Guest of the event, Mr Sandeep B Vasava, Council Member, IEI and Secretary, Roads and Building Department, Government of Gujarat addressed the audience through online mode. Keynote Speaker of the event, Mr Niraj A Shah, Chairman, Computer Society of India, Ahmedabad Chapter presented his views on smart engineering for a better world and emphasized the need of smart engineering to deal with global challenges like adverse effects of climate change, water scarcity, mixed energy usage, reducing the digital divide among others. At the end, Mr Dineshchandra Odhavjibhai Nakrani, Honorary Secretary, Gujarat State Centre, IEI proposed the vote of thanks.



Lokwani, MD, HLBS, Bhopal on the theme. Earlier, Mr Aviniash Chandra, Honorary Secretary, Madhya Pradesh State Centre, IEI welcomed the dignitaries.

Punjab & Chandigarh

Punjab & Chandigarh State Centre, IEI observed 55th Engineers' Day in association with American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Chandigarh Chapter on 15 September 2022 at Chandigarh. Chief Guest of the event was Prof (Dr) Harpreet Singh, Professor, Department of Mechanical Engineering, IIT Ropar and Guest of Honour was Prof (Dr) Vijay Kumar Banga, Principal, Amritsar Group of Colleges, Amritsar. Mr Sukhvir Singh Mundi, Chairman, Punjab and Chandigarh State Centre, IEI welcomed the guests and members. Keynote Speaker of the event was Dr Balkar Singh, Former Joint Director, Punjab Development Agency, Chandigarh. At the end, Mr Baljit Singh, Honorary Secretary, Punjab & Chandigarh State Centre, IEI proposed the vote of thanks.



Jharkhand

Jharkhand State Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Ranchi. Chief Guest of the event was Mr Murari Bhagat, Engineer-in-Chief cum Special Secretary, Rural Works Department, Government of Jharkhand. Special Guest of the event was Dr Rana S Chakravarty, Director (Marketing and Production), HEC Limited. Keynote Speaker of the event, Professor Vinay Sharma, Director, University Polytechnic, Birla Institute of Technology, Mesra explained the concept of smart home, smart manufacturing and other smart technologies, to improve the standard of living and also the use of AI in biomedical field. Earlier, Mohammed Iqbal Alam, Chairman, Jharkhand State Centre, IEI welcomed all. At the end, Mr Manoj Kumar, Honorary Secretary, Jharkhand State Centre, IEI proposed the vote of thanks.



Sikkim

Sikkim State Centre, IEI observed 55th Engineers' Day in association with College of Agriculture Engineering and Post Harvest Technology [CAEPHT], Rampool on 15 September 2022 through online mode. Chief Guest of the event, Mr G P Upadhyaya, Additional Chief Secretary, Government of Sikkim discussed on the issues and challenges faced by the nation and encouraged the participants to be innovative and self-reliant. Guest of Honour of the event was Dr P P Dabral, Dean, CAEPHT. Special Guests of the event were Mr Shankar Bhawmic, GM, National Highways and Infrastructure Development Corporation Limited (NHIDCL) and Mr Sahadev Khatua, GM, NHPC. The Director, Sikkim Manipal Institute of Technology, Principal, Advanced Technical Training Centre (ATTC), Principal, Centre for Computers and Communication Technology (CCCT) and Corporate Members of IEI attended the program. Keynote Speaker of the event, Dr C T Singh, CEO, ATAL Incubation Centre, Sikkim Manipal Institute of Technology (SMIT) highlighted the avenues of entrepreneurship for making the country self-reliant. Earlier, Mr Govind Prasad Sharma, Chairman, Sikkim State Centre, IEI delivered the welcome speech. Mr Lochan Kumar Adhikary, Honorary Secretary, Sikkim State Centre briefed on the theme.

Madhya Pradesh

Madhya Pradesh State Centre of the Institution observed 55th Engineers' Day on 15 September 2022 at Bhopal. Chief Guest of the event was Shri Vishvash Sarang, Hon'ble Minister of Medical Education, Bhopal Gas Relief & Rehabilitation Department, Government of Madhya Pradesh (in

LOCAL CENTRES

Agra

Agra Local Centre, IEI observed 55th Engineers' Day, in association with Anand Engineering College, Keetham, Agra on 15 September 2022 at



Agra. Guest of Honour of the event was Dr Aman Sachdeva, Principal, Anand Polytechnic College. Mr Mohd. Arif, Associate Professor, Department of Mechanical Engineering, Anand Engineering College

Keetham, Agra narrated the life sketch of Bharat Ratna Sir M Visvesvaraya. Mr Rajneesh Kumar Yadav, Associate Professor, BSA Engineering College, Mathura explained that engineering makes life easy through smart machines in all sectors like rail connectivity; drinking water, agriculture, healthcare, affordable houses, etc. Mr Rajneesh Kumar Yadav, Associate Professor, BSA Engineering College, Mathura and Joint Secretary, Agra Local Centre, IEI was present on the occasion.

Alwar

Alwar Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Alwar. Chief Guest of the event was Mr Dinesh Kumar, Chairman, Safety and Quality Forum, IEI. Special Guest of Honour of the event was Mr Sangeet Arora, Superintending Engineer, PWD, Alwar. Guests of Honour were Mr Praveen Kumar Singh, Director, Safety and Quality Forum, Delhi and Mr Bhupinder Sidhu, Regional Head, Customer Support, Ambuja Cement, Jaipur. Keynote Speaker of the event was Mr Ajit Jain, Retired Group General Manager, ONGC. Earlier, Mr Subhash Chandra Joshi, Chairman, Alwar Local Centre, IEI welcomed all the participants and paid tribute to Sir M Visvesvaraya and at the end of the session, proposed the vote of thanks.



Ahmednagar

Ahmednagar Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Ahmednagar. Chief



Guest of the event, Mr Manoj Patil, IPS, Superintendent of Police, Ahmednagar opined that engineers play crucial role in the development of the nation. Chief Guest, Mr Sudhakar Yariagadda, Principal District Judge,

Ahmednagar opined that engineers should work for fast expediency of cases in the court. Keynote address was delivered by Mr Arvind Pargaonkar, Director Manufacturing, Schneider Electric India Private Limited and Past Chairman, Ahmednagar Local Centre, IEI on the theme. He briefed on industrial revolution and digital transformation. Earlier, Mr Abhay Krishanrao Raje, Honorary Secretary, Ahmednagar Local Centre delivered the welcome address. Mr Manohar Mukund Anekar, Chairman, Ahmednagar Local Centre, IEI presided over the function.

Aurangabad

Aurangabad Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Aurangabad. Chief Guest of the event was Dr S A Nagre, Former Executive Director, Godavari Marathwada Irrigation Development Corporation (GMIDC), Aurangabad. Keynote Speaker of the event, Dr Vilas Sapkal, Vice



Chancellor, MGM University, Aurangabad delivered lecture on the theme. Ar Ajay Kulkarni, Architect Tilaknagar, Aurangabad; Mr Milind Kelkar, Industrialist, Aurangabad; Mr Sanjay Mungilwar, Superintending Engineer, Public Works

Circle, Satara and Mrs Arunadhathi Sharma, Superintending Engineer, Public Works Circle, Amravati were attended the programme. Dr Uttam Baburao Kalwane, Chairman, Aurangabad Local Centre, IEI welcomed all and informed about the technical activities of the host Centre. Prof Ravindara R Deshmukh, Honorary Secretary, Aurangabad Local Centre, IEI presented the life sketch of Bharat Ratna Sir M Visvesvaraya.

Bareilly

Bareilly Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Bareilly. Chief Guest of the event was Mr Rajeev Sharma, Chief Engineer, Uttar Pradesh Power Corporation Limited (UPPCL) and Guest of Honour of the event was Prof Y D S Arya, Vice Chancellor, Invertis University.

Mr Sudhir Kumar Gupta, Chairman, Bareilly Local Centre, IEI welcomed the dignitaries. Speakers of the event, Mr Sovan Mohanty, Assistant Professor, Shri Ram Murti Smarak College of Engineering & Technology [SRMSCET], Bareilly explained the terminology SMART, which is often associated with feats of modern engineering and the invention from the ancient times to modern era, scientists and engineers helps to build a modern society. Also, Mr Subhankar Puri, Invertis University, Bareilly, Mr Rohan and Ms Stuti, SRMSCET, Bareilly and Mr Awdesh Kumar, Assistant Professor, Invertis University, Bareilly delivered lecture on the occasion. At the end, Mr Mahendra Kumar Agarwal, Honorary Secretary, Bareilly Local Centre, IEI proposed the vote of thanks.



Bhimavaram

Bhimavaram Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Bhimavaram. Chief



Guest of the event, Mr S Lokeswara Rao, District (R&B) Engineering Officer, W.G District delivered lecture on the theme. Prof (Dr) K Brahma Raju, Council

Member, IEI discussed about the activities of IEI. At the end, Mr Karanam Suresh Babu, Honorary Secretary, Bhimavaram Local Centre, IEI proposed the vote of thanks.

Bokaro Steel City

Bokaro Steel City Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Bokaro.

Chief Guest of the event, Mr Amarendu Prakash, Director-in-Charge, SAIL, Bokaro Steel Plant inaugurated the function and stressed upon employment oriented skill development. Guest of honour of the event, Mr B K Tiwari, Executive Director (Works), SAIL, Bokaro Steel Plant mentioned about the administrative and management qualities of Sir M Visvesvaraya. Earlier, Mr Navin Prakash Srivastava, Chairman, Bokaro Steel City Local Centre, IEI welcomed the dignitaries and spoke about Sir M Visvesvaraya as a builder



of modern city and technology. At the end, Mr Sunil Kumar, Honorary Secretary, Bokaro Steel City Local Centre, IEI proposed the vote of thanks.

Dhanbad

Dhanbad Local Centre, IEI observed 55th Engineers' Day in association with Tata Steel, Jharia Division, Jamadoba, Dhanbad on 15 September 2022 at Dhanbad. Chief Guest of the event was Mr Sanjay Kumar Singh, Director (Technical), Bharat Coking Coal Limited, Dhanbad. Guest of Honour and Special Guest of the event was Prof Binay Dayal, Former Director (Technical), Coal India Limited. Keynote Speaker of the event was Mr Sanjay Rajoria, General Manager, Tata Steel, Jharia Division, Dhanbad. Dr Satyendra Kumar Singh, Chairman, Dhanbad Local Centre, IEI and Former Chief Scientist, CSIR-CIMFR, Dhanbad; Dr Arvind Kumar Mishra, Honorary Secretary, Dhanbad Local Centre, IEI and Professor & Head, Department of Mining Engineering, IIT-ISM, Dhanbad; Prof Biswajit Paul, Joint Honorary Secretary, Dhanbad Local Centre, IEI and Professor, Department of Environmental Science and Engineering, IIT-ISM, Dhanbad; Mr Mayank Shekhar, Chief, Tata Steel, Jamadoba, Dhanbad, members and guest from IIT-ISM, Dhanbad, Tata Steel, BIT, Sindri, BCCL participated in the programme. Mr Mayank Shekhar, Chief, Tata Steel welcomed the members and guests; Dr Arvind Kumar Mishra, Honorary Secretary, Dhanbad Local Centre, IEI presented the life sketch of Sir M Visvesvaraya; Dr Satyendra Kumar Singh, Chairman, Dhanbad Local Centre, IEI delivered Chairman's address. In the technical sessions papers were presented on Collaborative Robots for Smart industry, Next Generation wireless Technologies and Sustainable engineering. At the end, Dr Arvind Kumar Mishra, Honorary Secretary, Dhanbad Local Centre, IEI proposed the vote of thanks.



