



IEI NEWS

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A CENTURY OF SERVICE TO THE NATION

Volume 32

Number 7

Council Elects New President of IEI



Er. Manish Mahendra Kothari, a distinguished Engineer, seasoned industrialist, and visionary institutional leader, was elected as the President of The Institution of Engineers (India) for the Session 2025–2026 during the 731st Meeting of the Council held at Kolkata on 4 October 2025. He will formally assume the office of the President at the 106th Annual General Meeting of IEI to be held on 21 December 2025 at Durgapur during the 40th Indian Engineering Congress. His elevation to the highest office of IEI reflects his decades of dedicated service to the engineering profession, marked by innovation, inclusiveness, and transformational leadership.

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Conferment of the Life Time Fellowship of IEI upon Shri Nitin Jairam Gadkari



It was a moment of pride for The Institution of Engineers [India], when Hon'ble Union Minister for Road Transport & Highways, **Shri Nitin Jairam Gadkari** was conferred with the Life Time Fellowship of IEI at Nagpur on 10 October 2025, when he graced the inaugural function of an All India Seminar as the Chief Guest and inaugurated the Seminar, organised by Nagpur Local Centre of IEI. The All India Seminar was organised on the topic **Forensic Civil Engineering** during 10-11 October, 2025, under the aegis of Civil Engineering Division Board (CVDB), IEI.

The seminar aimed to highlight the growing significance of forensic investigations in civil engineering - a discipline that identifies causes of structural failures and ensures safety,

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From the President's Desk.....

Digital Solutions to Meet Climate Action



"Climate change is the defining challenge of our time — and we are at a defining moment." — António Guterres

The planet is warming at an unprecedented pace. Global average temperatures have already crossed 1.2°C above pre-industrial levels, and the window to limit warming to 1.5°C is rapidly narrowing. In this decisive decade, technology must become not the problem, but the solution.

Digital innovation is now an indispensable pillar of climate action. The same algorithms that power our economies can, when guided by purpose, power a greener planet. Artificial Intelligence is enabling early detection of forest fires and methane leaks; satellite-driven analytics are monitoring deforestation and glacier retreat; and digital twins are helping industries test carbon-neutral designs before a single material is used. These technologies, when embedded across energy, agriculture, transport, and construction, can reduce global emissions by up to 20% by 2030, according to leading estimates.

Yet, the true promise of digitalization lies not merely in efficiency, but in empowerment — empowering citizens, communities, and policymakers with real-time, actionable insights. Smart grids balance renewable generation with urban demand; IoT sensors guide precision irrigation to save water; and blockchain-based systems ensure transparent carbon credit markets. Collectively, they transform climate ambition into measurable climate action.

Globally, the Green Digital Action Initiative under the United Nations Digital Compact is rallying industries to harness data responsibly for a net-zero future. Technology leaders are committing to carbon-neutral data centres, circular electronics, and software that minimizes computational energy. This alignment of innovation with responsibility marks a historic convergence between digital progress and planetary stewardship.

India, too, has embraced this vision. Our National Green Hydrogen Mission, Smart Cities programme, and the Digital India framework are pioneering a new developmental

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Conferment of the Life Time Fellowship of IEI upon Shri Nitin Jairam Gadkari

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reliability and accountability in infrastructure development. The event brought together eminent academicians, industry experts, consultants, researchers and practicing engineers from across the country to exchange knowledge and experiences on this crucial and emerging domain.

In his inspiring address, Shri Gadkari emphasized the importance of innovation, cost-effectiveness and sustainable materials in enhancing the quality of infrastructure. He urged engineers to adopt advanced technologies and green practices to ensure longevity and resilience in infrastructure projects. A moment of immense pride for IEI was marked by the conferment of the Life Time Fellowship of IEI upon Shri Gadkari, a rare honour bestowed for only the twelfth time in the Institution's 105 year history. The Seminar Souvenir was also unveiled by the Chief Guest during the inaugural ceremony. The event was attended by Er Manish Mahendra Kothari, President (Elect), IEI and Er Anand Wamanrao Jawanjali, Chairman, Maharashtra State Centre, IEI along with many distinguished dignitaries, members and invitees from academia and the engineering fraternity.

