



# IEI NEWS

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A CENTURY OF SERVICE TO THE NATION

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## KIEE 55<sup>th</sup> Annual Conference 2024 Jeju, Korea

Based on the invitation from the Korean Institute of Electrical Engineers (KIEE), an IEI delegation consisting of President Dr. G. Ranganath and Dr. S. Dharmalingam, Member of the Electrical Engineering Division Board (ELDB), attended the 55<sup>th</sup> Annual Conference 2024 held in Jeju, South Korea, from July 10-13, 2024. The Conference was inaugurated by Prof. Byong Jun Lee, President of KIEE.

During the inaugural function, the President of IEI delivered a Congratulatory Speech, emphasizing the remarkable achievements and contributions of KIEE over the decades. He acknowledged how KIEE has significantly advanced the field of electrical engineering through a wide range of initiatives. These initiatives include publishing bulletins, journals, and books; conducting pivotal research; and hosting numerous scientific Conferences and lecture meetings. Additionally, KIEE has been instrumental in preparing standards and codes, facilitating international scientific exchange, and formulating technology policies. The organization's dedication to recognizing meritorious service and promoting both academic and practical studies further underscores its vital role in the engineering community.



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

### Mitigating the Impact of Major IT Outages in the Modern Age



The recent CrowdStrike-Microsoft outage serves as a stark reminder of the vulnerabilities inherent in our highly interconnected digital world. A faulty software update from CrowdStrike led to widespread disruptions, grounding flights, curtailing healthcare services, and affecting emergency response systems globally. This incident highlights the urgent need for robust technological interventions to prevent such catastrophic failures in the future.

The outage began with a defective update to CrowdStrike's Falcon software, crucial for protecting against malware and cyber-attacks. This update caused the notorious "blue screen of death" on numerous Windows systems, trapping them in a recovery boot loop and rendering them unusable. The ripple effects were immediate and severe: numerous flights were cancelled, hospitals in the U.S. and Europe had to curtail services, and emergency services in several states were also significantly impacted.

This incident underscores the dangers of over-reliance on a single point of failure in IT infrastructure. The concentration of services within a few major providers, like Microsoft, makes the system particularly fragile. When a flaw occurs in such a centralized system, the impact can be devastating, affecting a wide array of sectors simultaneously.

To mitigate such risks, organizations must diversify their IT infrastructure across multiple vendors, avoiding reliance on a single provider for critical services. Implementing redundant systems and robust fail over mechanisms can ensure continuity of operations even when primary systems fail. Regular updates are crucial for security, but they must be managed carefully, with a comprehensive patch management strategy that includes testing updates in a controlled environment before widespread deployment.

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IEI Technical Webinar under the aegis of Civil Engineering Division Board

## Landslide Risk Assessment and Protective Measures

Kochi Local Centre, IEI, in association with Indian Geotechnical Society and Indian Concrete Institute, Kochi Centre, organized a Technical Webinar on the theme **Landslide Risk Assessment and Protective Measures** on 07 June 2024 under the aegis of Civil Engineering Division Board [CVDB], IEI. This webinar aimed at providing a comprehensive view on managing landslide risks in mountainous regions, which is particularly relevant in the current scenario, given the increasing infrastructure development and environmental challenges faced by the countries like India. Prof Satyendra Mittal, Geotechnical Engineering, Department of Civil Engineering, Indian Institute of Technology Roorkee and Prof D Neelima Satyam, Department of Civil Engineering, Indian Institute of Technology Indore graced the event as the Panelists. Dr Anil Joseph, Chairman, Civil Engineering Division Board, IEI moderated over the session.



Prof Satyendra Mittal



Prof D Neelima Satyam

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# Landslide Risk Assessment and Protective Measures

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Prof Satyendra Mittal delved into the complex challenges posed by extensive infrastructure development in India's mountainous regions in his presentation titled 'Taming Mountains through Stitching'. Highlighting the country's fragile mountain ecosystems and susceptibility to landslides due to factors like heavy rainfall and seismic activity, he underscored the urgent need for sustainable construction practices. Key causes of landslides, such as unstable construction and geological factors, were identified, prompting recommendations for solutions. Proposed measures included consulting geotechnical experts prior to construction, implementing drainage systems and vegetation like vetiver grass as well as employing innovative techniques such as wooden stitching technique for slope stabilization. The presentation showcased various successful interventions, including reinforced earth walls and bioengineering solutions, emphasizing their efficacy in mitigating landslide risks. Overall, Prof Mittal advocated for a holistic approach combining engineering expertise with ecological sensitivity to ensure safer and more sustainable development in India's mountainous terrain.

Prof D Neelima Satyam delivered her presentation on the topic 'Landslide Modeling, Monitoring, and Forecasting', where she provided a comprehensive overview by focusing on two main areas: hazard evaluation and its vulnerability and landslide risk assessment. Her presentation focused on sub slope movements, signs of landslides and landslide forecasting. Emphasizing the severe impacts of landslides on lives, property, and agriculture, she stressed on the importance of proactive strategies to minimize these risks. Real-time monitoring feasibility studies tailored to specific regions were highlighted as crucial for early landslide detection. A significant portion of her presentation focused on rainfall thresholds for landslide forecasting, which anticipate the landslide occurrence and help in issuing a warning to the civil authorities and the general population. Various methodologies, including ID/ED Thresholds, probabilistic models and process-based approaches like the SIGMA Model, were discussed to

predict landslide occurrence based on rainfall patterns. A case study from Kalimpong, India, illustrated the estimation of rainfall thresholds using the power law equation, indicating critical rainfall intensities and durations likely to trigger landslides in the region. She elaborated that this data is vital for developing effective early warning systems, enhancing preparedness and reducing the impact of landslides in vulnerable areas like the Darjeeling Himalayas.

Moderator of the session, Dr Anil Joseph, Chairman CVDB, IEL summed up the proceedings of deliberations and pointed out that the presentations underscored the importance of interdisciplinary collaboration and data-driven decision-making in safeguarding vulnerable mountainous landscapes. Dr Joseph summarized Prof Satyendra Mittal's presentation, which highlighted the intricate dynamics of mountain stability, emphasizing the fragile nature of India's diverse topography; The



Dr Anil Joseph

discussion on landslide triggers such as heavy rainfall and seismic activity underscored the importance for geotechnical consultation and innovative stabilization techniques like wooden stitching, staging of vertical cuts and bioengineering. He further mentioned Prof D Neelima Satyam's insights in landslide modeling, monitoring, and forecasting, which added crucial layers to our understanding. The identification of rainfall thresholds, as exemplified by the case study in Kalimpong, demonstrated practical approaches to predicting landslide events and mitigating their impact; The emphasis on real-time monitoring and the application of sophisticated modeling techniques signify promising steps toward proactive landslide management strategies. He recommended on integrating the insights from the webinar into policy frameworks and suggested that development plans would be essential for building resilient communities in hilly terrains worldwide.

## KIEE 55<sup>th</sup> Annual Conference 2024, Jeju, Korea

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Dr. Ranganath also highlighted the rich legacy of IEL, which spans over a century and boasts a vast national and international presence through 124 Centers across India, Overseas Chapters, seven Fora, and the Engineering Staff College of India (ESCI) in Hyderabad. The Institution encompasses fifteen engineering disciplines and includes a corporate membership exceeding 250,000. He proudly noted that IEL is the first professional body from India to represent the country in several prestigious international organizations, such as the World Mining Congress, the World Federation of Engineering Organizations, the Commonwealth Engineers' Council, the Federation International du Beton, and the Federation of Engineering Institutions of South and Central Asia.

The President emphasized the significance of the bilateral Agreement of Cooperation between IEL and KIEE. This agreement serves as a cornerstone for collaborative efforts aimed at promoting and expanding the exchange of technical, scientific, and professional knowledge. He underscored the mutual objectives of both institutions, which include facilitating personnel visits, encouraging the exchange of publications, organizing joint academic Conferences and seminars, and enabling the participation of specialists and scholars in various events. Through these initiatives, both organizations aim to enrich their members and the broader engineering community.

The KIEE Summer Annual Conference is a noteworthy event that provides a platform for experts and enthusiasts in electrical engineering to share their knowledge, explore new ideas, and forge collaborative relationships. Dr. Ranganath expressed his belief that such Conferences not only advance technical understanding but also strengthen the bonds of international cooperation and friendship.

A delegation from the Institute of Electrical Engineers of Japan (IEEJ) also participated in this Conference. Prof. Shinya Fushimi, President of IEEJ, delivered a presentation on "IEEJ as a Matching Platform." Dr. S. Dharmalingam presented a paper on the 'growth of the Indian power sector and the challenges faced in the integration of renewable energy'.

The Conference saw participation from more than 800 delegates from various countries. Highlights of the event included a Mini Drone Competition and a Smart Energy Competition. An exhibition featuring more than 25 stalls showcased the latest advancements in electrical engineering. Overall, the Conference was well-organized and professionally managed, leaving a lasting impression on all attendees.

More than 800 delegates from various countries participated in this Conference. Mini Drone Competition and Smart Energy Competition was held as part of this Conference. An exhibition containing more than 25 stalls was arranged as a part of this Conference. Overall this Conference was well organized and professionally managed.





## SustainCon: Bridging Ideas for a Greener Future

**Coimbatore Local Centre**, IEI, in association with the Department of Civil Engineering, KPR Institute of Engineering and Technology (KPRIET), Coimbatore, organized a One Day Seminar on the theme **SustainCon: Bridging Ideas for a Greener Future** on 27 April, 2024 under the aegis of Civil Engineering Division Board [CVDB], IEI. The seminar aimed to explore sustainable construction practices and their impact on creating a greener future.

In the inaugural session, Dr J Krishnamoorthi, Chairman, Coimbatore Local Centre, delivered welcome address, setting the tone for the Seminar and highlighting the importance of sustainable construction. Mr Yusuf Turab, Managing Director, Inhabit and Buildscapes, Coimbatore, provided valuable insights during the inaugural address. He emphasized the need for sustainable building practices and the role of civil engineers in promoting a greener future. Dr R Ilangovan, Visiting Professor, Department of Civil Engineering,



KPR Institute of Engineering and Technology (KPRIET), Coimbatore, briefed on the objectives of the seminar and discussed the significance of the seminar's theme and its relevance in the current environmental context.

During the technical session, Mr Yusuf Turab delivered Invited Lecture on the topic 'Green Building - Focus Areas', where he provided valuable insights into the diverse focus areas within the domain of sustainable construction. He addressed the key aspects of green building, including energy efficiency, water conservation, material selection, indoor environmental quality, site planning, and lifecycle assessment. He emphasized a holistic approach to sustainable construction and provided the participants with a deeper

understanding of the principles and practices underpinning green building design and construction and the knowledge to contribute towards a more sustainable future in the built environment sector.

Mr L R Venkatesh, Managing Director, Vesat Renewables Private Limited Coimbatore, delivered an invited lecture on 'Sustainable Environment using Solar Energy', where he provided a comprehensive overview of the role of solar energy role in promoting environmental sustainability. He discussed solar technologies, their environmental benefits, applications and policy considerations, highlighting solar energy as a key strategy to mitigate climate change and foster energy independence.

During the paper presentation session, research papers were presented related to advanced construction materials and renewable energy. The session was chaired by Mrs S Bharani, Assistant Professor, Department of Civil Engineering, KPRIET. Paper titled "A Review on Advanced Material in Terrace Flooring" emphasized on selecting appropriate materials for terrace flooring that balance aesthetics, functionality and sustainability. Paper titled 'Mechanical Properties of Steel Fibre Reinforced Concrete', highlighted, how adding steel fibres helps resist tensile stresses, reducing cracking and enhancing overall structural integrity ;'Retrofitting of Thermally Affected Structural Compression Members Using Basalt FRP Laminates', which discussed how retrofitting with basalt FRP improves structural behavior, including increased stiffness and enhanced ductile response. Paper titled 'An Investigation on Polymer Concrete and Its Application - A Review' highlighted the benefits of polymer concrete for precast manufacturing, including faster curing times, improved surface finish and reduced maintenance requirements. Paper titled 'Assessing the Resilience of Sustainable Building Materials in Disaster-Prone Regions' discussed, how sustainable materials such as bamboo, straw bales and recycled content concrete exhibit superior durability and performance in disaster scenarios.

In the valedictory session, Prof (Dr) Madhan Mohan Gopalsamy, Honorary Secretary, Coimbatore Local Centre, proposed the vote of thanks, expressing gratitude to all speakers, participants, and organizers for making the event a success.

The Seminar successfully provided civil engineers with the tools and knowledge necessary to implement sustainable practices in construction, equipping them to contribute to a greener and more sustainable future.

## Controls and Optimization of Electric Vehicles

**Indore Local Centre**, IEI, organized a One Day Seminar on the theme **Controls and Optimization of Electric Vehicles** on 25 April, 2024 under the aegis of Electrical Engineering Division Board [ELDB], IEI. The objective of the Seminar was to emphasize the importance of controls and optimization in electric vehicle technology. The Seminar featured expert lectures, a hands-on session and discussions aimed at enhancing understanding and promoting the use of electric vehicles as the future mode of transportation.

Er Dinesh Kumar Shukla, Chairman, Indore Local Centre and Er Ramesh Singh Chouhan, Honorary Secretary, Indore Local Centre, extended a warm welcome to all the dignitaries and participants. Dr Shailendra Sharma, Professor, Shri Govindram Seksaria Institute of Technology and Science (SGSITS), Indore, graced the occasion as the Chief Guest. He delivered an insightful address on 'EV Introduction and Advanced Control Systems', where he elaborated on the various components of electric

vehicles and discussed advanced control systems. He shared his expertise on electrical vehicle charging technologies. Guest of Honour of the event, Dr D K Patnaik, Hon'ble Vice-Chancellor of Medi-Caps University, discussed the significant role of electric vehicles in shaping the future of transportation and highlighted the potential of EVs in reducing carbon emissions and promoting sustainable development.



The event witnessed participation from distinguished guests, experts from various industries and academics. Mr Sonu Singh, Founder & CEO, Shiksha Jn. Private Limited, Indore gave an invited lecture on 'EV Controls Basics and Challenges and Solutions for Battery Management', where he explained various controller designs used for different operations in electric vehicles, addressing the challenges and solutions for battery

management. Mr Pemendra Pardhi, Senior Design Engineer, Castnax Private Limited, Dewas, presented on the topic 'EV Control Design Optimization

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## Energy Efficiency in Heating, Ventilation, Air Conditioning & Refrigeration Systems and Air Pollution Control Equipment (EEHVACR-2023)

**Jharkhand State Centre, IEI**, in association with Indian Society for Heating Refrigeration & Air Conditioning Engineers, (ISHRAE), Ranchi Chapter, organized an All India Seminar on the theme **Energy Efficiency in Heating Ventilation Air Conditioning & Refrigeration Systems and Air Pollution Control Equipment (EEHVACR-2023)** during 10-11 February 2024, under the aegis of Mechanical Engineering Division Board [MCDB], IEI. The objective of the Seminar was to focus on current and future advancements in Heating Ventilation Air Conditioning & Refrigeration (HVAC&R) systems. The event provided an excellent platform for knowledge sharing among designers, suppliers, academicians, researchers, engineers, consultants, architects, students and builders, associated with the long term improvements in the energy efficiency of HVAC&R Systems. The key areas addressed during the two-day deliberation were, Energy Efficiency in HVAC & R Systems; Challenges for HVAC & R Industries; Use of Alternative Energy sources for HVAC & R Processes; Automation Benefits in Industrial AC Systems for Optimizations and Field Experiences/Case studies.

The Seminar was graced by the presence of Er S K Das, CGM (Mechanical C&S and U&S), Centre for Engineering and Technology - Steel Authority of India Limited (SAIL CET), Ranchi, as the Chief Guest. Er Das highlighted the importance of energy efficiency in HVAC & R systems, emphasizing its role in reducing energy consumption in buildings. He shared various initiatives undertaken by the Steel Authority of India Limited (SAIL) to promote sustainability, including the installation of solar panels, use of electric vehicles and efforts towards green steel production. His speech underscored the significance of adopting advanced technologies to meet emission norms and achieve net-zero emissions by the year 2050. Er Abinash Kumar Dipak, Former Chief Engineer BCD cum Executive Director, Jharkhand State Building Construction Corporation Limited (JSBCCCL), Government of Jharkhand, was the Guest of Honour. Er Dipak, in his address shared his experiences with large air conditioning systems during the construction of the new High Court building in Ranchi. He discussed the challenges of meeting diverse temperature requirements and collaborating with vendors to ensure timely project completion. His address highlighted the practical aspects of implementing HVAC & R systems in large-scale projects.

The Seminar was presided over by Dr Mahesh Kumar Gupta, Chairman, Jharkhand State Centre. In his welcome address, Dr Gupta emphasized the critical need for energy efficiency in HVAC & R systems and the role of citizens in supporting energy-saving initiatives. He highlighted the importance of adhering to government policies and regulations to ensure future energy security.

Keynote Speaker, Er S Ganesh, Executive Senior General Manager, MECON Limited, introduced the theme of the Seminar and discussed various initiatives by ISHRAE in the field of HVAC & R, including cold storage and transportation of perishable goods. He traced the evolution of compressors from their invention to modern star-rated products, emphasizing technological advancements in the industry.

The technical session started with an industrial presentation by Donaldson India Filter Systems. Er K Tulasidhar, AGM (Electrical), MECON Limited, Ranchi, spoke on the topic 'Sustainable Energy Storage Technologies for

Combating Climate Change', where he discussed innovative energy storage solutions aimed at reducing the impact of climate change, highlighting the importance of sustainable practices in the HVAC & R industry. Sri Atilesh Gautam, Electrical Executive Engineer cum SDA I/c, Jharkhand Renewable Energy Development Agency (JREDA), Ranchi, delivered lecture on 'Building Envelope Optimization in ECBC', where he presented strategies for optimizing building envelopes to improve energy efficiency, focusing on compliance with the Energy Conservation Building Code (ECBC). Er Anand Trivedi, DGM (Utilities), SAIL-CET, spoke on 'Increasing Energy Efficiency of Integrated Steel Plants by Using Lean Fuel-Based Combined Cycle Power Plants', where he shared insights on enhancing energy efficiency in steel plants through the implementation of combined cycle power plants using lean fuel. Er Ujjal Bhaskar, General manager & Chief of Communications, SAIL-RDCIS presented an insightful address on the occasion.

Over the two days, several papers were presented on the theme and related sub-theme, which include; Energy Efficiency in HVAC & R Systems,

Challenges for HVAC & R Industries, Use of Alternative Energy sources for HVAC & R Processes, Automation benefits in Industrial AC Systems for optimizations, etc. Papers presented included topics, namely 'Sustainable Energy Storage Technologies for Combating Climate Change', 'Building Envelope Optimization in ECBC', 'Increasing Energy Efficiency of Integrated Steel Plants by Using Lean Fuel-Based Combined Cycle Power Plants'. Er Fulender Kumar, Sr. Manager (FS & PD), MECON Limited presented paper titled 'Zero Liquid Discharge'; Er Rakesh Roshan, AGM, MECON Limited, Ranchi presented on 'Household Electricity Management'; Dr Arana Kausar, Assistant Professor, Xavier Institute of Social Service (XISS), Ranchi, on 'Financial Literacy for Sustainability'; Er K K Sinha, MECON Limited, Ranchi, on 'Green Steel Making through Blast Furnace' and Er A K Pandit, Sr Manager, MECON Limited, on 'Carbon Capture Usage & Storage'.

The Valedictory Function was chaired by Dr Mahesh Kumar Gupta. Concluding remarks were presented by Er Fulender Kumar, Past President, ISHRAE, Ranchi, and Er S Ganesh, Former Senior General Manager (FSPD), MECON Limited, Ranchi. Er Harun Ansari, Honorary Secretary, Jharkhand State Centre, delivered the vote of thanks, acknowledging the contributions of all participants and emphasizing the importance of adopting new technologies for sustainability.

The following recommendations from Industry experts emerged out of the deliberations in the two-day Seminar:-

To effectively reduce carbon emissions, it is crucial to use star-rated air conditioners and electric appliances, as these are designed to be more energy-efficient, thereby minimizing energy consumption and greenhouse gas emissions; Industries should set ambitious goals to achieve net-zero carbon emissions by 2050, aligning with government policies to combat climate change; On an individual level, adopting low-carbon-emission activities, such as using public transportation and reducing energy use, can significantly contribute to sustainability; Additionally, industries should focus on Carbon Capture, Usage and Storage (CCUS) technologies, which represent a significant paradigm shift, enabling the reduction of atmospheric CO<sub>2</sub> levels and supporting broader environmental goals.





## Operation and Control of Solar PV Electric Conversion Systems

**Tiruchirappalli Local Centre, IEI**, in association with the Department Electrical and Electronics Engineering, National Institute of Technology Tiruchirappalli, organized a five day All India Workshop on the theme **Operation and Control of Solar PV Electric Conversion Systems** during 18-22 December 2023, under the aegis of Electrical Engineering Division



Board [ELDB], IEI. The Workshop aimed to equip participants with practical knowledge and skills in the field of solar energy conversion. The workshop comprised of multiple technical sessions conducted by experts from academia and industry and covered a wide range of topics, including solar power plants, PV cell basics, transformer less PV inverter topologies, optimal sizing of solar PV systems, battery trends, design of solar PV powered cold storage systems, and more. Hands-on sessions and site visits provided practical insights into solar PV technologies.

Prof (Dr) S Ravimaran, presently Chairman, Tiruchirappalli Local Centre, IEI welcomed the participants, acknowledging the support from NIT Tiruchirappalli. Dr M Venkata Kirthiga, the program coordinator, outlined the workshop's theme and highlighted the practical sessions aimed at enhancing participants' understanding. Dr G Aghila, Director of NIT Tiruchirappalli, emphasized the importance of hands-on training and encouraged participants to pursue projects in renewable energy. Chief Guest and Keynote speaker of event, Er I Kamalakkannan, General Manager/SSTP, WRI & WCM, BHEL Tiruchirappalli focussed on various aspects of PV systems, including their structure, efficiency and applications. In his lecture, he conceptualized PV Cell, PV panels and arrays, design and maintenance of PV devices, the Solar PV conversion systems, significant aspects of Supervisory Control and data Acquisition (SCADA), maximum Power Point Tracking (MPPT), Grid connected PV Systems etc. Er S P Lakshmanan, Honorary Secretary, Tiruchirappalli Local Centre proposed the vote of thanks.

Dr S Dharmalingam, Council Member, IEI and Former General Manager at BHEL Tiruchirappalli, explained solar power plants, global warming,

renewable energy and transformative potential of robotics in panel manufacturing and maintenance. Dr N Kumaresan, Professor, NIT Tiruchirappalli and Past Chairman, Tiruchirappalli Local Centre explained the basics of solar PV cells / panels and delved in detail about solar PV fundamentals: I-V characteristics, series/parallel connections, shading effects, diodes, temperature/irradiance impacts, equivalent circuits, PV system types and maximum power point tracking (MPPT). Dr Satheesh Kumar Kuncham, Assistant Professor, Department of Electrical and Electronics Engineering, NIT Tiruchirappalli spoke on trends and challenges in Transformer-less PV Inverter Topologies for Grid-Connected Systems. He provided an overview on solar PV cells which includes basic factors associated with solar PV module and simulation.

Dr M Venkata Kirthiga, Professor, NIT, Tiruchirappalli and Ms Anusha Kumaresan, Energy Research Institute, Nanyang Technological University, Singapore, delivered a lecture on 'Optimal Sizing of Solar PV Systems with MPPT'. Dr P Raja, Associate Professor, Department of Electrical and Electronics Engineering (EEE), NIT Tiruchirappalli delivered lecture on 'Basic Experimentations on SPV & SPV Simulator'. Dr M P Selvan, Professor and Head of EEE, NIT Tiruchirappalli spoke on 'Reactive Power Control of Grid-integrated Photovoltaic Power Generation System'. The resource person of the seventh technical session was Dr R Muhammad Ehsan, Senior Manager, BHEL, Tiruchirappalli, who conducted the session on the topic 'Installation, Operation and Maintenance of Large-scale, Grid-connected PV Plants'. The eighth technical session was conducted by Mr K Kanagasabapathi, Head/Quality, High Energy Battery, Tiruchirappalli on the topic 'Mega Trends in Batteries for Solar Energy Applications'. The ninth session was conducted by Dr S Senthilkumar, Associate Professor, EEE, NIT Tiruchirappalli on 'Design and Development of Solar PV Powered Cold Storage Systems'. Resource person of the tenth session, Dr V Sankaranarayanan, Professor, EEE, NIT Tiruchirappalli discussed on 'Solar Powered Electric Vehicles'. Dr P Raja, Associate Professor, EEE, NIT Tiruchirappalli discussed on 'DC and AC Micro-grids: Opportunities and Challenges'. Dr S Moorthi, Associate Professor, EEE, NIT Tiruchirappalli spoke on 'Digital Controllers for Energy Management in Micro-grids' and the last technical session was organised by Dr M P Selvan, Professor and Head of EEE Department, NIT Tiruchirappalli on the topic 'Closed Loop Control of SPV System'.

The workshop concluded with a valedictory session, where Prof (Dr) S Ravimaran, Chairman Tiruchirappalli Local Centre, summarized the proceedings. Dr M P Selvan, Professor and Head of EEE, NIT Tiruchirappalli, delivered the valedictory address, emphasizing the importance of continued learning and research in solar energy. The event was concluded with a vote of thanks by Er S P Lakshmanan.

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

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Employing advanced cyber security measures, such as continuous monitoring, threat detection, and response capabilities, can help identify and mitigate issues before they escalate into major outages. Moreover, regulatory oversight and industry collaboration are essential. Governments and regulatory bodies should enforce standards that promote competition

and prevent monopolistic practices in the tech industry. Collaboration among industry players can foster the development of best practices and shared solutions to common challenges.

The CrowdStrike-Microsoft outage is a wake-up call. By adopting these technological interventions, we can build a more resilient IT infrastructure that can withstand and quickly recover from such disruptions, ensuring continuity and reliability in our increasingly digital world.

## Smart Factories: Transforming Manufacturing through Automation and AI

**Coimbatore Local Centre**, IEI, in collaboration with the Department of Mechatronics, PSG Polytechnic College (PSG PTC), organized a One Day Seminar on the theme **Smart Factories: Transforming Manufacturing through Automation and Artificial Intelligence (AI)** on 09 December, 2023 under the aegis of Mechanical Engineering Division Board [MCDB], IEI at Coimbatore. Mr Janradhan Tyagi, General Manager - Sales, Schneider Electric India Private Limited, Coimbatore, graced the function as the Chief Guest and delivered lecture on the topic 'Role of Internet of Things (IoT) in Smart Manufacturing', where he highlighted the emerging technologies in industries and the role of IoT in smart manufacturing. He also explained the advantages and benefits of the implementation of IoT in the manufacturing process. During the inaugural session, Dr J Krishnamoorthi, Chairman, Coimbatore Local Centre, welcomed the gathering and provided insights on the significance of the Seminar. Dr B Giriraj, Principal, PSG PTC, and Mrs D Sujatha, Head of the Department, Department of Mechatronics, PSG PTC, were present on the occasion and addressed the audience. Ms S Shymala Gowri, Assistant Professor, Department of Information Technology, PSG College of Technology, Coimbatore, delivered lecture on the topic 'Applications of AI in Smart Factories', where she explained the basics of Machine Learning, Deep Learning and Artificial Intelligence. She outlined how AI tools like Machine Learning (ML), Neural Networks, Natural Language Processing (NLP), Computer Vision, Expert Systems and Robotics help in problem-solving, learning and decision-making, simulating human intelligence or automating tasks. She highlighted the significance of Artificial Intelligence in smart factories and how to use it effectively. Mr S Gopala Krishnan, Manufacturing Execution System - IT



Analyst, Schlumberger India Private Limited, Coimbatore, delivered lecture on the topic 'Data Analytics for Predictive Maintenance', and stated that predictive maintenance is a proactive method that uses data analytics to predict equipment failures and schedule maintenance accordingly, thereby reducing unplanned downtime and extending asset life spans. Additionally, he emphasized the role of data analytics in predictive maintenance. Dr M Suresh, Associate Professor, Department of Robotics and Automation Engineering, PSG College of Technology, Coimbatore spoke on 'Robotics and Automation in Manufacturing'. The program ended with vote of thanks proposed by Prof (Dr) Madhan Mohan Gopalsamy, presently Honorary Secretary of Coimbatore Local Centre.

## Artificial Intelligence Impact on Enhanced Project Management

**Kadapa Local Centre**, IEI, organized a One Day Seminar on the theme **Artificial Intelligence Impact on Enhanced Project Management** on 02 October, 2023 under the aegis of Civil Engineering Division Board [CVDB], IEI. The Seminar aimed to provide insights into the application of artificial intelligence (AI) in project management, focusing on its potential to enhance efficiency and effectiveness in civil engineering projects. Er N Bramhananda



Reddy, Chairman, Kadapa Local Centre, IEI [Session 2021-23] inaugurated the Seminar, welcoming all participants and setting the stage for an engaging and informative session. The Speaker, Dr T Naresh Kumar, Associate Professor, Department of Civil Engineering, Annamacharya Institute of Technology & Sciences (AITS) Rajampet, delivered lecture on the theme. In his lecture, Dr Kumar highlighted the transformative impact of AI on project management. His speech provided valuable insights into how AI can assist in creating detailed schedules, comprehensive risk logs, predicting outcomes, optimizing resource allocation and enhancing communication in project management. His expertise in the area was instrumental in explaining how AI technologies can be leveraged to optimize project planning, monitoring

and execution. He shed light on the various ways AI and machine learning can be utilized in project management, particularly in enhancing efficiency, predicting outcomes and optimizing resource allocation. He discussed real-world case studies and applications of AI technologies, providing practical insights and demonstrating how AI can optimize various aspects of project management. Er R Narendra Rao, Honorary Secretary, Kadapa Local Centre [Session 2021-23] discussed the significance of the Seminar and the importance of integrating AI into project management processes. His address emphasized the potential of AI technologies to revolutionize the civil engineering domain by improving planning, measurement and uncertainty performance. The Seminar also featured addresses from other distinguished guests and dignitaries, including Dr I Satyanarayana Raju, Council Member & Member CVDB, Er G Gopal, Past Chairman Kadapa Local Centre, Er B T Prasad, Past Chairman Kadapa Local Centre, etc. which highlighted the relevance of the Seminar's theme and the need for civil engineers to adapt to the evolving technological landscape by integrating AI into their project management practices.

The Seminar concluded with a vote of thanks was delivered by Er R Narendra Rao, who expressed gratitude to the speakers, participants and organizers for making the event a success. The Seminar was a grand success providing civil engineers with the tools and knowledge necessary to leverage AI in project management, equipping them to meet the changing demands of the industry and enhance their professional skills.

The findings indicate that artificial intelligence, predominantly machine learning, can be considerably useful in the management of construction and IT projects. Further, it is notably encouraging for enhancing the planning, measurement, and uncertainty performance domains by providing promising forecasting and decision-making.



## Artificial Intelligence and Machine Learning Applications in Electrical Engineering

**Tiruchirappalli Local Centre**, IEI, in collaboration with the Department of Electrical and Electronics Engineering, Saranathan College of Engineering, Tiruchirappalli, organized an All India Seminar on the theme **Artificial Intelligence and Machine Learning Applications in Electrical Engineering** during 20-21 September 2023, under the aegis of Electrical Engineering Division Board [ELDB], IEI. The objective of the Seminar was to explore the latest advancements and applications of Artificial Intelligence (AI) and Machine Learning (ML) in the field of electrical engineering.

Er M S Ramesh, Former General Manager, Bharat Heavy Electricals Limited (BHEL), Tiruchirappalli, graced the occasion as the Chief Guest and delivered the Keynote address. In his address, Er Ramesh emphasized on



the transformative impact of AI on various sectors. He elaborated on how AI represented a convergence of various technologies that empower machines to perceive, understand, act and learn with human-like intelligence. He said that its integration across industries signified a transformative era, where AI and machine learning offered unprecedented opportunities for innovation from cyber security and image recognition to facial recognition. The demand for AI expertise is surging, making it one of the fastest-growing fields in the job market, with a particular need for AI engineers. He stated that while AI may replace some jobs, it also would create numerous new career paths, underscoring the importance for everyone to acquire at least basic AI knowledge to remain competitive. He opined that this technological revolution is reshaping society profoundly, with AI enhancing existing services like chatbots, simulations and virtual assistants such as Google Assistant, thereby enriching user experiences across various applications without necessitating new devices or interfaces.

The Seminar commenced with a welcome address by Er B Balasubramanian, Chairman, Tiruchirappalli Local Centre [Session 2021-23]. Dr S Dharmalingam, Council Member, IEI, provided an overview of the Seminar's theme, highlighting the crucial role of AI in modern electrical engineering and its potential to revolutionize the industry. He elaborated on the historical development of AI and its integration into electrical engineering. He discussed the advancements in AI technologies and their applications in power systems, renewable energy generation and energy storage. He mentioned that the electrical engineering community has been at the forefront of experimenting, using, and developing AI technologies to improve electrical components, equipment, machines, and systems; AI is used to improve their design, performance & optimisation, adaptive & fault-tolerant control, fault detection & diagnosis, condition monitoring & predictive maintenance, reliability, and cyber security. Dr D Valavan, Principal, Saranathan College of Engineering, in his address, highlighted the research facilities at Saranathan College of Engineering and the contributions of various departments to renewable energy research. Dr Kevin Ark Kumar, Honorary Secretary, Tiruchirappalli Local Centre [Session 2021-23] proposed the vote of thanks.

The technical sessions over the two days features a series of invited papers and lectures that showcased cutting-edge research and development. Dr M V Suganyadevi, Associate Professor, Electrical and Electronics Engineering Department (EEE), Saranathan College of Engineering explained the application of Artificial Neural Network (ANN) in Electrical Engineering. Dr Sishaj P Simon, Professor, EEE, National Institute of Technology [NIT] Tiruchirappalli discussed on 'Applications of Fuzzy Logic Systems in Engineering'; Dr S Moorthi, Associate Professor, EEE, NIT, Tiruchirappalli on 'Signal Processing Algorithms and Techniques'; Dr M Venkata Kirthiga, Professor, NIT, Tiruchirappalli on 'Expert System Applications in Power Systems and Power Electronics'; Dr S Ravimaran, Professor & Head, Department of AI and Data Science, Saranathan College of Engineering on 'Power System Optimization using ML and DL Techniques' and Dr K Geetha, Associate Professor, School of Computing, SASTRA University, Thanjavur on 'The Next Wave of Artificial Intelligence in Electrical Engineering'.

In the valedictory session, Dr S Dharmalingam welcomed the gathering, followed by a valedictory address given by Dr Krishna Kumar, Professor, EEE Department, Saranathan College of Engineering, who also summarised the proceedings of the seminar. Dr Kevin Ark Kumar, proposed the vote of thanks.

## Superannuation from IEI

Mr Arup Das, an employee of the Institution HQ was superannuated from the services of IEI on July 31, 2024. He joined the Institution on February 03, 1992 and rendered his services to the Institution over a period of 32 years.

IEI wishes Arup Das and his family a happy and healthy life in the future.



## Controls and Optimization of Electric Vehicles

Contd. from page 7

and Challenges and Solutions" and then conducted a hands-on session, where he demonstrated controllers, motors and driver circuit boards used in electric vehicles, providing practical insights and real-world case studies.

The Seminar concluded with the valedictory function in which the convener of the event, Dr Sanjiv Kumar Jain, Assistant Professor, Electrical Engineering Department, Medi-Caps University, Indore, delivered the concluding remarks, expressing gratitude to all the speakers, participants and organizers for making the event a success.

## Repair, Rehabilitation and Retrofitting of RCC Structures

Retrofitting involves making improvements or upgrades to an existing structure or system to enhance its performance, efficiency, safety, or compliance with current standards or regulations. Retrofitting can vary widely in scope and complexity, from relatively simple upgrades like replacing windows with energy-efficient ones, to comprehensive overhauls involving structural changes, electrical, plumbing, and mechanical system upgrades. Repair focuses on fixing specific issues or damage to restore something to its original condition, while retrofitting involves making improvements or upgrades to enhance performance, efficiency, safety, or compliance with current standards. Both approaches are essential for maintaining and extending the lifespan of existing structures and systems while adapting them to changing needs and requirements. RCC structures, like buildings, bridges, and dams, are subject to various forms of deterioration and damage over time. Repair and rehabilitation ensure that these structures maintain their structural integrity, preventing the risk of catastrophic failure, which can lead to loss of life and property. Demolishing and rebuilding structures can have a significant environmental impact due to the energy and materials required for new construction. Repair, rehabilitation, and retrofitting are more sustainable options as they reduce waste and minimize the carbon footprint associated with construction. Repairing or retrofitting specific components or areas of a structure can be more cost-effective than replacing the entire structure. It allows for targeted interventions where they are needed most, saving on construction costs.

**Coimbatore Local Centre**, IEI, in association with Department of Civil Engineering, KPR Institute of Engineering and Technology (KPRIET), Coimbatore, organized an All India Seminar on **Repair, Rehabilitation and Retrofitting of RCC Structures** during 24-25 August 2023, under the aegis of Civil Engineering Division Board [CVDB], IEI. The inaugural function started with welcome address delivered by Dr S Shanmugam, Chairman, Coimbatore Local Centre [Session 2021-23]. He presided over the inaugural session and briefed the importance of the seminar. Dr K Balasubramanian, Managing Director, Hitech Concrete Solution, Chennai, graced the occasion as Chief Guest. In his address, he elaborated the importance of repair and retrofitting works, required to restore the RCC structure. Dr M Ramasamy, Principal, KPRIET, Dr G Anusha, Professor and Head, Department of Civil Engineering, KPRIET and Dr V Rajeshkumar, Assistant Professor, Department of Civil Engineering, KPRIET also addressed the audience on the occasion. During the technical sessions, number of papers was presented.

Dr K Balasubramanian, delivered presentation on the topic 'Current Concrete NDT Practices and Case Studies', where he elaborated the importance of repair and retrofitting works needed to restore the RCC structure. He emphasized on the critical role of concrete in construction and the necessity of maintaining its structural integrity. Application of various non-destructive testing (NDT) methods were outlined, including Ultrasonic Pulse Velocity, Rebound Hammer Test, Half cell Potential Mapping, Ground Penetrating Radar, Impact-Echo Testing, Ultrasonic Tomography, Acoustic Emission Testing etc. Each technique was explained for its importance in assessing concrete quality and identifying defects, highlighting their significance in ensuring safe and durable concrete structures.

On the occasion, Keynote lectures were delivered by esteemed speakers embracing the theme and related topics. Ms R Kavitha, Assistant Professor, Department of Civil Engineering, KPRIET shared her expertise through delivering Keynote lecture on the topic 'Retrofitting of RCC Structures using Steel Plate', where she highlighted the benefits of using steel plates for retrofitting including increased load capacity, enhanced ductility, improved seismic performance, and ease of installation. Case studies were also presented to demonstrate how steel plate retrofitting effectively extended the service life of various structures, showcasing its practical benefits. Dr R Ilangoan, Visiting Professor, Department of Civil Engineering, KPRIET



presented Keynote lecture on 'Rehabilitation Techniques to Treat Leakage in Dams'. In his lecture, he emphasized on the critical importance of dam infrastructure and the challenges posed by leakage. The speaker provided an overview of the factors causing leakage in dams, which include aging materials, improper construction and changing hydrological conditions. The potential consequences of dam leakage, such as structural instability, erosion and environmental damage were also discussed, highlighting the need for effective monitoring and maintenance strategies. Mrs V Selvapriya, Assistant Professor, Department of Civil Engineering, PSG Institute of Technology and Applied Research, Coimbatore delivered Keynote lecture on 'Strengthening of Reinforced Concrete Structural Elements', in which the step-by-step process of strengthening RCC structural elements was explained highlighting extended service life and minimized disruption during construction, acknowledging challenges in RCC structural strengthening such as compatibility of materials, construction constraints and design complexities.

Further, Er N Asupathi, Specification Manager, Construction Chemicals Division, Dr Fixit Chennai, spoke on 'Water Proofing in RCC Structures'. Er Asupathi discussed the importance of waterproofing in RCC structures to prevent water penetration that leads to deterioration, corrosion and structural damage. Effective solutions discussed included cementitious coatings, liquid-applied membranes, bituminous membranes and polymer-modified coatings, highlighting their role in enhancing longevity, aesthetics and safety. Er Sivashankar, Civil Engineer, Titan Company Limited, Coimbatore, delivered lecture on the topic 'Repair Techniques in RC Structures', where he addressed common issues in Reinforced Concrete (RC) structures and how to rectify them. The speaker discussed the critical importance of timely repairs to maintain structural integrity and longevity. He explained that factors like environmental exposure, aging and design flaws can lead to deterioration and emphasized on the critical role of proper repair techniques in ensuring safety and functionality, encouraging participants to seek further resources and collaborate with experts in the field. Er R Ramachandran, Former Superintending Engineer, Public Works Department, Tamilnadu delivered lecture on the topic 'Flood Damaged Buildings', where he spoke on flood damage assessment and recovery, emphasizing the impacts of flood on buildings. He discussed the importance of thorough damage assessment and outlined immediate actions necessary to mitigate further damage after a flood event, reinforcing the need for effective recovery strategies. In the last technical session, Dr R Saravanakumar, Associate Professor, Department of Civil Engineering, KPRIET, spoke on 'Structural Health Monitoring (SHM)', where he focused on the importance of real-time monitoring for structural safety and performance and advocating for a proactive approach to assess structures over time. He highlighted the benefits of Structural Health Monitoring (SHM) in ensuring safety, extending service life, reducing maintenance costs and supporting data-driven decision-making, citing real-world examples that prevented catastrophic failures and enhanced operational efficiency.



IEI Celebrates

# World Environment Day 2024

Theme : Land Restoration, Desertification and Drought Resilience

World Environment Day was celebrated by the Centres/Forum of the Institution all over the country on 5 June, 2024. Brief accounts of the celebration as received from various Centres are reported hereunder.

## STATE CENTRES

### Assam



On 05 June 2024, Assam State Centre, IEI in association with AARANYAK, a NGO working on Environment, observed World Environment Day 2024 at Guwahati. Er

Mahesh Barkataki, Chairman, Assam State Centre, IEI presided over the function. Er Monojit Misra, Honorary Secretary, Assam State Centre, IEI welcomed the Speaker of the event, Dr Parimal Ch Bhattacharjee, Former Professor and HoD, Department of Zoology, Guwahati University and the audience. Er Misra delivered lecture on the theme 'Land Restoration, Desertification and Drought Resilience' and gave a detailed account of Indian Environmental Scenario with the help of power point presentation. At the end, Er Shantanu Choudhury, Joint Honorary Secretary, Assam State Centre, IEI proposed the vote of thanks.

### Manipur

On 05 June 2024, Manipur State Centre, IEI observed World Environment Day 2024 at Imphal. Er Huirem Bharat Meitel, Joint Honorary Secretary, Maniur State Centre, IEI welcomed all. Er Swamikanta Singh L, Chairman,



Manipur Local Centre, IEI presided over the function and spoke on reduction of plastic waste and re-use of waste water. He appealed to the public to conserve the environment and save the planet. Dr Tourangban

Brajakumar, Director, Environment and Climate Change, Government of Manipur, graced the occasion as Chief Guest and Theme Speaker. In his address, Dr Brajakumar emphasized that the citizens of our country are responsible to understand and address climate change and land degradation. He discussed about carbon emissions issues, maximum temperature at various towns and cities across the country, land and water issues faced by people across the globe and emphasized to solve the problem at the earliest. At the end, Er Thokchem Subhashchandara Singh, Honorary Secretary, Manipur State Centre, IEI proposed the vote of thanks.

### Tripura

On 05 June 2024, Tripura State Centre, IEI, in association with Tripura State Pollution Control Board observed World Environment Day 2024 at Agartala and a Seminar was organized on the theme. Dr Subhadeep



Bhattacharjee, Chairman, Tripura State Centre, IEI presided over the program. Dr Mrinal Kanti Deb Barma, Honorary Secretary, Tripura State Centre, IEI delivered the welcome address. Chief

Guest of the event, Dr Avinash Kanfode, IFS, Principal Secretary, Forest Department and Principal Chief Conservator of Forests, Government of Tripura in his address highlighted on heat waves, which are a growing threat to society and environment and it causes soil desiccation and intensify drought severity. Special Speaker of the event, Mr Anjan Sengupta, Joint Director of Biotechnology Department, Government of Tripura, focused on land restoration challenges and strategies and underscored the role of bamboo plantation, which can restore degraded lands and protect forests and combating desertification. Special Speaker, Er Biswajit Saha, Former Superintending Engineer, PWD (Water Resources), Government of Tripura discussed on water resource management and its role in tackling land degradation and desertification.

## LOCAL CENTRES

### Agra

Agra Local Centre, IEI, in association with RBS Management Technical Campus, Khandari Farm, Agra observed World Environment Day 2024 on 06 June 2024 at Agra. Prof (Dr) A N Singh, Director (Academic), RBS Management Technical Campus, Khandari Farm, Agra explained about land restoration, which is the forefront of environmental conservation efforts aiming to reverse the adverse impact of human activities and restore



ecosystems. Speaker of the event, Er Dinkar Saxena, Environmental Expert, explained the causes of desertification due to climate variation, urbanization, Impact of

desertification, etc and emphasized that farming becomes difficult for poor quality of water, over pollution, less rain, drought, etc. He opined that soil conservation can help to prevent desertification. Er Rajnesh Kumar Yadav, Honorary Secretary of Agra Local Centre, proposed the vote of thanks.

### Ahmednagar

Ahmednagar Local Centre, IEI in association with Lauritz Knudsen Electrical and Automation, MIDC, Ahmednagar, observed World Environment Day 2024 on 06 June 2024 at Ahmednagar. On this occasion, a knowledge sharing and guidance session on the theme followed by a tree plantation program was organized. Chief Guest of the event, Mr Siddharam Salimath, IAS, District Collector, Ahmednagar in his address highlighted that this



year, many parts of the state witnessed the record temperature rise and expressed concern that it may rise extremely in future. He stressed the need to protect the environment. He informed about various

initiatives taken by the Government, like increased plantation efforts, water reservoirs, arrest deforestation, etc. and appealed to all to involve in this movement. Er Manohar Mukund Anekar, Chairman, Ahmednagar Local Centre, IEI highlighted that large scale infrastructure projects causing



environmental impact and mentioned that many NGOs are contributing to alleviate pollution and restore land. Er Arvind Pargaonkar, Business Vice President, Schneider Electric India Private Limited, said that rapid industrialization has become global threat to environment. He stressed on saving the earth from greenhouse gas effect by planting trees and by lowering the use of fossil fuels. On this occasion, Dr Anagha Pargaonkar, President, 'Prayas', Dr Dilip Adhav, Plant Head, Lauritz Knudsen Electrical and Automation and Er Abhay Krishnarao Raje, Honorary Secretary, Ahmednagar Local Centre, IEI addressed the gathering and shared their valuable insights on environmental degradation.

#### Alwar

On 05 June 2024, Alwar Local Centre, IEI, observed World Environment Day 2024 at Alwar. Mahant Shri Shri 108 Sh Ganga Das Vadanti Ji Maharaj, Ayodhya Dham Ashram, Alwar graced the occasion as the Chief Guest; Dr (Ms) K K Gupta, graced the occasion as Special Guest of Honour and Er Rajdeep Sharma, Member, IEI, Er G S Shegal, Member, IEI and Mr Harish Khurana, CA, graced the occasion as Keynote Speakers. Shri Ganga Das



Ji Maharaj emphasized the crucial role of the environment in ensuring the well-being of people on our planet. He stressed the need for global awareness

campaigns to protect the environment and advocated for the development of an environmentally conscious society. Er Rajdeep Sharma shared his views about the World Environment Day and invited all to come forward to protect the environment not only for the present generation but also for the future generations. Er G S Shegal and Er Harish Khurana emphasized to make the environment as sustainable. At the end, Er R C Sharma, Honorary Secretary, Alwar Local Centre, IEI proposed the vote of thanks.

#### Anpara



On 05 June 2024, Anpara Local Centre, IEI, observed World Environment Day 2024 at Anpara. Er Prashant Kumar, Honorary Secretary, Anpara Local Centre, IEI and Assistant Engineer, 3X210

MW, Anpara Thermal Power Station (ATPS) welcomed the august gathering and delivered a keynote address expressing various challenges, methods and solutions pertaining to subject theme. Er D N Yadav, General Manager, 3X210 MW, ATPS, Anpara graced the occasion as the Chief Guest. He explained how land restoration, desertification and drought resilience are interconnected challenges are critical to sustainable development. He said that by fostering collaboration among Governments, communities and international organizations, we can develop resilient landscapes that supports sustainable development and enhance global food security. Speakers of the event Er Nitish Kumar, Assistant Engineer, 3X210 MW, ATPS explained interlinked environmental challenges on the subject that pose significant threats to global ecosystems, food security and human livelihoods and Mr Prabhakar Singh, Technician Grade-II, 2X500 MW, DTPS, Anpara Thermal Power Station explained the cause and impact of desertification and various techniques of land restoration and drought resilience. At the end, Er Prashant Kumar proposed the vote of thanks.

#### Faridabad

On 05 June 2024, Faridabad Local Centre, IEI, in association with J C Bose University of Science and Technology, (YMCA), Faridabad observed World Environment Day 2024 at Faridabad. Er Sandeep Handa, Past Chairman, Faridabad Local Centre, IEI welcomed the Chief Guest of the event, Dr Dinesh Kumar, Vice Chancellor, Gurugram University, Gurugram, Haryana, Prof Sushil Kumar Tomar, Vice-Chancellor, J C Bose University, (YMCA), Faridabad and the attendees. He explained the significance of the theme



of the day. A tree plantation programme as well as awareness campaign was organized on this occasion with the objective to foster a greener and healthier future for our community. This

initiative emphasized the significance of individual and collective efforts in preserving and protecting the environment. Prof Sushil Kumar Tomar shared his views about the consequences of deforestation and pollution due to urbanization and industrialization. He emphasized that new generation should adopt eco-friendly lifestyle as the world is facing global warming and environmental related issues. He suggested solving this problem by planting trees, emphasizing its necessity today. Prof Kumar highlighted the urgency in addressing environmental challenges and stressed the need for sustainable solution. Er Inderdeep Singh, Honorary Secretary, Faridabad Local Centre, IEI proposed the vote of thanks.

#### Gwalior



On 05 June 2024, Gwalior Local Centre, IEI observed World Environment Day 2024 at Gwalior. Er Radha Kishan Khetan, Chairman, Gwalior Local Centre, IEI welcomed all and focused on the role of health sector

in environmental conservation and climate action and stressed the need of strengthening collaboration between the health and environment sector to address shared challenges. Chief Guest of the event, Col A S Bais, Retired Colonel, Indian Army, discussed environmental degradation and its direct impact on human health, air pollution, water contamination and climate change. He emphasized that climate change and biodiversity poses major threat to health, regional economy and livelihoods across our region and stressed the need for development by adopting low carbon and zero-emission fuels as well as sophisticated infrastructure investments. Keynote Speaker of the event, Er Balvir Singh Sikarwar, Assiatant Project Manager, MP Urban Development Company Limited, focussed on spreading awareness and protection of the environment. Er Vinay Kumar Shukla, Past Honorary Secretary, Gwalior Local Centre, IEI, discussed about reforestation, sustainable land management practices and rehabilitation of degraded lands, etc. Er C S Malvi, Professor and HOD, Department of Mechanical Engineering, MITS, Gwalior, emphasized land restoration and urged everyone to protect and revive ecosystems worldwide to achieve Sustainable Development Goals. Er Prabhat Kumar Bhargava, Past Chairman, Gwalior Local Centre, IEI delivered lecture on 'Solution to Plastic Pollution' and emphasized that World Environment Day empower global stakeholders to confront the challenges of desertification and forging a path towards a more resilient and sustainable future.

#### Kadapa



Kadapa Local Centre, IEI observed World Environment Day 2024 at Kadapa on 08 June 2024. The event started with the welcome address delivered by Prof (Dr) V Adinarayana Reddy, Chairman, Kaddapa

Local Centre, IEI. Speaker of the event, Dr T Kiran Kumar, Professor, Civil Engineering Department, KSRM College of Engineering, Kadapa, delivered lecture on the theme. The aim of the Seminar was to raise awareness about environmental problems, inspire people to take action to prevent the growing strain on planet. Dr Kumar discussed briefly about land restoration, uses of land restoration, effects due to land degradation, desertification,



combating desertification, major areas affected by desertification, effects of desertification on health, drought resilience, resilience of Indian agriculture to droughts, drought management policy, etc.

#### Ludhiana



On 05 June 2024, Ludhiana Local Centre, IEI, observed World Environment Day 2024 at Ludhiana. Dr Arvind Dhingra, Chairman, Ludhiana Local Centre, IEI, explained the theme of the event and stressed on planting more trees to save the environment. On the occasion, trees were planted in the campus of Science & Technology Entrepreneurs Park, Ludhiana by the Executive Members of Ludhiana Local Centre, IEI.

#### Madurai



On 05 June 2024, Madurai Local Centre, IEI observed World Environment Day 2024 at Madurai. The program started with welcome address delivered by Prof (Dr) P Udhaya Kumar, Chairman, Madurai

Local Centre, IEI. Er A T Baskar, Honorary Secretary, Madurai Local Centre, IEI, introduced the Chief Guest of the event, Mr R Kanagarajan, Director, Local Government Advisory Services, Sydney and Formerly Manager at the Sydney City Council, Australia. Mr Kanagarajan shared his views about the challenges faced by the engineers on climate change and environmental protection. He highlighted on net zero emission, which is to be achieved when more carbon dioxide is absorbed from the atmosphere than is emitted and opined that India will reach net zero emission by 2070. He suggested to eliminate the practice of unauthorized urbanization of farm lands and conserving the same for agricultural resources and to encourage large agro holdings to operate and manage mega farms. In conclusion, he appealed to Indian engineers to contribute to the coordinated global efforts to combat the growing climate change threat. At the end, Er A T Baskar proposed the vote of thanks.

#### North Bengal



On 05 June 2024, North Bengal Local Centre, IEI observed World Environment Day 2024 at Jalpaiguri. Er Shrayasi Datta, Honorary Secretary, North Bengal Local Centre, IEI explained that land

restoration can reverse land degradation, drought and desertification, with each dollar invested in restoration in ecosystem services. She emphasized that restoration boosts the livelihoods, reduces poverty, and builds resilience to extreme weather, increases carbon storage and slow climate

change. Prof (Dr) Sudip Mukherjee, Immediate Past Chairman, North Bengal Local Centre, IEI, said that drought resiliency focuses on preparing the communities for future droughts to endure, withstand and recover from these events. Strategies to conserve water, access new water sources and manage drought on a watershed level can help the communities become more resilient. Committee Members of North Bengal Local Centre, IEI attended the event and shared their views on the topic. At the end, Er Shrayasi Datta proposed the vote of thanks.

#### Upper Assam

On 05 June 2024, Upper Assam Local Centre, IEI, in association with Assam



Petro-Chemicals Limited (APL), Namrup, observed World Environment Day 2024 at Namrup. Er Bhairab Bhuyan, Chairman, Upper Assam Local Centre, IEI, delivered the welcome

address. Mr Rajnesh Gogoi, MD, APL, Namrup graced the occasion as Chief Guest; Mr Jadu Pran Borgohain, GM, NTPS, AGPCL, NAMRUP graced the occasion as Guest of Honour. Mr Swapan Kumar Deb, Former DFO, Tinsukia graced the occasion as the Keynote Speaker and delivered Keynote speech on 'Land Degradation'. During the technical session, technical papers were presented namely 'Countering Desertification – An upcoming Challenge' by Mr Devanga Gaurav Borah, Deputy Manager, Production, APL, Namrup; 'Care for Mother Earth from Civil Engineering Perspective' by Mr Atanu Hazarika, CE (Civil), Oil India Limited Duliajan and 'Inherent Fault-tolerant Multilevel Inverter' by Mr Hillol Phukan, Engineer, APL, Namrup. At the end, Er Kishore Kumar Das, Honorary Secretary, Upper Assam Local Centre, IEI proposed the vote of thanks.

#### FORUM

##### Water Management Forum



On 05 June 2024, Water Management Forum, IEI, in association with Vadodara Local Centre, IEI, observed World Environment Day 2024 at Vadodara. Prof (Dr) Satishkumar Kantilal Joshi, Chairman, Vadodara Local

Centre, IEI, welcomed all the dignitaries, guests, participants. Er Ambikesh Natvarlal Padhya, Immediate Past Chairman, Vadodara Local Centre, IEI spoke about the importance of World Environment Day. Er Sandip B Vasava, Chairman- BOG, Water Management Forum, Ahmedabad, presided over the function and explained how to sustain a safe environment with a combined effort by all including Government. Mr. Vivek P. Kapadia, Vice President of Dholera SIR and Former Secretary of the Government of Gujarat, in his keynote address, explained the necessary steps the government and individuals should take to save land restoration, prevent desertification, and enhance drought resilience. At the end, Er Keyur Thakkar, Past Honorary Secretary, Vadodara Local Centre, IEI, proposed the vote of thanks.

## Certificate of Practice for Practicing Chartered Engineers

The Corporate Members of the Institution having **Chartered Engineer Certificate in the current grade of Membership with five years of experience** as an Engineer in the relevant field can apply for **Practicing Chartered Engineers Certification**. The Institution will issue **Practicing Registration No.** for practising Chartered Engineers, which is valid for **five years**.

The application fee for empanelment is, Rs.5900/- (GST included), which may be paid through Demand Draft/ Multi-city Cheque in favour of "The Institution of Engineers (India)" payable at Kolkata.

The hard copy of application form duly filled in alongwith supporting documents should reach to:-

**Deputy Director (Membership)**, The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700020

Please visit : <https://www.ieindia.org/webui/IEI-RegistrationForPPCE.aspx> for more details.



# IEI Celebrates World Telecommunication and Information Society Day 2024

**Theme: Digital Innovation for Sustainable Development**

World Telecommunication and Information Society Day was celebrated by the Centres of the Institution all over the country on May 17, 2024. Brief Accounts of celebrations as received from various Centres are given hereunder.

## STATE CENTRES

### Delhi

On 17 May 2024, Delhi State Centre, IEI observed World Telecommunication & Information Society Day 2024 online. In his welcome address, Dr Santosh Kumar Singh, Chairman, Delhi State Centre, IEI, highlighted the crucial role of digital innovation in promoting sustainable development globally. He emphasized that technologies like IoT in smart agriculture and blockchain for supply chain transparency are transforming industries and supporting UN Sustainable Development Goals. Prof S R N Reddy, HoD, Department of Computer Science and Engineering, Indira Gandhi Delhi Technical University of Women graced the occasion as the Chief Guest and Prof M Gangadharappa, Electronics and Communication Engineering Department, Netaji Subhash University of Technology, New Delhi, graced the occasion as the Guest of Honour. Prof Reddy appraised the main concepts of digital innovation transformation which encompasses technology integration, customer centricity, process of optimization, data driver decision making, etc. Prof Gangadharappa in his address emphasized that today we are connected to each other using technology and the world is different due to evolving technology. Keynote Speaker of the event, Dr Aafreen Khan, Teaching Fellow, Indraprastha Institute of Information Technology, Delhi, described about an antenna, which is an electrical device that converts electric currents into radio wave and vice versa and the antenna is required to communicate between two people when they are separated by some distances. At the end, Er Rajesh Sharma, Honorary Secretary, Delhi State Centre, IEI, proposed the vote of thanks.

### Gujarat

On 17 May 2024, Gujarat State Centre, IEI in association with AMA, Broadcast Engineering Society (BES), CSI (AC) observed World Telecommunication & Information Society Day 2024 at Ahmedabad and a panel discussion was



organised on the occasion. Mr Subhash Jayantilal Ghelani, Chairman, Gujarat State Centre, IEI welcomed all and explained the activities of IEI. The panelists, Dr Niraj Anilbhai Shah, Founder & CEO, Arihant Satiata and Honorary

Secretary, Gujarat State Centre, IEI; Mr Nilesh Vaghela, Founder & CEO, Electromech Cloudtech Private Limited and Vice Chairman, CSI AC and Prof Dhaval Pujara, Director, School of Technology, Pandit Deendayal Energy University (PDEU) participated in the discussion and fostered a lively intellectual environment for the audience. The session was moderated by Er Dinesh Agrawal, Committee Member, Gujarat State Centre. The day focused on how to use digital technology for all without fraud incidence and how to popularize technology for the development for all.

### Himachal Pradesh

On 19 May 2024, Himachal Pradesh State Centre, IEI observed World Telecommunication & Information Society Day 2024 through hybrid mode

on 19 May 2024 at Dehradun. Er Jaswant Singh, Honorary Secretary, Himachal Pradesh State Centre, IEI welcomed Er Vishwa Mohan Joshi, Chairman, Himachal Pradesh State Centre, IEI, the Keynote Speaker of the event, Dr Richa Chandel, Associate Professor from UIT HP University, Shimla, Faculty Members from UIT HP University, Shimla, all dignitaries and professionals. Er Joshi highlighted the importance of digital innovation in advancing sustainable development across the globe. He explained the significance of communication technologies in our daily lives and their role in bridging the gaps, fostering inclusivity, and thus enhancing socio-economic development. Dr Chandel emphasized that digital innovation has transformed many aspects in our lives and the use of digital communication technologies to optimize the production and distribution of electricity, reducing waste and enhancing efficiency. She highlighted how healthcare and telemedicine have revolutionized access to medical services, especially in remote areas. Through digital platforms, patients can now consult with specialists without needing to travel. At the end, Er Jaswant Singh proposed the vote of thanks.

### Jharkhand

On 17 May 2024, Jharkhand State Centre, IEI observed World Telecommunication & Information Society Day 2024 at Ranchi. Er Umesh Prasad Sah, General Manager, BSNL, Ranchi graced the occasion as the Chief Guest and Er Amit Kumar Gupta, Senior Regional Manager, Sheetal



Wireless Technologies Private Limited, Ranchi, graced the occasion as the Keynote Speaker. Dr Mahesh Kumar Gupta, Chairman, Jharkhand State Centre, IEI, explained the achievements of Jharkhand State Centre,

IEI, and urged everyone to support IEI for the sake of the benefit of mankind. Mr Vishal H Shah, Convener of the Program, Jharkhand State Centre, IEI, explained about Digital Innovation and stressed the need of sustainable development. Er Gupta shared his valuable insights on digital innovation. The practical application of wireless handsets in hazardous environment was demonstrated. Er Shah explained the role of telecommunications in achieving Sustainable Development Goals (SDGs) as set by UN. At the end, Er M R Kumar, Past Honorary Secretary, Jharkhand State Centre, IEI, proposed the vote of thanks.

### Manipur

On 17 May 2024, Manipur State Centre, IEI observed World Telecommunication & Information Society Day 2024 at Imphal. Er Swamikanta Singh L, Chairman, Manipur State Centre, IEI, presided over the function and delivered the welcome address. Er Huirem Bharat Meitei, Joint Honorary



Secretary, Manipur State Centre, IEI welcomed the Corporate Members, Engineers, Students and others. Chief Guest of the event, Prof (Dr) N Basant



Singh, Principal, Manipur Institute of Technology (MIT), Imphal, set several examples for data security and privacy issues and explained the weather forecast through digital technology. At the end, Er Thokchom Subhaschandra Singh, Honorary Secretary, Manipur State Centre, IEI proposed the vote of thanks.

### Telangana

On 17 May 2024, Telangana State Centre, IEI observed World Telecommunication & Information Society Day 2024 through virtual platform and a webinar was organised on the occasion. Dr G Venkata Subbaiah, Chairman, Telangana State Centre, IEI welcomed the gathering and presided over the function. Mr Jayesh Ranjan, IAS, Special Secretary, Department of ITE & C and Department of Industries & Commerce, Government of Telangana, graced the occasion as the Chief Guest and Mr G A Srinivasa Murthy, Distinguished Scientist and Director, DRDL, Hyderabad graced the occasion as the Guest of Honour. Er B Brahma Reddy, Immediate Past Chairman, Telangana State Centre, IEI delivered lecture on 'Digital Transformation in India: Integrating Technology Innovations for Sustainable Future'. At the end, Dr K Seetha Ram Babu, Honorary Secretary, Telangana State Centre, IEI proposed the vote of thanks.

## LOCAL CENTRES

### Aligarh

On 17 May 2024, Aligarh Local Centre, IEI observed World Telecommunication & Information Society Day 2024 at Aligarh. Er Jitendra Kumar Varshney, Honorary Secretary, Aligarh Local Centre, IEI delivered the welcome address.



Dr (Ms) Salma Shaheen, Chairperson, Aligarh Local Centre, IEI introduced the theme of the event and explained the contribution of telecommunication in creating digital network and economy. Chief Guest

of the event, Prof Mirza Salim Beg, Dean, Faculty of Engineering and Technology, AMU Aligarh shared his valuable insights on 'Digital Innovation for Sustainable Development in the field of Multimedia Over Wireless'. Addressing the audience, he shared that research is underway on electronic devices sensors for the nose, skin and tongue, capable of detecting natural or synthetic substances and environmental conditions through haptic touch.

### Brahmapur

On 17 May 2024, Brahmapur Local Centre, IEI observed World Telecommunication & Information Society Day 2024 at Brahmapur. Er Bibhudutta Panda, Chairman, Brahmapur Local Centre, IEI welcomed the gathering and presided over the function. Speaker of the event, Er Deepika Panda, Lecturer, UCP Engineering School, Brahmapur explained UN SDGs for sustainable development



in digital innovation. Guest of Honour of the event, Er G V Rajesh, Senior Manager, AAI, explained how digital innovation will be implemented in rural areas as well as for common people. At the end, Er Pradeep Kumar Patra, Honorary Secretary, Brahmapur Local Centre, IEI proposed the vote of thanks.

### Bokaro Steel City

On 17 May 2024, Bokaro Steel City Local Centre, IEI, observed World Telecommunication & Information Society Day 2024 at Bokaro. Mr Navin Prakash Srivastava, Past Chairman, Bokaro Steel City Local Centre, IEI delivered the welcome address and presented the programme details. Chief Guest of the event, Mr Ayban Bankira, Chief General Manager (C & IT),



SAIL, Bokaro Steel Plant, Bokaro in his inaugural address emphasized on different aspects of modern telecom developments. On this occasion, two technical papers were presented by

Mr Jayanta Kumar, Manager, Electronics & Telecommunication Department/SAIL, Bokaro Steel Plant and Mr YSN Reddy, Senior Manager, Electronics & Telecommunication Department/SAIL, Bokaro Steel Plant on the theme. At the end, Er Harihara Rout, Honorary Secretary, Bokaro Steel City Local Centre, IEI proposed the vote of thanks.

### Chandrapur

On 17 May 2024, Chandrapur Local Centre, IEI observed World Telecommunication & Information Society Day 2024 at Chandrapur.



The event witnessed the presence of Chief Guest, Dr A Z Chitade, Principal, Rajiv Gandhi College of Engineering, Research and Technology, Chandrapur and Keynote Speaker, Er Manohar Reddy Nalla, BSNL,

Chandrapur. Er Rajesh Eknathrao Thombre, Honorary Secretary, Chandrapur Local Centre, IEI addressed the audience about the latest developments in communication. He emphasized the importance of acquiring new skills to benefit the industry. Dr Chitade emphasized the importance of telecommunication, technologies and how telecommunication industry is progressing. He explained about the applications of telecommunications and how it should be used by the students in a positive manner to gain knowledge. Er Nalla presented the details of services provided by BSNL such as from landline to mobile, mobile to internet and fiber net to 4G, 5G and other services to be provided in future. He mentioned that BSNL is not only working in rural areas but also executing different projects in urban areas. At the end, Er Thombre proposed the vote of thanks.

### Coimbatore

Coimbatore Local Centre, IEI, in association Department of Electronics and Communication Engineering, PSG Institute of Technology and Applied



Research (PSG ITech), Coimbatore observed World Telecommunication & Information Society Day 2024 on 18 May 2024 at Coimbatore. Prof (Dr) Krishnamoorthi J,

Chairman, Coimbatore Local Centre, IEI delivered the welcome address and presided over the function. Dr G Ranganath, President, IEI in his recorded speech explained the importance of World Telecommunication and Information Society Day. Speaker of the event, Mr S Ramachandran, Principal Consultant – Manufacturing Engineering, Infosys Knowledge Institute, Bangalore discussed various digital technologies and their potential to drive sustainable practices in industries. He shared his valuable insights about the application of IoT, AI and data analytics in enhancing efficiency and reducing environmental impact and his contributions in the field of manufacturing technology and digital innovation. At the end, Prof (Dr) Madhan Mohan Gopalsamy, Honorary Secretary, Coimbatore Local Centre, IEI proposed the vote of thanks.

### Indore

On 17 May 2024, Indore Local Centre, IEI observed World Telecommunication & Information Society Day 2024 at Indore. Er Dinesh Kumar Shukla, Chairman, Indore Local Centre, IEI welcomed the members and attendees. In his presidential address, he explained the theme of the event and





Indore graced the occasion as the Guest of Honour and Keynote speaker. At the end, Er Ramesh Singh Chouhan, Honorary Secretary, Indore Local Centre, IEI proposed the vote of thanks.

#### Kalaburagi



Kalaburagi Local Centre, IEI presided over the function and welcomed the gathering. Speaker of the session, Mr Ananthram Chowdhary, DGM, BSNL, Kalaburagi delivered lecture on 'Digital Innovation for Sustainable Development'. Dr V D Mytri, Pro-Vice Chancellor, Shambasva University, Kalaburagi graced the occasion as the Guest of Honour. Dr S R Mise, Principal, PDA College of Engineering, Kalaburagi was also present on the occasion. At the end, Er Seetharam Munnur, Honorary Secretary, Kalaburagi Local Centre, IEI proposed the vote of thanks.

#### Neyveli

On 29 May 2024, Neyveli Local Centre, IEI observed World Telecommunication & Information Society Day 2024 at Neyveli. Er Appavu Eraniyan, Honorary Secretary, Neyveli Local Centre, IEI delivered welcome address. Er A Sekar, Council Member, IEI and former Chief General Manager, NLC India Limited, Neyveli presided over the function. Dr G



Lakshminarayanan, Professor and Head of Electronics and Communication Department, NIT Tiruchirappalli, delivered lecture on the theme. He explained how to meet human development goals while ensuring that natural systems continue to provide essential resources and ecosystem services. His discussion covered Sustainable Development Goals (SDGs), digital processing and techniques, innovations, the impact of digitalization on sustainability, and resource optimization.

#### Palghat

On 17 May 2024, Palghat Local Centre, IEI observed World Telecommunication & Information Society Day 2024 at Palakkad. Er A V Rajappan, Chairman, Palghat Local Centre, IEI welcomed the dignitaries and august audience. Er M S Ajayan, Chairman, IETE, Palakkad Centre delivered



address on the occasion. Er Rajesh Menon B, Honorary Secretary, Palghat Local Centre, IEI introduced the Guest Speaker of the event, Dr M Sabarimalai Manikandan, Associate Professor, Department of Electrical Engineering, Indian Institute of Technology Palakkad. Dr Manikandan delivered Keynote Address on 'Digital Innovation for Sustainable Development' and discussed on Digitalization and Digital Transformation, Sustainable Development Goals, Internet of Things, System Engineering and Control Perspective etc.

shared his views on it. Mr Amitabh Bhatia, Senior Vice President, CEO, Reliance Jio Infocom Limited graced the occasion as the Chief Guest and Mr Sanjeev Singhal, General Manager, BSNL,

#### Pune

On 25 May 2024, Pune Local Centre, IEI, in association with The Institute of Electrical and Electronics Engineers (IEEE), Pune Section, The Institution of Electronics and Telecommunication Engineers (IETE), Pune Centre and The Institution of Engineering and Technology (IET), Pune Network observed World Telecommunication & Information Society Day 2024 on 25 May 2024 online. Prof (Dr) Girish Shrikisan Mundada, Council Member and Chairman, CATE, IEI and Convener of the event welcomed the participants and stressed the need of having collaboration of technical societies for the benefit of engineering fraternity. Dr Alok Nath De, CTO, Xtrans Solutions, Adjunct Professor at IISc Bangalore, Former CTO & CVP, Samsung and Member, Electronics & Telecommunication Engineering Division Board [ETDB], IEI, graced the occasion as the Theme Speaker. He underscored how digital innovation creates sustainable prosperity for all. He focused on innovation and its evolution over the years, explained Sustainable Development Goals and developing the real time projects using 3Ps (people, profit and planet). Prof (Dr) Sanjay Bhaskar Zope, Immediate Past Chairman, Pune Local Centre, IEI, explained the activities of IEI. At the end, Dr Uttam Ramchandra Awari, Honorary Secretary, Pune Local Centre, IEI proposed the vote of thanks.

#### Saurashtra



On 17 May 2024, Saurashtra Local Centre, IEI, in association with A V Parekh Technical Institute, Rajkot, observed World Telecommunication & Information Society Day 2024 at Rajkot. Er Urvish C Kakkad, Chairman, Saurashtra Local Centre, IEI delivered the welcome

address. Mr Marmik Bhatt, Web and App Developer, Monktech Solution, Rajkot, graced the occasion as the Speaker of the event. He delivered presentation on the topic 'Microchip Development' and discussed about processes and nodes, hybrid process, process capabilities, competition, process technology parameters, etc. Prof G V Parmar, Head, Department of Electronics and Communication, A V Parekh Technical Institute, Rajkot, also spoke on the occasion.

#### Tirunelveli

On 28 May 2024, Tirunelveli Local Centre, IEI, observed World Telecommunication & Information Society Day 2024 online. Prof (Dr) R Velayutham, Past Chairman, Tirunelveli Local Centre, IEI, delivered the welcome address. Speaker of the event, Prof M S Ulaganathan, Assistant Professor, Department of Computer and Communication Engineering, Sri Sai Ram Institute of Technology, Chennai, discussed about smart agriculture and smart grid technology on environmental sustainability and explained about social sustainability covering healthcare innovations and online learning. At the end, Er Avudaiappan S, Chairman, Tirunelveli Local Centre, IEI, proposed the vote of thanks.

#### Trichur



On 17 May 2024, Trichur Local Centre, IEI observed World Telecommunication & Information Society Day 2024 at Thrissur. Er Thomas John V, Chairman, Trichur Local Centre, IEI addressed the gathering of Corporate Members, faculties and

Contd. on page 23



# News-in-Brief

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

## STATE CENTRES

### Karnataka

Organised International Women's Day on 27 March 2024 at Bengaluru and a Seminar was organised on the topic 'Invest in Women: Accelerate Progress'. Hon'ble Justice (Dr) Mrs Manjula Chellur, former Chief Justice of Kerala High Court, Bombay High Court, Calcutta High Court was the Chief Guest. In her Keynote address, she focussed on Women Empowerment and said that women should strive to achieve, with devotion and dedication, to reach high altitude in their respective fields. She also pointed out that women, as mothers, play a vital role in bringing up educated children, who contribute to society. Mrs Padmavati, Outstanding Scientist, Sc 'H', Project Director (LCA-AF-MK1), Assoc. Technology Director (Avionics & Weapon System) ADA, Bangalore, was the Guest of Honour. Prof (Dr) Shobha B N, Convener, spearheaded the entire program and also proposed the vote of thanks at the end.

Observed World Earth day on 30 April 2024 and a webinar was organised on 'Planet vs. Plastics'. Speaker of the session, Mr Marwan Abubkar A M, Co-Founder and Director, Hasiru Dala Innovations, in his Keynote address, stressed on the critical need to combat plastic pollution for the health of all on Earth. He highlighted the detrimental environmental impact of the petrochemical industry, emphasizing its role in producing vast amounts of harmful plastic waste. He discussed Bisphenol A (BPA), a common plastic additive, known to disrupt endocrine function in humans, posing significant health risks through exposure from everyday items like beverage containers and food can linings. He also addressed Phthalates, another group of chemicals used in plastics, linking them to adverse health effects including weight gain and insulin resistance, affecting metabolism in both males and females. In conclusion, Mr Marwan urged immediate action to reduce plastic usage, citing the profound threats posed by plastic pollution to human health and the environment. His presentation underscored the urgency of adopting sustainable practices to mitigate these risks.

Observed National Technology Day on 15 May 2024, and a webinar was organised. Guest Speaker, Er Thejesh P, Founder and Chief Technology Officer, Login-ware Softtec Private Limited, delivered Keynote lecture on 'School to Startups - Igniting Young Minds to Innovate'. In his address, he shared his expertise in nurturing a team of professionals in his organization. He detailed the company's evolution from workshops and internships to a product-focused enterprise in hardware and software and underscored his company's commitment to serving industrial clients globally. Concluding his presentation,

### Maharashtra

Organized a technical visit to Vari Pontoon Chakan Industrial area, Pune on 11 May 2024 at Pune. Vari Pontoon has unique & largest credentials in India for floating Pumping stations also called as Pontoon Pumping system. Vari pontoons are specialised in manufacturing floating pontoons for pumping stations installed in the lakes, dams, river waterways, etc. The Pontoon is made to float at distant place in the dams and heavy duty pumps are installed in pontoons, cofferdams/ void spaces. Mr Vijaykumar Kakade, Founder and Managing Director of the organisation explained the details and the procedure of fabricating pontoons at different levels.

### Punjab & Chandigarh

Organized a webinar on 'Trends in Mobile Communication – An Indian Perspective' on 12 January 2024. Keynote speaker, Er Sudesh Kumar Chopra, General Manager (Mobile) at Bharat Sanchar Nigam Limited (BSNL) Punjab, delivered lecture on Mobile Communication, highlighting its fundamental principles and societal importance. He emphasized its role in facilitating communication in a growing population and noted the increasing use of wireless devices. Er Chopra underscored that effective communication is crucial for exchanging information across distances, emphasizing its integral role in science and society.

Organized a technical webinar on 'Artificial Intelligence in Agriculture' on 17 February 2024. Prof (Dr) T S Kamal, Former Vice-President IEI, graced the occasion as the Chief Guest, and explained the importance and popular applications of Artificial Intelligence in Agriculture. Keynote Speaker, Prof (Dr) Amar Partap Singh, Professor, Department of Electronics & Communication Engineering, Sant Longowal Institute of Engineering & Technology (SLIET), Longowal, Sangrur (Punjab), who spoke about the application of Artificial Intelligence (AI) in addressing challenges in agriculture, food and bio-system engineering. He highlighted about how AI techniques are crucial for optimizing production processes and solving diverse agricultural problems exacerbated by climate change, pests and financial constraints faced by smallholding farmers in India. Dr Singh emphasized on the World Economic Forum's initiative, 'Artificial Intelligence for Agricultural Innovation', which aims to revolutionize Indian agriculture by integrating AI and related technologies. He said that this collaborative effort between government, academia and businesses seeks to innovate and implement solutions that enhance agricultural productivity and sustainability, thereby supporting farmers and transforming the agricultural landscape amidst contemporary challenges and global market dynamics.

### Tamil Nadu

Observed 'The Regional Languages Promotion Day' on 02 March, 2024 online. Guest speaker of the session, Er K Babusatharan, Founder & President, Nimir Elakiya Vattam, spoke on the topic 'Linguistic Management' and shared his views on how language forms the basis of communication, reflecting identity and shaping history.

### Tripura

In association with Women's Polytechnic, Hapania, organized a Seminar on 'Growing Presence of Women in Engineering' on 11 March 2024 in connection with the observance of International Women's Day at Agartala. The theme for International Women's Day, 2024 was 'Count Her In: Invest in Women. Accelerate Progress', underscores the importance of directing resources, support and attention towards women to expedite positive advancements in various aspects of society. Dr Tirtharaj Sen, Principal, Women's Polytechnic, graced the programme as the Guest of Honour and Dr Haimanti Bhattacharjee, Secretary, Spandan (A voluntary organisation working for women), graced the programme as the Special Guest. Dr Nabamita Goswami, Assistant Professor, Department of Electrical Engineering, National Institute of Technology Agartala and Er Soma Saha, Head, Department of Information Technology, Women's Polytechnic, made deliberations on the theme as Special Speakers. The Seminar focussed that by recognizing the achievement of women, be it in education, economic opportunities, or leadership roles, progress can be accelerated and gender equality can be promoted. This could empower women to contribute more significantly to social, economic, and cultural development. The seminar encouraged a collective effort to recognize the value of investing in women as a strategic and impactful way to drive positive change and move towards a more inclusive and equitable world.

Organised a Seminar on 'From Schools to Startups: Igniting Young Minds to Innovate' on 11 May 2024, in connection with National Technology Day. The programme was graced by Swami Vedangananda, Principal, Ramakrishna Mission Private ITI, Viveknagar, as the Chief Guest. Special Speakers of the Seminar were Dr Suman Deb, Assistant Professor & Head, Department of Computer Science & Engineering, NIT Agartala and Chairman, Institute Innovation and Start up and Er Rapti Chaudhuri, Founder Director and CEO of CUBO-BOTS Private Limited. Besides, Dr Partha P Debnath, Postdoctoral Fellow, The Hong Kong Polytechnic University, Hong Kong and Er Goubinda Sarkar, Department of Electrical Engineering, NIT Agartala made deliberations on their innovations and potentiality for start-up. The seminar underscored the importance of nurturing and mentoring young talents to tackle India's contemporary challenges.

## LOCAL CENTRES

### Ahmednagar

Organised a Technical Lecture on 'Indian Automobile – Car Segment' on 20 March 2024. Er Abhay Krishnarao Raje, Honorary Secretary of Ahmednagar Local Centre delivered lecture on 'Indian Automobile – Car Segment'. Er Raje delivered a comprehensive presentation on Indian cars, their historical evolution, classification by dimensions and popular segments based on body types such as mini, compact, hatchback, sedan, luxury, SUVs and more. He detailed technical specifications including power, cylinders, torque, and transmission types, emphasizing crash protection features. Er Raje also presented a case study comparing diesel and petrol cars, analyzing factors like initial cost, maintenance expenses and fuel efficiency to aid in understanding the economic aspects of car ownership and usage. His presentation provided a thorough overview of the Indian automotive landscape from both technical and economic perspectives.

### Erode

In association with Velalar College of Engineering and Technology, organised an online 'Awareness Programme on Energy Conservation' on 20 February 2024 for students and faculties. Dr M Jayaraman, Principal, Velalar College of Engineering & Technology, Erode, delivered a valuable speech about energy conservation and its needs. He also shared insights about how a college campus can conserve energy by various technologies.

In association with Velalar College of Engineering and Technology, organised an online Seminar on 'How to Become a Fullstack Developer' on 20 February 2024, where Ms S Sripriya, Corporate trainer, Shristi Tech Labs, Bangalore, delivered a high impact training on Java stack and web technologies with an in-depth knowledge for designing and developing training courses.

In association with Nandha College of Engineering, organised an online Workshop on 'Mobile Phone Servicing and Troubleshooting' on 01 March 2024. Dr B Krishnakumar, Founder & CEO, New Technology Institutions, Coimbatore delivered lecture and provided hands on training in mobile phone servicing and troubleshooting.

In association with Nandha College of Engineering, organised an online Industrial seminar on 'Mainframe Computers' on 01 March 2024. Panelist, Mr S Muthukumara Gowtham, Technology Lead, Infosys, Coimbatore, explained, how technologies work in banking, finance, health care, insurance, utilities, government and a multitude of other public and private enterprises. He also shared about data transfer between client and user and provide valuable tips on careers in the IT sector.

### North Bengal

Organized a lecture on 'Mapping Urban Noise: A GIS-based Analysis of Noise Levels in Jalpaiguri Town and Surrounding Zones' on 20 March 2024 at Jalpaiguri. Speaker of the session, Er Prithwish Roy, Assistant Professor, Department of Civil Engineering, Jalpaiguri Government Engineering College was the speaker, delivered a presentation on 'Noise Pollution', and mentioned that excessive or disruptive noise in the environment is harmful to human health and organisms.

### Pune

In association with Indian Society of Earthquake Technology, Pune Local Chapter, organized a Workshop on 'Research Topics for PG Students' on 27 April 2024. Dr Sunil Thakare, Chairman, Board of Studies, Civil Engineering Department, Savitribai Phule Pune Vidyapith (SPPU), updated the latest development and challenges in Structural Engineering. Resource persons of the event, Mr Usuf Inamdar, Business and Technical Head, Jaikumar Infra Project RMC Division, Pune, highlighted the challenge for budding engineers to cast the concrete without cement and aggregate in future. Dr Shreenivas Londhe, Professor, Civil Engineering Department, Vishwakarma Institute of Information Technology (VIIT) Pune, explained about the applications of Artificial Neural Network (ANN) in Civil Engineering. Er Kantish Chourpagar, Head Steelsoft Consulting Services India, spoke on the advantage of cold formed light gauge section for the design of steel structures.

Dr Jyoti Bhusari, Professor Sinhgad College of Engineering Pune, Dr Suhasini Madhekar, Chairperson, Indian Society of Earthquake Technology, Pune Local Chapter and Dr Manjunath Bhogone, Assistant Professor, Sinhgad College of Engineering Pune enlighten the research in structural Engineering.

### Rourkela

Organised a Technical paper meeting on 15 June, 2024 on the topic 'Insights into Wind Energy Potential and Aspects' through online mode. Speaker of the session, Dr Dipen Kumar Rajak, Scientist, Council of Scientific & Industrial Research (CSIR) - Advanced Materials and Processes Research Institute, Bhopal, said that India has substantial wind energy potential, primarily concentrated in coastal and inland regions. With one of the largest installed wind power capacities globally, the country has taken significant steps to connect this renewable resource. Moreover, Government initiatives, including policies incentivizing wind power generation and technological advancements in turbine design, have played essential roles in driving the growth of renewable energy. He said that despite land acquisition issues and intermittency of wind resources, wind energy is becoming increasingly economically viable in India, aided by declining costs and environmental benefits. He concluded that as India continued to prioritize renewable energy development to meet its growing electricity demands and ease climate change, wind energy would play a vital role in India's sustainable energy.

### Tiruchirappalli

Arranged an industrial visit to M/s Selvar Industries, Poonampalayam, Manachanallur, Tiruchirappalli on 17 March 2024 to get a real insight on the working procedure of industries and understand various techniques, technologies and technical parameters of PVC Pipes, Conduit (Electrical) PVC pipes, Plumbing PVC pipes, Agricultural PVC pipes and Rigid PVC pipes, which are manufactured at Selvar Industries.

### Udaipur

In association with Vigyan Samiti, Udaipur, Mining Engineers' Association of India, Rajasthan Chapter, Udaipur, Jain Engineers Society, Udaipur, observed National Technology Day on 11 May 2024 at Udaipur. Dr M S Mangal, Vice Chancellor of Pacific Medical University, was the Chief Guest. Keynote speaker, Prof B P Sharma, President of Pacific University Group pointed out that innovation can thrive even without formal education in a conducive environment. He also pointed out that GDP is directly proportionate to the young population of any country and proposed that entrepreneurship is the only remedy for removing unemployment. Er Madhusudhan Paliwal, Chairman of Mining Engineers Association, Rajasthan Chapter, Udaipur, shed light on the significance of the day.

### Visakhapatnam

Observed 'The Regional Languages Promotion Day' on 21 February, 2024 by observing a technical activity at Government Polytechnic, Kancharapalem, Visakhapatnam. Speaker, Cmde D Chandra Sekhar, Technology Director, Quality & Reliability, Naval Science & Technological Laboratory (NSTL) delivered lecture on 'Regional Languages promotion Day' and also spoke on 'Artificial Intelligence'. He spoke on linguistic diversity, rejecting linguistic fundamentalism for inclusive development and expression. Speaking on Artificial intelligence (AI), he elaborated that AI mimics human intellectual processes, and has huge impact on daily life and international security.

### Warangal

Observed World Earth Day on 27 April 2024 at Warangal and a seminar was organized on 'Planet vs. Plastics'. Chief Guest, Dr P Sridhar, Assistant Professor, Department of Civil Engineering, NIT Warangal stressed on the importance of saying no to usage of plastic. Dr Sridhar presented a comprehensive overview of the concerning penetration of plastics into the human body at the micro level, alongside the substantial energy consumption associated with producing plastic bottles. He underscored the critical importance of effectively managing plastic waste, highlighting its adverse impact on marine life and the varying sizes of plastic pollution — ranging



from micro to meso to macro debris — in the environment. Furthermore, Dr Sridhar delved into the problems associated with single-use plastics, exploring the diverse applications of plastics and their differing decomposition rates. He elucidated the myriad human health issues arising from plastic pollution, including contamination of food sources, respiratory problems due to the burning of plastics, and broader ecosystem disruptions, particularly affecting aquatic life. To address these pressing concerns, Dr Sridhar advocated for significant reductions in plastic production, and discussed amended regulations and initiatives proposed by both state and central pollution control boards to enforce stricter guidelines and promote sustainable plastic management practices.

## FORUM

### Water Management Forum

In association with South Gujarat Local Centre, IEI and the Department of Textile Processing Technology, Dr S & S S Ghandhy College of Engineering & Technology, Surat, organized an educational exhibition on 'Water Conservation' and an informative lecture on 'Identification of Ground Water Potential Zone' on 29 January 2023 at Bhilad. Speaker, Er Dipesh C Rajput, Lecturer, Civil Engineering Department, Dr S & S S Ghandhy College of Engineering and Technology, Surat discussed geospatial techniques for mapping recharge regions, aiding sustainable water management and informed decision-making. Mr Dhaval D Vyas, Lecturer, Department of Textile Processing Technology, Dr S & S S Ghandhy College of Engineering & Technology, Surat, in his address, focussed on water conservation as a practice of using water efficiently to reduce unnecessary water usage. Mr Pavan D. Panwala, Lecturer, Department of Textile Processing Technology, Dr

S & S S Ghandhy College of Engineering & Technology, Surat, also spoke and coordinated the whole event.

In association with Pidilite Industries Limited organised a corporate social responsibility (CSR) initiative by arranging Expert Talk on 'Green Building/ Green Plumbing' on 17 & 20 February 2024 and 05 March, 2024. Importance of water and how to implement things on Green Building / Green Plumbing were discussed during all the three days.

In association with Vadodara Local Centre, IEI and Government Engineering College (GEC) Bharuch, Gujarat, organized a Seminar on 'Change in Lifestyle to become 'aatmaNEERbhar' – Self-Reliant in Water' and exhibition on 'Save Water' on 22 April 2024 at Bharuch. Shri Kamlesh Dand, Past President, Rotary Club of Ankleshwar, Er Ambikesh Natavarlal Padhya, Managing Director, Baroda Encon Private Limited, Vadodara and Immediate Past Chairman Vadodara Local Centre, Prof (Dr) Satishkumar Kantilal Joshi, Chairman, Vadodara Local Centre, Prof (Dr) Pradeep Lodha, Principal, GEC Bharuch, Prof Nimit Palsanawala, Head, Civil Engineering Department, GEC Bharuch and Er Vijay Solanki from WMF, were present for the inauguration ceremony, addressed the audience and explained the importance of water and how to conserve water in day-to-day life. Mr Setu S Shah, Multi-skilled and Dynamic Entrepreneurs, Sujalaam, Ahmedabad delivered the Keynote address on 'Change in Lifestyle to become 'aatmaNEERbhar' – Self-Reliant in Water' and he explained about the past, present and future scenario of water in India as well as about the importance of water and how one can preserve water.

In association with South Gujarat Local Centre, IEI and Shree Surati Modh Vanik Nanpura Yuvak Mandal, Surat organized an educational exhibition on 'Save Water' and poster competition on 'Save Water, Secure The Future' on 4 May, 2024 at Surat.



## Know-Your- Member (KYM)

The Institution of Engineers (India) is updating the database of all its Corporate Members along with their achievements for which a Know-Your-Member (KYM) form has been introduced.

Every Corporate Member is requested to kindly fill up the form and forward it along with the self-attested copy of photo ID proof to the address given below:-

### Deputy Director (Membership)

The Institution of Engineers (India)

8 Gokhale Road, Kolkata 700020

Email: [datamemb@ieindia.org](mailto:datamemb@ieindia.org)

The form is available on IEI Website:

[https://www.ieindia.org/WebUI/ajax/Downloads/WebUI\\_PDF/HIGHLIGHTS\\_DOCUMENT-3332.pdf](https://www.ieindia.org/WebUI/ajax/Downloads/WebUI_PDF/HIGHLIGHTS_DOCUMENT-3332.pdf)

# The Institution of Engineers (India)

## PROCEDURE FOR CONDUCT OF ELECTIONS

(As approved by the Council at its 726th meeting held on 15 June 2024 at Kathmandu)

1. Unless specified otherwise, following clauses in the 'Procedure for Conduct of Elections' will be applicable for all elections under provision of Regulations 24, 25 and 26.
  2. The Corporate members on the roll of the Institution as on 31 Mar of the year in which elections are due shall form the electorate college for the elections which will be prepared and supplied by the IEI HQs. In order to cast vote and/or contest election, candidate must be on the roll and reachable electronically. Electronic identity of every member shall be determined by mobile number and/or email-id registered as on 31 Mar of the year in which elections are due. In case of any duplicate mobile or email-id found then such duplicate mobile number or email-id should be removed from the all such effected members during the finalization of the electoral roll.
  3. Any change in mobile or email after 31 Mar shall have no effect in the electoral roll prepared based on members database as on 31 Mar of that year.
  4. The window for e-voting activities shall open and close at midnight on the date specified for the purpose.
- c. By displaying in the notice board and website of the IEI for election under Regulation 24.
  - d. By displaying in the notice board and website (if any) of the respective Centre for election under Regulation 25 and 26.
  - ii. Such bio-data shall be uploaded as received from the concerned nominated members and the Board of Scrutineers shall not be responsible for correctness or otherwise of such information. The invitation for nomination should also include the election time table mentioning important dates in the election process as fixed by the BOS in consultation with the IEI HQs.
  - iii. A period of minimum 15 days from the last date of sending emails inviting nominations shall be allowed for submitting the nominations along with other requisites for elections under Regulations 24, 25 and 26. The earnest money paid during submission of nomination shall not be refunded under any circumstances.
  - iv. The notification shall direct that a member attached to a Division shall be eligible to submit nomination for election (under Regulation 24 and 25) only in that Division.
  - v. BOS shall forward the notice to be circulated to the Administrator (as defined in page 6) for circulating the same to the eligible corporate members through centralized gateway of email service provider.

### A. Scheduling an Election

- i. **Notification and Invitation of Nominations** : The notification must include the following:
  - a. Election Schedule
  - b. Details of the non-refundable earnest money
  - c. The notification shall also direct that a member attached to a Division shall be eligible to submit nomination for election (under Regulation 24 and 25) only in that Division.
  - d. In case multiple elections under Regulations 24, 25 and 26 are required to be conducted by a BOS in a given year, the BOS must conduct all such elections simultaneously with same election schedule.

However, in case any of such election(s) is/are withheld due to unavoidable circumstances e.g. litigation/ Court order etc., the other election(s) would continue uninterrupted.

- ii. **Last date of Receipt of Nomination** : Minimum 15 days from date of invitation of nomination.
- iii. **Last Date for Scrutiny of Nomination**: 2 days from A(ii)
- iv. **Last Date for Withdrawal of Nomination**: 7 days from A(iii)
- v. **Start of Election**: At least 2 days after A(iv)
- vi. **End of Election**: On 14th day (2400 hrs) from A(v) so that duration of evoting is 14 days.
- vii. **Declaration of Result**: On the day next to the end of e-voting.

### B. Invitation of Nomination for contesting in election

- i. The Board of Scrutineers shall invite self-nominations along with bio-data and non-refundable earnest money of the requisite amount from the eligible Corporate Members in the following ways:
  - a. Through notification in the publication (if any) circulated to all the Corporate Members eligible to contest in the election.
  - b. By sending email to the Corporate Members eligible to contest

in the election and having valid email ids as registered with IEI as on 31 Mar of the year.

- a. For election to the Council seat — Rs.20,000
  - b. For election to the State Centre Committee — Rs.5,000
  - c. For election to the Local Centre Committee — Rs.3,000
- The applicable amount to be paid for an election shall be displayed in the system.
- ### C. Submitting self-nominations along with other requisites
- i. A Corporate Member willing to contest in the election shall nominate himself and submit the nomination alongwith biodata and the earnest money deposit through the online portal, dedicated for IEI elections. The link of the portal shall be available in IEI website.
  - ii. For submitting self-nomination, candidate must be on the roll and reachable electronically as on 31 Mar of the year and must also be attached to the same Division of Engineering in the previous two consecutive electoral rolls.
  - iii. The credentials for login are to be generated by a member himself through the 'Get Password' option in the election portal by using his membership no. (e.g. AM1498757, F-1258972, M-0025688 etc.).
  - iv. While submitting nomination, the number of seats for a given election shall be shown by the System automatically and the member has to provide his membership no. and opt for the election he is willing to contest.
  - v. Upon successful entry of the details as stated above, the contestant has to make a payment as non-refundable earnest deposit as per following:



- vi. After successful payment, candidate has to submit his bio-data (maximum 2000 character including spaces). Any extra character provided shall be automatically truncated by the system. The Candidate shall be able to update his biodata till the last date of submission nomination. No further editing of biodata by the candidate is permissible after this last date.
- vii. In case any member willing to contest for more than one election he has to submit separate nomination for every type of election along with requisite earnest money.
- viii. For any payment related issue, the user may send email to [caffairs@ieindia.org](mailto:caffairs@ieindia.org)/ [ad\\_ca@ieindia.org](mailto:ad_ca@ieindia.org).

#### **D. Scrutiny of Nominations**

- i. After the last date of the receipt of Nomination, BOS members shall meet and scrutinize the nominations, rejecting the nominations which may be found to be invalid on account of their not being in conformity with the above requirements or Regulation 23(c). Reason of rejection, if any shall have to be recorded by BOS.
- ii. All nominations which have not been duly rejected by the BOS within the stipulated timeline shall be deemed as valid nominations and shall automatically appear for online voting in the election site.

#### **E. Withdrawal of nominations**

- i. Once submitted, a candidate can withdraw his / her nomination by logging in to the election portal during the period provided for the purpose. However, the earnest money paid during submission of nomination shall not be refundable under any circumstances.
- ii. In case the number of nomination(s) received is/are less than or equal to the number of seat(s) in an election, the said election shall not proceed to the next stage i.e. e-voting and BOS can take the printout of such candidates who stand elected uncontested and such information shall be made available in election site as well.

#### **F. Electronic Voting**

- i. Intimation for start of voting shall be given to the electorate after the date specified for the withdrawal of nomination. Such information shall be sent to the both registered Mobile number / e-mail id as applicable to the electronically reachable members as on 31 Mar of the year. No updation of mobile or email in the electoral roll is permissible under any circumstances whatsoever.
- ii. An eligible voter visiting the Institution website [www.ieindia.org](http://www.ieindia.org) will be guided to the election portal. Members are required to visit the election portal in order to get the login credentials. The credentials for login is to be generated by the members themselves through the "Get Password" option using his membership no. (e.g. AM1498757, F-1258972, M-0025688 etc.).  
  
The voter can access the voting page of the relevant election by using log-in ID and password for voting online.
- iii. A system generated One Time Password shall be sent to the both registered Mobile / e-mail as recorded in the electoral roll for casting of vote electronically. The One time Password shall have a validity of five minutes. Separate One time Password shall be issued for all elections. The vote cast by a voter shall be encrypted and not available to anyone. The details of the voter by his membership number shall be available in the system. The bio data of the contestants will be available for voters reference in the election portal.

- iv. In case a voter misplaces his password, he can request for computer auto generated log-in ID and password through 'Get Password' option from the HOME page of the IEI election web site. The login ID and password shall be sent to the voter's mobile and/or e-mail as registered in the electoral roll.
- v. In case of members residing abroad who have registered their e-mail id, they will be provided the log-in credentials through their e-mail only.

#### **G. Final Counting**

- i. BOS shall invite well in advance all the contestants to be present on the scheduled date and time for counting of votes. The contestants may be present in person or through authorized representative to witness the entire process of counting.
- ii. On the date of counting and declaration of the result, the BOS members as per the required quorum have to login to the election site. On clicking the "View Result" button against each election, the system shall count the online votes and final result shall appear on the BOS screen instantly.
- iii. In the event of a tie, the BOS shall decide the result by drawing lots, under observation of witnesses and update the information in system accordingly.
- iv. BOS has to Click "Publish" button in order to display the result in the election portal
- v. The administrator i.e. the Secretary and Director General shall have the right to withhold the result of an election, if necessary. In case BOS is required to withhold the result of any election then it must be communicated to the Secretary and Director General i.e. Administrator in writing well in advance for taking needful action.

#### **H. Result**

- i. The BOS shall print the report on the result of the voting which shall be signed by the members of the BOS present and present the report along with connected papers to the Chairman of the Centre and forward a copy of the report to the Honorary Secretary of the Centre and also to the Secretary & Director General of the Institution for necessary action. The names of the winning candidates shall also be put on display at the Election Site after publication of the same by BOS. The result shall be available in public domain upto 30 days from the date of declaration of result.
- ii. In case the BOS does not publish the result explicitly for any reason whatsoever, the result shall not be available in public domain.
- iii. After publication of the result by BOS, the Administrator i.e. the Secretary and Director General shall be able to view/ print the result.
- iv. In case of multiple elections, withholding the result of a particular election (because of unavoidable circumstances e.g. court stay order etc.) shall not impact the publishing of result(s) of other election(s).

#### **KEY FEATURES/ TERMINOLOGIES**

##### **I. Administrator**

Secretary and Director General (SDG) shall function as the Administrator of the Election Software. Administrator shall ensure the smooth functioning of the entire system pertaining to the functionalities of the election software. Administrator shall arrange for Login details of the BOS members upon receipt of the details of BOS. The Administrator shall also examine the feasibility of any request received from Convener, BOS for changes/modification in

election schedule, blocking an election etc. and arrange needful. Administrator shall overview the progress of the ongoing elections. He shall function as per the rules and regulations of the ByeLaws and laid down procedure for conduct of election duly approved by the Council.

#### **J. Board of Scrutineers (BOS)**

Board of Scrutinners are responsible for smooth conduct of the election under their control. No person shall be member of BOS for more than two consecutive elections. In case any issue / observation made by BOS or brought to the notice of BOS regarding the conduct/functioning of online election for which BOS requires support, then the details of such observation must be brought to notice of Administrator by Convenor, BOS. BOS shall work in close coordination with the Administrator for early resolution / resolve of the issue.

#### **K. BOS Control Panel**

- i. The BOS can access the BOS Control Panel of Election software only after they log-in with their log-in ID and requisite password. The Login credentials for BOS shall be made available to them by the Administrator. Before the first log-in, they will be required to change their password. BOS members have to create their own password and have to keep it strictly confidential.
- ii. The number of seats in an election shall be shown by the system along with the list of all candidates election-wise who has made successful payment shall also be available before the BOS. BOS has to scrutinise the nominations rejecting the nominations which may be found to be invalid on account of their not being in conformity with the above requirements or under Regulation 23(c). Reason of rejection, if any shall have to be recorded by BOS.
- iii. BOS members as per quorum specified are to login simultaneously from a single machine in order to access the BOS dashboard.
- iv. In case of any discrepancy/ problem/ trouble reported to the BOS by any candidates regarding online payment, submission of nomination etc., the BOS must bring it to the notice the Administrator immediately in writing / email.

#### **L. Security**

- i. A voter can log in using his / her password generated by himself/ herself through the election portal and delivered to his / her mobile phone / e-mail as registered in the electoral roll. However, while casting the vote, a system generated One Time Password (OTP) shall be sent to his / her both mobile / e-mail as registered in the electoral roll. Voter has to use that OTP for casting his / her vote. The validity of the OTP shall be for five minutes only or till its first successful use whichever is earlier.
- ii. The election service provider is to provide the source code under sealed cover to the Secretary and Director General for the purpose of record and safe custody. The Source Code is not to be opened and is to be kept sealed.
- iii. Election Software Application has to be hosted in server with valid SSL Certificate.
- iv. In case any correction/ change required by the BOS due to wrong entry/change of schedule etc. a communication is to be sent by the Convenor, BOS to the Administrator i.e. the Secretary and Director General. On receipt of such request, the Administrator shall arrange for necessary corrections, if feasible.
- v. The software shall log out automatically if no activity takes place for 10 minutes. After automatic logging out, re-logging by all three BOS members to access the site is mandatory.

- vi. The election window shall open/close at midnight i.e. 2400 hours on the date specified and no voting would be possible after the closure.
- vii. The vote cast by a voter shall be encrypted and not available to anyone

#### **M. Electronic Intimation**

Following electronic intimation should be sent:

- i. Notice inviting nomination to the registered email id of the eligible corporate members as registered in the electoral roll. It would be sent through centralized gateway of email service provider upon receipt of the duly filled in format of the notice from respective BOS. This would be circulated at least 15 days in advance from the last date of submit of nomination.
- ii. Information about the start of e-voting to the both registered email or mobile of the eligible electronically reachable corporate members as per electoral roll. In case of members residing at abroad such information shall be sent by email only. This system generated information would be sent prior to the start date of the election but after the date specified for the withdrawal of nomination

#### **N. Login Credentials**

Members are required to generate their login credentials by themselves. For generation of login credentials, the member must be in the electoral roll, electronically reachable and required to visit election portal. An eligible voter or contestant visiting the Institution's website [www.ieindia.org](http://www.ieindia.org) will be guided to the election portal. The members can generate their credentials through the "Get Password" option using his membership no. (e.g. AM1498757, F-1258972, M-0025688 etc.). The Login credentials generated shall be delivered to both mobile and email id of the concerned member as registered in the electoral roll. In case of any members residing in abroad such information shall be sent by email only. The login credentials once generated by a member shall be valid for all subsequent login of the said election(s) cycle i.e. he/she can use the same credentials for submission of nomination, withdrawal of nomination, casting of vote etc.

Login credentials for BOS shall be sent by Administrator separately which is exclusively meant for BOS activity only.

#### **O. One time Password (OTP)**

The OTP shall be generated by the system as and when required in the software process in order to confirm the activity of an authenticated user. The OTP generated by the system shall be delivered to the mobile and/or email of the concerned user/member as registered in the electoral roll. In case of members residing at abroad such information shall be sent by email only. The validity of the OTP shall be for five minutes only or till its first successful use whichever is earlier.

#### **P. Re-election**

Re-conduct of an election shall be held following the same procedure as it was conducted previously. Following shall be adhered to –

- i. A fresh Board of Scrutineers (BOS) should be constituted for the re-conduct of any election. The newly constituted BOS should initiate the process from the beginning i.e. by inviting self-nomination.
- ii. The electoral roll as frozen on last 31 March prior to the re-election should be used in the re-election.
- iii. The candidates, who had already paid the earnest money in the same election, shall stand exempted from paying the same once again.



- iv. The candidates winning through the re-election process shall assume office forthwith. Their term of office shall be for the reminder period i.e. co-terminus with the Committee/ Council to which election is sought.

#### Q. Bio data

Bio-data (maximum 2000 character including spaces).shall be uploaded by the concerned nominated members and the Board of Scrutineers shall not be responsible for correctness or otherwise of such information. However, the BOS shall have the right to edit the biodata, if so desires and the decision of the BOS shall be full and final. This shall be available in public domain. It shall also be available for view to the voter while casting the vote on web.

#### R. Preservation of Result and Data

For election to Council under Bye-law 4(a)(iii), Bye-law 4(a)(iv), Regulation 3(a)(v) and Regulation 25, the papers need to be preserved till 30 days from the date of the Institution's AGM, where after they shall be destroyed. Similarly, details/ records of all the web voting shall be destroyed by the administrator.

#### S. Role of Honorary Secretary and Chairman of Centre

- i. The Chairman and the Honorary Secretary in the office and the Chairman elect and Honorary Secretary-elect shall not be members of the BOS.
- ii. No person shall be member of BOS for more than two consecutive elections.
- iii. The Chairman / Honorary Secretary of the Centre, without involving himself in operational activities of the BOS, shall oversee the functioning of the BOS to ensure that the procedure is not violated inadvertently.
- iv. In case the Chairman / Honorary Secretary himself is a candidate in any of the elections being conducted at the Centres of which he is the Chairman / Honorary Secretary and/or candidate(s) in the election to the Council from the Division Board, he should not be involved in any of the activities relating to the election process at the Centre. In such case, the State/Local Centre Committee may resolve to authorize an appropriate available non-candidate corporate member preferably past Chairman to oversee the functioning of the BOS without involving himself in operational activities of the BOS.

# 57<sup>th</sup> ENGINEERS' DAY

## Theme: Driving Sustainability with Engineering Solutions Embracing the Latest AI Driven Technologies

**September 15** is celebrated every year in the country since the year 1967 as "Engineers' Day" to commemorate the birthday of the legendary engineer Sir Mokshagundam Visvesvaraya. Sir Visvesvaraya, an eminent Indian engineer and statesman was born in a remote village of Karnataka, the State that is incidentally now the Hi-tech State of the country. Due to his outstanding contribution to the society, Government of India conferred "Bharat Ratna" on this legend in the year 1955. He was also called the precursor of economic planning in India. His learned discourse on Economic Planning in India, Planned Economy for India and Reconstructing India, was the first available document on the planning effort of the country and it is still held as the parent source matter for economic planners. A theme of national importance is chosen every year by the Council of the Institution and deliberated at its various State/Local Centres to educate the engineering fraternity in general and the society in particular. This year the 57<sup>th</sup> Engineers' Day will be celebrated all over the country on the theme "**Driving Sustainability with Engineering Solutions Embracing the Latest AI-driven Technologies**".



Bharat Ratna Sir M Visvesvaraya

The Institution of Engineers (India) will celebrate the 57th Engineers' Day on September 15, commemorating the 163rd birthday of Bharat Ratna Sir

Mokshagundam Visvesvaraya. This day not only honors his pioneering spirit but also serves as a tribute to engineers worldwide, whose innovations and dedication shape our modern world. This year's theme, "Driving Sustainability with Engineering Solutions Embracing the Latest AI-driven Technologies," underscores the pivotal role of engineering in solving global challenges.

AI is revolutionizing our journey towards sustainability. In the fight against climate change, AI enhances predictive models, enabling better preparation for extreme weather and optimizing renewable energy use. In agriculture, AI-driven analytics are transforming crop management, leading to higher yields and a smaller environmental footprint. Urban areas benefit immensely from AI-powered traffic systems that reduce congestion and emissions, while intelligent waste management systems ensure efficient recycling.

Furthermore, AI is the key to optimizing resource management, from water to manufacturing processes, ensuring maximum efficiency and minimal waste. These advancements highlight the profound impact AI has on creating sustainable solutions for a brighter future. The integration of AI interfaces in sustainable engineering solutions has unlocked new realms of innovation. AI-driven platforms enable real-time monitoring and analysis, providing engineers with critical insights for informed decision-making. From smart grids that balance energy loads to adaptive systems that respond to environmental changes, AI interfaces enhance the effectiveness of sustainable engineering practices.

The Institution of Engineers (India) calls upon all State and Local Centres and associated entities to celebrate Engineers' Day in a grand and befitting manner. Let us honour the innovative spirit and contributions of engineers who are driving sustainability through cutting-edge AI-driven technologies. Together, we can pave the way for a greener and more sustainable tomorrow. Join the movement, celebrate innovation, and be part of the change!



## Aerospace Engineering Division

Thirty-seventh National Convention of Aerospace Engineers on **"Innovation in Aerospace Engineering"**  
Ranchi, November 23-24, 2024  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO Doranda, Ranchi 834002 [☎: 0651-3510412, E-mail: jharkhandsc@ieindia.org; Website: ieijscjharkhand.org]

## Agricultural Engineering Division

All India Seminar on **"Advanced Technologies in Agriculture for Sustainable Development and its Applications"**  
Chennai, August 01-02, 2024  
The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 /9962950333, E-mail: tnscc@ieindia.org, Website : www.ieitnsc.org]

Thirty-sixth National Convention of Agricultural Engineers on **"Conservation and Management of Engineering inputs Farm Mechanization Agro Processing"**  
Raipur, August 29-30, 2024  
The Honorary Secretary, IEI, Chhattisgarh State Centre, National Institute of Technology Campus, G E Road, Raipur 492010 [☎: 0771-2254625, E-mail: chhattisgarhsc@ieindia.org, Website : www.ieicg.org]

## Architectural Engineering Division

Thirty-ninth National Convention of Architectural Engineers on **"Disaster Mitigative Architecture and Construction"**  
Shimla, October 26-27, 2024  
The Honorary Secretary, IEI, Himachal Pradesh State Centre, Victoria Place, Opposite Nigam Vihar, Shimla 171 002 [☎: 0177-2623736; E-mail: hpssc@ieindia.org; Website: http://hppei.org/home.html]

## Chemical Engineering Division

Thirty-ninth National Convention of Chemical Engineers on **"R&D Activities in Minerals and Metallurgical Industries for Today's Society"**  
Bhubaneswar, October 19-20, 2024  
The Honorary Secretary, IEI, Odisha State Centre, Engineers Bhawan, Institution of Engineers Square, Sachivalaya Marg, Unit-4, Bhubaneswar 751001, [☎: 0674-2390291, E-mail: odishasc@ieindia.org, Website: www.ieiorissa.org]

## Civil Engineering Division

Thirty-ninth National Convention of Civil Engineers on **"Exploring Emerging Trends in Civil Engineering"**  
Kochi, October 17-18, 2024  
The Honorary Secretary, IEI, Kochi Local Centre, IEI Bhavan, Government Homeo Hospital Road, Pullepady, PO: Kaloar, Kochi 682017 [☎: 0484-2403838 / 2403993, E-mail : kochilc@ieindia.org; Website : www.ieikochi.org]

## Electrical Engineering Division

All India Workshop on **"Hydrogen Fuel Cell Technologies Towards Green Transportation"**  
Kattankulathur, August 22-23, 2024  
The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology, Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamil Nadu 603203 [Email: kattankulathurc@ieindia.org]

All India Seminar on **"Fuzzy Logic Control, Control of Grid Integrated and WEC System"**  
Bhubaneswar, October 07-08, 2024  
The Honorary Secretary, IEI, Odisha State Centre, Engineers Bhawan, Institution of Engineers Square, Sachivalaya Marg, Unit-4, Bhubaneswar 751001, [☎: 0674-2390291, E-mail: odishasc@ieindia.org, Website: www.ieiorissa.org]

Thirty-ninth National Convention of Electrical Engineers on **"Green Hydrogen, Electric Vehicle and Energy Storage System"**  
Chennai, October 25-26, 2024  
The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 /9962950333, E-mail : tnscc@ieindia.org, Website : www.ieitnsc.org]

## Electronics & Telecommunication Engg Division

Thirty-ninth National Convention of Electronics & Telecommunication Engineers on **"Internet of Things (IoT)"**  
Delhi, October 05-06, 2024  
The Honorary Secretary, IEI, Delhi State Centre, Bahadur Shah Zafar Marg, New Delhi 110 002, [☎: 011-23379948/23370489; Fax: 011-23370489; Email: delhisc@ieindia.org; Website: https://www.ieidsc.in]

All India Seminar on **"Emerging Technologies for 5G/6G Wireless Communication using AI/ML"**  
Bhubaneswar, November 16-17, 2024  
The Honorary Secretary, IEI, Odisha State Centre, Engineers Bhawan, Institution of Engineers Square, Sachivalaya Marg, Unit-4, Bhubaneswar 751001, [☎: 0674-2390291, E-mail: odishasc@ieindia.org, Website: www.ieiorissa.org]

## Environmental Engineering Division

Thirty-eighth National Convention of Environmental Engineers on **"Change Yourself Not the Nature"**  
Kochi, August 23-24, 2024  
The Honorary Secretary, IEI, Kochi Local Centre, IEI Bhavan, Government Homeo Hospital Road, Pullepady, PO: Kaloar, Kochi 682017 [☎: 0484-2403838 / 2403993, E-mail : kochilc@ieindia.org; Website : www.ieikochi.org]

All India Seminar on **"Green Technology for Environmental Management"**  
Guwahati, September 21-22, 2024  
The Honorary Secretary, IEI, Assam State Centre, East Lane, Panbazar Overbridge, Panbazar,

Guwahati 781001 [☎: 0361-2548742, Mobile: 6026461095, E-mail: assamsc@ieindia.org, Website: www.ieiasc.org]

All India Seminar on **"Augmentation of Bio Ethanol & Bio-hydrogen from Organic Wastes"**  
Chennai, October 05-06, 2024  
The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 /9962950333, E-mail : tnscc@ieindia.org, Website : www.ieitnsc.org]

One Day Seminar on **"Industrialization and Mission LiFE IML 2024"**  
Rourkela, December 07, 2024  
The Honorary Secretary, IEI, Rourkela Local Centre, National Institute of Technology Campus, Roukela 769008, Odisha [☎: 0661-2472709, E-mail: rourkelalc@ieindia.org]

## Mechanical Engineering Division

All India Seminar on **"Emerging Trends in Digital Manufacturing using 3D Printing and Flexible Manufacturing System"**  
Ranchi, August 10-11, 2024  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO Doranda, Ranchi 834002 [☎: 0651-3510412, E-mail: jharkhandsc@ieindia.org; Website: ieijscjharkhand.org]

Thirty-ninth National Convention of Mechanical Engineers on **"Innovations in Mechanical Engineering, Sustainable Manufacturing Technologies, Design and Energy Systems"**  
Chandigarh, September 13-14, 2024  
The Honorary Secretary, IEI, Punjab and Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [☎: 0172-2775418, Fax: 0172-2540133, Email: pcsc@ieindia.org]

One Day Seminar on **"CNC Based Composite Structure and their Nonlinear Dynamic Analysis"**  
Rourkela, September 14, 2024.  
The Honorary Secretary, IEI, Rourkela Local Centre, National Institute of Technology Campus, Roukela 769008, Odisha [☎: 0661-2472709, E-mail: rourkelalc@ieindia.org]

All India Seminar on **"Material Efficiency in Clean Energy Transition"**  
Thiruvananthapuram, October 22-23, 2024  
The Honorary Secretary, IEI, Kerala State Centre, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram 605033 [☎: 0471-2322991, 8078027563; E-mail: keralasc@ieindia.org; Website: www.ieitvm.org]

International Conference on **"Advances in Foundry and Forming Technology"**  
Ranchi, November 18-19, 2024  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO Doranda, Ranchi 834002 [☎: 0651-3510412, E-mail: jharkhandsc@ieindia.org; Website: ieijscjharkhand.org]

Fortieth National Convention of Mechanical Engineers on **"Recent Advances in Mechanical Engineering"**  
Durgapur, August 23-24, 2025  
The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B Zone, Durgapur 713 205 [ Fax:



0343-2564770, Email: [durgapurlc@ieindia.org](mailto:durgapurlc@ieindia.org),  
Website: <http://www.ieidurgapurlc.org>

#### Forty-first National Convention of Mechanical Engineers on "Emerging Domains in Robotics and AI"

Thiruvananthapuram, September 23-24, 2026  
The Honorary Secretary, IEI, Kerala State Centre, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram 605033 [☎: 0471-2322991, 8078027563; E-mail: [keralasc@ieindia.org](mailto:keralasc@ieindia.org); Website: [www.ieitvm.org](http://www.ieitvm.org)]

#### Forty-second National Convention of Mechanical Engineers on "AI and ML: Bridging Innovation & Shaping Tomorrow's Industries"

Belapur, September 17-18, 2027  
The Honorary Secretary, IEI, Navi Mumbai Local Centre, Plot No.106, Sector 15, C.B.D Belapur, Navi Mumbai 400614 [☎: 022-49706724, E-mail: [navimumbailc@ieindia.org](mailto:navimumbailc@ieindia.org); Website: [www.ieinmlc.org](http://www.ieinmlc.org)]

#### Metallurgical & Materials Engg. Division

##### One Day Workshop on "Powder Metallurgy and Smart Materials"

Rourkela, August 02, 2024  
The Honorary Secretary, IEI, Rourkela Local Centre, National Institute of Technology Campus, Rourkela 769008, Odisha [☎: 0661-2472709, E-mail: [rourkelalc@ieindia.org](mailto:rourkelalc@ieindia.org)]

##### All India Workshop on "Recent Trend In Materials and Manufacturing Processes"

Tiruchirappalli, October 18-19, 2024  
The Honorary Secretary, IEI, Tiruchirappalli Local Centre, Einstein College of Engineering, Sir C V Raman Nagar, Seethaparanallur, Tirunelveli 627012 [☎: 0462-2487111, Fax: 0462-2487112, Mobile : 9489903804, E-mail : [tirunelvelilc@ieindia.org](mailto:tirunelvelilc@ieindia.org), Web: [www.ieitylc.com](http://www.ieitylc.com)]

#### Thirty-seventh National Convention of Metallurgical & Materials Engineers on "Modern Steel Manufacturing Process"

Chennai, December 06-07, 2024  
The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 /9962950333, E-mail : [tncsc@ieindia.org](mailto:tncsc@ieindia.org), Website : [www.ieitnsc.org](http://www.ieitnsc.org)]

##### One Day Seminar on " Present future scenario of Nano Technology in field of Engineering Materials Agricultural Medical Sc"

Patna, November 10, 2024  
The Honorary Secretary, IEI, Bihar State Centre, 1942, Kranti Marg (Hardinge Road), R-Block, Chauraha (near Petrol Pump), Patna 800001 [☎: 0612-2222639 / 2330544, E-mail: [biharsc@ieindia.org](mailto:biharsc@ieindia.org), Website: [www.ieibihar.org](http://www.ieibihar.org)]

#### Mining Engineering Division

##### All India Seminar on "Mining 4.0 Technology Vision for Safe Smart and Sustainable 3S Mining"

Ranchi, October 26-27, 2024  
The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO Doranda, Ranchi 834002 [☎: 0651-3510412, E-mail: [jharkhandsc@ieindia.org](mailto:jharkhandsc@ieindia.org); Website: [ieijscjharkhand.org](http://ieijscjharkhand.org)]

#### Production Engineering Division

##### One Day Seminar on the "Recent Developments and Challenges Associated with Wire Arc Additive Manufacturing (WAAM)"

Coimbatore, August 16, 2024  
The Honorary Secretary, IEI, Coimbatore Local Centre, PSG College of Technology Campus, Peelamedu, Coimbatore 641 004 [☎: 0422- 2580733; Email: [coimbatorelc@ieindia.org](mailto:coimbatorelc@ieindia.org); Website: <https://www.ieicoimbatore.org>]

##### All India Seminar on "Innovations in Green Sustainable Production Practices for Futuristic Industries"

Hyderabad, November 22-23 2024  
The Honorary Secretary, IEI, Telangana State Centre, 6-2-910, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana, Ph: 040-23314969, E-mail: [telanganasc@ieindia.org](mailto:telanganasc@ieindia.org)

#### Textile Engineering Division

##### All India Seminar on "Technical Textiles: A Transformative Force for the Challenges in Agricultural Health Care and Construction Sector"

Bhubaneswar, August 24-25, 2024  
The Honorary Secretary, IEI, Odisha State Centre, Engineers Bhawan, Institution of Engineers Square, Sachivalaya Marg, Unit-4, Bhubaneswar 751001, [☎: 0674-2390291, E-mail: [odishasc@ieindia.org](mailto:odishasc@ieindia.org), Website: [www.ieiorissa.org](http://www.ieiorissa.org)]

##### Thirty-seventh National Convention of Textile Engineers on "Quality Profitability and Sustainability in Textiles"

Indore, September 28-29, 2024  
The Honorary Secretary, IEI, Indore Local Centre, SGSITS Campus, 23, Sir M Visvesvaraya Marg, (Park Road), Indore 452003 [E -mail: [indorelc@ieindia.org](mailto:indorelc@ieindia.org)]

##### One Day Seminar on "The Role of Textiles in Future Space Travel"

Chennai, November 16, 2024  
The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 /9962950333, E-mail : [tncsc@ieindia.org](mailto:tncsc@ieindia.org), Website : [www.ieitnsc.org](http://www.ieitnsc.org)]

#### Interdisciplinary Co-ordination Committee

##### International Conference on "Frontiers of Progress and Developments in Technology, Management and Healthcare"

Jabalpur, September 27-28, 2024  
The Honorary Secretary, IEI, Vishvesvaraya Marg, South Civil Lines, In front of Old RTO Office, Jabalpur 482001 [☎: 0761-2678929, E-mail: [jabalpurlc@ieindia.org](mailto:jabalpurlc@ieindia.org)]

## Air Ticketing through Travel Agent

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## IEI Celebrates

## World Telecommunication and Information Society Day 2024

Contd. from page 14

students. Chief Guest of the event, Er Remesh Kuruppath, Cofounder and MD, Jaldee Soft Private Limited, Thrissur emphasized the need for achieving sustainability in digital sector by developing generic and universally adaptable platforms. Dr Shibly Joseph, Professor, Computer Science and Engineering Department, Government Engineering College, Thrissur also addressed the audience on the occasion. Er Kumar P R, Honorary Secretary, Trichur Local Centre was present on the occasion.

### Varanasi

On 17 May 2024, Varanasi Local Centre, IEI observed World Telecommunication & Information Society Day 2024 at Varanasi. Prof (Dr) S N Upadhyay, Former Chairman, Varanasi Local Centre, IEI presided over the function. He welcomed the Expert Speakers, Dr Atul Kumar, Assistant

Professor, Department of Electronics Engineering, IIT BHU Varanasi and Dr Om Jee Pandey, Assistant Professor, Department of Electronics Engineering, IIT BHU Varanasi. In his welcome address, Prof Upadhyay mentioned that all the engineers are expected to carry out their professional activities in an friendly and sustainable manner to avoid adverse environmental impacts. Dr Atul Kumar delivered lecture on the topic 'Evolution of Telecommunication from Classical to Quantum' and highlighted the historical development of telecommunication as well as the possible future developments. Dr Pandey delivered lecture on 'Small – World Models for IoT Applications' and highlighted the recent development in the area of IoT and its expanding domain citing his own research activities in this area. At the end, Er Rahul Mourya, Honorary Secretary, Varanasi Local Centre, IEI proposed the vote of thanks.



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

Kolkata, December 20-22, 2024

**Theme: Irresistible India - a Global Engineering Powerhouse**



Organized by

**The Institution of Engineers (India)**

Hosted by: **West Bengal State Centre**

For details visit: [www.39iec.org](http://www.39iec.org)



## Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)  
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ISO/IEC 17025:2017 Certified, AICTE & CEA Recognized Institution)

### Continuing Professional Development Programmes (CPDPs) for the Month of August 2024

Sl. No.	Name of the Course	Scheduled Dates
1.	E-Waste Management-Issues, Collection and Disposal Mechanism	01 - 02 Aug 24
2.	Testing of Civil Engineering Materials	05 - 09 Aug 24
3.	3D Printing in Manufacturing	05 - 08 Aug 24
4.	Advance Excel for Report Generation & Analytics	05 - 07 Aug 24
5.	Linux Server (RHEL8) Administration	05 - 09 Aug 24
6.	Structural Safety of Existing Dams - Evaluation and Impacts	05 - 09 Aug 24
7.	Hands on Training on Advanced & Basic Excel (major focus towards Data Visualization)	06 - 08 Aug 24
8.	Maintenance and Troubleshooting of Hydraulics and Pneumatics Systems	06 - 09 Aug 24
9.	Operation, Maintenance & Testing of Power Transformers and HT Circuit Breakers	06 - 09 Aug 24
10.	Application of Bio-Engineering Technologies for Wastewater Treatment in Nalas, Drains, and Canals	07 - 09 Aug 24
11.	Promotion of Electrical Safety, Energy & Safety Audit in Mining Projects	07 - 09 Aug 24
12.	Artificial Intelligence and Machine Learning for Predictive maintenance, and Process automation in Process Industries	12 - 14 Aug 24
13.	Total Quality in Purchase Process Including ERP & e-Procurement)	12 - 14 Aug 24
14.	IT Enabled Applications in Water Supply and Sewerage Projects.	19 - 22 Aug 24
15.	Trends in Blasting in Opencast Mines to Mitigate Undesirable Effects	19 - 21 Aug 24
16.	Automation in Micro Irrigation Systems for improving Irrigation Efficiency	19 - 23 Aug 24
17.	Engineering Design using AutoCAD (Mechanical)	20 - 23 Aug 24
18.	Strategic Management for Scientists and Engineers	20 - 23 Aug 24
19.	Climate Change, Public Policy and Governance for Mitigation & Adaptation	21 - 23 Aug 24
20.	Solar Energy Storage Battery Maintenance and Related Issues	21 - 23 Aug 24
21.	Statistical Quality Control and Statistical Process Control	21 - 23 Aug 24
22.	Working with BOSS Linux & Libre Office	26 - 28 Aug 24
23.	Cyber Security & Digital Forensic Tools	26 - 30 Aug 24
24.	Corrosion Engineering, Advanced Materials for Corrosion Resistance Coatings and Emerging Applications	27 - 30 Aug 24
25.	Executive Development Programme on Strategic Management for Critical	28 - 30 Aug 24
26.	Distribution Automation & SCADA	28 - 30 Aug 24

For detail information please contact:

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