Ghaziabad

Ghaziabad Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Ghaziabad. Chief Guest of the event, Mr Rajiv Sharma, FMR, CMD, Power Finance Corporation (GOIU) expressed his view on generation and distribution of electric supply system in the country and explained supply and demand scenario of renewable energy projects. Guest of Honour of the function, Dr Priya Ranjan Swarup, Director General, Construction Industry Development Council [CIDC] emphasized on manpower utilization and deliberated on employment of engineers in the industries and academia. Guest of Honour & Keynote Speaker of the event, Mr M K Seth, ITS, FMR, Chief General Manager, ALTTC, BSNL explained the technological advancements in industries and healthcare. Earlier, Mr Raghunandan Prasad Sharma, Chairman, Ghaziabad Local Centre, IEI delivered the welcome address. Mr R R Tanwar, Council Member, IEI and Convenor presented the life sketch of Sir M Visvesvaraya and spoke on the Corporate Membership drive, PE Certification, Chartered Engineer Certification, AMIE Examination, etc. At the end, Mr Ashok Kumar, Honorary Secretary, Ghaziabad Local Centre, IEI proposed the vote of thanks.



Gorakhpur

Gorakhpur Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Gorakhpur. Chief Guest of the event, Prof (Dr) B B Singh, Retired Principal, Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur



stressed on the betterment of the engineering profession. Guest of Honour, Prof (Dr) Govind Pandey, Dean, Infrastructure and Planning, Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur briefed on the theme. Earlier, Mr Dharendra Chaturvedi, Chairman, Gorakhpur Local Centre, IEI welcomed the audience and presented a life sketch of Sir M Visvesvaraya. Mr Ved Prakash Gupta, Honorary Secretary, Gorakhpur Local Centre, IEI introduced the Honourable Speakers, and at the end, proposed the vote of thanks.

Jammu

Jammu Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Jammu. Chief Guest of the event, Mr Shiv Anant Tayal, IAS, Managing Director, Jammu Power Distribution Corporation Limited, Power Development Department, Government of Jammu & Kashmir highlighted the role of engineers in the development of country especially the progress achieved in the space sector, chip set designing and artificial intelligence based applications. In the technical session chaired by Mr Vinod Malhotra, Former Development Commissioner, Town Planning, Jammu, five technical papers were presented on the theme of the day. Earlier, Dr (Prof) Sanjay Khar, Chairman, Jammu Local Centre, IEI delivered the welcome address. At the end, Mr Chanchal Paul Sharma, Honorary Secretary, Jammu Local Centre, IEI proposed the vote of thanks.



Kadapa

Kadapa Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Kadapa. Mr N Bramhananda Reddy, Chairman, Kadapa Local Centre, IEI delivered presidential address. Chief Guest of the event was Mr V Narasimha Kumar, Superintending Engineer (Civil), APTRANSCO, Sankarapuram, Kadapa and Guest of Honour and Theme Speaker of the event was Dr G V Nagesh Kumar, Professor and HoD of EEE, JNTUA College of Engineering, Pulivendula. Mr R Narendra Rao, Honorary Secretary, Kadapa Local Centre, IEI proposed the vote of thanks.



Kakinada

Kakinada Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Kakinada. Mr Vadrevu Srinivasa Rao, Chairman, Kakinada Local Centre, IEI delivered presidential address and paid tributes to Bharat Ratna Sir M Visvesvaraya. Chief Guest of the event, Dr G V R Prasada Raju, Honourable Vice-Chancellor, Jawaharlal Nehru Technological University, Kakinada [JNTUK] delivered lecture on the theme. Guest of Honour of the event was Mr K V S L N Raju, Superintending Engineer, Irrigation Department, Government of Andhra Pradesh. Dr Malothu Ramesh, Honorary Secretary, Kakinada Local Centre, IEI proposed the vote of thanks.



Kalaburagi

Kalaburagi Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Kalaburagi. Chief Guest of the event, Mr R Cheluvraju, Former Chief Engineer, Government of Karnataka, DRIP discussed elaborately the



execution of major irrigation projects. Guest of Honours of the event were Mr Prem Singh, Chief Engineer, Krishna Bhagya Jala Nigam Limited [KBJNL], Bheemarayanagudi and Mr R P Jadhav, Superintending

Engineer, City Corporation, Kalaburagi. At the end, Mr Hanmayya Belure, Honorary Secretary, Kalaburagi Local Centre, IEI proposed the vote of thanks.

Madurai

Madurai Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Madurai. Chief Guest of the event was Dr S Dharmalingam, Former General Manager, BHEL, Trichy, Visiting Faculty, NIT Trichy and Council Member, IEI. Mr S Rajagopal, Immediate Past Chairman, Madurai Local Centre delivered welcome address and Prof (Dr) P Udhaya Kumar, Honorary Secretary, Madurai Local Centre, IEI introduced the Chief Guest and at the end of session, proposed the vote of thanks.



Meerut

Meerut Local Centre, IEI observed 55th Engineers' Day in association with Sir Chhotu Ram Institute of Engineering and Technology [SCRIET], Meerut on 15 September 2022 at Meerut. Chief Guest of the programme, Dr Niraj Singhal, Director, Sir Chhotu Ram Institute of Engineering and Technology,



Meerut delivered lecture on this occasion. Mr C P Gupta, Past Chairman, Meerut Local Centre, IEI presented the life sketch of Bharat Ratna Sir M Visvesvaraya and his contribution to the

nation. Speakers of the event, Dr Shobhit Saxena, Assistant Professor, Department of ECE, SCRIET, Meerut delivered lecture on 'Role of Engineers in achieving United Nations Sustainability Development Goals'. Mr Arphit Chhabra, Senior Computer System Analyst, SCRIET, Meerut discussed the smart ways of life as the best way of living. Earlier, Mr Mohan Lal Jain, Chairman, Meerut Local Centre, IEI welcomed the participants. At the end, Mr Raj Pal Agarwal, Honorary Secretary, Meerut Local Centre, IEI proposed the vote of thanks.

Munirabad

Munirabad Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Munirabad. Guest Speaker of the event, Mr K Madhusudhana, Vice President, MSPL Limited and National President, Mining Engineer's Association of India explained the significance and necessity to observe this day. Mr K Nanjappa, Honorary Secretary, Munirabad Local Centre, IEI welcomed the dignitaries and delivered the Keynote address on the theme. Prof (Dr) Kuppagal Veeresh, Chairman, Munirabad Local Centre, IEI in his welcome speech, extended warm wishes to all dignitaries, Executive Committee Members and attendees. Dr Vinay Kumar, Executive Committee Member proposed the vote of thanks.



Muzaffarpur

Muzaffarpur Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Muzaffarpur. Mr Anjani Kumar Srivastava, Chairman,



Muzaffarpur Local Centre, IEI delivered welcome address and narrated the life and achievements of Sir M Visvesvaraya. Chief Guest of the event, Mr Sudheshwar Prasad Yadav, Superintending Engineer

(Retd), Public Health Engineering Department (PHED), Government of Bihar stated that smart engineering comprises the integration of product development, production planning and control for implementation of innovative product ideas valued for digitally influenced development process. Prof C B Rai, Principal-in-Charge, Muzaffarpur Institute of Technology was present on the occasion and addressed the audience. At the end, Mr Sanjay Kumar Choudhary, Honorary Secretary, Muzaffarpur Local Centre, IEI proposed the vote of thanks.

North Bengal

North Bengal Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Jalpaiguri. Mr Chinmoy Ghosh, Honorary Secretary, North Bengal Local Centre, IEI delivered the welcome address. Mr Subhas Barman, Head, Department of Computer Science and Engineering, Jalpaiguri Government Engineering College briefed the life



sketch of Sir M Visvesvaraya. The theme Speaker of the day was Ms Jhuma Dutta, Assistant Professor, Computer Science and Engineering Department, Jalpaiguri Government Engineering College. Earlier, welcome address was delivered by Mr Chinmoy Ghosh, Honorary Secretary, North Bengal Local Centre, IEI. Prof (Dr) Sudip Mukherjee, Chairman, North Bengal Local Centre, IEI presided over the function. At the end, Mr G K Panda, Past Chairman, North Bengal Local Centre, IEI proposed the vote of thanks.

Ranipet

Ranipet Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Ranipet. Chief Guest of the event, Mr M G Rajasankar, Additional General Manager (Head/Quality), BHEL, Ranipet delivered lecture on the theme. Special Invitee of the event was Mr P Ravikumar, General Manager



(Operations), BHEL, Ranipet. Earlier, Mr M Salai Manalan, Chairman, Ranipet Local Centre, IEI delivered welcome address. At the end, Mr Vivek S, Honorary Secretary, Ranipet Local Centre, IEI proposed the vote of thanks.

Silchar

Silchar Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Silchar. Mr Gautam Dutta Choudhury, Chairman, Silchar Local Centre, IEI delivered the welcome address and highlighted the life sketch of Sir M Visvesvaraya. Chief Guest of the event, Mr Jitesh Choudhary, Director, Centre for Development of Advanced Computing (C-DAC), Government of India focused on application



of smart engineering for interdisciplinary engineering practices, improvised engineering, communication media; intelligent engineering for sensors, actuators, intelligence, sustainable engineering for environmental effect, nature inspired engineering with no waste or reusable products etc. Prof Promod Kumar Patowari, Mechanical Engineering Department, NIT Silchar was the Guest of Honour and Keynote speaker on the occasion. At the end, Dr Biswajit Purkayastha, Honorary Secretary, Silchar Local Centre, IEI proposed the vote of thanks.

Tirupati

Tirupati Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Tirupati. Prof R V Satyanarayana, Principal, S V U College of Engineering, S V University, Tirupati; Mr K Ramesh Reddy, A P State Committee Member; Prof G Umamaheswara Reddy, Past Honorary Secretary, Tirupati Local Centre, IEI; Engineer's Association of Southern Power Distribution Limited, Tirupati and Engineers Association (Welfare), Tirumala Tirupati Devasthanams, Tirupati participated in the programme.

Udaipur

Udaipur Local Centre, IEI observed 55th Engineers' Day at Udaipur on 15 September, 2022. Chief Guest of the event, Mr Shakun Vaidya, CTS Head - Grey Cement, J K Cement Limited, New Delhi mentioned about the skilled manpower of the organisation, provision of technical support through mobile van etc. testing through laboratories. Keynote Speaker of the event, Dr D N Ray, Senior Principal Scientist and Head, Design Management and System Engineering Group, CSIR - CMERI Durgapur informed about research activities in Central Mechanical Engineering Research Institute (CMERI), which include; Experimental Robotic System, Design, etc. He further elaborated on the application of robotics in disaster management, underground mining etc. Earlier, Mr Yawanti Kumar Bolia, Chairman, Udaipur Local Centre, IEI welcomed the guests, dignitaries and attendees. At the end, Mr Chandra Prakash Jain, Honorary Secretary, Udaipur Local Centre, IEI proposed the vote of thanks.



Upper Assam



Upper Assam Local Centre, IEI observed 55th Engineers' Day in association with Dibrugarh University Institute of Engineering and Technology, Dibrugarh, Assam, on 15 September 2022 at Dibrugarh. Mr Sasanka Pratim Deka, Chairman, Upper Assam Local Centre, IEI welcomed the participants and offered his respect to Sir M Visvesvaraya. Chief Guest of the event, Mr Jiten Hazarika, Honourable Vice-Chancellor, Dibrugarh University delivered his speech on the theme of the day. Guest of Honour of the event was Mr Prasanta Borkakoty,

Resident Chief Executive, Oil India Limited, Duliajan. Invited Guests on the event, Mr Dibakar Bhattacharjee, Past Chairman, Upper Assam Local Centre, IEI and Mr Bhairab Bhuyan, CGM (Inst) Oil India Limited delivered lectures on the theme. Keynote Speaker of the event, Dr Mukul Chandra Bora, Director, Dibrugarh University Institute of Engineering and Technology, Dibrugarh delivered lecture on the theme. A documentary video on the life and achievement of Bharat Ratna Sir Mokshagundam Visvesvaraya was presented by Mr Debajeet Sarma, Honorary Secretary, Upper Assam Local Centre, IEI. At the end, he also proposed the vote of thanks.

Vallabh Vidyanagar

Vallabh Vidyanagar Local Centre, IEI observed 55th Engineers' Day on 17 September 2022 at Vallabh Vidyanagar. Chief Guest and Expert Speaker of the event, Mr Nilesh M Desai, Director, Space Application Centre (SAC/ISRO), Gujarat delivered lecture on the theme and encouraged the young engineers in making Smart India in coming years. Guest of Honour of the event, Dr Pratapsinh Desai, President, ISTE, New Delhi discussed on ancient education system, role of engineers in current era and the problems faced by engineering community. He further opined on more employment generation and entrepreneurship spirit to be developed in budding engineer. Mr Dinesh Chandra Odhavjibhai Nakrani, Honorary Secretary, Gujarat State Centre, IEI proposed the vote of thanks.



Visakhapatnam

Visakhapatnam Local Centre, IEI observed 55th Engineers' Day on 15 September 2022 at Visakhapatnam. Chief Guest of the event, Dr Y Sreenivas Rao, Outstanding Scientist and Director, NSTL, DRDO, Ministry of Defence, Government of India, Visakhapatnam opined that, engineers should play the key role and serve the nation with innovative methods. He also explained the importance of primary education, health and moral values. Keynote Speaker of the event, Dr Manu Korulla, Scientist 'G', NSTL, Visakhapatnam explained briefly about the fundamentals of human well being for economic condition and processes; socio political and environmental conditions and processes; challenges for climate change etc. Prof (Dr) K Venkatasubbaiah, Senior Professor and HoD, Mechanical Engineering Department, AUCE, Andhra University and Council Member, IEI, was present on the occasion and addressed the audience. Dr B Venkataramana, Chairman, Visakhapatnam Local Centre and Council Member, IEI presided over the function. Earlier, Mr K Venkata Rama Mohana Rao, Honorary Secretary, Visakhapatnam Local Centre, IEI welcomed the gathering.



From the President's Desk.....

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From the holistic point of view, to improve the carbon footprint of new buildings, producers and contractors alike are now increasingly being expected to preserve natural resources while continuing to produce quality products, and are, therefore, searching for construction methods, practices

and products that will enhance the sustainability of new buildings and infrastructure. Finally, use of recycled or waste materials in the concrete industry is a feasible alternative to achieve the sustainable development goals across the globe.

IEI Celebrates Royal Charter Day

The Institution of Engineers (India) was incorporated by Royal Charter on September 9, 1935 by King and Emperor George V at the Court at Buckingham Palace, London and remains the only professional body in India to be accorded this Honour. This endowed the Corporate Members of the Institution with the right to use the title 'Chartered Engineer' after their names, implying that they are qualified engineers deemed worthy to hold a Charter. The 'Royal Charter Day' was celebrated by IEI all over the country on September 9, 2022. A brief accounts of celebration, as received from various Centres, are reported hereunder.

STATE CENTRE

Gujarat

Gujarat State Centre, IEI observed Royal Charter Day on 09 September 2022 at Ahmedabad and organized technical talk on 'National Education Policy – 2020'. Mr Dineshchandra Odhavjibhai Nakrani, Honorary Secretary, Gujarat State Centre, IEI delivered the welcome address. Guest of Honour of the event was Mr H U Kalyani, Immediate Past Chairman, GSC, IEI and Chief Engineer (Sau.) and Additional Secretary, Water Resources Department, Government of Gujarat and Chief Guest of the event was Mr Sandeep



B Vasava, Secretary, Roads and Buildings Department, Government of Gujarat and Council Member, IEI in absentia. Keynote Speaker of the event, Prof Shyam Varghese, Immediate Past Honorary Secretary, GSC, IEI and Head of Automobile Department, Government Polytechnic, Ahmedabad delivered the thematic address.

event was Mr H U Kalyani, Immediate Past Chairman, GSC, IEI and Chief Engineer (Sau.) and Additional Secretary, Water Resources Department, Government of Gujarat and Chief Guest of the event was Mr Sandeep

Chairman, Asansol Local Centre, IEI. Dr Shantanu Datta, Assistant Professor, Mechanical Engineering Department, Asansol Engineering College, Asansol delivered lecture on the topic 'Wind Turbines' and explained working principle and applications domain of wind turbine. At the end, Mr Sumanta Karmakar, Honorary Secretary, Asansol Local Centre, IEI proposed the vote of thanks.



Bokaro Steel City



Bokaro Steel City Local Centre, IEI observed Royal Charter Day on 09 September 2022 at Bokaro. Chief Guest of the event, Mr C P Sahay, Former Deputy General Manager

(Traffic), SAIL, Bokaro Steel Plant inaugurated the function and invited the engineers to join IEI and serve the humanity with the advancement of science and technology. Guest of Honour of the event, Mr Harihar Rout, General Manager, (ETL) SAIL, Bokaro Steel Plant mentioned the genesis of IEI and Royal Charter. Earlier, Mr Yogendra Nath Singh, Immediate Past Chairman, Bokaro Steel City Local Centre, IEI welcomed the dignitaries and the Corporate Members. At the end, Mr Sunil Kumar, Honorary Secretary, Bokaro Steel City Local Centre, IEI proposed the vote of thanks.

LOCAL CENTRES

Ahmednagar

Ahmednagar Local Centre, IEI observed Royal Charter Day in association with Department of Information Technology, Dr Vithalrao Vikhe Patil College of Engineering, Ahmednagar on 13 September 2022 at Ahmednagar. Mr H B Thigale, Past Honorary Secretary, Ahmednagar Local Centre, IEI briefed the audience about the incorporation of Royal Charter. On this occasion, Mr Abhay Krishnarao Raje, Honorary Secretary, Ahmednagar Local Centre, IEI discussed on the topic 'Indian Automobile-Car Segment'.

Anpara

Anpara Local Centre, IEI observed Royal Charter Day on 09 September 2022 at Anpara. Chief Guest of the event, Mr Ram Janam Yadav, Senior Manager, NCL Krishnshila appealed to the engineering fraternity to



follow the path laid down by Royal Charter and called the technical experts to work for Institution by setting up a task force and sharing their charter knowledge. Mr G K Maurya, and Mr Prashant Kumar, Assistant Engineers, Anpara Thermal Power Plant delivered lectures on the aspects of 'Royal Charter'. Earlier, Mr Amarnath Pandey, Chairman, Anpara Local Centre, IEI welcomed all. At the end, Mr Vikas Kumar Srivastava, Honorary Secretary, Anpara Local Centre, IEI proposed the vote of thanks.

Asansol

Asansol Local Centre, IEI observed Royal Charter Day on 09 September 2022 at Asansol. The program was inaugurated by Mr Tarun Tapan Lahiri,

Dhanbad

Dhanbad Local Centre, IEI observed Royal Charter Day on the topic 'Use of Artificial Intelligence and Machine Learning in Coal Mining Industry' on 09 September 2022 at Dhanbad. Mr Naveen Thakur, Area Manager (Planning), Sijua Area, BCCL, Dhanbad

delivered lecture on the theme. Mr Jitendra Malik, General Manager, Sijua Area, BCCL, Dhanbad and Director (Technical)-selected, NCL; Prof Biswajit Paul, Professor, Department of Environmental Science and Engineering, IIT-ISM, Dhanbad; Mr Sanjay Kumar Singh, Project Officer, Sijua Area, Dhanbad; Mr Naveen Thakur, Area Manager (Planning), Sijua Area, BCCL, Dhanbad, members from BCCL, guests and students from IIT-ISM, Dhanbad participated in the programme. Dr Arvind Kumar Mishra, Honorary Secretary, Dhanbad Local Centre, IEI deliberated on Royal Charter. At the end, Prof Biswajit Paul, Joint Honorary Secretary, Dhanbad Local Centre, IEI proposed the vote of thanks.



Ghaziabad



Ghaziabad Local Centre of the Institution observed Royal Charter Day on 09 September 2022 at Ghaziabad. Dr Arindam Basu, Director General, Northern India Textile

Research Association, Ghaziabad, [NITRA] and Dr H R P Yadav, Former Secretary and Director General, IEI were present in the event. Mr Raghunandan Prasad Sharma, Chairman, Ghaziabad Local Centre and Council Member, IEI welcomed all. Mr R R Tanwar, Council Member, IEI and Past Chairman, Ghaziabad Local Centre was present in the event.

Gorakhpur

Gorakhpur Local Centre, IEI observed Royal Charter Day on 09 September 2022 at Gorakhpur. Mr Dharendra Chaturvedi, Chairman, Gorakhpur Local Centre, IEI welcomed the dignitaries



and audience. Speaker of the event was Mr Mirza Waseem Beg, Former Chief Production Manager, Indian Oil Corporation Limited, Mathura Refinery and Past Chairman, Gorakhpur Local Centre, IEI. Mr Beg explained in details about the establishment of Royal Charter and its development till date. At the end, Mr Ved Prakash Gupta, Honorary Secretary, Gorakhpur Local Centre, IEI proposed the vote of thanks.

Indore

Indore Local Centre, IEI observed Royal Charter Day on 07 September 2022 at Indore. A seminar was organized on the occasion. Speaker of the event was Dr Manisha Gaur, CEO, Roopantaran. Mr Rajendra Prasad Gautam, Chairman, Indore Local Centre, IEI delivered the welcome



address. Dr Raksha Parolkar, Convenor proposed the vote of thanks.

Jammu

Jammu Local Centre, IEI Observed Royal Charter Day on 09 September 2022 at Jammu. Chief Guest of the event was J B S Johar, Vice Chairman, IIPA, Jammu & Kashmir Regional Branch and Former Chairman, Jammu Local Centre, IEI. Dr (Prof) Sanjay Khar, Chairman, Jammu Local Centre, IEI presided over the function and presented welcome address. Mr Anil Verma, Former Honorary Secretary, Jammu Local Centre, IEI briefed on Royal Charter. At the end, Mr Chanchal Paul Sharma, Honorary Secretary, Jammu Local Centre, IEI proposed the vote of thanks.



Kalaburagi

Kalaburagi Local Centre, IEI observed Royal Charter Day 2022 on 09 September 2022 at Kalaburagi. Chief Guest of the event was Dr V D Mytri, Pro-Vice Chancellor, Sharnbasva University, Kalaburagi. Speaker of the event was Mr Babu Sidramappa More, Immediate Past Chairman, Kalaburagi Local Centre, IEI. The function was presided by Mr Subhash Sugoor, Chairman, Kalaburagi Local Centre, IEI. At the end, Mr Hanmayya Belure, Honorary Secretary, Kalaburagi Local Centre, IEI proposed the vote of thanks.

Kanchepuram



Kanchepuram Local Centre, IEI observed Royal Charter Day in association with Department of Electrical and Electronics Engineering, Jerusalem College of Engineering, Chennai on 09 September 2022 at

Kanchepuram. Chief Guest of the event was Dr J Balamurugan, Assistant Executive Engineer, TNEB/TANGEDCO. Dr Asha Panchanathan, Professor and Head, Civil Engineering Department, Jerusalem College of Engineering; Dr Ramesh S, Principal, Jerusalem College of Engineering were present in the event. Earlier, Dr G Shanmugasundar, Honorary Secretary, Kanchepuram Local Centre, IEI welcomed all.

Kanyakumari

Kanyakumari Local Centre, IEI observed Royal Charter Day on 09 September 2022 at Kanyakumari. A technical session was organized on the topic 'International Space Station'. Dr S Arumuga Perumal, Chairman, Kanyakumari Local Centre, IEI presided over the function. Chief Guest of the event, Ms S Rasathi, Scientist, ISRO Propulsion Complex, Mahendragiri addressed the audience. Mr S Natarajan, Former Special Chief Engineer, Timalnadu Public Works Department [TNPWD] and Honorary Secretary, Kanyakumar Local Centre, IEI briefed on Royal Charter Day. At the end, Dr M Marsaline Beno, Honorary Joint Secretary, Kanyakumari Local Centre, IEI thanked all the participants.

Madurai

Madurai Local Centre, IEI observed Royal Charter Day on 15 September, 2022 at Madurai. Dr S Dharmalingam, Former General Manager, BHEL, Trichy was the Chief Guest of the session. Prof (Dr) P Udhya Kumar, Honorary Secretary, Madurai Local Centre, IEI introduced the Chief Guest and at the end of the session, delivered the vote of thanks.



Meerut

Meerut Local Centre, IEI observed Royal Charter Day on 09 September 2022 through online mode. Speaker of the event, Mr Rajneesh Kumar, Principal (Retired), D N Polytechnic, Meerut and Immediate Past Chairman, Meerut Local Centre, IEI discussed the brief history and background of IEI Royal Charter. Keynote Speaker of the event, Dr Pragati Sharma, Associate Professor & Head, Department of ECE, S D College of Engineering and Technology, Muzaffarpur delivered lecture on '6G-Potential Technologies and Challenges'. Earlier, Mr Mohan Lal Jain, Chairman, Meerut Local Centre, IEI welcomed the guests and the participants. At the end, Mr Raj Pal Agarwal, Honorary Secretary, Meerut Local Centre, IEI proposed the vote of thanks.

Muzaffarpur

Muzaffarpur Local Centre, IEI observed Royal Charter Day through online mode on 09 September 2022. A webinar was organized on the occasion on the theme 'Role of Engineers in Disaster Resilient State'. Mr Anjani Kumar Srivastava, Chairman, Muzaffarpur Local Centre, IEI delivered welcome address and explained the importance of Royal Charter. Keynote Speaker of the event, Prof Vijay Kumar, Department of Civil Engineering, Muzaffarpur Institute of Technology delivered lecture on the topic. At the end, Mr Sanjay Kumar Choudhary, Honorary Secretary, Muzaffarpur Local Centre, IEI proposed the vote of thanks. The programme was attended by Past Chairmen and Honorary Secretaries of the Local Centre and other dignitaries.

News-in-Brief

The following are the brief account of Technical Activities organised by various Centres

STATE CENTRES

Andaman and Nicobar

Organized webinar in association with Pidilite Industries Limited on 'Repair and Rehabilitation of Structures' on 08 June 2022. Speakers of the event, Mr A K Sinha, Senior Manager (Special Projects), Pidilite Industries Limited discussed on various products Pidilite for repair and rehabilitation of structures. Er Divya G, Area Manager (Special Products), Pidilite Industries Limited mentioned about the products available with Pidilite for repair and rehabilitation of structures.

Gujarat

Organized workshop in association with Aspire Disruptive Skill Foundation, Ahmedabad on 'Skill, Technology and Entrepreneurship on CNC/VMC and Solar Technology' during 14-16 July 2022 at Gandhinagar. Major Focus of the workshop was to provide hands on training and technology based entrepreneurship development for engineers. Mr Manoj Pundir, General Manager, Aspire Disruptive Foundation, Ahmedabad explained the role of the organization to empower young engineers and Technicians in the State of Gujarat. Mr Pawan Kumar Kaushal, Expert on Power and Energy briefed about the Scope of Solar Energy and Benefits.

Jammu & Kashmir

Organized workshop on 'Project Management (Contract Management)' on 28 May 2022 at Srinagar. The Quarterly Newsletter titled 'Engineers Bulletin' was also launched during the occasion. Chief Guest of the event was Mr Bashir Ahmad Dar, Secretary Technical, Jammu and Kashmir Power Development Department (JKPDD) and Guests of Honour of the event were; Mr Rafiq Ahmad Rafiq, Chief Engineer, PW R&B and Mr Mir Tanveer, Chief Engineer, Pradhan Mantri Gram Sadak Yojana (PMGSY). Speakers of the event were Mr Nadeem Akbar Najar, Research Scholar; Mr Sajad Ahmad Wani, Executive Engineer, Jhelum and Tawi Flood Recovery Project (JTFTP)/JKERA; Dr Saad Parvez, Associate Professor, NIT Srinagar; Mr Mir Tanveer, Chief Engineer, Pradhan Mantri Gram Sadak Yojana (PMGSY); Mr Iftikhar Ahad Kakroo, Chief Engineer, Srinagar Smart City Limited and Mr Iftikhar A Drabu, Consulting Civil Engineer deliberated on procurement and execution process of projects.

Organized Workshop in association with Disaster Awareness and Management Forum (DAMF), Safety and Quality Forum, IEI on 'Disaster Risk Awareness and Mitigation' on 31 May 2022 at Srinagar. Chief Guest of the event was Mr Narendra Singh, Immediate Past President, IEI. Guests of Honour of the event were Mr Dinesh Kumar, Chairman, SQF and Mr S C Goyal, Chairman, DAMF. Keynote Speaker of the event was Prof Dr Satyendra Mittal, IIT, Roorkee. Mr N K Yadav, Former Chief Engineer, I&FC, Uttarakhand and Mr Aijaz Ahmed, SDRF also on the occasion.

Karnataka

Organized Er B R Manickam Memorial Lecture on the topic 'The Journey of Bengaluru – from Southern Hemisphere to 1536 CE' on 21 May 2022. Keynote Speaker of the event was Mr Udaya Kumar P L, Project Director, Bengaluru Inscriptions 3D Digital Conversation, Mythic Society, Bengaluru.

Organized lecture on the topic 'National Education Policy 2020' on 07 July 2022 through hybrid mode. Keynote Speaker of the event, Dr S Y Kulkarni, Former Vice Chancellor, REVA University and presently Additional Director, BNM Institute of Technology, Bangalore highlighted the need for new education policy.

Kerala

Organized webinar in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'Distances & Similarities for Pattern Analysis Task' on 02 February 2022. Speaker of the event was Prof B S Shajee Mohan, Professor, Department of Allied Electronics & Instrumentation, GEC Kozhikode, explained that distance or similarity measures are essential in solving pattern recognition problems such as classification and clustering. He elaborated further, pattern analysis algorithms, selection of a particular distance measures and their significance in pattern analysis.

Organized webinar in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'Distances & Similarities for Pattern Analysis Task' on 09 February 2022. Speaker of the event, Prof (Dr) Arch Sunil Edward, Dean of PG Studies and Professor in Architecture, College of Engineering, Trivandrum discussed on Sustainable/Green buildings.

Organized 24th Er C S Padmanabha Iyer Memorial Lecture, in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'Uncertainty Analysis of Seismic Soil Liquefaction of Quo FEM (Project from NHERI REU at UC Berkely Simcentre)' on 11 February 2022. A webinar was organized on the occasion. Speaker of the event, Mr Adithya Salil Nair, PhD Scholar, Ohio State University, USA delivered on earthquake, landslides, floods, etc and also on Geohazard mitigation.

Organized webinar in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'Blind Spots in Your Thinking' on 16 February 2022. Speaker of the event was Dr Venugopal S Reddiar, Physician and Life Skills Coach, USA.

Organized webinar in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'Geo-Textiles-BhooVasthra on 23 February 2022. Speaker of the event, Dr K Balan, Vice-Principal & Dean (Research), Rajadhani Institute of Engineering & Technology (RIET) mentioned that Geosynthetic materials are used in soil to improve its engineering properties and it includes material like geotextile, geogrid, geomembrane, geocell, geofoam, geo tube, etc. He also explained application of Geotextiles in erosion control of highways or railway embankments, man-made or natural slopes, etc.

Organized webinar in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'Disciplined Agile – The New Arsenal of a Project Manager' on 02 March 2022. Speaker of the event was Lt Col L Shri Harsha, Project Management Professional and Past President, PMI, Bangalore.

Organized webinar in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'Evolution of Information Systems from an AI Perspective' on 16 March 2022. Speaker of the event was Dr Suresh Subramoniam, Professor and Director, CET School of Management, Thiruvananthapuram. Dr Suresh explained that information systems were used for transaction processing and later for the needs of middle level managers giving rise to management information systems with interactive query capability for performing structure data analysis. He mentioned that ERP systems have the capability of intelligent decision making and intended to address the ways by which how artificial intelligence can be made use of such systems.

Organized webinar in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'Indian Railways: A Net-Zero Carbon Emitter by 2030' on 23 March 2022. Speaker of the event, Mr K Madhana Mohan, Deputy Chief Electrical Engineer (Retd), Indian Railways in his lecture mentioned that transport sector contributes 12% of country's greenhouse

emission with railways account of 4% of these emissions. He mentioned that Indian railways is coming forward to decarbonize progressively from renewable energy to electricity in its traction network and reducing energy consumption. He spoke that Indian railways is committed to use solar energy to meet the traction power and the aims to become net zero carbon emitter by 2030 through various initiatives.

Organized webinar in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME IITArb, PMI, IETE on the topic 'The NEP and the Desirable Changes in Education in Kerala' on 30 March 2022. Speaker of the event, Dr Kuncheria P Issac, Former Vice Chancellor, A P J Abdul Kalam Technological University focused on various aspects of National Education Policy (NEP) and the major challenges, changes, and opportunities for engineers.

Organized five-day training programme on 'Estimation and Costing' from 18-22 April 2022 at Thiruvananthapuram. Various topics covered during the training program include; supervision and construction; quality control; management; construction safety management, commissioning and handing over; estimation and billing.

Madhya Pradesh

Organized webinar on the topic 'Concept & Development of Smart Cities' on 12 March 2022. Guest Speaker of the event was Mr Vivek Ranjan Shrivastava, Retd Chief Engineer, (Civil), M P Poorv Kshetra Vidyut Vitran Company, Jabalpur.

Mizoram

Organized webinar on the topic 'Electrical Vehicle for Future Generations' on 11 June 2022. Dr Pranjal Borah, Assistant Professor, Department of Instrumentation and USIC, Gauhati University delivered presentation on the topic 'Advances in Automotive Antenna Design'. Dr Pranjal Barman, Associate Project Engineer, E&ICT Academy, IIT Guwahati delivered lecture on 'The Growth of Electric Vehicles: India's Perspective'.

Puducherry

Organized webinar on the topic 'Emotional Intelligence for Engineers' on 10 May 2022. Mr D Karunakaran, Associate Professor, Sri Manakula Vinayagar Engineering College, Puducherry was the Speaker of the session.

Organized webinar on the topic 'Fundamentals of TPM Autonomous Maintenance' on 29 June 2022. Speaker of the event, Mr P Sivasankaran, Associate Professor, Manakula Vinayagar Institute of Technology, Puducherry explained the concepts of Total Productive Maintenance.

Organised Seminar on the topic 'Self Compacting Concrete – An Overview and Practical Applications' on 04 July 2022 at Puducherry. Speaker of the event, Mr J Somasundaram, Manager (Technical), Puducherry Smart City Development Limited explained the techniques and theory of self compacting concrete and enriched the students with practical knowledge by facilitating site visit.

Punjab & Chandigarh

Organized Seminar in association with Department of Computer Applications and Science and Department of Commerce and Economics, B A M Khalsa College, Garhshankar on 04-05 March 2022 at Chandigarh on the topic 'Business Intelligence with Intelligent Computing'. Chief Guest of the event was Prof (Dr) Tara Singh Kamal, Former Vice President, IEI and Guest of Honour of the event was Dr Ravinder Singh Zandu. On the occasion, Prof (Dr) Amar Pratap Singh, SLITE, Longowal; Prof (Dr) Satwinder Singh, HoD, Department of Computer Science and Technology, Central University of Punjab, Bathinda; Dr Arjan Singh, Punjabi University, Patiala, Dr Balkrishan, Associate Professor, Yadindra College of Engineering, Punjabi University, Dr Rohini Sharma, Chairperson, Department of Computer Science and Applications, Punjabi University, Chandigarh and other notable speakers graced the occasion with their august presence and delivered presentations.

Telangana

Observed National Survey Day on 10 April 2022 through online mode. Chief Guest of the event, Dr Swarna Subbarao, Former Surveyor General of India delivered Lecture on 'Relevance of Drones in Survey'. Guest of Honour of the event, Mr A Bhaskar, Joint Director and Vice Principal, State Survey Department addressed the audience as Guest of Honour and delivered lecture on 'Methodology of Cadastral Survey and Challenges'.

Observed Engineers Memorial Day on 14 April 2022 to pay homage to Sir Mokshagundam Visvesvaraya. Mr B Brahma Reddy, Chairman, Telangana State Centre and Council Member, IEI recalled about the immense contributions by Sir M Visvesvaraya, particularly in the engineering profession for nation building as a builder, a dreamer, a thinker and a man of action. On the day, the Corporate Members who passed away during 01 April 2021 to 31 March 2022, were remembered and paid homage by Dr I Satyanarayana Raju, Council Member, IEI, Mr Shyam Prasad Reddy, Council Member, IEI; Prof (Dr) Ramana Naik Banothu, Immediate Past Chairman, Telangana State Centre, IEI, Prof (Dr) Mohd. Mohinoddin, Joint Honorary Secretary, Telangana State Centre, IEI, and the Committee Members of the host Centre.

Organized ceremony of unveiling Statue of Late Er G Prabhakar, Past President, IEI and 1st Memorial Lecture on 15 April 2022. Chief Guest on this occasion, Mr T Harish Rao, Hon'ble Minister for Finance, Health, Medical & Family Welfare, Government of Telangana addressed the gathering as Chief Guest, unveiled the bust size statue of Late Er G Prabhakar and also inaugurated the Mr R Vidya Sagar Rao Conference Hall. Guest of Honour of the event, Mr V Prakash Rao, Chairman, Telangana Water Resources Development Corporation Limited & Indian Peninsular River Basins Council addressed the gathering and explained elaborately on 'Rivers Rejuvenation for Sustainable Development'. During the occasion, HYM International Certification Private Limited presented ISO 9001-2015 Certification Award to Telangana State Centre, which was awarded by the Chief Guest of the function.

Organized Felicitation Ceremony for the engineers selected for Civil Services – 2021 on 08 June 2022 at Hyderabad. Chief Guest of the event was Mr V Prashanth Reddy, Hon'ble Minister for Roads & Buildings, Legislative Affairs and Housing, Government of Telangana and Guest of Honour of the event was Mr V Prakash Rao, Chairman, TWRDC & IPRBC. Special Guest of the event was Mr Yashwanth Rao, IRS, Government of Telangana.

Uttar Pradesh

Organized webinar on the topic 'Bioprocessing of Fruits and Vegetables for Nutritional Security, Livelihood Upliftment and Employment Generation' on 11 May 2022. Chief Guest and Keynote Speaker of the event, Dr Neelima Garg, Acting Director, ICAR-CISH, Lucknow mentioned that India is the second largest producer of fruits and vegetables and presented facts and figures of these production mentioning the various types of vegetable and fruits. She mentioned that these horticultural crops not only provide nutrition and healthy food but generate revenue and employment. She also mentioned various processes to increase the shelf life of fruits and vegetables. She called upon the young generation of educated farmers, rural youth to become entrepreneurs and adopt horticulture as business enterprise.

West Bengal

Organized Seminar on the topic 'India Power Sector – Past, Present and Future' on 03 June 2022 at Kolkata. Guest of Honour of the event, Mr Joydeb Bandyopadhyay, Advisor (Engineering), West Bengal Electricity Regulatory Commission delivered lecture on the topic. Prof (Dr) Samiran Choudhuri, Past President, IEI graced the occasion as Special Invitee and addressed the august audience.

Organized Seminar on the topic 'Unveiling of Knitting Science: A New Horizon of Manufacturing Speciality Products' on 04 June 2022 at Kolkata. Speaker of the event, Prof (Dr) Sadhan Chandra Roy, Former Head, Department of Textile and Fibre Technology, University of Calcutta and presently Council

Member & Chairman, Textile Engineering Division Board (TXDB) explained knitting Science, engineering and technology, structure & design Aspects and applications.

Observed 169th Birthday of Sir R N Mookerjee, the Founder President of The Institution of Engineers (India) on 23 June 2022 at Kolkata. On the occasion, Mr Amitabha Ghoshal, Council Member, IEI and Past President, Consulting Engineers Association of India [CEAI] delivered Memorial Lecture on the topic 'Influence of Sir R N Mookerjee on Bridges in Kolkata – Rabindra Setu and Vidyasagar Setu'. Mr Sandip Kumar Deb, Vice President, IEI presided over the function. Mr Chanchal Chakraborty, Executive Vice President – Reliance Jio and Convener, Electronics and Telecommunication Engineering Division, WBSC presented a life sketch of Sir R N Mookerjee. Mr Anirban Datta, Chief Technology Officer – MESCIA Engineers and Joint Honorary Secretary, WBSC introduced the Speaker of the event.

Organized seminar on the topic 'Protected Cultivation: Concepts and Principles' on 28 June 2022 at Kolkata. Guest Speaker of the event, Dr K K Satapathy, Chairman, Agricultural Engineering Divisional Sub-Committee and Ex-Director, National Institute of Natural Fibre Engineering and Technology (ICAR-NINFET), Kolkata in his address emphasized the need of protected cultivation in the faster growing population coupled with the migration of people from village to cities. He further mentioned that high value crops cultivation under protected structure can pave the way for better earning for farmers leading to a better quality of working life with improved socio-economic condition.

Organized 36th A K Ghose Memorial Lecture on the topic 'Transmission Congestion Management Pricing and Locational Marginal Pricing in the Deregulated Power System' on 08 July 2022 at Kolkata. Guest of Honour of the event, Prof (Dr) Bishaljit Paul, HoD, Narula Institute of Technology discussed about the management of generator scheduling during overloading of lines or during outage of the elements and how to manage it. Prof Ashoke Kumar Paul, Professor, Electrical Engineering Department, Techno India University read out the life sketch of late A K Ghose.

LOCAL CENTRES

Ahmednagar

Arranged Site Visit to IEI Building under construction on 23 July 2022 at Ahmednagar. The purpose of this visit was to acquaint the members about the progress of construction, explain the building plan, architectural design and practical experience in construction.

Alwar

Organized seminar in association with National Safety Council, Rajasthan State Chapter; Safety & Quality Forum, New Delhi; and Factory & Boilers Department, Alwar on the topic 'Emergency Preparedness in Industry and Chlorine Hazard Control' on 11 June 2022 at Alwar. Chief Guest of the program, Mr Mukesh Jain, Chairman, National Safety Council, Rajasthan State Chapter shared his expertise during his tenure as Chief Inspector, Factories & Boilers Department, Rajasthan. Guest of Honour of the event, Mr Surendra Singh, Deputy Chief Inspector, Factories & Boilers Department, Rajasthan shared his practical experience on emergency preparedness in various industries. Special Guest of Honours of the event were Mr Dinesh Kumar, Chairman, and Mr Praveen Kumar Singh, Director, Safety and Quality Forum, IEI. Keynote Speaker of the program, Mr G P Kumawat, Executive Director – IGPCCL, New Delhi informed onsite Emergency Control in the industries and elaborated the responsibility of different officers in plant during such incident. Speaker of the program, Mr Arun Maurya, Assistant Director, SMTCL, Jaipur expressed the need of emergency preparedness in industry and the functioning of SMTCL establishment for benefit of industries. Mr Pankaj Dewan, Plant Head, Daikin Airconditioning India Limited expressed his views on the theme.

Amravati

Organized national level multidisciplinary project competition on the topic 'Techno Eagles 2022', in association with Department of Electronics and

Telecommunication Engineering, Ram Meghe Institute of Technology and Research Badnera on 13 May 2022 at Amravati. Guest of Honours of the event were Mr G U Barbade, Member, Maharashtra State Centre, IEI and Dr S G Fale, Joint Secretary, Amravati Local Centre, IEI. The objective of the competition was to enhance the technical skills of polytechnic students and to make them aware about the current trends.

Aurangabad

Observed Energy Conservation Day on 22 June 2022 in association with Urja Sahayog, Aurangabad and a webinar was organised on the topic 'Challenges in the field of Electrical Power in India'. Chief guest and speaker of the event, Mr Uttam Zalte, Director (Operations), Maharashtra State Electricity Board highlighted the major challenges faced by the country regarding the growth and improvement in reliability of electrical infrastructure along with bridging the gap between demand and supply. He discussed at a length the significant factors of Indian power sector, which include grid operation, transmission & distribution, operation and maintenance etc.

Organized webinar on 'Challenges and Opportunities in Developing Socio Economy of India with Reference to Solar System and Energy Conservation' on 15 January 2022, in association with Aurangabad Municipal Corporation. On this occasion, Mr Dhananjay Joshi, Head (Asset Management QHSE), Continuum Green Energy Private Limited, Mumbai explained technical knowhow, economics in solar system, Government policies and international treaties regarding solar system and energy conservation etc. Mr Mukund Kukarni, Director, Expert Global Solution Private Limited, Aurangabad explained significance of solar system and scope of energy conservation in Aurangabad jurisdiction and emphasized on the awareness for the utilization of solar energy.

Bareilly

Organized technical lecture meeting on the topic 'Internet of Things, AI & Machine Learning' on 05 March 2022. Speaker of the event, Mr Kaushlendra Singh Sisodiya, Chief Executive Officer, Uniconverge Technology explained the applications of Internet of Things (IoT).

Belagavi

Organized technical lecture on the topic 'Current Challenges in Water Resources Management and Solutions' on the occasion of Birth Centenary celebration of renowned irrigation expert Mr S G Balekundry on 05 May 2022 at Belagavi. Chief Guest of the event, Dr Rajendra S Poddar, Director, Water and Land Management Institute, Dharwad, Government of Karnataka delivered lecture on the topic and explained the need and possibilities of water management and highlighted challenges in protecting the water reservoirs. Mr C N Wali, SE (Retd) spoke about the personal and professional life of eminent irrigation expert Mr S G Balekundry.

Bokaro Steel City

Organized seminar jointly with SAIL, Bokaro Steel Plant on the topic 'Increasing Steel Consumption: Way to Increase Rural Steel Usage and India – Way Forward' on 06 July 2022 at Bokaro. Chief Guest of the event, Mr B K Tiwari, Executive Director (Works), Steel Authority of India Limited, Bokaro Steel Plant inaugurated the function and addressed the august audience. Guest of Honour of the event, Mr Sanjay Kumar, Executive Director (P & A), SAIL, Bokaro Steel Plant in his address explained methodologies to enhance steel consumption.

Coimbatore

Organized technical webinar in association with Department of Textile Technology, Kumaraguru College of Technology, Coimbatore on the topic 'Advances in Microencapsulation for Multifunctional Textiles' on 28 April 2022. Guest Speaker of the event, Dr Nagender Singh, Assistant Professor, Department of Fashion and Apparel Engineering, The Technological Institute of Textile and Sciences, Bhiwani, Haryana explained the core and shell material and microencapsulation techniques, spray drying, encapsulation efficiency and yield %, characterization of microcapsules.

Organized Innovation Contest in association with Department of Textile Technology, PSG College of Technology, Coimbatore on the topic 'Technology and Innovations in Technical Textiles' on 13 May 2022 at Coimbatore. This contest encourages design, innovation and product development activities amongst the students. Technical textiles/clothing/fashion products with innovative technologies were invited for the contest. Fifty presentations were displayed in the contest by different institutes and individuals and prize were distributed at the end of the contest.

Organized webinar in association with the Department of Biomedical Engineering, Dr N G P Institute of Technology, Coimbatore on 27 May 2022 on the topic 'Healthcare Engineering: Health Maintenance through Medical Technology Innovation'. Guest Speaker of the event, Dr Kalaivani Chellappan, Associate Professor, Healthcare Engineering, Universiti Kebangsaan Malaysia shared knowledge on medical technological innovations, data driven precision medicine, lifelong digital health assistant system etc.

Organized webinar in association with Department of Textile Technology, Kumaraguru College of Technology, Coimbatore on the topic 'Innovation in Textiles' on 30 May 2022. Guest Speaker of the event, Mr S Periasamy, Chief Executive Officer, AIC-NIFT TEA Incubation Centre for Textiles and Apparels, SIDCO, Tirupur delivered lecture on the topic.

Organized webinar in association with Department of Textile Technology, Kumaraguru College of Technology, Coimbatore on 'Developments in Spinning' on 14 June 2022. Guest Speaker of the event, Mr Vivek Arora, DGM – Sales (Domestic) and Marketing, Lakshmi Machine Works Limited, Coimbatore briefed about the industry requirement, evolving of spinning industry, yarn manufacturing contribution in India and globe, benchmark technology transformation from blow room to spinning and also explained the IOT-Spin connect.

Organized webinar on 17 June 2022 at Coimbatore in association with Department of Civil Engineering, Dr N G P Institute of Technology, Coimbatore on the topic 'Serviceability Limit States and Codal Provisions'. Guest Speaker of the event, Dr R Senthil, Professor and Director (Building Technology Centre), Department of Civil Engineering, Anna University, Chennai explained about the codal provisions, control of deflection of various structures subjected to dead and live loads, serviceability limit states and codal provisions for fire resistance of structures.

Dharwad

Organized one day training programme on 'PCB Design' on 05 June 2022 at Dharwad. Chief Guest of the event, Dr Ramesh L Chakrasali, Professor, Electrical and Electronics Engineering Department, Dean (AP) and Dean (R & D), S D M College of Engineering and Technology, Dharwad inaugurated the programme and in his address, highlighted the importance of skill development and mentioned the objective, mission and initiatives by the Government of India for skill development programmes.

Faridabad

Organized technical webinar on 07 January 2022 on the topic 'Critical Thinking: Way to Think for Sustainability'. Speaker of the event, Dr Sudhanshu Joshi, Professor, Department of Management Studies, Doon University stated that critical thinking is the most desirable skill while absorbing new employees and it has been making justified decision than technical knowledge. Speaker of the event, Dr Meghna Chhabra, Associate Professor, Faculty of Management Studies, Manav Rachna International Institute of Research and Studies [MRIIRS].stated that critical thinking and sustainable development are the approach for social, economic, political problem, solving for current and future generations through active mental and emotional inquiry, etc. The session was moderated by Dr Rajendra Kumar, Assistant professor, Mechanical Engineering Department, FET, MRIIRS.

Organized webinar on 'Power Quality Improvement' on 25 June 2022. Speaker of the event, Mr Pradeep Mallha, CEO, Technoipan Industries elaborated about power quality and explained different aspects of it. He mentioned that power quality depends on reliability, continuity of service,

voltage in form of pure sine wave, magnitude of voltage within certain limits, frequency within certain limits etc. Power quality problems arises due to disturbance caused by interruption, under voltage, over voltage, voltage/current unbalance, harmonics, voltage sag, flicker, outage. He also mentioned about the impact of lower power quality such as power failures (release switch, fuses blowing), breakdown or malfunctions of machines, overheating of machines, etc. He also suggested various ways to improve power quality by transient voltage surge supper, filters, isolation transformers, voltage regulators, dynamic voltage restorer, uninterruptible power supply (UPS), flexible AC transmission system, etc. In his concluding remark, he stated that, proper mitigation devices can be used to maintain the level of power quality as desired.

Organized webinar on the topic 'Digital Behaviours towards Human Life and Environment for Healthy Living' on 23 July 2022. Speaker of the event, Mr Pankaj Kumar, Director Technical, R & D Purecss, Faridabad mentioned about Digital Technologies and how it has made the life better and quicker.

Gorakhpur

Organized Seminar on the topic 'Advancement in Petroleum Technology' on 07 July 2022. Speaker of the event, Mr Mirza Waseem Beg, Former Chief Production Manager, Indian Oil Corporation Limited, Mathura Refinery and Past Chairman, Gorakhpur Local Centre, IEI discussed on refineries, its capacities and location along with the manufacturing process of various petroleum products with specification and importance. He further highlighted the risk for using highly volatile product along with safety during its use.

Indore

Organized seminar in association with Association of Structural Engineers (ASE) for discussion on the draft on 'Indian Standard Earthquake Resistant Design and Detailing of Steel Buildings' (ISC 91.120.25) brought by Bureau of Indian Standards (BIS) on 18 June 2022 at Indore.

Organized expert talk on 'Career Guidance and Roadmap for Industry' on 23 June 2022 at Indore. Guest Speaker of the event, Mr Jitesh Bharad addressed the students about the opportunities in Information Technology (IT) Sector and advised them for a well-planned roadmap for their career. This expert talk highlighted about how the aspirants would approach written aptitude, group discussion, and interview and be confident to face the interview.

Jabalpur

Organized Lecture on 'Captcha' on 24 April 2022 through virtual mode. Guest of Honour of the event, Dr Ayan Seal, Assistant Professor, Pandit Dwarka Prasad Misra Indian Institute of Information Technology, Design and Manufacturing, Jabalpur delivered Key note address on the topic.

Kalaburagi

Organized One Day Students Skill Enrichment Program, in association with Department of Information Science and Engineering, PDA College of Engineering, Kalaburagi on the topic 'Google Cloud' on 7 May 2022 at Kalaburagi. Chief Guest of the event was Dr S S Kalashetty, Principal, PDA College of Engineering. Guest of Honours of the event were Dr S R Patil, Vice Principal, and Dr Viswanath Burkpalli, HOD, Department of Information Science and Engineering, PDA College of Engineering, Kalaburagi.

Organized technical lecture on 26 July 2021 on the topic 'Role of Ceramic Engineer in Steel Industry'. Mr Harish Joshi, Assistant General Manager, JSW Steel Limited, Toranagallu Bellari delivered lecture on the topic.

Kalpakkam

Organized Industrial visit to BHEL Trichy on 28 May 2022. Members of Kalpakkam Local Centre, IEI actively enriched with the knowledge by observing different operations in plants like valves manufacturing, valve testing, fabrication shop, machine shop, boiler coil manufacturing unit and various welding processes unit, etc.

Organized Technical Meet and Technical Discussion Meet at Trichy on 28 May 2022.

Kanpur

Organized Lecture in association with All India Valuers Association, Kanpur on the topic 'Non Performing Assets' on 11 June 2022 through online mode. Chief Guest of the event was Mr Niraj Kumar Tiwari, Zonal Manager, Bank of India. Guest Speaker of the event, Mr S S Dash, Proprietor, S S Dash & Associates, Kanpur discussed briefly about the non-performing assets.

Organized lecture on the topic 'Technical Textiles for Defence Applications' on 22 July 2022 at Kanpur. Guest Speaker of the event was Dr Krishna Kumar Gupta, Former Scientist F/Joint Director, Defence Materials and Stores Research and Development (DMRDE), Kanpur. Throughout his presentation the speaker spoke about various fabric materials with their detailed specification like thickness, weight and also mention their uses in different sector of Indian Defence System.

Kharagpur

Organized webinar on 'Biological and Bio-electrochemical Wastewater Treatment Technologies to Facilitate Reuse of Treated Water and Resource Recovery' on 05 May 2022. Speaker of the event, Prof Makarand M Ghangrekar, Department of Civil Engineering, Indian Institute of Technology Kharagpur delivered lecture on the topic and informed that bio-electrochemical systems have a potential to offer sustainable waste water treatment and simultaneously recover valuables. He also mentioned that bio-electrochemical wastewater treatment is not easy because certain microbiological, technological and economic challenges which need to be resolved that not have been previously encountered in any other wastewater treatment system.

Organized webinar on 'Three Dimensional Computational Fluid Dynamics of Scour Around a Single Pile due to Combined Actions of Waves and Current using Level Set Method' on 28 April 2022. Speaker of the event, Dr Mohammad Saud Afzal, Assistant Professor, Department of Civil Engineering, Indian Institute of Technology Kharagpur delivered lecture on the topic and demonstrated three dimensional CFD Modelling of scour around a single pile due to combined action of the waves and current using level-set method.

Kochi

Observed World Telecommunication and Information Society day on 17 May 2022 through virtual mode. Speaker of the session, Dr P T Mathew ITS, Senior Deputy Director General, Ernakulam Circle, Department of Telecommunications, Government of India explained the significant aspects of mobile communication systems. Dr D Madhu, Convener, Technical Activity Committee introduced the speaker.

Kollam

Observed World Earth Day on 17 May 2022 at Kollam. Dr Najee M, Principal, MES Institute of Technology and Management (MESITAM) and Dr J Udayakumar, Associate Professor, TKM College of Engineering, Kollam delivered address on the occasion.

Mangalore

Organized seminar on 'Wind Industry Overview in India' on 10 May 2022 at Mangalore. Guest Speaker of the event, Dr A S Karanth, Wind Energy Consultant, Bengaluru delivered lecture on the subject and stressed on using local expertise and technology for harnessing wind energy to achieve self reliance.

Munirabad

Observed World Asteroid Day on 30 June 2022 at Munirabad. Speaker of the event was Dr M Prabhugouda, Associate Professor and HOD, Department of Physics, VNC College, Hosapete.

Muzaffarpur

Participated in technical activity programme on the topic 'Robotic Model Competition (DANGAL)' in association with MIT, Muzaffarpur on 25-26 May 2022 at Muzaffarpur.

North Bengal

Organized lecture meeting through online mode on 10 January 2022 on the topic 'Multi Factor Based Authentication System for User Verification. Theme speaker of the event was Mr Subhas Barman, Head of the Department, Department of Computer Science and Engineering, Jalpaiguri Government Engineering College, Jalpaiguri. In his lecture, Mr Barman explained that Multi factor based authentication is a security technology that requires multiple methods of authentication from independent categories of credentials to verify user's identity for a login or other transaction. He spoke on different type of authentication processes, namely password based authentication, multi factor authentication, certificate based authentication, biometric authentication and token based authentication.

Pune

Observed Energy Conservation Day in association with Institute of Industrial and Computer Management and Research (IICMR) Pune and organized webinar on the topic 'Introduction to Six Sigma for Operational Excellence' on 27 April 2022 at Pune. Speaker of the event, Dr Abhay Kulkarni, Director, IICMR mentioned the importance of celebration of energy conservation day and emphasized the need of energy cost saving.

Organized technical talk in association with ASM International Pune Chapter on the topic 'Integrated Computational Materials Engineering (ICME) in Material and Process Development for Automotive Components' on 02 June 2022 at Pune. Speaker of the event, Dr Ajeet Babu, Manager, ARAI explained the importance of ICME in materials and process development; redesign of Cadillac Control Arm: Integration of coupled metal/thermo mechanical simulations to predict final properties, purpose of the ICME platform, concept of virtual modelling, simulation software, etc.

Organized Sunday Tech Talk and Eyeball QSO in association with Pune Hams and IETE on 05 June 2022 at Pune. Speaker of the event, Com Ashish Saxena, VU2ANM explained the importance of FSM in radio communication. Speaker of the event, Mr Om Ajit Karnik, VU2AMK, Ex-Director, C-DAC interacted with the students.

Organized bi-monthly 24th Tech Talk jointly with Tech Forum through online mode on 12 June 2022. Speaker of the event, Mr Deepak Bhalariao, Tech Forum, mentioned about the liquid saving flow control device, henceforth called as 'Cut Off Valve' or 'Valve' is designed to prevent water wastage from overhead water tanks in societies, buildings, etc. Speaker of the event, Mr Laxmikant Vishnupant, Rashingkar innovation, mentioned about the liquid saving flow control valve patented technology.

Organized technical talk in association with ASM International, Pune Chapter on the topic 'Flash Carbide – A Novel Techno Economical Alternative to Electroplated Hard Chrome Plating (EHC)' on 23 June 2022 through online mode. Speaker of the event, Dr Dattatraya Arvind Karandikar, Head of Materials Division, Thapar Corporate R & D Centre, Metallizing Equipment Company, Jodhpur discussed on flash carbide coating technology, carbide coating applications and the benefit of flash carbide coating.

Organized online event in association with Tech Forum on 26 June 2022. Mr Veerava Narasimhan, Bliksem Chief Engineer deliberated on electronic DIY kit for students designed by BLIKSEM Tech Singapore.

Organized Pre-preparatory meeting, in hybrid mode, in association with Regional Transport Office, Pune for annual programme of road safety activities in the form of workshop on Road Safety on 27 June 2022 at Pune. Speaker of the event, Mr Sanjay Sasane, Secretary, District Road Safety Committee and Deputy RTO, Pune highlighted the objectives of the meeting and mentioned the planning for different road safety activities during 2022-23.

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37th INDIAN ENGINEERING CONGRESS

Chennai, December 16-18, 2022

Theme: **Role of Engineers for Creating a Sustainable & Self Reliant India**

Organized by

The Institution of Engineers (India)

Hosted by: **Tamilnadu State Centre**

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December 16-18, 2022, Chennai

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Theme

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News-in-Brief

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Ranipet

Organized Lecture Programme on the topic 'Solid Propulsion - Launch Vehicles Applications' on 31 March 2022 through online mode. Speaker of the event, Mr K Sangeetha, Scientist-F, Satish Dhawan Space Centre, SHAR, ISRO explained evolution of human needs and start of space exploration; tools for space exploration: space craft, launch vehicle; Components of launch vehicle; Propulsion system – fuel sources; Merits of solid propulsion system; De-merits of solid propulsion system; Operating principle for solid rocket motor; Components of solid propulsion system: oxidizer, fuel, additives; Evolution of launch vehicles in India (ISRO); Challenges faced during evolution; Other applications of solid energetics; Future scope in solid propellant launch vehicle etc.

Organized Lecture Programme on the topic 'Requirements of Automated Control for Thermal System Accessories to Improve Efficiency' on 18 April 2022 through online mode. Speaker of the event was Mr M Salai Manalan, Deputy General Manager, Water Systems Engineering, Boiler Auxiliaries Plant, BHEL, Ranipet and Chairman, Ranipet Local Centre, IEI. Chairman, RLC in his lecture, highlighted the role of boiler and its function in a thermal power station. He explained the function of Air Preheater, constructional details and application of Electrostatic Precipitator, etc.

Thanjavur

Organized webinar on the topic 'Machine Learning Algorithms in Control Perspective' on 15 March 2022. Guest Speaker of the event was Dr R Rajaprasanna, Assistant Professor, Nadar Saraswathi College of Engineering & Technology, Theni.

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IEI DIARY



Aerospace Engineering Division

Thirty-fifth National Convention of Aerospace Engineers on **"Smart Materials and their Applications in Aerospace Structures"**

Chandigarh, November 25-26, 2022

The Honorary Secretary, IEI, Punjab and Chandigarh State Centre, Plot No.1-A, Engineers Bhawan, Madhya Marg, Sector 19-A, Chandigarh 160019 [☎: 0172-2775418, E-mail: pcsc@ieindia.org, Website: www.ieichd.org]

Architectural Engineering Division

Thirty-sixth National Convention of Architectural Engineers on **"Green Buildings, Innovation and Sustainability (NCGBIS)"**

Bhopal, November 19-20, 2022

The Honorary Secretary, IEI, Madhya Pradesh State Centre, Visvesvaraya Marg (Kasturba Hospital Road), PO : Habibganj, Bhopal 462024, [☎: 0755-2474572 / 2502987; E-mail:mpsc@ieindia.org; Website : www.mpsciei.org]

Chemical Engineering Division

All India Seminar on **"Wastewater Treatment Systems: Water Efficient Technologies and Opportunities"**

Coimbatore, December 22-23, 2022

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore 641004, Tamilnadu, [☎: 0422-2580733, E-mail: coimbatorelc@ieindia.org]

Civil Engineering Division

All India Seminar on **"Air Quality Monitoring and Analysis: Challenges and Research Gap"**

Coimbatore, November 03-04, 2022

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore 641004, Tamilnadu, [☎: 0422-2580733, E-mail: coimbatorelc@ieindia.org]

All India Seminar on **"Use of Green Technology in Road Construction"**

Ranchi, January 28-29, 2023

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO : Doranda, Ranchi 834002 [☎: 0651-2491344, Mobile: 9431382798, E-mail : jharkhandsc@ieindia.org, Website: ieijscjharkhand.org]

All India Seminar on **"Water Security: Challenges for Present and Future"**

Ranchi, February 25-26, 2023

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO : Doranda, Ranchi 834002 [☎: 0651-2491344,

Mobile: 9431382798, E-mail : jharkhandsc@ieindia.org, Website: ieijscjharkhand.org]

Computer Engineering Division

Thirty-fifth National Convention of Computer Engineers on **"Cyber Security/Privacy"**

Bareilly, February 18-19, 2023

The Honorary Secretary, IEI, Bareilly Local Centre, 44, Camphor State Colony, Near Camphor Estate Colony, Rampur Road, C B Ganj, Bareilly 243502, Uttar Pradesh [Mobile: 9634953691, E-mail: bareillylc@ieindia.org]

All India Seminar on **"Recent Trends in Information and Communication Technology"**

Kanchepuram, March 15-16, 2023

The Honorary Secretary, IEI, Kanchepuram Local Centre, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [☎: 9789924739]

Electrical Engineering Division

Thirty-seventh National Convention of Electrical Engineers on **"Green Energy and Clean Energy for New India"**

Jabalpur, November 12-13, 2022

The Honorary Secretary, IEI, Jabalpur Local Centre, Vishvesvaraya Marg, South Civil Lines, In front of Old RTO Office, Jabalpur 482001 [☎: 0761-2678929, E-mail: jabalpurlc@ieindia.org]

All India Seminar on "National Campaign on Electrical Safety at Residential, Commercial & Public Building & Utility"

Kolkata, November 18-19, 2022

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 **"Importance of Calibration and Concepts of Uncertainty Measurements as per ISO/IEC 17025:2017 Standards"**

Coimbatore, December 01-02, 2022

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore 641004, Tamilnadu, [☎: 0422-2580733, E-mail: coimbatorelc@ieindia.org]

One Day Seminar on **"Industrial Automation"**

Kanchepuram, December 13, 2022

The Honorary Secretary, IEI, Kanchepuram Local Centre, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [☎: 9789924739]

All India Workshop on **"Renewable Energy Integration with Energy Storage Systems"**

Tiruchirappalli, January 04-05, 2023

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

Electronics and Telecom. Engineering Division

Thirty-seventh National Convention of Electronics & Telecommunication Engineers on **"The Impact of 5G: Creating New Value across Industries and Society"**

Hyderabad, November 18-19, 2022

The Honorary Secretary, IEI, Telangana State Centre, IEI, 6-2-910, "Visvesvaraya Bhavan", Khairatabad, Hyderabad 500004 [☎: 040-23314969/23373087/23370779, E-mail: telanganasc@ieindia.org, Website: www.ieitsc.org.in]

All India Workshop on **"Design and Testing of Advanced Robots"**

Kanchepuram, December 19-20, 2022

The Honorary Secretary, IEI, Kanchepuram Local Centre, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [☎: 9789924739]

One Day Seminar on **"Emerging Signal Processing Applications"**

Hyderabad, February 11, 2023

The Honorary Secretary, IEI, Telangana State Centre, 6-2-910, "Visvesvaraya Bhavan", Khairatabad, Hyderabad 500004, Telangana, [☎: 040-23314969/23373087/23370779, E-mail: telanganasc@ieindia.org, Website: www.ieitsc.org.in]

Marine Engineering Division

All India Seminar on **"Technological Innovation in Sea Water Desalination, Waste Water Management and Zero Liquid Discharge"**

Belapur, November 26-27, 2022

The Honorary Secretary, IEI, Navi Mumbai Local Centre, Plot No.106, Sector 15, CBD-Belapur, Navi Mumbai 400614 [☎: (022) 27579935; E-mail:belapurlc@ieindia.org; Website: www.ieibelapur.org]

Thirty-sixth National Convention of Marine Engineers on **"Contemporary Developments in Maritime Technologies"**

Visakhapatnam, December 02-03, 2022

The Honorary Secretary, IEI, Visakhapatnam Local Centre, 43-18-22, "Visvesvaraya Bhavan", Venkatarajunagar, Railway Station Road, Visakhapatnam 530016 [☎: 0891-2947460; E-mail: visakhapatnamlc@ieindia.org]

All India Seminar on **"Smart and Sustainable Marine Operations: Emerging Paradigm"**
Ranchi, January 07-08, 2023

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO : Doranda, Ranchi 834002 [☎: 0651-2491344, Mobile: 9431382798, E-mail : jharkhandsc@ieindia.org, Website: ieijscjharkhand.org]

All India Seminar on Proposed **'Port Bill 2022 & Its Implications in Maritime Logistics'**
Hyderabad, January 08-09, 2023

The Honorary Secretary, IEI, Telangana State Centre, IEI, 6-2-910, "Visvesvaraya Bhavan", Khairatabad, Hyderabad 500004 [☎: 040-23314969/23373087/23370779, E-mail: telanganasc@ieindia.org, Website: www.ieitsc.org.in]

Mechanical Engineering Division

All India Seminar on **"Logistics and Supply Chain"**

Bareilly, November 11-12, 2022
The Honorary Secretary, IEI, Bareilly Local Centre, 44, Camphor State Colony, Near Camphor Estate Colony, Rampur Road, C B Ganj, Bareilly 243502, Uttar Pradesh [Mobile: 9634953691, E-mail: bareillylc@ieindia.org]

All India Workshop on **"Solar Energy for Residential Application"**

Kanchepuram, November 10-11, 2022
The Honorary Secretary, IEI, Kanchepuram Local Centre, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [☎: 9789924739]

All India Seminar on **'Alternative Energy Systems'**

Bangalore, 16-17 November 2022
The Honorary Secretary, IEI, Karnataka State Centre, No.3, Dr B R Ambedkar Veedhi, Bangalore 560001, Ph: (080) 22264698 [Telefax: 080-22256191, E-mail: karnatakasc@ieindia.org, Web: www.ieiksc.org]

All India Seminar on **"Small Hydro Projects in Hilly Region"**

Dehradun, November 25-26, 2022
The Honorary Secretary, IEI, Uttarakhand State Centre, Near ISBT Flyover, Saharanpur Road, Dehradun 248002 [Telefax : 0135-2641190 /9412056431; E-mail : uttarakhandsc@ieindia.org; Website : www.ieiuksc.org]

Thirty-seventh National Convention of Mechanical Engineers on **"Advances in Battery Technologies for Electric and Hybrid Vehicles"**
Hyderabad, December 09-10, 2022

The Honorary Secretary, IEI, Telangana State Centre, IEI, 6-2-910, "Visvesvaraya Bhavan", Khairatabad, Hyderabad 500004 [☎: 040-

23314969/23373087/23370779, E-mail: telanganasc@ieindia.org, Website: www.ieitsc.org.in]

All India Seminar on **"An Application and Performance Analysis of Refractories in the Thermal Power Plant"**

Bokaro Steel City, December 17-18, 2022
The Honorary Secretary, IEI, Bokaro Steel City Local Centre, Abhiyanta Bhawan, Sector V-A, Bokaro Steel City 827006, [☎: 06542-267227, E-mail : bokarolc@ieindia.org, Web: www.bokarolc.org]

All India Workshop on **"Smart Manufacturing and Automation using Advanced Robotics"**

Kanchepuram, January 04-05, 2023
The Honorary Secretary, IEI, Kanchepuram Local Centre, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [☎: 9789924739]

All India Seminar on **"Challenges and Opportunities in Electric Vehicles"**

Madurai, February 15-16, 2023
The Honorary Secretary, IEI, Madurai Local Centre, E r 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-eighth National Convention of Mechanical Engineers on **"Emerging Trends and Developments in Smart Manufacturing , Renewable Energy and Mechanical Systems Diagnostics/Design"**

Nagpur, September 08-09, 2023
The Honorary Secretary, IEI, Nagpur Local Centre, North Ambazari Road, Nagpur 440010, [☎: 0712-2525617, E-mail : nagpurlc@ieindia.org]

Metallurgical & Materials Engg. Division

Thirty-fifth National Convention of Metallurgical & Materials Engineers **"Valuing Low-grade Ore and Waste: Challenges and Remedies"**

Durgapur, January 21-22, 2023
The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B-Zone, Durgapur 713205 [☎: 0343-2564770, E-mail: durgapurlc@ieindia.org; Website: www.ieidurgapurlc.org]

Mining Engineering Division

Thirty-second National Convention of Mining Engineers on **"Occupational Health Problem and Remedial Measures in Mining Operation"**
Durgapur, 03-04 December, 2022

The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B-Zone, Durgapur 713205 [☎: 0343-2564770, E-mail: durgapurlc@ieindia.org; Website: www.ieidurgapurlc.org]

All India Seminar on **"Sustainable Development of Mines - Role of Mining Technology"**

Ranchi, January 07-08, 2023
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO : Doranda, Ranchi 834002 [☎: 0651-2491344, Mobile: 9431382798, E-mail : jharkhandsc@ieindia.org, Website: ieijscjharkhand.org]

Textile Engineering Division

All India Seminar on **'Sustainability in Apparel and Textile - 2022'**

Coimbatore, November 25-26, 2022
The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore 641004, Tamilnadu, [☎: 0422-2580733, E-mail: coimbatorelc@ieindia.org]

Thirty-fifth National Convention of Textile Engineers on **"Resource Efficient Technologies in Textile Manufacturing"**

Kolkata, February 11-12, 2023
The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020, [☎: 033-22238914, Fax: 033-22233140, E-mail: wbsc@ieindia.org]

Interdisciplinary Coordination Committee

All India Seminar on **"Data Analytics: End-to-End AI Solutions and Augmented Analytics"**,

Ranchi, December 10-11, 2022
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO : Doranda, Ranchi 834002 [☎: 0651-2491344, Mobile: 9431382798, E-mail : jharkhandsc@ieindia.org, Website: ieijscjharkhand.org]

All India Seminar on **"Role of Artificial Intelligence in Technological Advancements in Industry"**

Hyderabad, January 06-07, 2023
The Honorary Secretary, IEI, Telangana State Centre, IEI, 6-2-910, "Visvesvaraya Bhavan", Khairatabad, Hyderabad 500004 [☎: 040-23314969/23373087/23370779, E-mail: telanganasc@ieindia.org, Website: www.ieitsc.org.in]

All India Seminar on **'Piped Distribution — Efficiency'**

Hyderabad, January 20-21, 2023
The Honorary Secretary, IEI, Telangana State Centre, IEI, 6-2-910, "Visvesvaraya Bhavan", Khairatabad, Hyderabad 500004 [☎: 040-23314969/23373087/23370779, E-mail: telanganasc@ieindia.org, Website: www.ieitsc.org.in]



Project Management Associates Weekend Programme



International Project Management Association

IPMA is a federation of about 72 Member Associations (MAs) who develop project management competences in their geographic areas of influence. Through IPMA, project management practitioners from all parts of the world can network, share ideas through effective collaboration and cooperation.

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- Registration fee is non refundable. However, alternate persons can be nominated.
- Cheque / draft or NEFT is payable to "Project Management Associates" at Delhi.
- The registration fee does not include travel and hotel accommodation.

Next batch of on-line learning sessions on Project Management Competence Building (PMCB) based on ICB Version 4, knowledge base for IPMA Level C and Level D by our Learning partner PMA is from **November 11-12, 18-19, 2022**. The relevant material is available in the link <https://www.pma-india.org/brochures>.

Exam Dates for Level C: 26 November & 2-3 December 2022

Exam Dates for Level D: 26 November 2022

Exam Venue: Secure and Seamless Online Exam & Assessment

For more details, please contact:

Arvind Agarwal, Head, PMA Cert (Certification Body)

Project Management Associates

FC-33, Plot No. 1 & 2, Periyar Centre, 3rd Floor, Institutional Area, Jasola, New Delhi – 110025

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News-in-Brief

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Tiruchirappalli

Organized Lecture through online mode on 21 December 2021 on the topic 'Living in Nature vs Living with Nature'. Speaker of the event was Mr S Stella Mary, Head, Department of Architecture, M A M School of Architecture, Tiruchirappalli.

Organized lecture in association with Computer Society of India, Tiruchirappalli Chapter, Indian Institute of Welding Tiruchirappalli branch; Indian Welding Society Southern Zone; Indian Institute of Metals Tiruchirappalli Chapter and Indian Institution of Industrial Engineering, Tiruchirappalli on the topic 'Management Information System for Wind Farms' on 12 April 2022 through online mode. Speaker of the event was Dr T Koilpillai Prabhakar, Director, RS Wind Tech Engineers Private Limited, Nagercoil.

Tirunelveli

Organized technical seminar on 'Computational Thinking – Problem Solving Approaches' on 07 January 2022 through online mode. Resource person of the event, Mr Premkumar M, Assistant Professor (Sr. G), KPR Institute of Engineering and Technology, Coimbatore explained about problem identification, development of algorithm for the identified problem and finally implementing the algorithm to develop a computer program. He further discussed the concept, how Computational Thinking allows us to take complex problems, understand what the problem is, and to develop solutions. He also explained computational thinking methodologies, namely decomposition, pattern recognition, abstraction, and algorithms.

Organized seminar on 'Big Data using Apache Hadoop & Spark' on 11 January 2022 through online mode. Dr K Saravanan, HOD, Department of Computer Science and Engineering, Anna University Regional Campus, Tirunelveli delivered lecture on the topic.

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