The inaugural session commenced with a warm welcome address by Er Satish Sambhaji Raipure, Chairman, Nagpur Local Centre, IEI who expressed gratitude to the Chief Guest, dignitaries, speakers and delegates and highlighted the relevance of the seminar theme in the current engineering landscape and reaffirmed IEI's commitment to professional excellence and capacity building.

The Seminar featured multiple technical sessions comprising Keynote addresses, Invited Lecture and case study presentations by eminent experts from both academia and industry. The discussions covered diverse aspects of forensic civil engineering, including structural failures, retrofitting, geotechnical investigations and legal frameworks related to infrastructure safety. Prominent topics covered during the Seminar titled 'Root Cause Analysis of a 33.3 m MS Chimney Structural Failure', 'Earthquake Resilience in India: Challenges and Opportunities', 'Bridge Failures, Analysis and Forensics', 'Structural Retrofitting: Present & Future', 'Retrofitting Projects

of National Importance', 'Significance of Geotechnical Investigation', 'Forensic Collapse Investigation: Methods and Tools', 'Forensic Structural Engineering Case Study on Building Collapse in Pune', '5D Methodology in Forensic Civil Engineering' and 'Forensic Evaluation and Remediation of Chloride-Induced Damage in Concrete Structure'. The sessions witnessed enthusiastic participation and in-depth deliberations. The exchange of ideas among speakers and delegates effectively bridged the gap between research and practical applications in this emerging field.

The valedictory function, was graced by Hon'ble Justice (Retd) Shri Avinash Gharote as the Chief Guest. In his address, Justice Gharote underscored the importance of accountability and ethics in engineering practice, emphasizing the legal dimensions of forensic civil engineering. Participants expressed their appreciation for the seminar's relevance and its contribution to professional development. The vote of thanks was proposed by Dr Swapneel Satone, Organising Secretary, of the event, who extended heartfelt gratitude to all dignitaries, speakers, delegates, sponsors and volunteers for their invaluable contributions to the event's success.

Special acknowledgment was made to the Organizing Committee led by Er Satish Raipure, Chairman, Nagpur Local Centre, IEI; Dr Sandeep Shirkhedkar, Convener; Dr Dilip Mase and Dr Mahesh Shukla, Co-Conveners; Dr Swapneel Satone, Organising Secretary; Dr Valsson Varghese, Chairman, Technical Committee and Dr A M Pande & Dr R K Ingale, Co-Chairmen, Technical Committee along with the dedicated team of coordinators and volunteers. Heartfelt thanks were also extended to the Sponsors and Industry Partners, including M/s Ultratech Cement Ltd, M/s P T Mase & Associates, M/s MYK Arment Private Limited, M/s Fosroc Chemicals India Private Limited and many others for their generous support.

The Seminar successfully fulfilled its objectives by providing a dynamic platform for professional exchange, technical learning and collaborative growth. The insightful deliberations reinforced the crucial role of forensic engineering in ensuring safety, sustainability and accountability in the nation's infrastructure development. The seminar concluded with optimism for fostering best practices, innovation and ethical standards in civil engineering.



IEI - Springer Journal





ISSN Print: 2250-2149
ISSN Online: 2250-2157

SCOPUS Indexed

Series A
CiteScore 2024
2.8
Google Scholar h5 Index 2023
22



ISSN Print: 2250-2106
ISSN Online: 2250-2114

SCOPUS Indexed

Series B
CiteScore 2024
3.9
Google Scholar h5 Index 2023
24



ISSN Print: 2250-0545
ISSN Online: 2250-0553

SCOPUS Indexed

Series C
CiteScore 2024
2.7
Google Scholar h5 Index 2023
24



ISSN Print: 2250-2122
ISSN Online: 2250-2130

SCOPUS Indexed

Series D
CiteScore 2024
2.5
Google Scholar h5 Index 2023
19



ISSN Print: 2250-2483
ISSN Online: 2250-2491

SCOPUS Indexed

Series E
CiteScore 2024
2.8
Google Scholar h5 Index 2023
11

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Recent Advances in Mechanical Engineering

Durgapur Local Centre, IEI, in association with the Department of Mechanical Engineering, National Institute of Technology Durgapur organized the 40th National Convention of Mechanical Engineers during 23-24 August 2025 at Durgapur. A National Conference was organized concurrently on the theme **Recent Advances in Mechanical Engineering**. Prof Arvind Choubey, Director, NIT Durgapur graced the inaugural function as the Chief Guest. Mr A K Singh, Chief General Manager, MECON Limited, Durgapur and Mr Saibal Kanti Das, Managing Director, Durgapur Projects Limited, Durgapur graced the occasion as the Guests of Honour. The session was presided over by Er Sajjan Singh Yadav, Chairman, Mechanical Engineering Division Board, IEI. The event started with the welcome address delivered by Prof (Dr) Chandan



Koner, Chairman, Durgapur Local Centre, IEI. Dr G Ranganath, Immediate Past President, IEI and Member, MCDB, IEI in his address highlighted the significance of technical activities being organized by different State and Local Centres of IEI all over the year. Er Safikul Islam, Organising Convener of the event and Immediate Past Chairman of the host Centre briefed about the theme and a detailed overview of two-day programme. Er Sajjan Singh Yadav, Chairman, MCDB, IEI in his address focused on the key innovations and advancements in the field of Mechanical Engineering, which include sustainable manufacturing technologies, advanced design practices, data driven decision making and renewable energy systems. He opined that Additive Manufacturing, 3D Printing, Robotics and Automation, Reverse Engineering, implementation of Circular Economy, are revolutionizing the industry by reducing material waste and energy consumption. Digital technologies are being incorporated into all aspects of engineering, from design and prototyping to the manufacturing process and maintenance; By combining robotics, real-time data and artificial intelligence, smart factories can make adjustments as soon as they're needed, often without the need for human intervention, he added.

Guest of Honour, Mr A K Singh discussed the significant aspects of steel manufacturing. He discussed the National Steel Policy, covering manufacturing, transportation, consumption, and material-handling issues. He explained PM Gati Shakti Master Plan, future of steel industry and future prospects of India, employment opportunities for the young engineers in the steel sector etc. Guest of Honour, Mr Saibal Kanti Das elaborated on the significant aspects of power sector and the future road map.

Chief Guest, Prof Arvind Choubey in his address emphasized the significance and application of AI and ML for Technological Development and advocated to introduce AI and ML in undergraduate engineering curriculum for in all disciplines followed by periodic overview of the course curriculum. He elaborated the application of Machine Learning in thermodynamics and heat transfer, machine design, healthcare system & diagnostic services and so on. On the occasion, Prof (Dr) Kuldeep Kumar Saxena, FIE, Director of Research Collaboration, Galgotias University, UP; Er Vijaya Nand Sharma, FIE, Sr General Manager & HOP, CTPS, Damodar Valley Corporation; Prof (Dr) Onkar Singh, FIE, Vice Chancellor, Veer Madho Singh Bhandari, Uttarakhand Technical University, (Formerly Uttarakhand Technical University), Dehradun, Uttarakhand [in absentia]; and Dr R Velraj, FIE, Professor, Institute for Energy Studies (IES), Anna University, Chennai and Former Vice Chancellor, Anna University, Chennai were felicitated as

Eminent Engineering Personalities for their relentless contribution in the field of Mechanical Engineering.

Further, the IEI Young Engineers Award in Mechanical Engineering Division were presented Dr R Arun Kumar, AMIE, Asst Professor III, Department of Mechanical Engineering, RAMCO Institute of Technology, TN in Academics; Dr Prasanta Majumder, AMIE, National Post-Doctoral Fellow, Heat Transfer Lab, Interdisciplinary Centre for Energy Research, IISc Bangalore in R&D and Mr Gaurav Sanjay Dambir, MIE, Lead Engineer [Design Engineer III], Regal Rexnord Corporation, Marathon Electric India Private Limited, Pune in industry category.

The soft copy of the Proceedings was released on the dais in august presence of the dignitaries. For details pls refer following link:

<https://shorturl.at/g3zcW>

Dr Bimal Das, Honorary Secretary, Durgapur Local Centre proposed the vote of thanks at the end of inaugural session.

The inaugural session was followed by Dr S C Bhattacharyya Memorial Lecture and Dr S P Luthra Memorial Lecture. Shri Sanjay Kumar Ghosh, Executive Director [Fuel], Damodar Valley Corporation HQ, Kolkata delivered the Dr S C Bhattacharyya Memorial Lecture on the topic 'Sustainable Efficient Green Power Generation through Thermal Flexibilisation & Role of DVC'. He explained the significance of coal in power generation, how to achieve the net zero emission, the power station flexing trends to accommodate variable renewable energy generation, advanced process control implementation through AI, Boiler Stress Monitoring Implementation, Coal Yard Management, implementation of battery storage systems, maintenance process upgradation strategy etc. The Dr S P Luthra Memorial Lecture was scheduled to be delivered by Dr Subhasis Bhaumik, Professor [HAG], IEST Shibpur on the topic 'Intelligent Manufacturing: A Path to Excellence and Sustainability for People and Planet'. In his absence, Prof Shibendu Shekhar Ray, Department of Mechanical Engineering, NIT Durgapur delivered the presentation and mentioned that Intelligent manufacturing is a cornerstone



of Industry 4.0, which aims to make the factories more responsive and flexible. A Panel Discussion was held on the topic 'Future of Mechanical Engineering'. The discussion focused on sharing firsthand knowledge with the students for better understanding of the subject. The discussion also stressed on interdisciplinary approach of study and experience based learning, which is the prime factor to enhance competency. The State of the Art Lecture was delivered by Dr Dip Narayan Ray, Chief Scientist & Head, Intelligent Systems Engineering Group, CSIR-CMERI. A Keynote lecture was delivered by Mr Tusar Kanti Kirole, Associate Vice President, Matrix Fertilizers on advancement in mechanical engineering and mechanical systems. He explained design and manufacturing through SpaceX, development of nanocrystals, robotics and automation etc. Eight technical sessions were organized on four verticals, namely Machine Design, Production, Thermal engineering and Heat Transfer and Miscellaneous. A number of papers was presented during the technical sessions based on the sub theme. For details of technical sessions and Memorial Lecture, kindly refer the following link.

During the valedictory function, Mr Surajit Mishra, Director in Charge, ISP & DSP graced the function as the Chief Guest. Mr Pranab Kumar Ghosh, Managing Director, South Bengal State Transport Corporation and Mr Sanjay Kumar Ghosh were the Guests of Honour. The session was presided

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Council Elects New President of IEI

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Academic and Professional Credentials

Er. Kothari holds a Bachelor's Degree in Mechanical Engineering from Pune University (1993) and an Advanced Diploma in Industrial Safety (ADIS). He is a Fellow of The Institution of Engineers (India) and a Chartered Engineer recognized by the Government of India. His professional accreditations further include being a Government-approved Valuer, a Certified Safety Auditor, and an Authorized Competent Person under the Factories Act. In addition, he serves as an Empanelled Chartered Engineer with the Customs Department, providing expert consultancy in valuation, safety, and industrial compliance. His academic foundation, combined with his practical acumen, has established him as a leading authority in the domains of industrial safety, aerospace manufacturing, and engineering governance.

Professional Journey and Industrial Contributions

With a professional career spanning more than thirty-five years, Er. Kothari has harmoniously blended engineering expertise with entrepreneurial excellence. He is the Director of Maharashtra Pipes & Allied Industries, Nashik, a reputed ancillary unit of Hindustan Aeronautics Limited (HAL) engaged in the manufacture of Ground Handling and Ground Support Equipment (GHE/GSE) and precision components for fighter aircraft of the Indian Air Force. Under his leadership, the company has earned recognition for engineering precision, technological advancement, and adherence to rigorous quality standards.

He also serves as Director of Pushkar Enterprises, a leading enterprise in material-handling systems and wind-operated ventilation technologies, contributing significantly to sustainable industrial design. Through these ventures, Er. Kothari has demonstrated his commitment to promoting indigenous manufacturing, operational efficiency, and safety excellence. His work in the industrial sector exemplifies his philosophy that engineering must not only serve industry but also safeguard lives, processes, and the environment.

Association with The Institution of Engineers (India)

Er. Kothari's association with The Institution of Engineers (India) extends over three decades and stands as a model of consistent and progressive leadership. Beginning as a Corporate Member in 1995, he steadily rose through the ranks—serving the Nashik Local Centre as Committee Member, Joint Secretary, Secretary, and later as Chairman—where he played a pivotal role in strengthening professional activities and member engagement. His leadership subsequently extended to the Council of IEI, where he served with distinction for multiple terms.

At the national level, Er. Kothari has served on almost all major committees of the Institution, including the Finance Committee, Membership Committee, Standing Committee on Headquarters Management (SHMC), Bye-Laws Committee, Institutional and Industrial Excellence Awards Committee, and the Safety and Quality Forum. As Chairman of the Finance Committee, he spearheaded process reforms, strengthened internal financial controls, and

introduced transparency in budgeting and fiscal monitoring. As Lead of the Membership Committee, he pioneered the online membership application platform, the first of its kind within IEI, which revolutionized the enrolment process and enabled year-on-year growth in corporate membership. His strategic vision also led to the establishment of Memoranda of Understanding with leading financial institutions, insurance providers, and automobile manufacturers such as Mercedes-Benz and Kia, thereby enhancing the professional and financial benefits available to IEI members.

Leadership Beyond IEI

Beyond his contributions to IEI, Er. Kothari has played a transformative role in India's industrial ecosystem. As Chairman of the Nashik Engineering Cluster, a flagship project of the Government of India under the Department for Promotion of Industry and Internal Trade (DPIIT), he successfully guided an investment of ₹250 crore—the only project of its kind in the country to achieve complete and sustainable implementation. His leadership enabled numerous startups and MSMEs to secure over ₹50 crore in funding and adopt advanced technologies for manufacturing excellence.

As President of the Nashik Industries Manufacturers' Association, representing over 7,000 MSME and large-scale industrial units, Er. Kothari has been instrumental in fostering industrial growth, infrastructure development, and policy advocacy. He also serves as Director of the Maharashtra Chamber of Commerce, Industries and Agriculture, where he actively works towards strengthening collaboration among industry, academia, and government. His presence on the Governing Councils of several engineering institutions reflects his dedication to aligning academic curricula with industry requirements and promoting innovation-driven education.

Vision and Philosophy

Er. Kothari is a family-oriented, value-driven leader whose professional life is guided by integrity, discipline, and service to society. He is the proud father of three children, excelling in diverse fields such as Food Engineering, Robotics, and Fashion Design, symbolizing his belief in holistic education and interdisciplinary excellence. His vision for IEI is anchored in digital transformation, financial sustainability, and member-centric governance. He advocates for a transparent and responsive institutional framework that promotes professional growth, strengthens industry partnerships, and ensures that engineering continues to serve as a catalyst for national development.

Legacy and Outlook

Er. Manish Mahendra Kothari embodies the ideals of professional excellence, visionary leadership, and national commitment. His presidency marks a decisive step forward in IEI's journey towards modernization, accountability, and global engagement. Under his stewardship, The Institution of Engineers (India) is poised to reinforce its role as the premier multidisciplinary professional body of engineers, advancing the cause of engineering education, research, and innovation for the progress of the nation.

From the President's Desk.....

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paradigm — one where bytes and watts converge for sustainability. Engineers are at the heart of this transformation — designing resilient infrastructure, modelling renewable systems, and ensuring that every digital footprint leaves a lighter carbon footprint.

As members of The Institution of Engineers (India), we must continue to lead this transition. Every circuit, every algorithm, every line of code can become an act of climate responsibility. The time has come to move from awareness to action, from innovation to impact.

For the future we engineer today will decide the climate we inherit tomorrow.

Seminar on 'Ethics and Contract Management' organized by Hindustan Copper Limited, Hotel HHI, Kolkata



Maj Gen (Dr) MJS Syali, VSM (Retd), Secretary and Director General, IEI, delivering the Keynote Address



A Seminar on 'Ethics and Contract Management' was organised by Hindustan Copper Limited (HCL) on 9 October 2025 at the Hotel Hindustan International, Kolkata. The event brought together senior executives, officers, and thought leaders from public and private sectors to deliberate on the ethical dimensions of professional conduct and effective contract management practices.

The programme commenced with the welcome address by the Chief Vigilance Officer, HCL, followed by addresses from dignitaries of the Ministry of Mines and HCL Board of Directors. The inaugural session set the tone for the day, highlighting the importance of ethical governance and transparent business processes in public sector enterprises.

The Keynote Address was delivered by Maj Gen (Dr) MJS Syali, VSM (Retd.), Secretary and Director General, The Institution of Engineers (India), who spoke on 'Ethics in Workplace.' He emphasized that while rules can be taught, values must be lived; ethics, he noted, 'is not a paragraph in a manual but the oxygen of every organization.'

Drawing from Indian philosophical heritage and global corporate practices, Dr. Syali urged professionals to integrate Dharma, fairness, and integrity into every facet of workplace culture. He cited examples from both Indian and international organizations, illustrating how ethical courage and transparency strengthen institutional credibility and add period.

The day-long Seminar also featured thematic sessions by Swami Vedatitananda of the Ramakrishna Mission Shilpamandira, Howrah, who spoke on spiritual perspectives of ethical living, and Shri Rajesh Prasad, Advisor (Corporate Coordination), IRCON International Limited, who shared insights on contract management. The final technical session on Legal Aspects in Contract Management was conducted by Shri Ashutosh Kumar Mishra, Advocate, Supreme Court of India.

The Seminar concluded with an interactive discussion and a vote of thanks, reiterating the collective resolve to uphold integrity, transparency, and accountability in all professional dealings — the true foundation of good governance in public enterprises.

Recent Advances in Mechanical Engineering

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over by Prof (Dr) Chandan Koner. Dr Arup Kumar Mandal, Joint Organizing Secretary of the event proposed the vote of thanks.

Recommendations emanating from the two-day deliberation are as follows.

Sustainable manufacturing demands an urgent focus on reducing the carbon footprint and adopting comprehensive decarbonization policies; The promotion of renewable energy and a clear transition to clean energy will form the backbone of the future roadmap for the power sector; Digital transformation through Artificial Intelligence (AI) and Machine Learning (ML) should be incorporated into all undergraduate engineering curricula. Applications of Industry 4.0 components must be explored in machine design, heat transfer, product development, as well as healthcare services and diagnostics; In thermal power plants, coal continues to play a vital role in power generation. To achieve net-zero emissions, coal-based stations must enhance their daily flexing capabilities to accommodate the variability of renewable energy generation; Experimental challenges in thermal power stations must be carefully addressed, with effective

mitigation strategies formulated to ensure efficiency and sustainability; Since intelligent manufacturing is the cornerstone of Industry 4.0, factories must become more responsive and flexible to adopt emerging technologies such as robotics, analytics, additive manufacturing, and fused deposition modelling; Organizational sustainability can only be achieved through cost-effectiveness combined with the creation of value-added products and services; Practical exposure and the transfer of first-hand knowledge within organizations, along with sharing such experiences with students, lead to deeper subject understanding. This must be emphasized to ensure effective engineering and technical education; Revision of the undergraduate Mechanical Engineering curriculum is essential, particularly with the integration of Mechatronics, Computer-Integrated Manufacturing (CIM), Special Purpose Machines (SPM), Computer-Aided Manufacturing (CAM), and other advanced manufacturing systems; An interdisciplinary approach to education and practice will soon take center stage, enhancing the knowledge base of engineers while also broadening job opportunities.

Irrigation, Drainage, Water Management, Soil Conservation Practices, Watershed Management Practices, Rainwater Harvesting, Conservation, Ground Water Recharge & Reutilization, Waste used, Water Utilization in Agriculture by Recycling etc

Bareilly Local Centre, IEI, in association with Gautam Buddha Mahavidyalya, Firozpur, Bareilly, organized an All India Seminar on **Irrigation, Drainage, Water management, Soil Conservation Practices, Watershed Management Practices, Rainwater Harvesting, Conservation, Ground Water Recharge & Reutilization, Waste used, Water Utilization in Agriculture by Recycling etc.** during 21 - 22 June, 2025, under the aegis of Agricultural Engineering Division Board [AGDB], IEI. The event witnessed participation from engineers, faculty members and students and served as a multidisciplinary platform to deliberate on sustainable water management and agricultural technologies ensuring environmental balance and resource efficiency.

The inaugural session commenced with the welcome address by Prof (Dr) Pankaj Sharma, Chairman, Bareilly Local Centre, IEI. He emphasized the importance of sustainable irrigation, soil conservation and integrated watershed management. He encouraged participants to adopt efficient water resource utilization, groundwater recharge and wastewater recycling methods to support sustainable agriculture.

The Chief Guest, Dr H C Yadav, Chief Technical Officer, Indian Veterinary Research Institute (IVRI), Bareilly, inaugurated the seminar and shared his views on the significance of integrated water management in modern agriculture. The Keynote Speaker, Prof S S Tripathi, Invertis University, Bareilly, highlighted innovative methods of wastewater recycling and reuse in agriculture. Both dignitaries were felicitated by Prof (Dr) Pankaj Sharma, and other senior members of the centre. Dr H C Yadav delivered an insightful lecture on 'Integrated Water Resource Management for Sustainable Agriculture: Innovations in Irrigation, Drainage and Wastewater Reuse', stressing holistic approaches that combine advanced irrigation systems, rainwater harvesting and groundwater recharge. Prof Tripathi elaborated on 'Recycling and Reuse of Wastewater in Agriculture' outlining the benefits of treated wastewater for irrigation and soil enrichment while ensuring environmental safety. A souvenir was released on the occasion in the august presence of dignitaries on the dais.

Er Hanumant Sharan Singh, Resource Person, Babasaheb Bhimrao Ambedkar University, Lucknow, presented his talk on 'GIS for the Assessment of Groundwater Recharge Potential Zones', demonstrating the application of spatial mapping for identifying recharge sites. Prof (Dr) Pankaj Sharma, presented a paper on "IoT-Based Smart Irrigation and Water Management

System for Sustainable Agriculture", emphasizing real-time automation and water-use efficiency. Er Neha Saifi, Assistant Professor, Rakshpal Bahadur Management Institute, Bareilly, discussed on 'AI-Enabled Decision Support System for Precision Irrigation and Water Resource Optimization', showcasing the role of AI and predictive analytics in optimizing irrigation schedules. Mr Rohit Maurya, Principal, Gautam Buddha Mahavidyalya, shared insights on "Integrated Watershed Management: A Holistic Approach to Soil and Water Conservation for Sustainable Rural Development", emphasizing community participation and environmental stability. Dr Gaurav Shukla, Assistant Professor, Maharshi University of Information Technology, Lucknow, presented Smart Irrigation Systems: Leveraging IoT and Automation for Precision Agriculture. Dr Chhavi Sharma, Professor, MJP Rohilkhand University, Bareilly, discussed Embedded Systems for

Automated Drainage and Water Quality Monitoring. Er Rizwan Khan, Assistant Professor, Invertis University, presented 'Integrated Civil Engineering Approach for Sustainable Irrigation and Water Resource Management.' Mr Ray Kumar, Assistant Professor, Gautam Buddha Mahavidyalya, delivered a lecture on 'Soil and Water Conservation'. Ms Tanvi Sharma, Mr Ashok Kumar, Mr Vijay Singh and Mr Vivek Kumar, students of Gautam



Buddha Mahavidyalya, presented papers on Rainwater Harvesting, Smart Rainwater Harvesting, Wastewater Recycling in Agriculture and Public Awareness and Acceptance of Wastewater Use in Food Production, respectively, reflecting active student engagement and innovation.

The valedictory session began with a welcome address by Prof (Dr) Pankaj Sharma, Chairman and Convener, Bareilly Local Centre, IEI. Dr Ruchit Jain, Head, HOD (MCDB), RIMT, Bareilly, delivered the Valedictory Address, summarizing the key learnings and outcomes of the seminar. Mementoes were presented to all speakers and contributors. Er Sanjay Kumar Srivastava, Honorary Secretary, Bareilly Local Centre, IEI proposed the vote of thanks, extending gratitude to dignitaries, participants and organizing committee members for making the seminar a grand success.

The All India Seminar successfully brought together experts, academicians, engineers and students to exchange ideas and innovative practices in sustainable water and soil management. The deliberations and technical papers highlighted the importance of integrating traditional conservation techniques with modern technologies like IoT, AI and GIS to achieve sustainable agricultural development and resource optimization.

Discount at the Samsung e-store for IEI Corporate Members

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Safety and Security in Process Plant Installations and Facilities

Bareilly Local Centre, IEI, in association with Rajshree Institute of Management & Technology (RIMT), Bareilly, organized an All India Seminar on **Safety and Security in Process Plant Installations and Facilities** during 12 - 13 June, 2025, under the aegis of Chemical Engineering Division Board [CHDB] at Rajshree Institute of Management & Technology, Bareilly. The Seminar aimed to provide a platform for engineers, academicians, researchers and students to discuss advancements in industrial safety, cyber security and sustainable process management. The programme witnessed the active participation of engineers, staff members and students. The event featured an inaugural session, several technical sessions, invited lectures and paper presentations focusing on smart technologies, process plant optimization and cyber-physical safety frameworks.

The Seminar commenced with the welcome address by Prof (Dr) Pankaj Sharma, Chairman, Bareilly Local Centre, IEI. In his address, Dr Sharma emphasized that safety and security in process plant installations form the foundation of sustainable industrial growth and operational excellence. He stressed the importance of robust safety protocols, modern monitoring systems and continuous training to build a culture of safety and accountability in the engineering fraternity.

The Chief Guest and Keynote Speaker during the inaugural session, Dr Tilak Joshi, Senior Scientist, CSIR-Advanced Materials and Processes Research Institute, Bhopal (MP), highlighted the importance of predictive safety systems and intelligent risk mitigation in modern process plants. He spoke about the integration of smart sensors, AI-driven surveillance and advanced materials to enhance industrial safety, emphasizing the need for cyber-physical security to ensure sustainable and resilient operations. A brief seminar overview was presented by Dr Anuj Verma, Head, Civil Engineering Department, RIMT, while Dr Ruchit Jain, Head, Mechanical and Civil Departments, RIMT, underlined the relevance of the seminar theme to the industrial and academic community. The Souvenir of the seminar was released by the Chief Guest, Chairman and other dignitaries, during the inaugural session.

The first technical session began with an Invited Lecture by Dr Tilak Joshi on 'Safety and Security in Process Plant Installations and Facilities'. He discussed predictive safety systems, smart containment materials and AI integration for real-time risk management. This was followed by an Invited Lecture by Dr Chhavi Sharma, Professor, Department of Electronics & Communication Engineering, MJP Rohilkhand University, Bareilly, on 'Smart Safety and Security Systems for Process Plant Facilities in the Era of Industry 4.0'. She emphasized the convergence of IoT, AI and automation in ensuring operational safety and cyber security in industrial environments.

The next Invited Lecture was by Dr Praveen Yadav of Bansal Institute of Engineering & Technology, Lucknow and Dr Hanumant Sharan Singh of Babasaheb Bhimrao Ambedkar University, Lucknow, on 'Analysis of Chemical Parameters of Drinking Water'. