



# IEI NEWS

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A CENTURY OF SERVICE TO THE NATION

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## Fourth National Quality Convention 2025

### Driving a National Quality Movement for Resilient and Sustainable Growth



The Safety and Quality Forum (SQF) of The Institution of Engineers (India), in collaboration with the Sustainable Development Forum (SDF) and Bihar State Centre, IEI organized the Fourth National Quality Convention during 19–20 April 2025 on the theme **Driving a National Quality Movement for Resilient & Sustainable Growth** at Patna Taramandal [Planetarium], Indira Gandhi Science Complex, Patna. Dr M K Sinha, Chairman, Central Water Commission graced the inaugural function as the Chief Guest. The Convention drew a number of delegates from various sectors including industry, academia and policymaking. The objective was to promote quality as a foundational pillar for sustainable national development.

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

### Making AI Less Thirsty



The rapid evolution of Artificial Intelligence (AI) has redefined how we live, learn, work, and interact with the world. As engineers, we celebrate this progress. Yet, as stewards of sustainable development, we must also acknowledge the growing ecological footprint of digital technologies. One of the most pressing, yet under-recognised, concerns is AI's enormous water consumption.

Recent studies have revealed that training large language models such as GPT-3 consumes hundreds of thousands of litres of purified water. As AI continues to scale—powering smart cities, autonomous vehicles, climate prediction tools, and virtual assistants—its thirst will only grow. It is estimated that by 2027, AI-related data centres could consume up to 6.6 billion cubic metres of water annually. This figure is alarming in the backdrop of a world where billions already face water scarcity. India, too, is experiencing a severe water crisis. Groundwater levels are plummeting. Urban populations in cities like Bengaluru and Chennai rely heavily on tanker water, and rural communities often struggle to access even the bare minimum. Water-related disputes are rising, some even turning violent. As engineers and professionals dedicated to public welfare, we must act decisively and innovatively.

This is where engineering leadership becomes vital. While AI contributes to water stress, it also holds the key to mitigation. Smart irrigation systems, AI-driven leak detection, and intelligent water grid management can collectively save billions of litres annually. With nearly 90% of our water used in agriculture, even modest improvements in irrigation efficiency can have transformative impacts.

At The Institution of Engineers (India), we are committed to promoting responsible engineering practices. Through our forums, training, and collaborations, we must now explore how to make AI and digital infrastructure more water-efficient. This includes advocating for regulatory frameworks, adopting green computing practices, and encouraging research on water-efficient cooling technologies.

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## International Conference under the aegis of Mechanical Engineering Division Board

### Advances in Foundry and Forming Technology (ICAFFT 2024)



**Jharkhand State Centre**, IEI, in collaboration with National Institute of Advanced Manufacturing Technology [NIAMT], Ranchi, organized an International Conference on **Advances in Foundry and Forming Technology (ICAFFT 2024)** during 18-19 December, 2024, under the aegis of Mechanical Engineering Division Board [MCDB], IEI at NIAMT Ranchi. The Conference aimed to bring together thought leaders from academia, industry and policy-making bodies to discuss current advancements and emerging challenges in the domains of metal casting, forming and digital manufacturing technologies. The two-

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# Driving a National Quality Movement for Resilient and Sustainable Growth

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The inaugural session commenced with the traditional lighting of the lamp. Er Ajoy Kumar Sinha, Chairman, Board of Governors-Sustainable Development Forum [BOG-SDF], IEI, delivered the welcome address. He highlighted the critical role of engineers in achieving sustainable development and emphasized the collaborative spirit of the organizing forums. Er Jagdish Chand Singhal, Chairman, BOG-SQF, IEI, in his Convention address, spoke about the Forum's mission and its growing efforts to promote a national culture of quality and resilience in all sectors of development. Er Praveen Kumar Singh, Director, SQF, IEI, provided a structured Convention overview, outlining the event's objectives, technical agenda, expected outcomes and contributions toward national development policies.

Er VB Singh, President, IEI, in his Presidential Address invoked India's civilization ethos of 'Quality in Work is True Service' and underscored the ethical and strategic necessity of embedding quality principles in national projects. Chief Guest of the session, Dr M K Sinha, delivered an impactful Keynote address on the role of water infrastructure in driving sustainability. He spoke on the integration of quality within water infrastructure projects to promote sustainability, resilience and inclusive growth. He emphasized climate-adaptive engineering and commended the SQF for its foresight.

The Quality Innovation Award 2025 was conferred upon five exemplary organizations namely, GAIL (India) Limited, Chhainsa Compressor Station; HCC VCCL JV, DMRC DC-06 Project; Patel Engineering Ltd, Jogeshwari (West), Mumbai; IRCON International Limited, New Delhi and SIGMA ONE SOLUTIONS, Pantnagar, Uttarakhand. A souvenir encapsulating technical papers, case studies and messages from dignitaries was officially released during the inaugural session. Er Jai Prakash Narayan, Chairman, Bihar State Centre, IEI, proposed the vote of thanks at the end of the inaugural session, recognizing the contributions of all dignitaries, speakers, organizers and delegates.

The Convention featured four high-impact technical sessions focused on the integration of quality in strategic sectors. The first technical session commenced on the topic 'Fostering Quality and Innovation for Industrial

and Economic Growth', chaired by Er Sanjay Sen, Council Member, IEI and co-chaired by Prof (Dr) N S Maurya, Department of Civil Engineering, NIT Patna. The session explored the best practices and tools for achieving operational excellence in manufacturing and industrial sectors. The second technical session on the topic 'Driving EHS through Quality Framework', was chaired by Er P Balakrishnan Nair, Chairman, Kerala State Centre and Council Member, IEI and co-chaired by Er Mahesh Barkataki, Chairman, Assam State Centre and Council Member, IEI. The session highlighted the frameworks for integrating safety, health and environmental quality into organizational systems. The third technical session themed as 'Leveraging Quality through Digital Transformation', was chaired by Er Kishore Kumar, Member, BOG-SDF, IEI and co-chaired by Er Parashuram Singh, Member, BOG-SDF, IEI. The session focussed on applications of AI, data analytics and digital tools in ensuring quality across industrial ecosystems. The fourth technical session commenced on the topic 'Embedding Quality in Sustainable Infrastructure Development', which was chaired by Dr N Sivasubramanian, Former CGM, ISRO and Co-chaired by Dr Barma Ganguli, Assistant Professor, BIPFP. During the session, a discussion was held on the development of resilient infrastructure strategies for urban and rural sectors through policy and technical innovations. Over 15 invited lectures and paper presentations were conducted across these sessions, spanning topics like AI in quality assurance, circular economy, quality in public governance and more.

In the Valedictory session on 20 April 2025, Shri Deepak Kumar Singh, IAS, Additional Chief Secretary, Rural Works Department, Government of Bihar graced the function as the Chief Guest. Dr Satyajit Kumar Singh, Immediate Past Chairman, CII Patna graced the occasion as the Guest of Honour. Maj Gen (Dr) MJS Syali, VSM (Retd), Secretary & Director General, IEI was present on the dais as the Special Guest. Er Shivanand Roy, Past President, IEI presided over the function. The welcome address delivered by Er Jay Prakash Narayan followed by an address from Er Jagdish Chand Singhal. Er Kishore Kumar, summed up the proceedings of deliberation. The vote of thanks was delivered by Er Neel Mani Rangesh, Honorary Secretary, Bihar State Centre, IEI.

## All India Workshop under the aegis of Computer Engineering Division Board

# Skill Development in Complex Project Management Using Jira and Confluence

**Rourkela Local Centre**, IEI, in association with Mahatma Gandhi Institute of Technology [MGIT], Hyderabad organized an All India Workshop on the theme **Skill Development in Complex Project Management Using Jira and Confluence** during 04-05 January, 2025, under the aegis of Computer Engineering Division Board [CPDB], IEI at Rourkela. The Workshop aimed to enhance participants' skills in managing complex projects using advanced tools like Jira and Confluence.

Chief Guest of the Workshop, Er Sudip Pal Chowdhury, Executive Director (Projects), SAIL, Rourkela Steel Plant, emphasized the critical role of Jira and Confluence in improving project management efficiency. He highlighted how Jira is excellent for planning and tracking project work, while Confluence organizes ideas, content and files, supporting collaborative work.

The welcome address was delivered by Er Santosh Kumar Polaki, Chairman, Rourkela Local Centre, IEI. He spoke about the importance of integrating Confluence and Jira for efficient project management and introduced the

theme of the Workshop. Convener of the Workshop, Er Kailash Chandra Behera, Certified Project Management Professional, PMI, USA briefed the audience about the Workshop theme. He explained the relevance of the tools in complex project management. He delivered two Keynote speeches titled 'Manage Projects Using Jira and Confluence' and 'Manage Projects Using Jira and Confluence in Various Applications'. A Souvenir was released on the occasion. Dr Ajit Behera, Honorary Secretary, Rourkela Local Centre, delivered the vote of thanks at the end of inaugural session.



Dr Ashutosh Pattanaik, Faculty of Engineering & Technology, JAIN (Deemed-to-be) University, Bengaluru, delivered lecture on 'Complex Project Management and Application'. Dr Asit Behera, Assistant Professor, School of Mechanical Engineering, KIIT University, presented on 'Complex Project Management in Engineering'. Dr K N Barik, Department of Chemical Engineering, Indira Gandhi Institute of Technology Sarang, discussed on 'Jira and Confluence in Various Applications'. Dr Ajit Behera, Department of Metallurgical &

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## Frontiers of Progress and Developments in Technology, Management and Healthcare in the Modern Era

**Jabalpur Local Centre**, IEI, in collaboration with Shri Ram Group, Jabalpur, organized an International Conference on the theme **Frontiers of Progress and Developments in Technology, Management and Healthcare in the Modern Era** during 27-28 September, 2024, under the aegis of Interdisciplinary Coordination Committee [ICC], IEI at Shri Ram Institute of Technology [SRIT], Jabalpur in hybrid mode. The Conference brought together renowned experts, academicians, industrialists, professionals and students from various domains to deliberate on the latest technological advancements and their impact on society. Dr Sudhir Mishra, DRDO Chair (Prof S. Bhagavantham), DRDO HQ, New Delhi, Former Distinguished Scientist & Director General (BrahMos), DRDO, Ex CEO & MD, BrahMos Aerospace, graced the inaugural function as the Chief Guest. Dr S P Vyas, UGC-BSR Faculty Fellow and Professor, Department of Pharmacy, Dr Harisingh Gour University, Sagar, MP, served as the Guest of Honour.



The Inaugural Session commenced with the welcome address delivered by Er Sanjay Kumar Mehta, Chairman, Jabalpur Local Centre, IEI. He formally welcomed the Chief Guest, Guest of Honour, dignitaries, participants and all delegates and emphasized the importance of collaboration between academia and industry. Dr L K Patel, Group Director, SRIT, Jabalpur, Dr Y M Dubey, Director, SRIT Jabalpur and Er Rakesh Kumar Rathore, Council Member, IEI were present on the dais and addressed the august audience.

Chief Guest of the function, Dr Sudhir Mishra delivered a presentation on Developments in UAV Technologies, highlighted the application of AI-driven drones in defence, agriculture, infrastructure and last-mile delivery. He emphasized the strategic role of UAVs in national defence and economic sectors. Guest of Honour, Dr S P Vyas in his address mentioned the application of engineering and technology from ancient times. A Technical Proceedings was released on the occasion in the august presence of dignitaries on the dais.

Mr Manish Kumar Gupta, Sr Technology Architect, and Community Leader – Integration Cluster, Capgemini Netherlands, delivered Keynote address on the occasion. Dr Shakti Koshta, Founder and CEO, CEEIAT, California, USA delivered Keynote address on the topic 'Technology Trends 2024-2030'. Mr Siva Shanmugam V, Country & Delivery Head, Finzly, Pune delivered Keynote lecture on the topic 'Importance of Banking'. Mr Bharathkumar Mayakrishnan, Head of HR, Finzly, Pune delivered Keynote address on the topic 'Navigating Talent Management in the Modern Era'. Mr Ankur Tiwari, Backend Developer, Hilti Group, Germany delivered Keynote address on the

topic 'Bridging Academic and Industry: Aligning Education with Evolving Market Needs'. Mr Victor Sundararaj, Associate Vice President, Head of Infosys Education – Americas, Head of Infosys Engineering Academy – Chief Mentor Infosys Springboard, Bengaluru delivered Keynote address on the topic 'Advances in Education, Learning and Development – Industry Perspectives in the era of AI'. Mr Sahil Nayar, HR Leader and Influencer, Mumbai delivered Keynote lecture on the topic 'Cracking the Campus Interviews'.

Mr Chandra Prakash Tiwari, Operations Director, Nokia Cloud and Cognitive Services, UAE delivered a State-of-the-Art Lecture on 'Future of Telecommunication'. Dr Neeraj Rao, VNIT, Nagpur delivered an Invited lecture on the topic 'Introduction to Non-destructive Evaluation using Microwaves and its Potential for Future Applications'. Dr Rajesh Gupta, VNIT, Nagpur delivered an Invited lecture on the topic 'Recent Developments in the Optimization Technologies'.

Further, during the technical sessions, papers were presented on Critical Infrastructure with AI based Fraud Analysis; Enhancing Privacy in Machine Learning; Automated Traffic Signal Control based on Real-Time Object Count Detection; Exploring the Role of Acetylcholine Esterase Inhibitors in Management of Alzheimer's Disease' etc.

A technical exhibition was inaugurated on the first day, showcasing innovations by students, research groups and industry. The technical sessions comprised oral and poster presentations across technology, healthcare and management domains. Topics included AI, telecommunication, renewable energy, cyber security, structural design, neural networks and VR/AR in healthcare.

During the valedictory function, Mr Victor Sundararaj, Associate Vice President, Head of Infosys Education - Americas, Head of Infosys Engineering Academy and Chief Mentor, Infosys Springboard, Bengaluru graced the occasion as the Chief Guest. Mr Sahil Nayar, HR Leader and Influencer, Mumbai was the Guest of Honour. Dr Indra Kumar Khanna, Committee Member, Jabalpur Local Centre, IEI, presented a detailed report of the two-day conference. Dr Y M Dubey, Convener, offered remarks on the success and relevance of the conference. Er Surendra Singh Pawar, Organising Secretary, delivered the vote of thanks, acknowledging the contributions of all participants, organizers and sponsors. Recommendations emanating from the two-day deliberations are as follows.

- *The risks and problems associated with IoT devices are one of the most significant aspects, need to be addressed.*
- *A thorough analysis of recent advancements in energy storage and management systems across various applications, including renewable energy integration, microgrid operation, and hybrid energy systems is the need of the hour.*
- *The importance of various control strategies in energy management systems, including PID, MPC, AI-based controllers, FLC, and hybrid*

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

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Technology companies have pledged to become 'water positive' by 2030, aiming to restore more water than they consume. Let us, as India's premier engineering institution, support and accelerate such initiatives in our national context. Our collective voice must call for accountability, innovation, and a shift in mindset—from abundance to sustainability.

Let us reimagine a future where AI not only solves problems but does so responsibly—where intelligence is not only artificial but also aware, efficient, and empathetic. The challenge is immense, but so is our capacity to engineer a better tomorrow.

## Frontiers of Progress and Developments in Technology, Management and Healthcare in the Modern Era

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approaches need to be explored further. Each strategy has its strengths and is suited to specific applications, depending on system complexity, variability, and uncertainty. PID controllers are effective for simple, well-defined systems, while MPC and AI-based controllers excel in dynamic environments with multiple interacting variables.

- *Neural Network Controllers offer significant potential for enhancing voltage stability in modern power systems, particularly with high renewable energy penetration. Despite notable advancements, addressing challenges related to data, computation, and integration will be essential for the successful deployment of these technologies. Continued research and development in this field are necessary to overcome current limitations and fully realize the benefits of neural network-based control strategies.*
- *Design, development and implementation of a Neural Network controller is required to detect faults in a solar microgrid system. The microgrid, which includes a Maximum Power Point Tracking (MPPT) system, a Buck converter, and various loads, aims to optimize the efficiency and reliability of solar energy utilization. By employing artificial intelligence, the Neural Network controller is capable of real-*

*time fault detection and diagnosis, significantly enhancing the system's operational stability and safety. Developed in MATLAB Simulink, the controller demonstrates high accuracy in identifying different types of faults, thereby minimizing disruptions and ensuring continuous power supply.*

- *Among the array of emerging technologies, virtual reality (VR) and augmented reality (AR) have emerged as powerful tools with the potential to reshape medical practices and enhance patient experiences. Virtual reality simulations provide a realistic, risk-free environment for surgeons to practice complex procedures, while AR overlays real-time data during surgeries for enhanced precision. These technologies also benefit patients by providing interactive, visual representations of medical conditions, facilitating better understanding and informed decision-making about their healthcare. VR therapy is emerging as an effective treatment for mental health conditions like post-traumatic stress disorder and anxiety disorders, offering tailored immersive environments for exposure therapy. While the potential of VR and AR in healthcare is vast, challenges such as cost, technical complexity, and standardization hurdles must be navigated.*

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## Advances in Foundry and Forming Technology (ICAFFT 2024)

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day event comprised 12 sessions, featuring 25 invited guests & speakers and 31 technical paper presentations, along with networking opportunities. Shri Santosh Kumar Gangwar, Hon'ble Governor of Jharkhand graced the function as the Chief Guest. Shri Arun Kumar Jha, Hon'ble Chancellor, NIAMT Ranchi was present on the dais as the Guest of Honour.

The inaugural session began with the welcome address delivered by Dr Mahesh Kumar Gupta, Chairman, Jharkhand State Centre, IEI. Prof Partha Protim Chattopadhyay, Director, NIAMT Ranchi, also welcomed the guests and dignitaries. They emphasized the significance of ICAFFT 2024 in fostering dialogue on Industry 4.0, sustainable processes and smart manufacturing. Prof Chattopadhyay underlined NIAMT's commitment to bridging academia and industry for national progress in advanced manufacturing.

Chief Guest, Shri Santosh Kumar Gangwar, Hon'ble Governor of Jharkhand, delivered an inspiring address on the importance of innovation, sustainability and industrial research in transforming India's manufacturing landscape. He applauded the organizers and highlighted the strategic importance of such academic-industry collaborations. Guest of Honour, Shri Arun Kumar Jha, Hon'ble Chancellor, NIAMT Ranchi emphasized the role of NIAMT as a leading institute driving manufacturing excellence. He encouraged participants to contribute actively towards the development of indigenous technologies and workforce skill enhancement. A souvenir was released on the occasion.

The Keynote addresses were delivered by prominent leaders in academia and industry namely Prof D K Singh, Vice Chancellor, Jharkhand University of Technology, Dr Suvrokanal Dutta, Political, Economic & Foreign Policy Expert and Shri Sham Arjunwadkar, Former Chairman, Board of Governors, NIAMT Ranchi. These addresses touched on key policy-level challenges and opportunities in manufacturing, integration of global trends with local industries and the need for rapid adoption of digital technologies and AI/ML in the manufacturing sector.

Technical Sessions were organised on the sub-topics; Advanced Foundry and Casting Processes, Forging and Forming Processes, Advances in Smart Materials and Testing Technologies, Metal Solidification, Deformation,

Tooling and Methoding, Composite Materials, and Machining Techniques, Advanced Casting and Joining Process, Advancements in Precision Machining and Sustainable Material Processing, Sheet Metal Forming and Casting, Automation and Digital Twin in Manufacturing, Innovation in Additive Manufacturing and Bioengineering. A panel discussion was also organised on 'Future Trends and Challenges in Foundry and Forge Industry'.

Various other lectures on 'Advances in Metal Casting and Foundry', 'Forging, Forming, and Deformation Processes', 'Smart Materials and Process Technology', 'Automation and Digital Manufacturing' and 'Additive Manufacturing and Advanced Machining', Optimizing Inclusion Removal and Flow Dynamics in Continuous Casting Tundishes with Multi-Hole Ceramic Filters, Reverse Cladding: A Novel Approach to Produce Components with Integrated Cladding through Casting, Machinability study and optimization of EDM process parameters for AA7050-B4C-T6 Composite using Grey Taguchi Method, Effect of Cooling Conditions on Developing Ultra-High Strength Micro Alloyed Steel for Railway Applications, Analysis and Multi-objective Optimization of Incremental Sheet Forming of Aluminium Alloy Sheet using Machine Learning Techniques etc. were thoroughly discussed during the Conference.

For further details of the technical sessions, kindly refer the link

<https://shorturl.at/PTTNO>

During the valedictory function, Dr Himanshu Khandelwal, Convenor, ICAFFT 2024, Prof Manoj Kumar, Secretary, ICAFFT 2024, Er Harun Ansari, Honorary Secretary, Jharkhand State Centre, IEI, Dr Vineet Chuk, Co-Convenor ICAFFT 2024 and Er M R Kumar, Organising Secretary of the event extended gratitude to all stakeholders, speakers and volunteers. Dr Khandelwal, in his address, expressed optimism for future collaborations and reiterated the role of such platforms in national development.

ICAFFT 2024 emerged as a premier forum for discussing advances in foundry and forming technology. The seminar successfully bridged academic research with industrial needs, promoted sustainable manufacturing and encouraged dialogue on digital transformation. With its diverse participation, cutting-edge content and excellent organization, ICAFFT 2024 reinforced India's leadership in forging innovation in manufacturing technology.

## Building a Greener Future: Modern Construction Practices for Sustainability

Faridabad Local Centre, IEI, in association with the Department of Civil Engineering, Manav Rachna International Institute of Research & Studies, [MRIIRS] Faridabad, Haryana organized an All India Seminar on the theme **Building a Greener Future: Modern Construction Practices for Sustainability** during 08-09 April, 2025, under the aegis of Civil Engineering Division Board [CVDB], IEI at Manav Rachna International Institute of Research & Studies, Faridabad. The objective of this seminar was to bring together researchers, academicians, industry experts and students to



explore cutting-edge advancements in sustainable construction practices. The seminar was divided into four technical sessions, covering sub-themes such as Innovative Sustainable Building Materials, Energy-Efficient Construction Techniques, Green Building Certifications, Digital Innovations for Sustainable Construction, Water Conservation and Circular Economy in Construction.

The inaugural session began with the welcome address delivered by Er Inderdeep Singh Oberoi, Chairman, Faridabad Local Centre, IEI. Prof (Dr) Senthil Vadivel T, Head, Department of Civil Engineering, SET, MRIIRS briefed

the audience about the theme of the seminar. Dr P N Ojha, Joint Director & Head, CDR, National Council for Cement and Building Materials, Faridabad, graced the occasion as the Chief Guest and Keynote Speaker. Dr Ojha discussed the emerging applications of sustainable materials in sustainable cement manufacturing. A souvenir was released on the occasion. Er Varun Jay Rana, Chief Operating Officer, YOGIJI DIGI Private Limited and Prof (Dr) Pardeep Kumar, Pro Vice Chancellor and Dean, School of Engineering and Technology, MRIIRS were present on the dais and expressed their views on the theme. Prof Pradeep Kumar, Faridabad Local Centre, IEI presented the vote of thanks.

Er Aman Sehgal, Regional Head, Technical, UltraTech Cements Limited in his Keynote lecture enlightened the audience about the role of UltraTech Cement in making sustainable cement and concrete composites. Er Rakshit Kumar, Manager (Civil), Transmission Line Design, Tata Consulting Engineers, in his Keynote address, discussed the initiatives taken by Tata Group in sustainable construction practices. Dr Sanjay Mundra, General Manager, National Council for Cement and Building Materials, Faridabad in his keynote lecture discussed the sustainability aspects of concrete materials and how the addition of sustainable materials affects the properties of concrete composites. For further details of the technical session, please refer the link

<https://shorturl.at/WYvDK>

During the valedictory session, Dr Sanjay Mundra graced the occasion as the Chief Guest. Er Inderdeep Singh Oberoi, summarized the seminar's outcomes and the key contributions made by the Keynote speakers and emphasized that sustainability is central to future development. Prof (Dr) Geeta Nijhawan, Associate Dean, SET, MRIIRS discussed the importance of sustainability in modern construction practices. Prof (Dr) Senthil Vadivel T, summed up the proceedings of deliberations. Prof Pradeep Kumar, Honorary Secretary, Faridabad Local Centre, IEI proposed the vote of thanks.

## Emerging Trends in Engineering and Technology: Shaping the Future of Innovation

Pune Local Centre, IEI organized an All India Seminar on the theme **Emerging Trends in Engineering and Technology : Shaping the Future of Innovation** on 19-20 March, 2025, under the aegis of Interdisciplinary Coordination Committee (ICC), IEI at Pune. The Seminar aimed to provide



a platform for experts, researchers, academicians and students to discuss and explore the latest advancements in engineering and technology.

The Inaugural Session began with a welcome address delivered by Er Vasant Dattatraya Pandarkar, Chairman, Pune Local Centre, IEI. Dr Nilesh Uke, Principal and Professor, Indira College of Engineering and Management, Pune graced the inaugural session as the Chief Guest and delivered a keynote address on the topic 'Innovation, Inventions and the Generation of Innovation from Everyday Ideas' and emphasized the importance of

cultivating curiosity and creativity to drive innovation. He also discussed email security and the significance of secure digital communication. Dr Sonali Nalamwar, Assistant Professor, AISSMS, COE, Pune delivered lecture on 'Deep Learning: A Catalyst for Next-Generation Engineering Solutions', and explained Pattern recognition to solve complex problems in the field of structural health monitoring, smart grids and predictive maintenance. Dr Aishwarya Apte, AISSMS COE, Pune delivered lecture on 'Vector Control of AC Motor for Electric Vehicles'. She explained how vector control enables precise regulation of motor speed and torque, enhancing efficiency and dynamic response. She highlighted that traditional control methods struggle with rapid torque and speed variations, whereas vector control ensures smoother acceleration, improved energy efficiency, and better overall vehicle performance. She emphasized its role in minimizing power losses and extending battery life—both critical for EV technology. Dr Pramod Patil, Dean, Faculty of Science and Technology SPPU, Pune delivered a lecture titled 'Emerging Trends in Technology, Blockchain, and Research Writing'.

Papers were presented on relevant sub-themes, which included Bridging the Gap: A Power Efficient IoT GPS Mini Tracker for Dynamic Applications; Traffic Scene Understanding through Image Capturing; Advanced Yield Prediction Models for Precision Farming using Machine Learning; AI-Based Wildlife Recognition System; Early Detection of Breast Cancer Using AI - A Deep Learning Approach using CNN Model; Living Building - Bioengineered Materials for Self-Sustaining Architecture; IoT-Based Automated Feedback

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## Flexible Electronics: Real-World Applications

**Faridabad Local Centre**, IEI, in collaboration with the Department of Electronics and Telecommunication Engineering, J C Bose University of Science & Technology, YMCA, Faridabad, organized an All India Seminar on the theme **Flexible Electronics: Real-World Applications** during 07-08 March, 2025 at Faridabad, under the aegis of Electronics & Telecommunication Engineering Division Board [ETDB], IEI. The objective of the Seminar was to bring together researchers, academicians, industry experts and students



to explore the latest advancements in flexible electronics and their practical applications across healthcare, defense, IoT, and sustainability.

The Seminar began with a welcome address delivered by Er Inderdeep Singh Oberoi, Chairman, Faridabad Local Centre, IEI. Mr Tejvir Singh, Chief Technology Officer, Fabtech Technologies International Limited graced the inaugural function as the Chief Guest and emphasized the importance of flexible electronics in revolutionizing various sectors, including healthcare, defense and IoT. He highlighted how innovations in this field can drive sustainable development.

Prof Bijoy Kumar Kuanr, Professor at the Special Centre for Nanoscience, Jawaharlal Nehru University, New Delhi and an eminent researcher in the field of Nanoelectronics and Spintronics presented a keynote address on the role of magnetic materials in antennas, exploring their applications in sensors and detection devices. Prof Kulwant Singh, Professor and Chairperson at the Industry 4.0 Department, Shri Vishwakarma Skill University, Pawal delivered a Keynote Address on the topic 'Recent Trends of Semiconductor Devices: From Rigid to Flexible' and discussed the evolution of semiconductor devices from rigid to flexible, highlighting advancements in materials and manufacturing.

Dr Rakhi Nangia, Deputy Director, India Electronics and Semiconductor Association and an eminent researcher in the field of VLSI and semiconductor devices delivered a Keynote lecture on 'Indian Mission on Semiconductor and focused on India's mission in semiconductor technology, emphasizing the role of flexible electronics. Dr Bijender Kumar, Technology Architect, Wipro Limited, Gurugram and an eminent researcher in the field of electric vehicles delivered a Keynote address on 'Flexible Electronics Applications in Electric Vehicles' and highlighted their impact on sustainable transportation. A souvenir was released on the occasion.

During the technical sessions, papers were presented on relevant sub-theme, which included:

Smart Wearables for Health Monitoring; Optimizing Surface Finishes for Flexible PCBs: Critical Factors and Proven Strategies; Soft Robotics Enabled by Flexible Electronics; Future of Smart and Adaptive Devices using Flexible Electronics; Advancement in Microfluidic Device Technology for Biomedical Applications; Latest Trends of Flexible Bioelectronics for Health Care Applications; AI-Driven Wearable Sensor System for Early Detection of Mental Health Disorders; Fabrication of Activated Carbon Based Electrode Materials for Energy Storage Devices; etc.

For further details regarding the Technical Sessions please follow the link: <https://shorturl.at/kMoi3>

The valedictory session was graced by Prof (Dr) Shamim Ahmad, J C Bose University of Science and Technology, YMCA, Faridabad who delivered the Keynote Lecture on Printed Intelligence and Printed Electronics. His talk emphasized the transformative potential of Printed Electronics in healthcare, packaging and IoT. Prof Pradeep Kumar, Honorary Secretary, Faridabad Local Centre, IEI delivered the vote of thanks, expressing gratitude to all dignitaries, speakers, sponsors, participants and organizers.

The All India Seminar on Flexible Electronics 2025 successfully provided a platform for knowledge exchange, research discussions and networking. It inspired participants to explore new frontiers in flexible electronics, driving innovation and sustainability in various domains. Notably, the seminar witnessed enthusiastic participation from researchers, academicians, industry professionals and students. The technical sessions were engaging, fostering discussions on the latest trends in flexible electronics.

## Green Renewable Electronics for Environmental Nurturing and Sustainability (GREENS)

**Uttar Pradesh State Centre**, IEI in collaboration with the Institute of Engineering & Technology [IET], Lucknow organized an All India Seminar on the theme **Green Renewable Electronics for Environmental Nurturing and Sustainability" (GREENS)** during 04-05 February, 2025, under the aegis of Electronics & Telecommunication Engineering Division Board [ETDB], IEI at Lucknow. The Seminar aimed to promote awareness, discussion, and innovation in green and sustainable electronic technologies.

The welcome address was delivered by Prof Neelam Srivastava, Member ET, IEI, SCC Member, who extended a warm welcome to all dignitaries, participants and attendees. Prof. Srivastava highlighted the importance of sustainable practices in the field of electronics and introduced the keynote speakers of the seminar.

The Chief Guest of the seminar was Prof Jai Prakash Pandey, Hon'ble Vice-Chancellor, Dr A P J Abdul Kalam Technical University (AKTU). In his address, Prof Pandey emphasized the significance of environmental sustainability and the need for adopting green practices in technology and education. The Guest of Honour, Mr Ashok Kumar Rajput, Member, Power Systems, Ministry of Power, Central Electricity Authority, spoke about the



role of green electronics in sustainable development and highlighted key topics such as Eco-Friendly Materials, Energy Efficiency, Renewable Energy Integration and E-Waste Management.

The Keynote address was delivered by Prof (Dr) Vinit Kansal, Director IET, who discussed the critical need for environmental sustainability and green practices, stressing the importance of reducing pollution and conserving natural resources.

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## Advancing Digital Innovation for Sustainability in Energy, Environment, Health and Agriculture (ADISEHA 2025)

**Durgapur Local Centre**, IET organized an All India Seminar on **Advancing Digital Innovation for Sustainability in Energy, Environment, Health and Agriculture (ADISEHA 2025)** during 18-19 January, 2025, under the aegis of Electrical Engineering Division Board [ELDB], IET at Visvesvaraya Auditorium, Durgapur Local Centre, IET. The Seminar aimed to provide a platform for academicians, researchers, industry professionals and policymakers to discuss and exchange ideas on the latest advancements in digital innovations and their applications in critical sectors. The Seminar included seven dynamic tracks: Computer Science and Engineering, focusing on computational advancements like algorithms, imaging, and IoT; Electrical Engineering, addressing power systems, sensing technologies, and grid advancements; Energy and Electronics Engineering, highlighting renewable energy systems, VLSI, and energy harvesting techniques; Material and Chemical Engineering, exploring breakthroughs in nanotechnology, biomedical instrumentation, and biofuels; Structural and Mechanical Systems, covering innovations in civil, mechanical, and medical sciences; Environmental Engineering, emphasizing green energy, pollution mitigation, and sustainable practices; and Agriculture Engineering, showcasing advancements in smart farming, agricultural drones, and food quality assessment. By integrating emerging technologies with sustainable development goals, the seminar not only tried to inspire interdisciplinary research especially among students, research scholars, and young researchers and scientists, but also to accelerate the adoption of innovative solutions, and highlight their practical applications for societal benefits in our daily life.



The event started with a welcome address delivered by Prof (Dr) Chandan Koner, Chairman, Durgapur Local Centre, IET. Prof Koner warmly welcomed the dignitaries, delegates and participants. Convener of the event, Dr T K Bera, elaborated the seminar's objectives, emphasizing the critical role of digital innovations for sustainability.

Chief Guest, Mr Debes Kumar Deb, General Manager (P&P), The Durgapur Projects Limited delivered a thought-provoking address, emphasizing the importance of digital transformation for sustainability. The Guests of Honour, Prof (Dr) Debangshu Dey, Department of Electrical Engineering, Jadavpur University, Kolkata; Dr Dhavala Venkata Rajan, Senior General Manager (Electrical), Damodar Valley Corporation (DVC), Kolkata and Dr Swapan Kumar Ghosh, Associate Professor and Head of the Department of Physics, Durgapur Government College provided insights on the importance of digital innovations in their respective fields.

A souvenir was released on the occasion in the august presence of dignitaries on the dias.

Prof Debangshu Dey delivered an Invited Speech on the topic 'Synergism of Signal Processing and Machine Learning Tools for Condition Monitoring Applications'. In his address, Prof Dey highlighted the crucial intersection of signal processing and machine learning in modern condition monitoring systems. He explained how signal processing techniques extract vital features from raw sensor data, which serve as the foundation for monitoring system health. These features are then analyzed by advanced machine learning algorithms to classify system conditions, predict potential failures, and optimize maintenance schedules. Dr Dey further emphasized that the combination of signal processing's robust analytical capabilities and machine learning's advanced pattern recognition provides a comprehensive approach to condition monitoring. This synergistic methodology not only improves the accuracy of fault detection but also enhances predictive maintenance, resulting in increased system reliability and reduced operational downtime.

The speech resonated with the audience, especially industry professionals and researchers, as Dr Dey provided real-world examples and case studies illustrating the practical implementation of these technologies. His address reinforced the importance of interdisciplinary approaches in advancing sustainable and efficient monitoring systems.

Dr Dhavala Venkata Rajan delivered Invited Speech on 'Advancing Digital Innovations for Sustainability in Energy, Environment, Health and Agriculture'. Dr Rajan's presentation emphasized the pivotal role of digital innovations in enhancing sustainability across key sectors. He detailed how emerging technologies such as smart grids and AI-driven monitoring are revolutionizing energy management and environmental conservation.

By utilizing advanced data analytics and machine learning, industries can predict and prevent equipment failures, ensuring operational efficiency and resource optimization. Dr Rajan highlighted how digital innovations in healthcare, such as telemedicine and remote diagnostics, are bridging the gap between patients and medical professionals while reducing the carbon

footprint associated with traditional healthcare delivery. In agriculture, precision farming technologies, driven by IoT and AI, are improving crop yields, minimizing waste, and promoting sustainable agricultural practices. His presentation underscored the need for a collaborative approach to harness the full potential of digital technologies for a more sustainable future. The speech was well-received by the audience, offering profound insights and practical strategies for integrating digital innovations into diverse domains.

Dr Santanu Paul, Assistant Professor, Department of Electrical Engineering, NIT Durgapur delivered an Invited Lecture on the topic 'Application of Modern AI Techniques for Large Scale Wind Energy Planning'. Dr Paul's presentation focused on the cutting-edge application of modern AI techniques in large-scale wind energy planning. He elaborated on how AI-driven solutions can optimize the design, control, and maintenance of offshore wind farms. Dr. Paul highlighted the integration of AI with advanced energy storage methods, enhancing the reliability and efficiency of wind energy systems. His research contributions and practical insights provided a comprehensive overview of the future of renewable energy planning.

Dr Tushar Kanti Bera, Assistant Professor, Department of Electrical Engineering, NIT Durgapur delivered an Invited Lecture on 'Electrical Impedance Tomography in Modern Healthcare Technology'. Dr Bera's presentation provided an in-depth exploration of Electrical Impedance Tomography (EIT) and its transformative role in modern healthcare technology. He explained how EIT, a non-invasive imaging technique, is revolutionizing medical diagnostics by enabling real-time monitoring of physiological changes. Dr Bera highlighted recent advancements in EIT, including its applications in detecting lung abnormalities, breast cancer screening, and brain function monitoring. He emphasized the advantages of EIT, such as low cost, portability, and safety, making it a promising tool for future medical applications. The audience appreciated his detailed insights into emerging trends and the future potential of EIT in enhancing healthcare outcomes.

Dr Banibrata Mukherjee, Assistant Professor, Advanced Technology Development Centre, IIT Kharagpur delivered an Invited Lecture on 'Vibration Energy Harvesting Technology for Self-powered Systems'. Dr Mukherjee's presentation highlighted the advancements in vibration energy harvesting

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## Skill Development in Complex Project Management Using Jira and Confluence

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Materials Engineering, NIT Rourkela, spoke on 'Skill Development and Complex Project Management'. Dr Ashutosh Pattanaik, also delivered a session on "Complex Project Management in Biomedical Application" and delivered a lecture on 'Future Scenario in Project Management using Jira and Confluence'. For further details about the technical sessions, please follow the link

<https://shorturl.at/qTzv5>

The workshop also included a hands-on practice session where participants

engaged in Real-world Project Management Scenarios and Q&A and networking sessions for knowledge sharing.

The workshop concluded with a valedictory session where key takeaways were discussed and certificates were distributed to participants. Dr Ajit Behera, Honorary Secretary, Rourkela Local Centre, IEI proposed the vote of thanks, acknowledging the efforts of the organizers, speakers and participants.

## Frontiers of Progress and Developments in Technology, Management and Healthcare in the Modern Era

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- *Future research should focus on long-term durability studies of advanced materials under diverse environmental conditions. Additionally, exploring the application of optimization techniques across different structural types could provide further insights.*
- *The Guardian Bot could provide a cornerstone of modern protection strategies that give improved safety and efficiency in a wide range of critical applications by overcoming the challenges outlined and addressing ethical and legal implications. Further research and development, coupled with collaboration between industry, government, and academia, are necessary to realize the described potential of this technology.*
- *Based on the findings of the study, several recommendations can be made to ensure the preservation and integration of Indian Knowledge*

*Systems (IKS) into contemporary education and society. Firstly, it is crucial to incorporate IKS into the formal education curriculum at all levels, from primary to higher education. This integration should not merely be an add-on but a core component of the educational framework, ensuring that students are exposed to the richness of indigenous knowledge alongside Western perspectives. Educational institutions should develop specialized courses, workshops, and research programs dedicated to IKS, encouraging a deeper understanding and appreciation of these systems among students and scholars.*

The International Conference provided a vibrant platform for knowledge sharing, innovation showcasing and interdisciplinary dialogue. With global participation and thought-provoking discussions, the event significantly contributed to the advancement of technology, management and healthcare for a better and sustainable future.

## Emerging Trends in Engineering and Technology: Shaping the Future of Innovation

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System for Non-Functional Streetlights; CNN Based Plant Disease Detection System; Urban and Rural Air Quality: An IoT and Sales Force-Based Comparative Study; Integrated Parcel Management System with ML-Based Resource Analysis for Goods Transport Problem: Integrated IoT-Based Weather Monitoring and Machine Learning Weather Prediction System; Adaptive Web Application Firewall using AI Solution: AI-powered AWAFF for Real-time Cyber Threat Detection; AI-Based Structural Health Monitoring

of Bridges; Corrosion Assessment of Reinforced Concrete Structures etc.

During the valedictory function, Dr Pramod Patil graced the occasion as the Chief Guest and delivered a lecture on the topic 'Emerging Trends in Technology, Blockchain, and Research Writing'. In his address, he highlighted the rapid advancement in technology in transforming industry and emphasised the growing significance of blockchain technology in ensuring data security, transparency and decentralization amongst different sectors.

## Green Renewable Electronics for Environmental Nurturing and Sustainability (GREENS)

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Earlier, Er Satya Prakash, Chairman, Uttar Pradesh State Centre, IEI, delivered the Presidential Address, emphasizing the role of engineering in sustainability. Er Vijaya Pratap Singh, Honorary Secretary, Uttar Pradesh State Centre, IEI, shared insights on the objectives of the seminar. Prof (Dr) Bharat Raj Singh, Council Member, IEI spoke about green technologies and their impact on society. Dr Seetha Lakshmi, Associate Dean, Post Graduate Studies and Research, Dr APJ Abdul Kalam Technical University [AKTU], Lucknow, highlighted the importance of sustainable practices in higher education. Dr Anurag Tripathi, Dean UG, AKTU, Lucknow, spoke on the role of green electronics in undergraduate education.

The seminar featured several technical sessions where invited papers were presented by experts in the field. Key topics covered included: Sustainable Power Generation and Management; Energy-Efficient Electronics Design;

Role of Microelectronics in Sustainable Technology; Renewable Energy Integration and Storage Systems; Smart Grids and Microgrids; AI and IoT in Energy Conservation; Sustainable Electronic Manufacturing Processes; Photovoltaic and Solar Power Systems; Policy, Regulation and Education for Green Electronics, Green and Smart Cities among others.

The seminar witnessed active participation from academicians, researchers, industry experts and students. The event was held in hybrid mode, with participants joining online from the USA, the Netherlands and Ethiopia, along with several cities across India. The seminar provided a vibrant platform for meaningful dialogue among experts, researchers, and students on sustainable practices in electronics. It emphasized the importance of adopting eco-friendly technologies and fostered collaboration among stakeholders for a sustainable future.

## Role of Artificial Intelligence in Technological Advancements in Aerospace and Defence Industries

Telangana State Centre, IEI, in association with Mahatma Gandhi Institute of Technology (MGIT), Hyderabad organized an All India Seminar on **Role of Artificial Intelligence in Technological Advancements in Aerospace and Defence Industries** during 27-28 December, 2024, under the aegis of Electronics and Telecommunication Engineering Division Board (ETDB),



IEI at Visvesvaraya Bhavan, Khairatabad, Hyderabad. The Seminar aimed to explore the transformative role of Artificial Intelligence (AI) in enhancing the capabilities of aerospace and defence sectors. Shri U Raja Babu, Distinguished Scientist & Director General, Missile Strategic Systems [MSS], RCI, DRDO, Hyderabad graced the inaugural session as the Chief Guest. In his address, Shri Raja Babu emphasized the critical role of AI in revolutionizing aerospace and defence industries. He highlighted the importance of continuous innovation and adopting AI technologies to enhance operational efficiency and security. Dr Y Srinivasa Rao, Distinguished Scientist and Director General (Retd), NSM, DRDO, addressed the gathering as a Special Guest. He emphasized the significance of AI in strengthening national security and its wide-ranging applications in defence systems. Dr M Ram Manohara Babu, Head, Center for Research Excellence in National Security, BITS Pilani and Former Distinguished Scientist & Director, ASL, DRDO, Hyderabad, graced the function as the Guest of Honour and Keynote speaker. In his lecture, Dr Babu emphasized the critical role of AI in enhancing technological capabilities in aerospace and defence industries and discussed the potential of AI to enhance efficiency, reliability and security in critical defence operations. Dr G Chandramohan Reddy, Principal, MGIT, Hyderabad graced the occasion as the other Guest of Honour and highlighted the importance of collaboration between academia and industry in leveraging AI technologies.

The event started with the welcome address delivered by Dr G Venkata Subbaiah, Chairman, Telangana State Centre, IEI, who also presided over the inaugural session. He highlighted the importance of the seminar and its relevance in the current technological landscape. Er B Brahma Reddy, Immediate Past Chairman Telangana State Centre and Chairman, Technical Committee introduced the Special Guest. Dr L Nirmala Devi, Joint Honorary Secretary of the centre and Convener of the event introduced the Chief Guest and briefed the gathering about the seminar. Dr K Seetha Ram Babu, Honorary Secretary, Telangana State Centre, IEI proposed vote of thanks at the end of the inaugural session.

A souvenir was released on the occasion in the august presence of dignitaries on the dias.

The technical sessions were chaired by Dr Vijay Pal, Principal, KMIT, Hyderabad; Dr Rajendra Prasad, HOD, Electronics and Communication Engineering Department [ECE], Vidya Jyothi Institute of Technology, [VJIT], Hyderabad; Dr G Parameswar, ECE, VJIT, Hyderabad; Prof (Dr) L Nirmala Devi, Electronics and Communication Engineering, UCE, Osmania University, Hyderabad and Prof (Dr) S P Singh, HOD, ECE, MGIT, Hyderabad.

The following distinguished speakers delivered invited lectures:

Dr M Chandra Sekhar, Senior Manager, Bharat Dynamics Limited, Hyderabad delivered an Invited Lecture on the topic 'The Role of Artificial Intelligence in Missiles Advancements in Aerospace and Defence'. Dr Ram Singh, Scientist G, DRDO, Hyderabad delivered Invited Lecture on the topic 'Role of AI in Workload Reduction of Fighter Pilot and Health Monitoring of the Avionics Systems'. Dr A K Singh, Scientist G, Project Director, DRDL, Hyderabad delivered Invited Lecture on 'Artificial Intelligence in Space Electronics Warfare: A Revolutionary Leap in Aerospace and Defence Industries'.

During the technical sessions, papers were presented on relevant topics, which include; A Review of AI based Aircraft Detection Algorithms and Datasets in Aerial Imagery; Enhancing Target Accuracy Using AI in Aircraft Defence Systems; AI-Powered Drowsiness Detection Systems: A Comprehensive review with Applications in Aerospace and Defence; Intelligent Assistive Devices: Depth-Sensing for Stairs Recognition and Navigation; Analysis of Transforming Defence Strategies based on Natural Language Processing using Neuro evolution; The Role of Artificial Intelligence in Strengthening Cybersecurity for Defence Systems; etc.

For further details of Technical sessions pls follow the link:

<https://shorturl.at/b4Yni>

During Valedictory Session, Dr A K Singh, Scientist G & Project Director, DLRL, Hyderabad graced on occasion as Chief Guest. Dr G Chandra Mohan Reddy, Principal, MGIT, Gandipet, Hyderabad addressed the gathering. Er B Brahma Reddy, Immediate Past Chairman, Telangana State Centre and Chairman, Technical Committee presented recommendations.

*Data Security and Privacy Concerns: The cybersecurity measures, including AI-driven security systems, secure data pipelines, and continuous threat detection need to be enhanced; AI Reliability and Safety: Rigorous testing, validation, and certification processes for AI systems, including creating fail-safe mechanisms, explainability in AI decision-making, and redundant systems for critical operations are strongly recommended; Ethical and Accountability Issues: It is required to establish clear ethical guidelines, international treaties, and regulations to govern the use of AI in defence. Further, the human oversight in all critical decision-making processes also needs to be ensured; Interoperability and Integration Challenge: The universal standards for AI technologies, ensuring smooth integration with legacy systems, and fostering collaboration between AI developers and defence contractors need to be developed; Regulatory Hurdles and Policy Challenges: Governments and international organizations must work together to create AI standards and regulations that are flexible and adaptable to rapidly advancing technologies; Cost and Resource Constraints Challenge: The public-private partnerships need to be encouraged, fostering collaboration between academia and industry, and exploring more cost-effective AI solutions tailored for diverse users; Challenges in Shortage of Skilled Manpower: Investing in AI education and training programs, fostering collaboration with universities, and incentivizing professionals to enter the aerospace and defence sectors; Adversarial AI and Counter Measures: Robust AI systems resistant to adversarial attacks, as well as real-time monitoring systems capable of detecting anomalies in AI decision-making processes need to be developed; Impact on Workforce and Employment: The AI-driven future workforce needs to be developed through reskilling initiatives and creating new roles that leverage human and AI collaboration; Geopolitical Implications: International diplomacy and multilateral agreements on the use of AI in defense need to be strengthened, alongside strategic partnerships to promote balanced AI development globally.*

## Additive Manufacturing in Production: Challenges and Opportunities

**Puducherry State Centre**, IEI, in association with Department of Mechanical Engineering, Sri Manakula Vinayagar Engineering College (SMVEC), Puducherry organized a One Day Seminar on the theme **Additive Manufacturing in Production - Challenges and Opportunities** on 26 March 2025 under the aegis of Production Engineering Division Board [PRDB], IEI at Puducherry. The Seminar aimed at bridging the gap between theoretical knowledge and industrial practices in the fast-evolving field of additive manufacturing. The event brought together leading academicians, researchers and industry experts to discuss innovations, applications and future trends in the domain.

The event commenced with the opening remarks, delivered by Dr K Velmurugan, Dean (Research), SMVEC, who emphasized the importance of collaborative research and innovation in production engineering. Dr A A Arivalagar, Dean - Academics, SMVEC, highlighted the critical role of academia in nurturing future-ready engineers equipped with the skills needed for emerging technologies.

Dr G G Sozhamannan, HoD – Mechanical, SMVEC, delivered the introductory address, outlining the seminar's objectives and the current relevance of additive manufacturing in modern engineering. His overview established the framework for the subsequent sessions and discussions. Dr L Martin, Committee Member, Mechanical Engineering Division, Puducherry State Centre, IEI played a pivotal role by formally introducing the distinguished speakers and dignitaries to the audience, ensuring a smooth transition into the core segments of the seminar.

Dr S Thirougnaname, Chairman, Puducherry State Centre, IEI in his special address, acknowledged the growing importance of additive manufacturing technologies and the need for collaborative platforms to explore their potential. Dr L M Varalakshmi, Head, Department of ICE and IEI Student

Chapter Coordinator, SMVEC underscored the significance of integrating theoretical research with industrial applications to foster innovation-led growth in engineering disciplines.

The Seminar featured two technical sessions, where experts from both academia and industry delivered comprehensive and thought-provoking lectures. Dr E Gnana Manoharan, Associate Professor, Department of Electronics and Communication Engineering, Annamalai University, Chidambaram delivered a lecture on 'Additive Manufacturing and Metallization of High Frequency Communication Devices'. Shri Vijayaraj Shanmugam, System Engineer and Machine Design Enthusiast, TCS, Chennai spoke on 'Integration of Additive Manufacturing into Traditional Production Lines'. Shri Saravanan A, CEO, Saravanan Paper Machinery India Private Limited, spoke on 'Additive Manufacturing in the Semiconductor Industry: Technology Penetration and Roadmap'. Dr Karunakaran, Associate Professor, Department of Mechanical Engineering, SMVEC spoke on 'Advancements in Materials for Additive Manufacturing'.

The seminar concluded on an inspiring note with a vote of thanks delivered by Er K Soundararajan, Honorary Secretary, Puducherry State Centre, IEI who expressed gratitude to all speakers, organizers and participants for their active involvement and contribution. The seminar served as a robust platform for knowledge exchange between academic institutions and industry. The event effectively bridged theoretical perspectives and industrial practices in additive manufacturing. The presence of eminent speakers and the active participation of attendees ensured that the seminar achieved its objective of fostering innovation and collaboration in engineering and manufacturing.



## IoT and Cloud Computing

**Durgapur Local Centre**, IEI, in collaboration with the Department of Computer Science & Engineering, Sanaka Educational Trust's Group of Institutions (SETGOI), Durgapur successfully organized a One-Day Seminar on **IoT and Cloud Computing** on 11 March 2025 under the aegis of Electronics & Telecommunication Engineering Division Board [ETDB], IEI at Durgapur. The seminar aimed to provide participants with a comprehensive understanding



of the Internet of Things (IoT) and Cloud Computing, emphasizing their integration in revolutionizing industries and enhancing daily life.

The seminar commenced with a warm welcome to the dignitaries, faculty, students and members of the IEI Durgapur Local Centre.

Chief Guest of the session, Mr S K Srivastava, Principal-Director, National Power Training Institute (NPTI-ER), Durgapur, discussed the transformative impact of IoT and Cloud Computing on automation, particularly in the power sector. He highlighted the use of smart meters, sensors and automated

systems for efficient energy management. Special Guest of the session, Dr Amit Kumar, Associate Professor and Head, Department of Computer Science & Engineering, SETGOI, emphasized the vast applications of IoT and Cloud Computing in connecting physical devices to the digital world and enabling scalable data analysis. Prof (Dr) Chandan Koner, Chairman, Durgapur Local Centre, IEI stressed the importance of acquiring skills in IoT and Cloud Computing to remain competitive in the rapidly evolving technological landscape.

The Keynote Speech was delivered by Dr Suvadip Batabyal, Assistant Professor, Department of Computer Science and Engineering, NIT Durgapur on the topic 'Opportunistic Network - Augmenting the Networks of Future'. He explained how future networks could overcome spectrum scarcity using opportunistic communication, enhancing network efficiency.

Dr Rajesh P Barnwal, Senior Principal Scientist, CMERI-Durgapur, delivered an Invited lecture on the topic 'Security Challenges in IoT-Cloud'. In his address, he outlined the key security concerns, including device vulnerabilities, weak security practices, data privacy, and cloud-specific risks. He stressed the importance of data integrity, confidentiality, and secure communication protocols like TLS and AES encryption. He also highlighted authentication mechanisms, such as multi-factor authentication and role-based access control, to safeguard IoT ecosystems from cyber threats.

Dr Sujoy Saha, Assistant Professor, Department of CSE, NIT Durgapur, discussed on 'Exploration of TinyML in IoT: A Deep Dive' He discussed

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## Fundamentals and Innovations in Electric Vehicle Technologies

**Bhimavaram Local Centre**, IEI, organized a One Day Seminar on the theme **Fundamentals and Innovations in Electric Vehicle Technologies** on 08 March 2025 under the aegis of Interdisciplinary Coordination Committee [ICC] at Bhimavaram. The Seminar aimed to provide a comprehensive understanding of Electric Vehicles (EVs), focusing on their fundamentals, advanced technologies and future research avenues.

The Seminar commenced with a welcome address by Prof (Dr) K Brahma Raju, Council Member, IEI who welcomed all dignitaries, speakers and participants, setting a positive tone for the event. Prof K Murali Krishnam Raju, Principal, SRKR Engineering College, graced the occasion as the Special Guest and addressed the audience. Dr G H K Varma, Convenor of the seminar, provided an overview of the program, highlighting the objectives and the importance of understanding advancements in Electric Vehicle technologies.

Dr Tummuru Narsa Reddy, Associate Professor, School of Electrical and Computer Sciences, IIT Bhubaneswar graced the occasion as the Chief Guest and Keynote Speaker. He emphasized the significance of Electric Vehicles in modern transportation, discussing the benefits of EV adoption, sustainability and the global shift toward green mobility. Prof S Rajesh, Honorary Secretary, Bhimavaram Local Centre, IEI concluded the inauguration ceremony with a vote of thanks, expressing gratitude to all dignitaries, participants and organizers for their valuable presence.

Dr Tummuru Narsa Reddy delivered a lecture on the topic 'Fundamentals of EV'; 'Fundamentals of Power Converters'; 'EV Charging Infrastructure' and 'Research Avenues in EV', providing insights into potential areas of research for future advancements in EV technology.



The valedictory session was chaired by Prof (Dr) K Brahma Raju, Council Member, IEI summarized the key takeaways from the seminar. Prof (Dr) B R K Varma, Head, Department of Electrical and Electronics Engineering, SRKR Engineering College, delivered a brief report on the successful completion of the seminar, highlighting the active participation and insightful discussions. Prof (Dr) Rajesh Siriyala, Honorary Secretary, Bhimavaram Local Centre, IEI concluded the session with a final vote of thanks, expressing appreciation to all who contributed to the success of the seminar.

Faculty members, students, and industry professionals attended the seminar. The event provided a comprehensive understanding of Electric Vehicles, their components, charging infrastructure and research opportunities. It successfully fostered knowledge sharing and inspired future research and innovation in the field of Electric Vehicle Technologies.

## Smart Cloud-Based Meditation System with Adaptive AI for Holistic Wellbeing

**Erode Local Centre**, IEI, in association with Velalar College of Engineering and Technology organized a One-Day Seminar on the theme **Smart Cloud-Based Meditation System with Adaptive AI for Holistic Wellbeing** on 07 March 2025 under the aegis of Computer Engineering Division Board [CPDB] at Erode. The seminar aimed to provide participants with insights into how advanced technologies, particularly Artificial Intelligence (AI) and Cloud Computing, can enhance personal wellbeing.

The Seminar began with a warm welcome by Prof (Dr) Kumaravelan Radhakrishnan, Chairman, Erode Local Centre, IEI who addressed the participants, emphasizing the importance of integrating technology with wellness practices to improve mental and physical health. Dr M Jayaraman, Principal, Velalar College of Engineering and Technology highlighted the importance of digital wellness solutions in today's world. Prof (Dr) C N Marimuthu, Honorary Secretary, Erode Local Centre, IEI and Dr V K Manavalasundaram, Committee Member [Computer Division], Erode Local Centre, IEI also shared their insights, emphasizing the role of technology in promoting holistic health. Prof (Dr) S Mangai, Department of Bio-Medical Engineering, Velalar College of Engineering and Technology delivered a lecture on the topics 'The Role of Adaptive AI in Meditation Systems' and 'Smart AI for Deepening Mindfulness and Enhancing Wellness'. She discussed the core concepts and objectives of studying adaptive AI in meditation systems and stressed to explore how advanced AI technologies can personalize and enhance meditation experiences. She also addressed the significance of adaptive AI that can tailor meditation practices, based on individual needs, preferences, and psychological states.

Dr J Rajalakshmi, Professor, Department of Biomedical Engineering, Velalar College of Engineering and Technology delivered lecture on 'Technologies behind Cloud-Based Meditation Systems' and 'Transform Your Mind and Body with Intelligent, Adaptive Meditation'. Dr J Rajalakshmi focused on holistic health, the features the system is able to integrate, such as guided



meditation, breathing exercises, stress management, and sleep optimization, accessible via a user-friendly platform. Subsequently, she talked about a transformative solution for individuals seeking to enhance their mental, emotional, and physical health. By harnessing the power of AI and cloud technology, the system provides highly personalized meditation experiences that adapt to the user's unique needs, preferences, and lifestyle.

The valedictory address was delivered by Dr R Menaka, Associate Professor, Department of Information Technology, Velalar College of Engineering and Technology, Erode. She emphasized the importance of adopting technology for personal wellness and commended the participants for their enthusiastic engagement. Dr R Kumaravelan, Chairman, Erode Local Centre, IEI and Dr C N Marimuthu, Honorary Secretary, Erode Local Centre, IEI distributed certificates to all participants.

The seminar witnessed enthusiastic participation from students and faculty across institutions. It concluded on a successful note, having equipped attendees with insights into the integration of AI and cloud computing for holistic wellbeing.

## Harnessing Solar Energy for Sustainable Marine Development: Aligning with SDG 14

Tamilnadu State Centre, IEI, in collaboration with AMET University, Chennai successfully organized a One-Day Seminar on **Harnessing Solar Energy for Sustainable Marine Development: Aligning with SDG 14** on 21 February 2025 under the aegis of Electrical Engineering Division Board [ELDB] at Salem. The Seminar aimed to promote understanding and explore the application of solar energy in achieving Sustainable Development Goal (SDG) 14, which focuses on conserving and sustainably using oceans, seas and marine resources.



The event commenced with the opening remarks by Dr D Lakshmi, Professor, Department of Electrical and Electronics Engineering, AMET University, expressing gratitude to all dignitaries, faculty members and students for their active participation.

Dr R Muthezhilan, Registrar i/c, AMET University, in his address, emphasized the importance of SDG 14 and the need for responsible actions to achieve sustainable marine development. He discussed the critical role

of solar energy in mitigating climate change and promoting eco-friendly marine practices. A souvenir compiling the proceedings of the seminar was released, symbolizing the collective efforts of experts, researchers and participants.

The Chief Guest and Keynote speaker, Dr L Ramesh, President, IGEN and Joint Registrar, Dr M G R Educational and Research Institute, Chennai graced the occasion virtually. He highlighted the importance of sustainable development goals and encouraged students to leverage the opportunities available through IEI.

Er D Gokul, Honorary Secretary, Tamilnadu State Centre, IEI delivered the vote of thanks at the end of inaugural session, expressing appreciation to all dignitaries, organizers and participants for their contributions.

During the technical session, invited lectures were delivered by Dr D Lakshmi on the topic 'SDG Goals and Harnessing Solar Energy for Sustainable Marine Development'. Dr J Balamurugan, Chairman, Tiruvallur Local Centre, IEI delivered an Invited Lecture on 'Transforming Energy Sector – Advanced Metering Infrastructure (AMI)'.

Further, research papers were presented during the technical sessions on various topics, namely 'Induction Motor Driven EV Using PV Based Converter with Optimized Control Approach'; 'Hand Gesture Recognition Using Open CV'; 'Renewable Energy for Ocean Sustainability: The Role of Solar Power in Achieving SDG 14'; 'Enhancing Environmental Monitoring through Advanced Analytical Approaches for Marine Ecosystem Health' and 'Design and Performance Analysis of an Asymmetrical Multilevel Inverter Structure'.

## SDGs and the Role of Emerging Technologies: Vision and Implementation

Gorakhpur Local Centre, IEI, in association with the Institute of Technology and Management (ITM), GIDA, Gorakhpur successfully organized a One Day Seminar on **SDGs and the Role of Emerging Technologies: Vision and Implementation** on 25 January 2025 under the aegis of Interdisciplinary Coordination Committee [ICC] at Institute of Technology & Management, GIDA, Gorakhpur (UP).

The Seminar started with a welcome address delivered by Dr Narendra Kumar Singh, Chairman, Gorakhpur Local Centre, IEI. In his address, he warmly welcomed the Chief Guest, Guests of Honour, speakers and participants from IEI, academia and industry, emphasizing the importance of the active involvement of engineering students.

Prof (Dr) A K Singh, Vice Chancellor, Mahayogi Guru Gorakhnath AYUSH University, Gorakhpur, graced the occasion as the Chief Guest. In his speech, he highlighted the ancient Indian philosophy of sustainable development, emphasizing traditional practices of respecting nature and using natural resources responsibly. Er J B Rai, President, Madan Mohan Malaviya Alumni Association, MMMUT, Gorakhpur; Prof Rakesh Kumar, Dean-Research, M M M University of Technology, Gorakhpur; Dr Pawan Kumar Mishra, Senior Director, Construction Industry Development Council and Er M W Beg, Former Chief Plant Manager, Refinery Division, Indian Oil Corporation were the Guests of Honor.

Er J B Rai, in his address inspired the younger generation to develop innovative ideas aligned with sustainability. Dr Pawan Kumar Mishra emphasized in aligning emerging technologies with the sustainable future needs of society. Er Pavnes Kumar, Honorary Secretary, Gorakhpur Local Centre, IEI proposed the vote of thanks.



During the technical session, Dr Pawan Kumar Mishra delivered his presentation on the topic 'Green Construction Technologies for Sustainable Cities'. His lecture highlighted the critical role of sustainable construction practices in shaping the future of urban environments. Dr Mishra, with extensive experience in the construction and skill development sector, shared his insights on adopting green technologies to balance development and environmental preservation. He underscored the role of the construction industry in achieving SDG 11 (Sustainable Cities and Communities). He introduced several cutting-edge green construction technologies, including: Smart Building Materials: Use of self-healing concrete, eco-friendly bricks, and low-carbon cement; Energy-efficient Design: Passive solar design and energy-efficient HVAC systems and Waste Management in Construction: Recycling construction debris and adopting circular economy practices. Dr Mishra highlighted the importance of training construction professionals in green technologies. He shared CIDC's initiatives in this domain, including

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

Durgapur

**Theme: Innovative Engineering Solutions for Viksit Bharat @ 2047**



Organized by

**The Institution of Engineers (India)**

Hosted by: **Durgapur Local Centre**

Date: December 19-21, 2025

## **Advancing Digital Innovation for Sustainability in Energy, Environment, Health and Agriculture (ADISEHA 2025)**

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technology and its applications in developing self-powered systems. He discussed the design and implementation of interfacing power management circuits that efficiently convert mechanical vibrations into electrical energy for autonomous devices. His insightful speech covered recent innovations, including energy harvesting materials, circuit design optimization, and real-world applications in industrial monitoring and wearable electronics. The audience appreciated the practical implications of his research in enabling sustainable and self-sufficient electronic systems.

The Technical Sessions focused on Machine Learning applications in energy systems and environmental sustainability. Presentations highlighted innovative algorithms for predictive maintenance, renewable energy integration, and optimization techniques; addressed advancements in healthcare technology through digital innovations, including applications in medical diagnostics, telemedicine, and real-time patient monitoring;

Emphasized agricultural advancements using soft computing and digital solutions. Topics included precision farming, crop monitoring, and sustainable agricultural practices; Explored interdisciplinary applications of machine learning in industrial automation, including smart manufacturing, supply chain optimization, and advanced data analytics; Covered advanced solutions in energy storage and power management systems ; Focused on future challenges and solutions in environmental monitoring and sustainable development using digital innovations.

For further details of the technical sessions, please follow the link :

<https://shorturl.at/pOAol>

During the valedictory function, Dr Nilanjan Chattaraj, Assistant Professor, Department of Electronics and Communication Engineering, NIT Durgapur graced the session as Distinguished Guest and emphasized the significance of continuous research and collaboration to drive sustainable digital innovations.

## **IoT and Cloud Computing**

*Contd. from page 10*

IoT sensing technologies, communication protocols (I2C, SPI, UART), and sensor selection. He emphasized TinyML's role in enabling real-time, offline decision-making in low-power environments, improving privacy and energy efficiency. A case study on faulty sensor identification in pollution monitoring illustrated its real-world applications. He also introduced IoT hardware developed at NIT Durgapur and explored TinyML's future in healthcare, smart cities, and environmental monitoring.

The Seminar concluded with a vote of thanks by Dr D R Kisku, Convener of the seminar, who expressed gratitude to all participants, speakers and

organizers for their valuable contributions. He emphasized the need for continued exploration and skill development in IoT and Cloud Computing to keep pace with technological advancements.

The Seminar successfully brought together experts, students and faculty members to explore the latest developments and practical applications of these technologies. It provided participants with valuable insights and fostered a spirit of knowledge sharing and collaboration in the field of IoT and Cloud Computing.

### **Know-Your-Member (KYM)**

**Is your mobile number & e-mail updated with us ? If not, then please forward your Know-Your-Member (KYM) form immediately for participating in IEI Election process.**

You are requested to forward your KYM 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://shorturl.at/8Q5tF> or scan the code:



05<sup>th</sup> April is celebrated every year in India as National Maritime Day to commemorate the maiden voyage of the first Indian owned commercial vessel SS Loyalty that set sail from Bombay (Mumbai) to London, on 05<sup>th</sup> April 1919. 'National Maritime Day commemorates our nation's entry into the international mercantile shipping community in 1919. A brief account of the Day, as celebrated at various State/Local Centres of The Institution of Engineers (India), are reported hereunder.

## STATE CENTRES

### Goa



Goa State Centre, IEI organized a webinar on 09 April 2025, to celebrate National Maritime Day. Expert speaker of the day, Mr Junaid Beig, from Merchant Navy Institute, Sea Scan Maritime Academy, shared

his maritime experience. Mr Beig's insightful talk addressed environmental challenges in maritime activities and the importance of sustainable practices, technological advancements and research in shaping the industry's future. Cdr (Dr) Bhaskar M Bhandarkar, Council Member, IEI and Chairman, Indian Maritime Society, Goa Chapter also graced the occasion and addressed the virtual audience.

### Jammu & Kashmir



Jammu & Kashmir State Centre, IEI organized a seminar on National Maritime Day on 05 April 2025 at Srinagar. Dr Jahangeer Ali, Honorary Secretary of the host Centre introduced the theme and emphasized the need for marine sustainability and

innovation to combat environmental challenges. Dr Manoj Kumar, Immediate Past Honorary Secretary, Jharkhand State Centre, IEI delivered an expert talk highlighting the ocean's dual role as a vital resource and a fragile ecosystem. He discussed regulatory and safety concerns, advocating for advanced engineering solutions and collaborative policy-making. Er Iftikhar Ahmad Hakim, Chairman, Jammu & Kashmir State Centre, IEI spoke on the transformative impact of engineering in maritime sectors, focusing on digital navigation, offshore infrastructure and environmental monitoring technologies to enhance safety and reduce ecological impact. The event stressed sustainable practices, pollution control and the integration of modern technologies to revive maritime traditions and foster economic growth.

### Punjab & Chandigarh



Punjab & Chandigarh State Centre, IEI celebrated National Maritime Day on 06 April 2025 in collaboration with the Institute of Marine Engineers (India), Chandigarh Chapter,

Company of Masters Mariners (India), Merchant Navy Officers Association (Chandigarh) and Maritime Trainers Guild at Chandigarh. Keynote speaker,

Capt Nitin Agarwala from the Indian Navy stressed the need for sustainable maritime practices. Capt Rohit Shridhar, Marine Advisor & SIRE Inspector, spoke on shipping's responsibility in environmental protection. Mr Piyush Jindal, Chartered Accountant, discussed the IMO's role in promoting safe and sustainable shipping. Other notable speakers included Er Arun Agarwal, Chairman IMEI-Chd Chapter, Capt Jagdeep Khalon, Chairman, CMMI, Chandigarh, Capt Prabhat Nigam, Vice President (Maritime) & Principal, School of Maritime Studies and Er Rakesh Mittal, President MNOA Chandigarh.

### Tripura

Tripura State Centre, IEI commemorated National Maritime Day on 05 April 2025, by organizing a webinar. Er Paramananda Sarkar Banerjee, Chairman, Tripura State Centre, IEI emphasized the historical importance of the SS Loyalty's maiden voyage in 1919 and highlighted India's maritime legacy. Two distinguished speakers, Er Goutam Majumder and Er Sanjoy Chakraborty, both Chief Engineers in the marine sector, delivered impactful talks. Er Majumder focused on maritime safety, seafarer training, marine pollution and the alarming issue of plastic waste in oceans. Er Chakraborty discussed infrastructure gaps in Indian ports, technological limitations, threats posed by piracy and job opportunities in marine engineering, shipbuilding and sustainable shipping technology. Their insightful presentations sparked engaging discussions during the interactive Q&A session. The webinar successfully brought together engineers and enthusiasts, reinforcing the collective responsibility to protect and utilize ocean resources sustainably.

### Uttar Pradesh

Uttar Pradesh State Centre, IEI organized a Technical Talk on 'National Maritime Day' at Lucknow on 05 April 2025. Chief



Guest, Er Gaurav Rohtagi, Chief Engineer, ADNOC, Abu Dhabi, in his address focused on the maritime sector's pivotal role in sustaining life, trade and

economic growth, while emphasizing the urgent need for ocean conservation and the adoption of sustainable practices.

### Uttarakhand

Uttarakhand State Centre, IEI celebrated National Maritime Day 2025 on 05 April 2025 at Dehradun.



Er Narendra Kumar Yadav, Chairman, Uttarakhand State Centre, IEI emphasized the historical and economic significance of India's maritime sector. A special Guest Lecture was delivered

by Capt Priyank Bahuguna, a renowned maritime expert, captivated the audience as he discussed global trends in shipping, emerging technologies, sustainability practices and future workforce needs. The occasion featured

an engaging lecture by Er Amit Singh, Executive Member of Marine Engineering Division, Uttarakhand State Centre, IEI, who reflected on the legacy of the S S Loyalty, the first Indian-owned ship that sailed from Mumbai to London in 1919, highlighting its importance in India's maritime journey. Er Amit Dimri, Corporate Member in Marine Engineering Division, delivered a technical presentation on the use of nuclear power in vessels. The interactive session fostered vibrant discussions.

### West Bengal

West Bengal State Centre, IEI in collaboration with the Institute of Marine Engineers (India), Kolkata Branch, celebrated National Maritime Day 2025 on 08 April 2025 at Kolkata. Er Gautam Sen, Former Director, Marine Department, Kolkata Port Trust, delivered a comprehensive talk on the journey of Indian merchant shipping, beginning with the voyage of S S Loyalty on 5 April 1919. He traced the challenges faced during British rule and the pioneering efforts of figures like Prince Dwaraka Nath Tagore. Prof Soumitra Neogi of Indian Maritime University, Kolkata Campus, discussed India's current shipbuilding capacity, its global position compared to Far East nations, existing industry challenges and future prospects. Er Sadhan Kumar Sarkar, Former Director (I/C), Marine Engineering and Research Institute, spoke on the topic 'Our Seas and Subsea Wealth', detailing India's Exclusive Economic Zone and subsea resources including oil, gas and marine biodiversity.



## LOCAL CENTRES

### Bareilly



Bareilly Local Centre, IEI celebrated National Maritime Day on 05 April 2025, at Bareilly. Prof (Dr) Pankaj Kumar Sharma, Chairman, Bareilly Local Centre, IEI emphasized the need for sustainable maritime

practices. Er K B Agrawal, Past Chairman of the host Centre, underlined the ocean's crucial role in supporting life and trade. Er Sudhir Kumar Gupta, Past Chairman of the host Centre, discussed the balance between conservation and opportunity through responsible ocean stewardship. Er Subhash Mehra, Past Chairman and Er Pradeep Madhwar, Immediate Past Honorary Secretary of the Centre also shared their insights and experiences.

### Bhimavaram

Bhimavaram Local Centre, IEI organized a guest lecture titled 'Corrosion Challenges and Developments in Stainless Steels for Marine Applications' on the occasion of National Maritime Day, held online on 05 April 2025. The event was graced by Chief Guest and Keynote speaker, Dr Raffi Mohammed, Assistant Professor & Head of the Department of Metallurgical and Materials Engineering at National Institute of Technology Andhra Pradesh. In his insightful lecture, Dr Mohammed addressed the corrosion challenges faced in marine environments, including pitting, crevice corrosion and stress corrosion cracking, which affect the service life of stainless steel components. He also highlighted the recent advancements in alloy design, surface treatments and corrosion resistant grades aimed at enhancing durability and performance in marine structures.

### Coimbatore

Coimbatore Local Centre, IEI in association with Coimbatore Marine College, Coimbatore, organized a technical lecture on the topic 'Current Challenges and Future Trends in the Maritime Industry' to mark National Maritime Day 2025 on 05 April 2025. Guest Speaker, C/E Gopalanvelayudam, Head of



the Department of Marine Engineering, Coimbatore Marine College delivered an insightful lecture covering ship emissions, control technologies, alternative fuels and the innovative gate rudder design to enhance vessel efficiency. He further delivered an overview on the future of modern shipping technologies including the application of AI and key performance parameters, namely EEDI, EEOI and SEEMP. Emphasizing sustainability, he urged young engineers to drive innovation for a greener maritime industry.

### Gorakhpur

Gorakhpur Local Centre, IEI organized a webinar on 05 April 2025, to celebrate National Maritime Day. Keynote Speaker of the session was Mr Adarsh Bhatt from MTM Ship Management, with experience in tanker and bulk carrier operations. Mr Bhatt delivered an insightful and comprehensive lecture emphasizing the ocean's crucial role in global trade, environmental sustainability and marine biodiversity. He discussed the IMO's global regulatory framework for cleaner seas and the importance of international cooperation through initiatives like the BBNJ Agreement and the upcoming UN Ocean Conference 2025.

### Gwalior



Gwalior Local Centre, IEI organized a technical program on National Maritime Day on 05 April 2025 at Gwalior. Keynote Speaker, Er Adesh Gupta, Chief Engineer, Merchant Navy, discussed

advancements in marine systems, including digital twin technology and the growing need for sustainable shipping. Capt Ajay Singhal and Capt M L Suryavanshi, from Merchant Navy, shed light on India's maritime legacy and recent defense and sustainability initiatives. Er Anshuman Khetan, MTech Scholar at MITS Gwalior, emphasized the infrastructure demands for adopting low-emission fuels.

### Kancheepuram

Kancheepuram Local Centre, IEI in association with Department of Mechanical Engineering, St Joseph's College of Engineering, Chennai celebrated National Maritime Day on 05 April 2025 at Kancheepuram. Mr Koki Panneerselvam, Chief



Engineer, Mitsui OSK Lines Sailing Company, Japan & Associate Professor, Marine Engineering Department, AMET University, delivered a Guest Lecture on the topic 'Sustainable Shipping for a Thriving Ocean: Our Obligation and Opportunity'. The event highlighted valuable insights in sustainable shipping, green marine technologies and career opportunities in maritime and offshore industries. The program also featured student presentations on 'Sustainable Marine Propulsion: The Future of Green Shipping' and 'Reducing Carbon Footprint in Maritime Transport: Challenges and Solutions'.

### Kochi

Kochi Local Centre, IEI commemorated National Maritime Day on 09 April 2025 at Kochi, with a meaningful event highlighting India's maritime legacy and the sector's critical role in economic and environmental sustainability. Chief Guest, Mr J Senthil Kumar, Principal Officer, Mercantile Marine Department, recognized for his expertise in maritime safety and administration delivered an impactful address on the theme focusing on the challenges of



marine pollution, overfishing and climate change and underscoring the need for innovation and policy reform to ensure sustainable ocean use. He also highlighted India's expanding role in

global maritime trade and encouraged youth to explore career opportunities in the sector.

#### Kothagudem

Kothagudem Local Centre, IEI celebrated National Maritime Day on 11 April 2025, by organizing a webinar. The highlight of the event was an insightful lecture delivered by Ms Rupali Raj Joshi, Surveyor 1, Marine Components and Service Supplies, who addressed the evolving maritime industry landscape. In her engaging talk, Ms Joshi emphasized the collaborative role of key stakeholders such as ship owners, regulators, seafarers, technology providers and environmental agencies in fostering sustainable maritime growth. She outlined the sector's urgent need for unified frameworks to navigate the digital and green transitions and called for inclusive, forward-thinking strategies to protect marine ecosystems. Her session combined technical depth with practical insights and inspired participants to rethink their roles in the maritime domain. The event reaffirmed the Centre's commitment to promote awareness and innovation in the maritime sector.

#### Ludhiana

Ludhiana Local Centre, IEI celebrated World Maritime Day 2025 through online mode on 06 April 2025. Prof (Dr) T S Kamal, Past Vice President, IEI, graced the function as the Chief Guest. Cdr (Dr) Bhaskar M Bhandarkar, Council Member, IEI served as the Guest of Honour. Cdr Ashim Kumar Bandopadhaya was the Keynote Speaker. Prof Kamal emphasized the importance of Marine Engineering and its potential. Cdr Bhandarkar introduced Cdr Bandopadhaya, who spoke about the significance of maritime trade. He highlighted the shift towards greener practices in the industry, which included blockchain technologies and green shipping. Cdr Bandopadhaya also discussed career opportunities in the marine sector and the importance of raising awareness in training institutes.

#### Meerut

Meerut Local Centre, IEI celebrated National Maritime Day on 05 April 2025 through online mode. A webinar was organized on the occasion. The Keynote address was delivered by Er Ranvir Singh, Former Chief Engineer, Merchant Navy. Er Singh discussed the pivotal role of oceans in the global economy, emphasizing that over 80% of global trade is carried by sea. He highlighted the ocean's role in providing food, employment and regulating the Earth's climate. Er Singh also discussed maritime laws and the efforts of the International Maritime Organization (IMO) in minimizing environmental impacts, aligning with the United Nations' Sustainable Development Goals.

#### Nashik

Nashik Local Centre, IEI celebrated National Maritime Day on 05 April 2025 at Nashik. The Keynote address was delivered by Er Sumit Kantilal Khinvasara, Past Chairman, Nashik Local Centre, IEI who emphasized the significance of maritime activities in ensuring a sustainable future and highlighted the ocean's role in global trade,



climate regulation and biodiversity. The event aligned with international maritime efforts such as the BBNJ Agreement, global plastic pollution negotiations and the upcoming Third UN Ocean Conference. It concluded with a collective reaffirmation of commitment toward sustainable ocean resource management and environmentally responsible shipping practices.

#### North Bengal

North Bengal Local Centre, IEI observed National Maritime Day 2025 on 05 April 2025 at Jalpaiguri. The event focused on the IMO-endorsed theme



highlighting the shared global responsibility in ocean conservation and the opportunities for sustainable development. Prof (Dr) Amitava Ray, Chairman, North Bengal Local Centre, IEI, introduced the theme,

stressing the ocean's critical role in innovation, climate regulation and ecological balance. Er Chinmoy Ghosh, Past Honorary Secretary of the Centre elaborated on the ocean's economic significance, noting that over 80% of global trade moves by sea and that the marine ecosystem sustains millions of livelihoods and diverse species.

#### Rourkela

Rourkela Local Centre, IEI observed National Maritime Day on 05 April 2025 in hybrid mode at Rourkela.



The event featured a talk titled 'National Maritime Day 2025: Charting India's Maritime Future'. Speaker of the session, Prof Arun Prasath Venugopal,

Department of Food Processing Engineering, NIT Rourkela highlighted India's maritime heritage, global trade role and vision for sustainable development through massive investments under Maritime Amrit Kaal Vision 2047. He addressed India's growing maritime security, innovation in shipbuilding, alternative energy like offshore wind and the Blue Economy 2.0 Initiative led by Odisha.

## 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 practicing 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 Engineering Day for Sustainable Development 2025

*Theme*  
**Unleashing the Power of  
Engineers to Advance the  
Sustainable Development  
Goals**

**World Engineering Day for Sustainable Development was celebrated by the Centres of the Institution all over the country on March 04, 2025. Brief accounts of the celebration as received from various Centres are reported hereunder.**

## STATE CENTRES

### Assam



Assam State Centre, IEI on the occasion of World Engineering Day organized a Lecture on 04 March 2025 at Guwahati. Speaker of the session, Dr Manoj Kumar Das, Former DGM, NEDFi delivered an engaging

presentation on the theme, emphasizing the critical role of engineers in clean energy, climate resilience, and sustainable infrastructure. He urged the engineering fraternity to come forward and play the key role in decarbonization, AI-driven sustainability, space exploration and building communities for the future.

### Delhi



Delhi State Centre, IEI observed World Engineering Day for Sustainable Development on 04 March 2025 at Delhi. The event was graced by Dr Amar Pratap Singh, Managing Director,

Amyob Education India, as the Chief Guest. Shri Vinod C Pandita, Founder & CEO, Perception Management Consulting Private Limited delivered lecture on the theme, emphasizing the crucial contributions of engineering innovations in addressing challenges related to clean energy, sustainable cities and climate action. Dr Singh also spoke about the transformative power of engineering in achieving inclusive and sustainable growth. The online event was attended by nearly 50 members, guests and invitees, reflecting active participation and interest in sustainable development.

### Puducherry

Puducherry State Centre, IEI celebrated World Engineering Day for Sustainable Development



with a technical programme held on 06 March 2025, at Puducherry. Dr S Mohan, Vice-Chancellor, Puducherry Technological University, graced the occasion as Chief Guest and delivered a

comprehensive lecture on aligning various sectors with the SDGs to promote sustainability. Distinguished speakers, Er K Veeraselvam, Superintending Engineer and Er Kalyanasundharam, Retired Superintending Engineer from the Public Works Department, Puducherry, shared insights on integrating sustainable practices into engineering operations. Er T Umopathy, Executive Engineer, PWD, delivered the vote of thanks. Dr S Thirougnaname, Chairman,

Puducherry Local Centre, IEI delivered the Keynote address highlighting the role of engineers in achieving the Sustainable Development Goals (SDGs). The event witnessed enthusiastic participation from newly recruited and in-service engineers of the Public Works Department, along with active members of the Puducherry State Centre, fostering a collaborative platform for promoting sustainability through engineering excellence.

### Rajasthan

Rajasthan State Centre, IEI celebrated World Engineering Day for Sustainable Development 2025 on 04 March 2025 at Jaipur. Chief Guest of the session,



Shri Pritam Singh, IAS (Retd) commended the theme and encouraged young engineers to stay abreast of evolving technologies. The Keynote address was delivered by Dr Shraddha Arya, BIS Mentor, Rajasthan, Government of India, who

shared valuable insights on sustainable engineering practices. The speaker mentioned that by driving innovation and applying technical skills, engineers contribute to the transformative changes for sustainable development. The speaker also stressed on the importance of interdisciplinary learning to address the SDGs.

### Tamilnadu

Tamilnadu State Centre, IEI celebrated World Engineering Day for Sustainable Development on 08 March 2025, at Chennai. Dr Palanivel Thiagarajan,



Hon'ble Minister for Information Technology and Digital Services, Government of Tamil Nadu, graced the occasion as Chief Guest and Mr C Valliappa, Chairman, Sona Institutions, Salem, was the Guest of Honour. Mr C Valliappa, in

his address, emphasized the transformative role of engineering in human development and future innovation. Dr Thiagarajan spoke on sustainability, climate resilience and the value of industry-academia synergy.

### Tripura

Tripura State Centre, IEI, in association with the Institute Innovation Council (IIC) Cell of Tripura Institute of Technology, organized a seminar on 04 March 2025, at Tripura Institute of Technology [TIT], Narsingarh, to celebrate World Engineering Day for Sustainable Development 2025. The event highlighted the pivotal role of engineers in tackling global challenges like climate change, poverty and inequality through innovation and interdisciplinary collaboration. Prof (Dr) B K Upadhyaya, Principal, Tripura Institute of Technology, graced the occasion as Guest of Honour. Key deliberations were made by the



Special speakers, Er Chandrim Banerjee, ADB Consultant and PFCCL Advisor, Kolkata and Dr Sanjoy Mitra, Associate Professor, CSE Department, TIT, who emphasized empowering engineers through education, collaboration and R&D in sustainable technologies. The seminar reinforced engineering's vital contribution to achieving the United Nations' Sustainable Development Goals.

#### Uttarakhand

Uttarakhand State Centre, IEI celebrated World Engineering Day for Sustainable Development on 04 March 2025 at Dehradun. Er Narendra Kumar Yadav, Chairman, Uttarakhand State Centre, IEI emphasized the significance



of the day and highlighted the critical role engineers play in achieving the United Nations' Sustainable Development Goals (SDGs). He underlined the necessity of interdisciplinary collaboration among engineers, scientists,

policymakers and the public to foster sustainable development. The celebration served as a platform to reinforce the commitment towards innovative and responsible engineering practices.

### LOCAL CENTRES

#### Ghaziabad

Ghaziabad Local Centre, IEI celebrated World Engineering Day for Sustainable Development on 08 March 2025 at Inderprastha Engineering College, Sahibabad, Ghaziabad. Er Anand Prakash, Director, Global IITians for Quantum Consciousness Forum



graced the function as the Chief Guest. Prof (Dr) Ajay Kumar, Director, Inderprastha Engineering College was present on the

dais as the Guest of Honour. Convener of the event was Prof (Dr) Meenakshi Sharma, Professor and Dean, Inderprastha Engineering College. Prof Kumar emphasized the need for engineers to actively contribute to achieve the UN-SDGs. Chief Guest, Er Anand Prakash delivered an enlightening address on quantum consciousness and its relevance to sustainability, integrating ancient wisdom with scientific understanding. The session witnessed high engagement with interactive Q&A.

#### Jabalpur

Jabalpur Local Centre, IEI observed World Engineering Day for Sustainable Development 2025 through online mode on 04 March 2025. The Keynote lecture was delivered by Dr Rajeev Jain, Head, Mechanical Engineering Department, Kalaniketan Polytechnic College, Jabalpur and Honorary Secretary, Jabalpur Local Centre, IEI, on the topic 'Hydrogen Vehicles'. He elaborated their working mechanism, advantages such as zero tailpipe emissions, faster refueling compared to electric vehicles and potential for reducing greenhouse gas emissions. Dr Jain emphasized hydrogen's role as a clean and abundant energy carrier with the potential to replace fossil fuels across various sectors. As convener and moderator of the event, he also delivered the vote of thanks, stressing the urgency of sustainable engineering solutions to meet the rising demands of a growing global population.

#### Kalaburagi

Kalaburagi Local Centre, IEI celebrated World Engineering Day for Sustainable Development on 10 March 2025 at Kalaburagi. Guest speaker, Dr T Palanisamy, Associate Professor, Department of Civil Engineering, NITK Surathkal delivered the theme lecture. Dr Palanisamy highlighted the vital role of engineers in advancing scientific research and innovations to achieve sustainable development, focusing on environmentally friendly construction techniques such as Bio-Concrete. The talk sparked a highly interactive discussion among IEI members from various engineering disciplines, who exchanged ideas on sustainable practices and the future of green construction. The event successfully emphasized the need for engineering solutions in addressing global challenges.

#### Kochi

Kochi Local Centre, IEI organized a technical talk while observing World Engineering Day for Sustainable Development 2025 on 04 March 2025



at Kochi. Guest speaker of the event was Dr Vasudev R, Professor & Head, Department of Civil Engineering, TocH Institute of Science & Technology, delivered an insightful talk on the use of bamboo as an eco-friendly alternative

in construction, highlighting its rapid growth, durability, affordability and potential to reduce environmental impact.

#### Madurai

Madurai Local Centre, IEI celebrated World Engineering Day for Sustainable Development on 08 March 2025 at Madurai. Chief Guest of the session,



Er C Seenivasan, General Manager (Operations), JK Fenner India Limited, Madurai delivered an insightful lecture on the theme, emphasizing the ethical and sustainable responsibilities of engineers

in combating global challenges such as climate change, poverty and inequality.

#### Meerut

Meerut Local Centre, IEI celebrated World Engineering Day for Sustainable Development with an online technical session on 04 March 2025. The event featured two keynote speakers, Er Mohd. Murtaza, Assistant Professor, Department of Electronics Engineering and Er Priyank Sirohi, Assistant Professor, Department of Information Technology, SCRIET, Meerut. Er Murtaza delivered a presentation on 'Evaluation of Site for Renewable Energy Power Plants Using MCDM Technology', focusing on SDG-7 and India's strides in renewable energy, with detailed case studies and insights into the MCDM methodology. Er Sirohi followed with a talk on 'Machine Learning in Predictive Maintenance, Smart Infrastructure and Reinforcement Learning for Complex Engineering Problems', discussing the role of ML in proactive maintenance and intelligent infrastructure systems. He explained the application of Supervised, Unsupervised and Reinforcement Learning to combat complex engineering challenges.

#### Prayagraj

Prayagraj Local Centre, IEI celebrated World Engineering Day for Sustainable Development on 04 March 2025, at Prayagraj. Prof Avanish Kumar Dubey, Chairman, Prayagraj Local Centre, IEI emphasized the global contributions of engineers toward achieving the Sustainable Development Goals (SDGs), drawing parallels with Indian philosophy and Sanatan traditions advocating for universal well-being. Prof A K Sachan, Department of Civil Engineering,



MNNIT Allahabad delivered the Keynote lecture on 'Sustainable Concrete in Construction', elaborating on eco-friendly practices in construction such as reducing carbon emissions, recycling 'C' and 'D' waste and utilizing industrial by-

products.

### Pune

Pune Local Centre, IEI celebrated World Engineering Day for Sustainable Development on 04 March 2025, in collaboration with AISSMS College of Engineering, AISSMS Polytechnic and Marathi Vidyan Parishad, Pune. Chief Guest, Dr Deepak Shikarpur, AI Expert delivered address on the role of AI and emerging technologies in sustainable development.



Er Dhaval Jitkar, Managing Committee Member, AISSMS Pune, served as Guest of Honour and highlighted engineering innovations driving the SDGs.

AISSMS Pune, served as Guest of Honour and highlighted engineering innovations driving the SDGs.

### Rourkela

Rourkela Local Centre, IEI observed World Engineering Day for Sustainable Development on 04 March 2025 through hybrid mode. A webinar was organized on the topic 'Activated Carbon from Bio Waste for Sustainable Future'. Keynote speaker, Prof Subash Chandra Mishra, Former HOD and HAG, Professor, Department of Metallurgical & Materials Engineering, NIT Rourkela delivered an insightful talk on the production, properties and applications of activated carbon derived from biomass waste, highlighting its use in adsorption, environmental remediation and electrochemical energy storage.

### Sunabeda

Sunabeda Local Centre, IEI celebrated World Engineering Day for Sustainable Development on 04 March 2025, at Sunabeda. The event featured a



Keynote presentation by Er Anada Prasad Sahu, Chief Manager (Indigenization), HAL Sunabeda, who emphasized the vital role of engineers in addressing global issues such as climate change, poverty and inequality.

Er Pradeep Kumar Das, Senior Manager (Projects), HAL Sunabeda, highlighted the impact of engineering solutions in sustainable development, citing innovations in renewable energy, water purification and smart infrastructure. Er Premananada Maity, Chairman, Sunabeda Local Centre, IEI and Chief Manager (Special Process Shop) and Er Sanjaya Kumar Bishoyi, Honorary Secretary, Sunabeda Local Centre, IEI and Chief Manager (Aero Engine Testing), also shared insights on the technical topic. Er Sanjeeb Kumar Mishra, Senior Manager (Aero Engine Testing), HAL delivered the concluding remarks. The event reflected a strong commitment to advancing sustainable engineering solutions.

### Tiruchirappalli

Tiruchirappalli Local Centre, IEI, in collaboration with the Indian Institute of Welding, Computer Society of India, Safety Quality Forum IEI, Indian Welding Society (Southern Zone), Indian Institute of Metals, Indian Institution of Industrial Engineering, Indian Institution of Plant Engineers,

Kumari Arivial Peravai, and Indian Society for Non-Destructive Testing, organized a technical lecture on 04 March 2025, through online mode. Speaker, Prof (Dr) P Udhayakumar, Professor and Head, Mechanical Engineering Department, K L N College of Engineering, Pottapalayam and Council Member, IEI, delivered the Keynote lecture, sharing his expertise with the participants. The collaborative effort reflected the Centre's ongoing commitment to knowledge sharing and interdisciplinary engagement.

### Trichur

Trichur Local Centre, IEI celebrated World Engineering Day for Sustainable Development on 11 March 2025 at Trichur. Dr K Meenakshy, Principal, Government Engineering College, Thrissur, delivered the theme lecture,



highlighting the crucial role of engineers in achieving SDGs such as clean water and sanitation, clean energy, sustainable cities, climate action and responsible production. She mentioned that by empowering the engineers, providing the

right support and fostering a culture of collaboration can unlock the full potential of engineering profession to meet the SDGs and can build a more equitable and sustainable world for future generations.

### Tuticorin

Tuticorin Local Centre, IEI celebrated World Engineering Day on 04 March 2025 at Tuticorin. The event highlighted the crucial role engineers play in addressing global challenges such as climate change, poverty and inequality.



Keynote speaker, Er Dr T Sivageerthi, Executive Engineer, Tuticorin Thermal Power Station delivered a compelling talk on how engineering drives sustainability through technologies like renewable energy, smart infrastructure and water purification

systems. The event underscored the need for strategic frameworks to strengthen engineering capacities worldwide, especially in developing nations.

### Udaipur

Udaipur Local Centre, IEI celebrated World Engineering Day on 04 March 2025 at Udaipur. Chief Guest of the event was Dr S M Prasanna Kumar, Director, Geetanjali Institute of Technical Studies. Keynote speaker of the session was Dr Pramod Paliwal, Professor, School of Management, Pandit Deendayal Energy University. The speakers emphasized the critical role engineers play in



sustainable development. Dr Prasanna Kumar highlighted the importance of technological advancements in improving human life. Dr Pramod Paliwal discussed the global challenges, such as climate change and pollution and the role of engineers in addressing them. Er Rajesh Nimare, former Dean of Secure Academy, underlined the significance of sustainability and its link to the United Nations' Sustainable Development Goals (SDGs).

Dr Prasanna Kumar highlighted the importance of technological advancements in improving human life. Dr Pramod Paliwal discussed the global challenges, such as climate change and pollution and the role of engineers in addressing them. Er Rajesh Nimare, former Dean of Secure Academy, underlined the significance of sustainability and its link to the United Nations' Sustainable Development Goals (SDGs).

### Vallabh Vidyanagar

Vallabh Vidyanagar Local Centre, IEI, in association with Sardar Patel College of Engineering, Bakrol, Anand, celebrated World Engineering Day for Sustainable Development on 04 March 2025, at Vallabh Vidyanagar.

Mr Sanjiv Shah, Founder & Managing Partner, Sanjiv Enterprise, Vadodara



introduced participants to the fundamentals of sustainable development, focusing on energy generation, waste management and pollution control. Er Asim Kumar Joshi, Senior Scientist, Solar Energy Division, Sardar Patel Renewable Energy Research Institute [SPRERI] provided insightful knowledge on renewable energy, including solar and biomass technologies. Participants explored the applications of solar cells, cookers, panels and water heaters to reduce carbon footprints.

## Visakhapatnam

Visakhapatnam Local Centre, IEI organized a virtual technical session on 04 March 2025 to mark World Engineering Day for Sustainable Development. The Keynote lecture was delivered by Dr T Karthikeya Sharma, Assistant Professor, NIT Andhra Pradesh, who spoke on the critical role of engineers in driving sustainable development. He emphasized how engineers, through innovation and technological progress, can address environmental challenges and improve the quality of life. The session highlighted the importance of integrating sustainability into engineering practices to build a greener and more resilient future. The program concluded with a strong message on the need for continued research, collaboration and supportive policy frameworks to enhance the role of engineers in creating a sustainable and equitable world.

## SDGs and the Role of Emerging Technologies: Vision and Implementation

*Contd. from page 12*

skill development programs for engineers, architects, and workers. The lecture featured successful case studies from India and abroad, showcasing the positive impact of adopting green construction technologies in urban development projects.

Er J B Rai spoke on 'Balancing Technological Advancements and Sustainability'. His address emphasized the importance of harmonizing technological progress with environmental preservation and social well-being. Er Rai discussed the role of advanced irrigation technologies such as precision irrigation, automated water management systems, and sensor-based monitoring in ensuring sustainable agricultural practices. The speaker highlighted the importance of engineers and policymakers adopting ethical practices to minimize negative environmental impacts while leveraging technological advancements. He emphasized the need for collaboration between government agencies, industries, and academia to foster sustainable technological innovations. Er. Rai concluded with a call for responsible engineering and mindful technological advancements to address the growing environmental and societal challenges. He urged stakeholders to innovate while preserving natural resources for future generations, emphasizing the role of water management in sustainable development.

Prof Rakesh Kumar spoke on 'Role of AI, ML, and IoT in Achieving Sustainable Development Goals (SDGs)'. Prof Rakesh Kumar's lecture explored the transformative role of Artificial Intelligence (AI), Machine Learning (ML), and the Internet of Things (IoT) in accelerating progress toward the United Nations' Sustainable Development Goals (SDGs). He highlighted how these emerging technologies are pivotal in addressing global challenges such as healthcare access, agricultural efficiency, resource management, and climate action. Prof Kumar emphasized the importance of integrating these technologies ethically and inclusively to support marginalized communities and avoid exacerbating social inequalities. He called for robust regulatory

frameworks to address risks, including data privacy concerns, algorithmic biases, and the environmental impact of technological advancements. The lecture concluded with a call for collaboration among governments, industries, and civil society to harness the full potential of AI, ML, and IoT for a sustainable and equitable future. Strategic implementation of these technologies, he argued, can propel the world closer to achieving the SDGs, creating a more inclusive and resilient society.

Er M W Beg delivered a talk on 'Sustainable Development Goals: Vision & Implementation'. The lecture provided valuable insights into both industrial and domestic energy conservation strategies, emphasizing practical solutions for sustainable energy practices. The session concluded with actionable advice to contribute towards achieving SDGs through mindful energy production and consumption at all levels.

Dr Krishna Kumar, Professor, CSE, ITM, delivered a lecture on the topic 'Assessing SDGs for Environmental Attainment Using ML Approaches'. Dr Krishna Kumar's lecture emphasized the role of Machine Learning (ML) in advancing environmental sustainability and achieving the Sustainable Development Goals (SDGs). He highlighted the rapid growth of the renewable energy sector and emphasized the need for innovative efficiency solutions. Key points of the lecture included: Renewable Energy and SDGs; Application of Machine Learning; Model Efficacy and Results and Implications for Sustainability. The lecture concluded by highlighting the need for continued research and technological innovation to leverage ML for achieving environmental sustainability and advancing SDG-related goals.

Ms Shalini Singh, Department of Computer Science, ITM, Gorakhpur, summed up the Proceedings of the deliberation, highlighting the key takeaways from the sessions. Er Pavnes Kumar, Honorary Secretary, Gorakhpur Local Centre, IEI extended a vote of thanks, expressing gratitude to all dignitaries, speakers, participants and organizers for their valuable contributions.

### Chartered Engineer Certification

The Members who have not availed the Chartered Engineer Certificate [CEng(I)], are requested to apply online:

<https://www.ieindia.org/WebUI/iei-Memb.aspx#chartered-engineering>

# IEI Celebrates World Water Day



## Theme - Glacier Preservation

The World Water Day was celebrated by the Institution all over the country on March 22, 2025. Reports of celebration received from various Centres are reported here.

### STATE CENTRES

#### Bihar



Bihar State Centre, IEI celebrated World Water Day on 29 March 2025 at Patna with a focus on the importance of glaciers and sustainable water management. Prof Suresh Kumar Verma, Vice Chancellor, Bihar Engineering University, Patna graced the occasion as the Chief Guest and Dr D P Singh, Chairman, IWRS, Patna, was the Keynote speaker. Prof Verma delivered an enlightening address on the event's theme, emphasizing that glaciers are the vital reservoirs that provide fresh water to millions, regulate global climate patterns and support ecosystems. Dr Singh highlighted Bihar's pressing water challenges due to its unique geography and rising population, stressing the need for collaborative efforts by governments, communities, scientists and policymakers to ensure water security for future generations.

of water conservation, with a focus on glacier preservation and brought together engineers, corporate members and students to discuss critical environmental issues.

#### Tripura



The event emphasized the critical role glaciers play in sustaining global water supplies. Er Rajib Majumder, Chief Engineer, PWD (DWS), Tripura, was the Keynote Speaker and highlighted the current state of drinking water and sanitation in the state, including initiatives under the Jal Jeevan Mission. Prof (Dr) Ratul Das from NIT Agartala, discussed the impact of Himalayan glaciers on climate change, particularly glacial bursts in Sikkim. Dr Anshuman Pal, Water Supply Expert, SPMU, JJM, PWD (DWS) Tripura, focused on the global importance of glacier preservation and the need to reduce greenhouse gas emissions.

Uttarakhand State Centre, IEI, celebrated World Water Day on 22 March 2025 at Dehradun. Er Narendra Kumar Yadav, Chairman, Uttarakhand State Centre, IEI, delivered an insightful lecture on the inspection of Hydro Mechanical Equipment and Hydro Projects as part of the TOT program under the Ministry of New and Renewable Energy, Government of India. He emphasized the growing challenges posed by climate change, citing the increasing frequency and intensity of extreme weather events such as droughts and floods, which disrupt the natural water cycle. Er Yadav shared several real-world case studies where engineering solutions have effectively addressed water scarcity issues. Er Satish Kumar Chauhan, Honorary Secretary, Uttarakhand State Centre, IEI highlighted the significance of World Water Day in raising awareness about the global water crisis.

#### Uttarakhand



Uttarakhand State Centre, IEI, celebrated World Water Day on 22 March 2025 at Dehradun. Er Narendra Kumar Yadav, Chairman, Uttarakhand State Centre, IEI, delivered an insightful lecture on the inspection of Hydro Mechanical

Uttarakhand State Centre, IEI highlighted the significance of World Water Day in raising awareness about the global water crisis.

### LOCAL CENTRES

#### Bhimavaram

Bhimavaram Local Centre, IEI organized a webinar titled 'Digital Water Management – Challenges in Water Bodies' on the occasion of World Water Day, held on 22 March 2025. Chief Guest and Speaker, Mr P Raju, Assistant Professor, Department of Civil Engineering, SRKR Engineering College in his insightful lecture, elaborated on the application of digital technologies to monitor, analyze and manage water resources effectively. He stressed the urgency of adopting smart solutions to combat water scarcity, reduce pollution and improve the overall efficiency of water body management. The

#### Delhi

Delhi State Centre, IEI organized a webinar on 'Glacier Preservation' to commemorate World Water Day on 24 March 2025. The event featured two insightful Keynote addresses by Shri R S Tyagi, Former Member, Delhi Jal Board, who highlighted the urgent need for glacier conservation and sustainable water management. Shri Ravinder Pal Singh, President & CEO, Gokaddal Inc, delivered a presentation on the topic 'Using the Power of Four A Tech to Preserve Glaciers'. Both speakers stressed the importance of global cooperation, technological innovation and policy reforms to combat climate challenges. The program concluded with meaningful discussions on glacier and water resource preservation.

#### Goa



Goa State Centre, IEI, in collaboration with Goa College of Engineering (GEC), Civil Engineering Division Student Chapter and the Association of

Civil Engineering Students (ACES), commemorated World Water Day on 27 March 2025 at Goa with a Digital Poster-Making Competition aimed at promoting awareness on water conservation and sustainability. Prof (Dr) Deepankar Choudhury, Professor in Civil Engineering at IIT Bombay, Mumbai was the Chief Guest. Attended by number of participants, the event encouraged student engagement with environmental challenges and emphasized engineers' roles in sustainable development and responsible water management.

#### Rajasthan



Rajasthan State Centre, IEI, celebrated World Water Day 2025 on 26 March 2025 at Jaipur. The celebration successfully highlighted the importance

session provided valuable perspectives on integrating innovation into civil and environmental engineering practices.

### Coimbatore

Coimbatore Local Centre, IEI, in association with the Agricultural Engineering College and Research Institute (AEC&RI), Tamil Nadu Agricultural University (TNAU), Coimbatore, organized a technical lecture on the



topic 'Water Resources Management in the Digital Era through Spatio-Temporal Analysis' on 24 March 2025 to mark World Water Day 2025 at Coimbatore. The session featured Dr Balaji Kannan, Professor & Head, Department of Soil and Water Conservation Engineering, AEC&RI, TNAU, as the Guest speaker. Dr M Balakrishnan, Professor & Head, Department of Food Processing Engineering, AEC&RI, introduced the speaker. Dr Kannan delivered an insightful lecture highlighting the importance of water resource management in India, water resource mapping through remote sensing techniques and focusing on current challenges and research directions. The lecture underscored the role of digital tools in sustainable water governance.

### Dhanbad

Dhanbad Local Centre, IEI, in collaboration with the EIACP Programme (RP), Department of Environmental Science & Engineering, IIT ISM Dhanbad,



celebrated World Water Day 2025 on 22 March 2025 at IIT ISM Dhanbad. Chief Guest of the session was Dr Mukesh Kumar, Associate Professor in Operations Management, University

of Cambridge, UK. Prof Subrata Hait, Associate Professor, Department of Civil and Environmental Engineering, IIT Patna was the Keynote speaker. Prof (Dr) Dheeraj Kumar, Deputy Director, IIT ISM Dhanbad and Chairman, Dhanbad Local Centre, IEI shared insights on sustainable water practices in the mining sector. Prof Hait's lecture addressed presence of micro plastics in water and sustainable solutions. The event included a pledge ceremony, Q&A session, documentary screening and student visits to SBR plants and rainwater harvesting structures. The session marked a successful initiative toward environmental awareness and glacier preservation.

### Durgapur

Durgapur Local Centre, IEI observed World Water Day 2025 on 22 March 2025 at Durgapur. The event was graced by Mr Pranab Kumar Ghosh, MD, SBSTC, Durgapur, as the Chief Guest. Dr Ashim Kumar Bhattacharya, Founder and Executive Director, Academy of Water Technology and Environmental Management,



Kolkata and Dr Sandip Mondal, Assistant Professor, Department of Earth and Environmental Science, NIT Durgapur were Guests of Honour. Mr Ghosh addressed global warming mitigation and SBSTC's green energy initiatives. Dr Bhattacharya spoke on sustainable water futures through conservation, wastewater recycling and reuse, aligning with SDGs. Dr Mondal elaborated on glacier conservation amid climate change, stressing the urgency of action. The programme opened with a film on the International Year of Glacier Preservation and concluded as an insightful and impactful celebration on water sustainability and glacier preservation.

### Faridabad

Faridabad Local Centre, IEI celebrated World Water Day on 22 March 2025 at Faridabad. The Keynote address was delivered by Dr Jagdeesh Chaudhary, Chairman, Indian Institute of Water Research (IIWER), who highlighted



the alarming rate of glacier melt due to climate change and advocated strategic interventions to protect these vital freshwater sources. The event emphasized engineering's critical role in sustainable water solutions

and concluded with an appeal to the participants to embrace water-saving practices and support initiatives for glacier and water resource preservation.

### Gorakhpur



Gorakhpur Local Centre, IEI, in collaboration with the Gandak Zone, Department of Irrigation, UP, Gorakhpur, organized a technical program on World Water Day 2025 on 22 March 2025

at Gorakhpur. Chief Guest of the session, Er R P Tiwari, Former Engineer-in-Chief & HOD, Department of Irrigation, UP, delivered a compelling lecture on ancient Indian water management practices. Guest of Honor, Er J B Rai, President, Malaviya Alumni Association, advocated for eco-conscious human behavior. The Keynote Speaker, Dr P K Mishra, Senior Director, CIDC, New Delhi, stressed the urgent need for glacier preservation through citizen responsibility, carbon reduction, technological innovation and policy reform.

### Jabalpur



Jabalpur Local Centre, IEI celebrated World Water Day on 22 March 2025 at Jabalpur. The event was graced by Chief Guest, Dr Rajeev Chandak, Principal, Jabalpur Engineering College and Keynote

Speaker, Shri A S Khan, Senior Geologist, Geological Survey of India. Dr Chandak emphasized the critical need for glacier conservation to safeguard global freshwater resources, while Shri Khan delivered a detailed Keynote presentation on 'Glacier Preservation', highlighting sustainable management and international collaboration.

### Jammu



Jammu Local Centre, IEI celebrated World Water Day on 22 March 2025 at Jammu. Chief Guest of the event, Mr Javed Ahmed Rana, Hon'ble Minister, Jal Shakti, Forest, Ecology & Environment and Tribal Affairs Department,

Government of Jammu & Kashmir emphasized the urgent need for glacier conservation. Guests of Honour of the session were, Mr Satish Sharma, Hon'ble Minister for IT, Youth Services & Sports, Transport, Science & Technology, Food, Civil Supplies & Consumer Affairs, ARI & Training and Mr Khurshid Ahmad Shah, Mission Director, Jal Jeevan Mission, J&K. The speaker advocated for simple living, afforestation and community-led conservation practices. Er Iftikhar Ahmed Kakroo, Chairman, JKWRA and Mr Jose George Pottakkal, Head, Western Himalayan Regional Centre, NIH Jammu, delivered Keynote addresses highlighting glacier depletion, its consequences and strategies for preservation.

### Jodhpur

Jodhpur Local Centre, IEI, in collaboration with UltraTech Cement, organized World Water Day on 22 March 2025 at Jodhpur. Keynote speaker of the



session was Dr Dinesh Kumar Periwal, Ex-Additional Chief Engineer, PHED, Jodhpur. Dr Periwal delivered an insightful presentation on glacier conservation, emphasizing the urgency to reduce greenhouse gas emissions, adopt water conservation measures and promote sustainable development to combat the global water crisis.

#### Kadapa



Kadapa Local Centre, IEI, in collaboration with JCI, Kadapa, observed World Water Day on 22 March 2025 at Kadapa. Keynote speaker of the session, Er B Nagendra Naik, Assistant Executive Engineer, Pincha Project, Annamayya District,

delivered an insightful lecture highlighting the urgent need to preserve glaciers as critical freshwater sources and the broader global efforts to tackle the water and sanitation crisis affecting billion of people. Shri K Karunakar, Senior Journalist discussed the significance of the theme and the necessity of sustainable water management. Participants pledged to commit to water conservation efforts, ensuring sustainable development and environmental protection for future generations.

#### Kakinada



Kakinada Local Centre, IEI organized a lecture on 22 March 2025 to mark World Water Day at Kakinada. Speaker of the event, Dr G V R Prasada Raju, Department of Civil Engineering, University

College of Engineering, Kakinada, delivered lecture on the topic 'Water for Peace'. Dr Raju emphasized the human rights to water, as recognized by the UN in 2010, stressing that access to safe, clean drinking water is critical for everyone's well-being and dignity.

#### Kanpur

Kanpur Local Centre, IEI, jointly with the Department of Civil Engineering, HBTU Kanpur, observed World Water Day through online mode on 22 March 2025. Er Jaiprakash Nayak, Assistant Professor, Department of Civil Engineering, HBTU Kanpur, delivered an insightful lecture on the critical role of glaciers as vital freshwater reserves and the threats they face from climate change, black carbon pollution and deforestation. Er Nayak emphasized strategies for glacier preservation, including reducing carbon emissions, afforestation, sustainable water management and adopting technologies like artificial ice storage. He highlighted glaciers' importance in freshwater supply, climate regulation, hydropower generation and biodiversity support. The event was marked by lively engagement and a strong call for climate action.

#### Kollam

Kollam Local Centre, IEI observed World Water Day on 22 March 2025 through online mode. Keynote Speaker, Dr Sudheer Padikkal, General Manager, Kerala Irrigation Infrastructure Development Corporation, Government of Kerala delivered an informative talk highlighting the UNGA's declaration of 2025 as the International Year of Glacier Preservation and the institution of March 21st as the World Day for Glaciers.

#### Kothagudem

Kothagudem Local Centre, IEI, in association with the University College of Engineering, Kakatiya University, Kothagudem, organized a webinar on 24 March 2025 to mark World Water Day. The Special Guest and Keynote Speaker, Dr I Satyanarayana Raju, Council Member, IEI, delivered an insightful lecture highlighting the significance of World Water Day 2025 and its role in raising awareness about global water challenges. Dr Raju discussed the Sustainable Development Goal (SDG) pyramid, focusing on SDG 6 (Water, Sanitation, and Hygiene - WASH) and its critical contribution to sustainable development. He also explained the differences between glaciers and sea ice, stressing the need for immediate, coordinated global actions to protect these essential resources. His comprehensive lecture underscored the urgent need for glacier conservation as a key strategy for climate resilience and sustainable water management, inspiring all participants to commit to proactive environmental stewardship.

#### Madurai



Madurai Local Centre, IEI observed World Water Day on 15 March 2025 at Madurai. Chief Guest of the session, Dr P Mariappan, Executive Engineer, TWAD Board, Dindigul delivered an insightful lecture highlighting

the significance of glaciers in the hydrological cycle, their vital role in sustaining billions of lives and agriculture, and the alarming impacts of global warming causing glacier retreat. The session underscored the importance of global commitment to glacier conservation for future generations.

#### Neyveli



Neyveli Local Centre, IEI, celebrated World Water Day on 27 March 2025 at Neyveli. Chief Guest, Dr A Murugappan, Professor, Civil Engineering Department and Former Dean, Faculty of Engineering & Technology,

Annamalai University, Chidambaram, delivered an insightful lecture on the theme. Dr Murugappan, in his address, emphasized the critical role glaciers play in maintaining the Earth's freshwater resources and highlighted the urgent need for global action to preserve these vital ecosystems amidst the challenges posed by climate change. The celebration concluded with a collective resolve to promote awareness and action towards glacier preservation.

#### North Bengal



North Bengal Local Centre, IEI, observed World Water Day 2025 on 22 March 2025 at Jalpaiguri Government Engineering College, Jalpaiguri. Prof (Dr) Amitava Ray, Chairman, North Bengal State Centre, IEI,

initiated the programme by emphasizing the critical role of glaciers, which store about 70% of the world's freshwater and are essential for drinking water, agriculture, and climate regulation. He highlighted the importance of glacier preservation for sustaining ecosystems and regulating the Earth's hydrological cycle. Er P K Saha, Committee Member of the centre, stressed that combating climate change through reduced greenhouse gas emissions and promoting renewable energy are vital steps for glacier conservation. Other committee members, including Er G K Panda, Er Sudip Mukherjee,

Er Subrata Bhattacharya and Er Asim Mahapatra, actively participated in the discussion, sharing their insights on sustainable practices for glacier preservation.

### Prayagraj



Prayagraj Local Centre, IEI, in association with the Indian Water Works Association (IWWA) Prayagraj Centre, celebrated World Water Day on 22 March 2025 at Prayagraj. Chief Guest,

Padma Shri Dr Ajai Kumar Sonkar discussed the vital role of glaciers in global water systems and the impacts of global warming on glacial melt. Keynote speaker, Prof H K Pandey, Department of Civil Engineering, MNNIT Allahabad explained the challenges of preserving glaciers under climate change, advocating for reducing greenhouse gas emissions and using advanced monitoring technologies. Er Gulab Chandra Dubey, Ex-Director, U P Jal Nigam and Prof R C Vaishya, Honorary Secretary, IWWA, also contributed to the discussions.

### Sunabeda

Sunabeda Local Centre, IEI, organized World Water Day on 22 March 2025 at Sunabeda. Er Tikeswar Pradhan, Senior Manager, Aggregate Overhauling Shop, HAL Sunabeda,



presented a talk highlighting the critical role glaciers play in sustaining global water supply. He emphasized the rapid melting of glaciers, disrupting water flows

and affecting millions through floods, droughts, and rising sea levels. Er Sharmistha Das, Manager (Planning), HAL Sunabeda, discussed efforts to preserve glaciers, stressing the importance of reducing greenhouse gas emissions, promoting sustainable energy and using technologies like satellite monitoring and climate models to assess glacier health. Er Premananda Maity, Chairman, Sunabeda Local Centre, IEI & Chief Manager, Special Process Shop, HAL and Er Sanjaya Kumar Bishoyi, Honorary Secretary, Sunabeda Local Centre, IEI & Chief Manager, Aero Engine Testing, HAL, also shared their insights on the topic. Er Ramakrushna Khanduala, Senior Manager, Tooling, HAL recognized the importance of preserving glaciers to ensure a sustainable water supply for future generations.

### Tiruchirappalli

Tiruchirappalli Local Centre, IEI, in collaboration with Indian Institute of Welding Tiruchirappalli Branch, Computer Society of India, Tiruchirappalli Chapter, Safety Quality Forum, IEI, Indian Welding Society, Southern Zone, Indian Institute of Metals, Tiruchirappalli Chapter, Indian Institution of Industrial Engineering, Tiruchirappalli, Indian Institution of Plant Engineers, Trichy Chapter, Kumari Arivial Peravai Kanyakumari and Indian Society for Non-destructive Testing, Trichy chapter organized a lecture on 25



March 2025 through hybrid mode to commemorate World Water Day. Speaker of the session, Dr Lekshmi Mohan V, Assistant Professor, Department of Civil Engineering, National Institute of Technology, Tiruchirappalli delivered an insightful lecture on relevant technical topics, contributing valuable knowledge to the attendees. The lecture brought together professionals and members from various engineering and technical societies, fostering a rich exchange of ideas and knowledge.

### Tiruvallur



Tiruvallur Local Centre, IEI, celebrated World Water Day on 22 March 2025 at Tiruvallur. The event featured Dr Sheik Syed Ishak, K A, Regional Head - Water Resources,

South, Bureau Veritas (India) Private Limited, as the esteemed speaker. Dr Ishak, an expert in water resource management and environmental sustainability, shared his extensive knowledge and insights on water quality management, sustainable water solutions and environmental compliance. His contributions to the field have made a significant impact on promoting responsible water management practices. The seminar emphasized the importance of water conservation, sustainable water management and rural development, providing a platform for knowledge exchange and inspiring the audience to adopt responsible water practices.

### Trichur



Trichur Local Centre, IEI, celebrated World Water Day on 23 March 2025 at Trichur. Keynote speaker, Dr E J James, Institute Professor & Advisor at Karunya Institute of Technology & Sciences, Coimbatore delivered an insightful talk on the importance of glacier preservation. He discussed the causes of glacier loss, the challenges faced in their preservation and the strategies required to slow down or halt glacier degradation. The session highlighted the urgent need for global efforts to protect glaciers, vital

for maintaining freshwater resources and climate balance.

### Tuticorin



Tuticorin Local Centre, IEI, celebrated World Water Day on 22 March 2025, at Tuticorin. Er Justin Jagadeep Kumar, Chairman, Tuticorin Local Centre, IEI emphasized the urgent need

to address the rapidly deteriorating ecosystem, particularly the fast-melting glaciers, which are disrupting water flows and affecting millions through floods, droughts and rising sea levels. Er I Maria Michael Raj, Past Chairman, Tuticorin Local Centre, IEI and Technical Services Manager [Former], heavy Water Board, Tuticorin, Department of Atomic Energy, delivered the Keynote address. He highlighted the critical role of glaciers in providing freshwater, stating they store about 70% of the world's fresh water, vital for drinking, agriculture and hydropower.

### Udaipur

Udaipur Local Centre, IEI, celebrated World Water Day on 22 March 2025, at Udaipur. Er Purushottam Paliwal, Chairman, Udaipur Local Centre, IEI highlighted the importance of glacier conservation for sustaining the global water supply. Dr Kshipra Sharma, Assistant



Professor, Guru Gobind Singh Indraprastha University, New Delhi, delivered the Keynote speech, discussing the alarming effects of rising temperatures on glaciers and the urgent need to reduce CO2 emissions to combat climate change. Dr Gyandeep Chaudhary, Assistant Professor, Bennett University, Greater Noida, spoke about the critical role of glaciers in regulating the water cycle, influencing global temperatures and ensuring water security for billions.

## Empanelment as Advocate/ Attorneys & Chartered Accountant who are also Engineers

The Institution of Engineers (India) invites practicing Advocates/Attorneys and Chartered Accountants who are also Engineers to apply for empanelment to enhance their visibility in the public domain. Empanelment entails a nominal application fee of Rs. 5900/- (inclusive of GST) payable by Demand Draft/Multi-city Cheque drawn in favor of "**The Institution of Engineers (India)**" and payable at Kolkata.

Applicants are requested to send a hard copy of their application to the **Deputy Director (Membership)**, The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700020. For further details, please visit our website at <https://www.ieindia.org/webui/iei-home.aspx>.

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- ❖ Aerospace Engineering Division,
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- ❖ Mechanical Engineering Division,
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## List of Institutional Members (IM) from January to May 2025

IM No.	Name of Institution/ Organisation	Date of Election
IM0008025	Bhoj Reddy Engineering College for Women, Hyderabad	03 February 2025
IM0008038	D Y Patil College of Engineering, Pune	03 February 2025
IM0008046	Madanapalle Institute of Technology & Science, Andhra Pradesh	18 February 2025
IM0008054	Dr B C Roy Engineering College, Durgapur, West Bengal	25 February 2025
IM0008062	Amrita Vishwa Vidyapeetham, Thiruvallur, Tamil Nadu	25 February 2025
IM0008070	Atria University, Bengaluru	25 February 2025
IM0008089	Elan Greentech Energies Limited, Gurgaon	20 March 2025
IM0008097	Gitam School of Technology, Hyderabad	09 May.2025
IM0008100	Sage University, Indore	13 May.2025

### Corporate Air Ticketing for IEI Members

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Members of The Institution of Engineers (India) who meet the prescribed eligibility criteria are encouraged to apply for upgradation of their membership as follows:

Associate Members (AMIE) who fulfill the required experience and qualifications may apply for upgradation to the Member (MIE) or Fellow (FIE) grade, as applicable.

Members (MIE) who satisfy the requisite professional standing and contributions are invited to apply for elevation to the prestigious grade of Fellow (FIE).

For detailed eligibility criteria and application procedures, please contact:

Deputy Director (Membership)  
The Institution of Engineers (India)  
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### Discount at the Samsung e-store for IEI Corporate Members

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# News-in-Brief

The following are brief accounts of Technical Activities organised by various Centres and Fora

## STATE CENTRES

### Delhi

Organized the 39<sup>th</sup> Maj Gen Harkirat Singh Memorial Lecture on 07 April 2025, at Delhi. Shri O P Goel, Past President, IEI, graced the occasion as Chief Guest, while Lt Gen Surinder Mohan Mehta, AVSM, SM, VSM and Bar to VSM, Chairman, Asian Townsville Farms Private Limited and Rear Admiral Anil Kumar Verma, VSM, Ex CMD, GRSE, Kolkata, were the Guests of Honour. Shri Sat Pal Singh, Chairman, Delhi State Centre, IEI, welcomed the dignitaries and highlighted Maj Gen Harkirat Singh's pivotal role in conceptualizing and constructing IEI's iconic seven-storey headquarters in Kolkata. Shri Pradeep Chaturvedi, Past Chairman, Delhi State Centre, IEI and Founder Chairman, SQF-IEI, delivered the Keynote address on Artificial Intelligence. Lt Gen Surinder Mohan Mehta spoke on 'Life Beyond the Uniform' and Rear Admiral Verma addressed 'Defence Production: A Boost to Indian Economy'.

### Rajasthan

In collaboration with the Department of Chemical Engineering, Malaviya National Institute of Technology Jaipur (MNIT), AMRUT Funded Centre of Urban Planning and IICHE Jaipur Regional Centre organized a five-day national workshop on 'Hands-on Practice on Advanced Analytical Instruments for Energy and Environment Applications during 14 to 18 April 2025 at MNIT Jaipur. The workshop provided in-depth training on advanced instruments such as TPR, HPLC, TOC, Electrochemical Workstation and COD/BOD/DO, vital for energy and environmental research. Resource person of the workshop session, Dr Sushant Upadhyaya, Head, Department of Chemical Engineering, MNIT Jaipur emphasized fostering industry-academia collaboration. Dr Hemant Kumar Garg, Honorary Secretary, Rajasthan State Centre, IEI, delivered an inspiring address encouraging participants to embrace practical skills for real-world impact. Prof SP Chaurasia, Founder Chairman, IICHE Jaipur Regional Centre, underscored the importance of analytical instrumentation in research and industry. The workshop attracted faculty, researchers and professionals from across India, equipping them with essential hands-on skills and exposure to cutting-edge technology, thus driving innovation and sustainable advancements in science and industry.

## LOCAL CENTRES

### Ahilyanagar

Organized a technical lecture on 'Energy Consumption Analysis and Forecasting of Residential Building using Artificial Intelligence' on 17 April 2025 at Ahilyanagar. Chief Guest, Er Dilip Joshi, Chief Executive Officer, Eetamax Energy Solutions Private Limited, spoke on the critical role of data analytics in smart energy management. Speaker of the session, Prof (Dr) Kalpana D Vidhate, Assistant Professor, Department of Electrical Engineering, Dr Vithalrao Vikhe Patil College of Engineering presented her research on using AI and machine learning to optimize energy consumption in residential buildings. She emphasized the significance of accurate energy consumption forecasts considering variables like building characteristics, weather conditions and occupant behavior and highlighted applications in smart homes, predictive maintenance and energy trading.

### Bokaro Steel City

Organized a technical paper presentation on 'AI Adoption in Manufacturing Industries' on 11 April 2025, at Bokaro. The session was delivered by Er Parichay Bhattacharjee, Senior Manager (CRM-3), SAIL, Bokaro Steel Plant, who provided an insightful overview of the transformative role of Artificial

Intelligence in the manufacturing sector. His presentation covered key areas such as the classification of AI, global adoption trends and industry-specific investment patterns, emphasizing how AI is reshaping production efficiency and decision-making.

### Munirabad

In collaboration with the Department of Archaeology, Museums and Heritage, Kamalapura-Hampi and Hampi Virupaksheshwara Swamy Degree College, celebrated World Heritage Day 2025 on 18 April 2025 at Hampi. Dr R Shejeshwara, Director, Department of Archaeology, Museums and Heritage, Kamalapura-Hampi, delivered the Keynote address, stressing that preserving heritage honors both our ancestors and our future. Dr R Manjanaik, Assistant Archaeologist, Department of Archaeology, Museums and Heritage, Kamalapura-Hampi, presented a lecture highlighting Hampi's rich Vijayanagara legacy and called for active public participation in heritage conservation. Chief Guest, Shri Basavaraj Emmiganur, Principal, Hampi Virupaksheshwara Swamy Degree College, encouraged student involvement in historical research. Dr S S Satmar, Assistant Professor, History Department, SBBN BEd Degree College Kamalapura and Dr Veena, Assistant Professor, Hampi Virupaksheshwara Swamy Degree College, Kamalapura also graced the occasion. The program was preceded by a cleanup drive at the temple site and saw enthusiastic participation from faculty, students, local staff and the community, reinforcing the message that heritage is a living legacy to be preserved and celebrated collectively.

### Silchar

Organized a Lecture Meeting on 08 April 2025, at Silchar. Honorary Guest Speaker, Dr Sumit Bhowmik, Associate Professor, Mechanical Engineering, NIT Silchar, delivered an impactful presentation on 'Revolution in Materials: Sustainable Fillers in Polymer Composite Innovations'. His talk highlighted eco-friendly composites developed from agricultural waste, offering sustainable solutions to plastic pollution.

### Sunabeda

Organized a technical paper presentation on 12 April 2025, at Sunabeda on the topic 'Quality Management System (QMS)'. Er Ranjit Kumar Sahu, Manager (Quality), HAL Sunabeda, presented the paper, highlighting the significance of QMS as a structured system that defines and documents an organization's processes, procedures and responsibilities to ensure consistent quality and meet policy objectives. Er Pradeep Kumar Das, Senior Manager (Projects), HAL Sunabeda and Er Premananda Maity, Chief Manager (Shop), HAL Sunabeda and Chairman, Sunabeda Local Centre also shared their expert insights on the topic, emphasizing the practical implementation and continuous improvement aspects of QMS in engineering industries.

Organized a technical paper presentation on 22 April 2025 at Sunabeda to mark 'World Earth Day' with the theme 'Our Power, Our Planet', focusing on renewable energy. Er Sanjeeb Kumar Mishra, Senior Manager (Testing), HAL Sunabeda, presented the paper emphasizing Earth Day's historical significance and the urgent global need for a shift to clean energy. He underscored the call to triple renewable energy generation by 2030 and encouraged environmental advocacy through petitions and protests. Er Pradeep Kumar Das, Senior Manager (Projects), HAL Sunabeda and Er Premananda Maity, Chief Manager (Shop), HAL Sunabeda and Chairman, Sunabeda Local Centre also shared their perspectives on the technical theme, contributing valuable insights. The session was attended by 15 members. Er Sanjaya Kumar Bishoyi, Chief Manager (Quality), and Honorary Secretary of the Centre, delivered the vote of thanks, appreciating the speakers and participants for their contributions to the event.

## Tiruchirappalli

In association with multiple professional bodies including the Indian Institute of Welding Tiruchirappalli Branch, Computer Society of India Tiruchirappalli Chapter, Safety Quality Forum-IEI New Delhi, Indian Welding Society Southern Zone, Indian Institute of Metals Tiruchirappalli Chapter, Indian Institution of Industrial Engineering Tiruchirappalli, Indian Institution of Plant Engineers Trichy Chapter, Kumari Arivial Peravai Kanyakumari and Indian Society for Non-Destructive Testing Trichy Chapter, organized a technical lecture on hybrid mode on 'Introduction to HAZOP - (Hazard and Operability)' on 22 April 2025. Speaker of the session was Er E Thirumavalavan, Former General Manager, Health, Safety and Environment, Bharat Heavy Electricals Limited (BHEL), Tiruchirappalli. The lecture focused on key aspects of safety and environment management in industrial settings.

In collaboration with Indian Institute of Welding (IIE), Tiruchirappalli Branch, Computer Society of India, Tiruchirappalli Chapter, Safety Quality Forum – IEI, Indian Welding Society, Southern Zone, Indian Institute of Metals, Tiruchirappalli Chapter, Indian Institution of Industrial Engineering, Tiruchirappalli, Indian Institution of Plant Engineers, Trichy Chapter, Kumari Arivial Peravai, Kanyakumari and Indian Society for Non-destructive Testing, Trichy Chapter organized a technical lecture titled 'A Comprehensive Study on the Weldability Characteristics of 904L Stainless Steel for Heat Exchanger Applications' on 29 April 2025 through online mode. Speaker of the session was Mr Binayak Behera, Assistant General Manager, Isgec Heavy Engineering Limited, Yamunanagar, Haryana. The session featured a detailed technical insight into the unique properties, challenges and welding techniques associated with 904L stainless steel in industrial heat exchanger applications.

## Tirunelveli

Organized a technical seminar on 'Climate Smart Agriculture: Adapting to Changing Environmental Conditions' on 23 April 2025 at Einstein College of Engineering, Tirunelveli. Mr K Anand Narayanan, Senior Vice President, Plintron, Chennai, served as the Chief Guest and Keynote speaker. In his address, Mr Narayanan elaborated on strategies for transitioning Agri-food systems towards environmentally sustainable and climate-resilient practices and discussed pressing challenges in implementing smart agriculture solutions under changing climatic conditions. His insights emphasized the urgent need for innovation in farming techniques to ensure food security in a warming world. The event was successfully conducted by the Tirunelveli Local Centre team, fostering awareness and dialogue on sustainable agricultural practices in response to global environmental shifts.

## Udaipur

Organized a Round Table Discussion cum Workshop on 'Establishing EV Charging Stations in India' on 11 April 2025 at Udaipur. Er Purushottam Paliwal, Chairman, Udaipur Local Centre, IEI highlighted the growing need for EV charging infrastructure amid rising electric vehicle adoption. Er Piyush Javeria, Honorary Secretary, Udaipur Local Centre, IEI emphasized the importance of developing a roadmap for EV charging stations to support environmental sustainability and reduce fossil fuel dependency. Keynote Speaker Er Neha Sakka, Jr Engineer (Electrical), Jaipur Vidyut Vitaran Nigam Limited, delivered a comprehensive presentation on essential components like land, chargers, EVSE, electricity supply and management systems, noting that establishing EV charging stations is a license-free activity. She also detailed renewable energy options and recent government guidelines for integrating EV infrastructure into new developments. Guest speaker Mr Jaideep Singh Shaktawat, CEO, YoCHARGE, discussed technical and operational aspects such as real-time monitoring, billing systems and revenue models.

## Varanasi

Organized the Professor B B Bansal Memorial Lecture on 19 April 2025 at Varanasi. Invited speaker of the session, Prof Om Prakash Singh from the Department of Mechanical Engineering, IITBHU Varanasi delivered the lecture on the topic 'How to Design Energy Efficient Building'. Dr Bipin Kumar Srivastava, Ex-Vice Principal, Technical Training Centre, Banaras Locomotive Works, presented a life sketch of Late Prof BB Bansal, highlighting his pivotal role in the development of the Local Centre. The event saw the presence of a large number of faculty and students, who benefited from the insightful lecture.

## Visakhapatnam

Organized a technical webinar on 22 April 2025 to mark World Earth Day. Guest speaker was Dr P Jagadeeswara Rao, Head, Department of Geo-Engineering, Andhra University College of Engineering. Dr Rao delivered an insightful lecture on environmental sustainability and highlighted the carbon sequestration potential at Visakha Pharmacy, emphasizing how mature plantations in the area are effective carbon sinks that help regulate local climate, purify air, and support biodiversity. The session reinforced the importance of engineering solutions in ecological conservation and sustainable industrial practices, encouraging greater awareness and action among professionals and students alike.



# IEI - Springer Journal



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

Theme: Deep Tech & Engineering Excellence: Driving India's Techade

**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 58<sup>th</sup> Engineers' Day will be celebrated all over the country on the theme "**Deep Tech & Engineering Excellence: Driving India's Techade**".



Bharat Ratna Sir M Visvesvaraya

On 15<sup>th</sup> September 2025, The Institution of Engineers (India) (IEI) celebrates Engineers' Day across all State and Local Centres, paying tribute to Sir M. Visvesvaraya, whose vision laid the foundation for engineering excellence in India. The theme, "**Deep Tech & Engineering Excellence: Driving India's Techade**," underscores the crucial role of engineers in steering AI, Quantum Computing, Semiconductors,

Robotics, and Advanced Materials toward national growth and global competitiveness.

As India enters its Techade, deep tech innovations are reshaping industries and redefining progress. Unlike conventional IT solutions, these technologies demand long-term R&D, scientific rigor, and advanced engineering expertise. Recognizing this, the Government of India introduced the National Deep Tech Start-up Policy (NDTSP) in 2024 to support startups and researchers working on transformative technologies. But fostering deep tech is not just about policies—it requires a robust ecosystem where research translates into industrial applications, and engineers play a defining role in this shift.

IEI, with its rich legacy of advancing engineering research and innovation, has long been a catalyst in this transformation. Through its R&D Grant-in-Aid Scheme, IEI has supported breakthrough ideas even at the undergraduate level, enabling young engineers to experiment, innovate, and create impactful solutions. This commitment to engineering-led progress has earned IEI recognition as a Scientific and Industrial Research Organization (SIRO) by the Ministry of Science & Technology, Government of India. By fostering research, bridging academia with industry, and nurturing talent, IEI has positioned itself as a key enabler of India's deep tech journey.

As we mark Engineers' Day 2025, it is evident that deep tech is no longer an emerging field—it is the present and the future. The challenge ahead is immense, but so is the opportunity. With vision, expertise, and unwavering commitment, engineers must innovate, lead, and build technologies that will drive India's transformation into a global powerhouse. And as always, IEI stands ready to support this mission, ensuring that India's engineering community continues to push the boundaries of possibility.

## Professional Engineers (PE) Certification by IEI — A Pathway towards Success

Get the **Professional Engineers Certification** by IEI to enhance your knowledge, skill and competency and also elevate your career by becoming a member of an elite group of engineers.

### Who can be a Professional Engineer —

- Having Bachelor's Degree in Engineering or equivalent recognized by Statutory Authority or Government of India;
- Having experience of at least 5 years in engineering practice.

### Why to be an Professional Engineers (PE) —

- Improved career prospects and employability;
- Makes you suitable to attain higher levels of authority and responsibility;
- It is envisaged that in future, only a professional engineer would be empowered to prepare, sign, seal and submit engineering plans and drawings to a public authority for approval, or to seal engineering work for public and private clients;
- With growing economy and large scale expansion of infrastructure, the demand of PE certified engineers are expected to be much higher.

### How to apply for Professional Engineers?

The details is available on IEI Website

<https://shorturl.at/mRIYu>

or

scan the code



For any query and assistance, please send email to: [pe@ieindia.org](mailto:pe@ieindia.org) or contact (033) 40106275



# Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)  
(IMS [ISO 9001:2015, ISO 14001:2015, ISO 50001:2018, ISO 45001:2018],  
ISO/IEC 17025:2017 Certified, AICTE & CEA Recognized Institution)

## Continuing Professional Development Programmes (CPDPs) for the Month of June 2025

Sl. No.	Name of the Course	Scheduled Dates
1.	5S for Work Place Excellence	02 - 04 Jun 25
2.	Working with BOSS Linux & LibreOffice	02 - 05 Jun 25
3.	Aerospace materials –Selection, Processing, Testing & Applications, Qualification and Certification process	02 - 06 Jun 25
4.	Advances in Fusion and Solid-State Welding Technologies and Non-Destructive Testing (NDT) Methods	02 - 06 Jun 25
5.	Climate Change and Its Impacts on the Energy Sector	11 - 13 Jun 25
6.	Professional Management Programme for Trade Union Leaders in Mining Industry	04 - 06 Jun 25
7.	Air Pollution Monitoring & Modeling using Software Applications – Theory & Practical's.	09 - 11 Jun 25
8.	Advanced Office Management & Effective Administration	09 - 11 Jun 25
9.	Coating & Paint Technology	09 - 12 Jun 25
10.	Automation in Micro Irrigation Systems for improving Irrigation Efficiency	09 - 13 Jun 25
11.	Rooftop Solar PV Grid - Design, Erection, Commissioning & Maintenance - PM Suryagharyojana Scheme	10 - 12 Jun 25
12.	Training on Pedagogy, Accreditation, Research and Entrepreneurship	11 - 13 Jun 25
13.	Trends in Drilling & Blasting Operations in Mining for Blasting Engineers.	11 - 13 Jun 25
14.	E-Tendering and Condition of Contract for EPC /Turnkey projects	16 - 18 Jun 25
15.	Condition Based Maintenance – Oil and Wear Debris Analysis (including AI based)	16 - 19 Jun 25
16.	Mobile Application Development Using REACT NATIVE	16 - 21 Jun 25
17.	Mine & Land Surveying through Advanced Technology - Total Station, DGPS,3D Laser Scanner, LiDaR, Drones, GIS, Remote Sensing Demonstration and Hands-on Training on Instruments	17 - 20 Jun 25
18.	Substation Automation and Smart Grids	17 - 20 Jun 25
19.	Data Security & Digital Personal Data Protection Act (DPDP) 2023	18 - 20 Jun 25
20.	Reservoir Sedimentation Impact and Management Strategies	23 - 25 Jun 25
21.	Non-Destructive Testing of materials. – Principles, Equipment, Calibration, & Data Interpretation	23 - 26 Jun 25
22.	Certification on Microsoft Power BI Data Analyst (PL 300)	23 - 26 Jun 25
23.	Industrial Bearings Revisited- Maintenance, Condition Monitoring, Analysis and Prevention of Failures	23 - 26 Jun 25
24.	Laboratory Management System Awareness & Internal Auditing (As per ISO/IEC 17025:2017 & NABL Requirements)	23 - 26 Jun 25
25.	Environmental Issues, Challenges and Pollution Control Strategies in Thermal Power Plants	24 - 26 Jun 25
26.	Governance for Climate Resilience: Embedding ESG Principles in Organizations	18 - 20 Jun 25
27.	Application of GIS, GPS & RS in Environmental Data Management.	25 - 27 Jun 25
28.	Leadership Styles and Teambuilding Skills for Organizational Development	25 - 27 Jun 25
29.	Application of Digital Technologies to Promote Safety and Productivity - Application of Internet of Things (IoT), Smart Sensors and Artificial Intelligence, Remote Operations, Men-Tracking	25 - 27 Jun 25

For detail information please contact:

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# IEI DIARY



## Agricultural Engineering Division

Thirty-seventh National Convention of Agricultural Engineers on **"Innovation Approaches in Agricultural Engineering for Agriculture of Viksit Bharat A Road Map for Next 25 Years"**  
Lucknow, August 29-30, 2025

The Honorary Secretary, IEI, Uttar Pradesh State Centre, Engineers' Bhawan, River Bank Colony, Lucknow 226018 [☎: 0522-3512499, E-mail: upsc@ieindia.org, Website: www.ieiup.org.in]

## Aerospace Engineering Division

All India Workshop on **"Advancement of Drone Technology Transforming Industries in 2025"**  
Hosur, July 15-16, 2025

The Honorary Secretary, IEI, Hosur Local Centre, No. 69, Kamaraj Nagar, Kumudepall, Near, Adhiyamaan College of Engineering, Hosur, 635109, Tamilnadu [Email: hosur@ieindia.org]

All India Seminar on **"Applications of Smart Materials in Aerospace Defense"**  
Coimbatore, July 24-25, 2025

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore, Tamilnadu 641004 [☎: 0422-2580733, E-mail: coimbatore@ieindia.org; ieicoimbatore@gmail.com, Website: www.ieicoimbatore.org]

One Day Seminar on **"Living in Space"**  
Kattankulathur, October 08, 2025

The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology, Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamilnadu 603203, [☎: 044-2745 2270]

Thirty-eight National Convention of Aerospace Engineers on **"Advancing AI and Additive Manufacturing in Aerospace Industries"**  
Salem, November 06-07, 2025

The Honorary Secretary, IEI, Salem Local Centre, 104/7, Manivannan Road, 3rd Floor, SPC, Bhawan, Opp to Salem New Bus Stand, Salem 636004 [Ph: 0427-2332544, E-mail: salem@ieindia.org, Website: www.ieisl.com]

## Architecture Engineering Division

Fortieth National Convention of Architectural Engineers on **"Towards Sustainable Cities -Strategies and Technologies"**

Kochi, October 09-10, 2025

The Honorary Secretary, IEI, Kochi Local Centre, IEI Bhavan, Government Homeo Hospital Road, Pullepady, PO: Kaloork, Kochi 682017 [☎: 0484-2403838 / 2403993, E-mail: kochi@ieindia.org; Website: www.ieikochi.org]

## Chemical Engineering Division

All India Workshop on **"Hydrogen Economy- Opportunities & Challenges"**

Kochi, July 25-26, 2025

The Honorary Secretary, IEI, Kochi Local Centre, IEI Bhavan, Government Homeo Hospital Road, Pullepady, PO: Kaloork, Kochi 682017 [☎: 0484-2403838 / 2403993, E-mail: kochi@ieindia.org; Website: www.ieikochi.org]

One Day Seminar on **"Energy Materials and AI Enabled Sustainability Solutions"**

Salem, July 26, 2025

The Honorary Secretary, IEI, Salem Local Centre, 104/7, Manivannan Road, 3rd Floor, SPC, Bhawan, Opp to Salem New Bus Stand, Salem 636004 [Ph: 0427-2332544, E-mail: salem@ieindia.org, Website: www.ieisl.com]

All India Seminar on **"Circular Economy in Chemical Engineering Innovations for A Sustainable Future"**

Puducherry, August 05-06, 2025

The Honorary Secretary, IEI, Puducherry State Centre, No. 63, Nethaji Subash Chandra Bose Salai, Ground Floor, PWD Campus, Puducherry 605001 [Mobile: 9489766701, E-mail : puducherry@ieindia.org, Website : www.ieipsc.org]

All India Seminar on **"Sustainability on Process During Chemical Operations"**

Thiruvananthapuram, September 19-20, 2025

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]

All India Seminar on **"Innovations in Biotechnology: Shaping the Future of Health and Sustainability"**

Hosur, September 24-25, 2025

The Honorary Secretary, IEI, Hosur Local Centre, No. 69, Kamaraj Nagar, Kumudepall, Near, Adhiyamaan College of Engineering, Hosur, 635109, Tamilnadu [Email: hosur@ieindia.org]

Fortieth National Convention of Chemical Engineers on **"Green Energy Technology and AI Enabled Sustainable Chemical Process"**

Visakhapatnam, October 12-13, 2025

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

## Civil Engineering Division

One Day Workshop on **"Design and Applications of Prestressed Concrete Structures"**

Pune, July 04, 2025

The Honorary Secretary, IEI, Pune Local Centre, Abhiyanta Bhavan, 1332 J M Road, Shivajinagar, Pune 411005 [☎: 020-25533376 (Admin Incharge: 8668475255 / Office Admin:

9822754165), E-mail: ieiplc41@gmail.com; punelc@ieindia.org, Website: www.ieipune.org]

One Day Seminar on **"Cutting Edge Technologies In Infrastructure Projects"**

Puducherry, July 22, 2025

The Honorary Secretary, IEI, Puducherry State Centre, No. 63, Nethaji Subash Chandra Bose Salai, Ground Floor, PWD Campus, Puducherry 605001 [Mobile: 9489766701, E-mail : puducherry@ieindia.org, Website : www.ieipsc.org]

All India Seminar on **"Artificial Methods for Retrofitting and Rehabilitation of Buildings"**

Chennai, 24-25 July 2025

The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 / 9962950333, E-mail: ieitamilnadu@gmail.com; tns@ieindia.org, Website: www.ieitnsc.org]

All India Workshop on **"Emerging Applications of Artificial Intelligence in Civil Engineering Systems"**

Indore, July 28, 2025

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

All India Seminar on **"3D Printing in Civil Engineering: Advancements Design and Sustainability"**

Coimbatore, July 28-29, 2025

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore, Tamilnadu 641004 [☎: 0422-2580733, E-mail: coimbatore@ieindia.org; ieicoimbatore@gmail.com, Website: www.ieicoimbatore.org]

One Day Seminar on **"Advances in Microstructural Analysis of Durable and Sustainable Concrete"**

Kattankulathur, July 30, 2025

The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology, Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamilnadu 603203, [☎: 044-2745 2270]

One Day Seminar on **"Emerging Trends in Civil Engineering"**

Hosur, July 31, 2025

The Honorary Secretary, IEI, Hosur Local Centre, No. 69, Kamaraj Nagar, Kumudepall, Near, Adhiyamaan College of Engineering, Hosur, 635109, Tamilnadu [Email: hosur@ieindia.org]

All India Seminar on **"Intelligent Drones in Industry 7.0 AI and IoT Driving the Future of Engineering"**

Salem, September 22, 2025

The Honorary Secretary, IEI, Salem Local Centre, 104/7, Manivannan Road, 3rd Floor, SPC, Bhawan, Opp to Salem New Bus Stand, Salem 636004 [Ph: 0427-2332544, E-mail: salem@ieindia.org, Website: www.ieisl.com]

### All India Workshop on "Ultrahigh Performance Concrete UHPC for Advanced Structural Applications"

Kattankulathur, September 30, 2025

The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology, Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamilnadu 603203, [☎: 044-2745 2270]

### All India Seminar on "Forensic in Civil Engineering"

Nagpur, October 10-11, 2025

The Honorary Secretary, IEI, Nagpur Local Centre, North Ambazari Road, Nagpur 440010 [☎: 0712-2525617, E-mail: nagpuric@ieindia.org, Website: ieinagpur.net]

### One Day Seminar on "Urban Flood Management Strategies For Resilient Cities"

Coimbatore, October 11, 2025

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

### Computer Engineering Division

#### One Day Seminar on 'Exploring Quantum Frontiers the Future of Computation'

Coimbatore, June 27, 2025

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

#### One Day Seminar on 'Smart Cloud Based Meditation System With Adaptive AI for Holistic Wellbeing'

Erode, July 03, 2025

The Honorary Secretary, IEI, Erode Local Centre, Sri Ramakrishna Seva Samithi Religious Library, Thindal Murugan Temple Premises, Thindal, Erode 638012, Tamilnadu [E-mail : ieierode2015@gmail.com, erodelc@ieindia.org, Web: www.ieierode.org]

#### One Day Seminar on 'Computational Intelligence in Healthcare Systems'

Hyderabad, August 03, 2025

The Honorary Secretary, IEI, Telangana State Centre, 6-2-910, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana [☎: 040-23314969, E-mail: telanganasc@ieindia.org]

#### All India Workshop on "Android and IOS App Development for Preservation and Revitalization of South Dravidian Endangered"

Kattankulathur, August 07-08, 2025

The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology,

Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamilnadu 603203, [☎: 044-2745 2270]

#### All India Seminar on "Quantum Computing Bridging Theory Research and Applications"

Salem, August 08-09, 2025

The Honorary Secretary, IEI, Salem Local Centre, 104/7, Manivannan Road, 3rd Floor, SPC, Bhawan, Opp to Salem New Bus Stand, Salem 636004 [Ph: 0427-2332544, E-mail: salemic@ieindia.org, Website: www.ieislsc.com]

#### All India Seminar on "AI Powered Innovations Shaping the Future of Healthcare"

Coimbatore, August 21-22, 2025

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

#### One Day Seminar on "AI and Machine Learning in Quantum Computing Bridging the Future of Intelligent Systems"

Kattankulathur, September 08, 2025

The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology, Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamilnadu 603203, [☎: 044-2745 2270]

#### Thirty-eight National Convention of Computer Engineers on "Quantum Computing for Nextgen Digital Transformation Bridging Innovation with Intelligence"

Salem, October 27-28, 2025

The Honorary Secretary, IEI, Salem Local Centre, 104/7, Manivannan Road, 3rd Floor, SPC, Bhawan, Opp to Salem New Bus Stand, Salem 636004 [Ph: 0427-2332544, E-mail: salemic@ieindia.org, Website: www.ieislsc.com]

#### All India Seminar on "Artificial Intelligence Design Thinking and Innovation"

Agartala, December 19-20, 2025

The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Gurkhabasti, PO: Kunjaban, Agartala, West Tripura 799006 [☎: 0381-2304700, Mobile: 9774129593; Email: tripurasc@ieindia.org; ieitripura@gmail.com, Web: www.ieitripura.org]

### Electrical Engineering Division

#### One Day Seminar on "Opportunities and Challenges of Electrical Vehicles EV in Bharat"

Jaipur, June 24, 2025

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

#### One Day Seminar on "Recent Trends in AI Enabled Technologies and IoT in Emobility"

Salem, June 28, 2025

The Honorary Secretary, IEI, Salem Local Centre, 104/7, Manivannan Road, 3rd Floor, SPC, Bhawan, Opp to Salem New Bus Stand, Salem 636004 [Ph: 0427-2332544, E-mail: salemic@ieindia.org, Website: www.ieislsc.com]

#### One Day Seminar on "Cyber Security is the Set of Mechanism that Prevents Cyber Incidents"

Kota, June 29, 2025

The Honorary Secretary, IEI, Kota Local Centre, Engineers Bhawan, Near BSNL Office, Jhalawar, Road, Kota 324005, Rajasthan [☎: 0744-2428250, E-mail: kotalc@ieindia.org]

#### All India Workshop on "Potential Applications of Artificial Intelligence and Machine Learning in Electrical Engineering"

Tiruchirappalli, July 11, 2025

The Honorary Secretary, IEI, Tiruchippalli Local Centre, BHEL Main Office Road, Opposite to 79 Building, Kailasapuram Post, Tiruchirappalli 620014, Tamil Nadu [E-mail: tiruchirapallilc@ieindia.org]

#### One Day Seminar on "Big Data Analytics for Smart Grids Challenges and Opportunities"

Vijayawada, July 18, 2025

The Honorary Secretary, IEI, Andhra Pradesh State Centre, Dr K L Rao Bhavan, #29-33-14, Near Civil Courts, Gopal Reddy Road, Governorpet, Vijayawada 520002 [☎: 0866 - 2576822, Email: apsc@ieindia.org, Website: www.ieiapsc.org]

#### All India Seminar on "Electric Vehicles and Their Impact on Power Grid Infrastructure"

Agartala, July 25-26, 2025

The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Gurkhabasti, PO: Kunjaban, Agartala, West Tripura 799006 [☎: 0381-2304700, Mobile: 9774129593; Email: tripurasc@ieindia.org; ieitripura@gmail.com, Web: www.ieitripura.org]

#### One Day Workshop on "Artificial Intelligence Driven Advances in Electrical Engineering Strategies and Practical Perspectives"

Tiruchirappalli, August 04, 2025

The Honorary Secretary, IEI, Tiruchippalli Local Centre, BHEL Main Office Road, Opposite to 79 Building, Kailasapuram Post, Tiruchirappalli 620014, Tamil Nadu [E-mail: tiruchirapallilc@ieindia.org]

#### All India Seminar on "Electric Vehicles the Future of Transportation in Sustainable Energy Systems"

Amravati, August 04-05, 2025

The Honorary Secretary, IEI, Amravati Local Centre, Govt. Polytechnic Premises, Opp Venus Plaza, Shegaon Naka, VMV Road, Amravati 444603 [Ph : 9325444884, E-mail: amravatilc@ieindia.org, Website: www.ieiamt.org]

#### One Day Seminar on "Electric Vehicles Steering Towards A Greener Future"

Puducherry, August 21, 2025

The Honorary Secretary, IEI, Puducherry State Centre, No. 63, Nethaji Subash Chandra Bose Salai, Ground Floor, PWD Campus, Puducherry 605001 [Mobile: 9489766701, E-mail : puducherryisc@ieindia.org, Website : www.ieipsc.org]

All India Workshop on **"Energy Sphere IoT Powered Smart Grids for Sustainable Cities and Green Power"**

Chennai, August 29-30, 2025

The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 / 9962950333, E-mail: ieitamilnadu@gmail.com; tncs@ieindia.org, Website: www.ieitnsc.org]

All India Workshop on **"Signal Intelligence Winter School on Image and Signal Processing"**

Kattankulathur, September 09-10, 2025

The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology, Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamilnadu 603203, [☎: 044-2745 2270]

One Day Workshop on **"Essentials of Electric Vehicle Hardware Design"**

Coimbatore, September 12, 2025

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

One Day Seminar on **"Smart Cities and Digital Transformation"**

Kanpur, September 27, 2025

The Honorary Secretary, IEI, Kanpur Local Centre, Engineers Bhawan, HBTU Campus, Nawabganj, Kanpur 208002 [Mobile: 9140018277, E-mail: kanpurlc@ieindia.org, Website: www.ieikanpur.org]

Fortieth National Convention of Electrical Engineers on **"Influence of Artificial Intelligence on Modern Trends in Electricity Generation, Transmission & Distribution"**

Thiruvananthapuram, October 15-16, 2025

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]

### Electronics & Telecomm. Engineering Division

One Day Seminar on **"Dive into AI Deep Learning and Machine Learning"**

Kancheipuram, 25 June 2025

The Honorary Secretary, IEI, Kancheipuram Local Centre, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [Mobile: 9789924739, Whatapp number: 8870531609, Email: kancheipuramlc@ieindia.org; Website: www.ieindiaklc.org]

All India Seminar on **"Quantum Machine Learning For Next Generation Wireless"**

Prayagraj, August 16, 2025

The Honorary Secretary, IEI, Prayagraj Local Centre, 'Engineers Bhawan', MNNIT Campus, Teliarganj, Prayagraj 211004, [☎: 0532-2545539/2271149, E-mail: allahabadlc@ieindia.org]

### Environmental Engineering Division

All India Seminar on **"Blue Planet, Green Future: The Critical Role of Water in Maintaining Biodiversity and Environment"**

Thiruvananthapuram, June 10-11 2025

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]

One Day Workshop on **"Climate Change and Sustainable Environment"**

Madurai, July 26, 2025

The Honorary Secretary, IEI, Madurai Local Centre, Er TM Jambulingam Bhavan, No.1, Vivekananda Nagar, 120 Feet Road, Surveyor Colony, K Pudur, Madurai 625007 [☎: 0452-4373067, E-mail: madurailc@ieindia.org, Website: www.ieimadurailc.org]

All India Seminar on **"Drone Remote Sensing Satellite and Artificial Intelligence Based on Environment Management Solution"**

Salem, July 29-30, 2025

The Honorary Secretary, IEI, Salem Local Centre, 104/7, Manivannan Road, 3rd Floor, SPC, Bhawan, Opp to Salem New Bus Stand, Salem 636004 [☎: 0427-2332544, E-mail: salemic@ieindia.org, Website: www.ieisl.com]

Thirty-ninth National Convention of Environmental Engineers on **"Environment and Digital World for Sustainable Development"**

Chennai, August 22-23 2025

The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 / 9962950333, E-mail: ieitamilnadu@gmail.com; tncs@ieindia.org, Website: www.ieitnsc.org]

All India Seminar on **"Air Pollution and Control in Factories and Industries"**

Hosur, August 28-29, 2025

The Honorary Secretary, IEI, Hosur Local Centre, No. 69, Kamaraj Nagar, Kumudepall, Near, Adhiyamaan College of Engineering, Hosur, 635109, Tamilnadu [Email: hosuric@ieindia.org]

All India Workshop on **"Smart Solutions for Environmental Applications"**

Dhanbad, November 03-04, 2025

The Honorary Secretary, IEI, Dhanbad Local Centre, Signature Corals Apartment, Flat No.B/4, First Floor, Block – A, Kusum Vihar, Phase-I, PO: BCCL Township, Koyla Nagar, Dhanbad 826005, Jharkhand, Mobile: 9934896322/8789853083, E-mail: dhanbadlc@ieindia.org; Website: www.iedhanbad.org

### Mechanical Engineering Division

All India Seminar on **"Innovative Role of Artificial Intelligence in Solar Power Generation and Optimization"**

Kota, July 15-16, 2025

The Honorary Secretary, IEI, Kota Local Centre, Engineers Bhawan, Near BSNL Office, Jhalawar, Road, Kota 324005, Rajasthan [☎: 0744-2428250, E-mail: kotalc@ieindia.org]

All India Seminar on **"Role of AI & ML for Sustainable Development – Vikshit Bharat by 2047"**

Belapur, July 18-19 2025

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, Website: www.ieinmlc.org]

All India Seminar on **"Industrial Hydraulics and Automation"**

Madurai, August 13-14, 2025

The Honorary Secretary, IEI, Madurai Local Centre, Er TM Jambulingam Bhavan, No. 1, Vivekananda Nagar, 120 Feet Road, Surveyor Colony, K Pudur, Madurai 625007 [☎: 0452-4373067, E-mail: madurailc@ieindia.org, Website: www.ieimadurailc.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: durgapuric@ieindia.org, Website: http://www.ieidurgapuric.org]

One Day Seminar on **"Data Driven Lean Leveraging Smart Manufacturing For Continuous Improvement"**

Coimbatore, August 29, 2025

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

All India Seminar on **"Additive Manufacturing for Enhanced Productivity"**

Agartala, September 05-06, 2025

The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Gurkhabasti, PO: Kunjaban, Agartala, West Tripura 799006 [☎: 0381-2304700, Mobile: 9774129593; Email: tripurasc@ieindia.org; ieitripura@gmail.com, Web: www.ieitripura.org]

All India Workshop on **"Recent Trends and Technology in Refrigeration Air Conditioning"**

Indore, September 09, 2025

The Honorary Secretary, IEI, Indore Local Centre,

SGSITS Campus, 23, Sir M Visvesvaraya Marg (Park Road), Indore 452003 [E-mail:indorelc@ieindia.org]

All India Seminar on **"A Comprehensive Insights into Vibrationbased Condition Monitoring Theory Techniques Applications"**

Coimbatore, September 19-20, 2025

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

**Metallurgical & Materials Engineering Division**

One Day Seminar on **"Advances in Modelling and Simulation for Material Processing"**

Coimbatore, July 04, 2025

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

Thirty-eighth National Convention of Metallurgical & Materials Engineers on **"Capacity Building in Process Metallurgy"**

Rourkela, July 26-27, 2025

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

**Mining Engineering Division**

Thirty-fifth National Convention of Mining Engineers on **"Mining And Environment Quo Vadis 2070"**

Dhanbad, November 07-08, 2025

The Honorary Secretary, IEI, Dhanbad Local Centre, Signature Corals Apartment, Flat No.B/4, First Floor, Block – A, Kusum Vihar, Phase-I, PO: BCCL Township, Koyla Nagar, Dhanbad 826005, Jharkhand, Mobile: 9934896322/8789853083, E-mail: dhanbadlc@ieindia.org; Website: www.iedhanbad.org

**Production Engineering Division**

All India Seminar on **"Unlocking the Future with 3D Printing and Additive Manufacturing"**

Kanchepuram, July 09-10, 2025

The Honorary Secretary, IEI, Kanchepuram

Local Centre, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [Mobile: 9789924739, Whatapp number: 8870531609, Email: kanchepuramlc@ieindia.org; Website: www.ieindiaklc.org]

One Day Seminar on **"Innovations and Best Practices in Production Management"**

Kanchepuram, 24 July, 2025

The Honorary Secretary, IEI, Kanchepuram Local Centre, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [Mobile: 9789924739, Whatapp number: 8870531609, Email: kanchepuramlc@ieindia.org; Website: www.ieindiaklc.org]

All India Seminar on **"Nanotechnology for Industrial Applications"**

Chennai, June 27-28, 2025

The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 / 9962950333, E-mail: ieitamilnadu@gmail.com; tncsc@ieindia.org, Website: www.ieitnsc.org]

Fortieth National Convention of Production Engineers on **"Sustainable Smart Manufacturing for Sustainable Economy"**

Coimbatore, June 19-20, 2026

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

One Day Seminar on **"Building the Future: An Introduction to Smart Manufacturing"**

Coimbatore, July 18, 2025

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

**Textile Engineering Division**

All India Seminar on **"CAD Based Design and Development of Value Added Textile and Apparel Products"**

Coimbatore, July 16-17, 2025

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

Thirty-eighth National Convention of Textile Engineers on **"Emerging Challenges of Sustainable Textiles"**

Ghaziabad, September 05-06, 2025

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15, Shopping Complex, ALT Centre, Rajnagar, Ghaziabad 201002 [☎: 0120-2702673, Email: ghaziabadlc@ieindia.org]

**Interdisciplinary Coordination Committee**

All India seminar on **"Sustainable Technologies and Green Initiative"**

Durgapur, 17-18 July, 2025

The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B Zone, Durgapur 713 205 [ Fax: 0343-2564770, Email: durgapurlc@ieindia.org, Website: http://www.ieidurgapurlc.org]

All India Seminar on **"Sustainable Technology Solutions For Rural India Towards Viksit Bharat"**

Prayagraj, July 26, 2025

The Honorary Secretary, IEI, Prayagraj Local Centre, 'Engineers Bhawan', MNNIT Campus, Teliarganj, Prayagraj 211004 [☎: 0532-2545539/2271149, E-mail: allahabadlc@ieindia.org, website: www.ieiallahabad.org]

One Day Seminar on **"Decarbonisation Challenges And Research Opportunities In Energyintensive Industries"**

Coimbatore, August 02, 2025

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

All India Seminar on **"Green India Mission"**

Tiruchirappalli, August 07-08, 2025

The Honorary Secretary, IEI, Tiruchippalli Local Centre, BHEL Main Office Road, Opposite to 79 Building, Kailasapuram Post, Tiruchirappalli 620014, Tamil Nadu [E-mail: tiruchirappallilc@ieindia.org]

One Day Seminar on **"Green Energy and Sustainable Development"**

Puducherry, 11 August 2025

The Honorary Secretary, IEI, Puducherry State Centre, No. 63, Nethaji Subash Chandra Bose Salai, Ground Floor, PWD Campus, Puducherry 605001 [Mobile: 9489766701, E-mail : puducherryisc@ieindia.org, Website : www.ieipsc.org]

All India Seminar on **"Biotechnology: Harnessing Life Sciences for A Better Tomorrow"**

Thiruvananthapuram, 12/08/2025

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]

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## The Institution of Engineers (India)

### Notification for R&D Grant-in-Aid

To promote appropriate technology, assist in building up design & research talents and, most importantly, to help in nurturing potential R&D venture amongst engineering students pursuing Diploma/UG/PG/PhD courses, The Institution of Engineers (India) had instituted the R&D Grant-in-Aid program way back in 2001. Like every year, the Institution invites applications for the session 2025-26 for funding industry-oriented R&D projects and research initiatives aimed at improving the life-style of common people from engineering students pursuing full time Diploma/UG/PG/PhD engineering program in AICTE/UGC/NAAC approved Institutions/Colleges/Universities. The application form and guidelines are available in our website <https://www.ieindia.org>. The projects should be carried out under the guidance of faculty members who are Corporate Members of IEI. Membership criteria for student investigator(s), guide(s) and Institution(s) are as follows:

Project Category	Student/Applicant Membership	Guide(s) Membership	Institutional Membership	Quantum of Grant (INR)
1. Diploma	Exempted [Membership of Student Chapter is desirable]	AMIE/MIE/FIE	Not Mandatory	Not exceeding ₹15,000/- for a single project
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4. PhD	AMIE/MIE/FIE	MIE/FIE	Applicant's Institute should preferably be an Institutional Member with NBA / NAAC Accreditation	Not exceeding ₹1,50,000/- for a single project

The soft copy of the duly filled-up applications (in editable format), as per the pro-forma available in our website [www.ieindia.org](http://www.ieindia.org), should be sent through email to [research@ieindia.org](mailto:research@ieindia.org) and one printed copy of the same should reach the following address:

**Deputy Director (Technical)**

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

Applications received in format other than that available on our website will not be accepted. Application should be forwarded through the Guide, Head of the Department or Head of the Institution. Please note that preference will be given to project proposals received from Institutions who are Members of The Institution of Engineers (India) and with NBA / NAAC Accreditation. Kindly go through the guidelines ([visit link https://shorturl.at/BiAQQ](https://shorturl.at/BiAQQ)) carefully before filling up the application.

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


**MACCAFERRI**

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# I.E.I NEWS

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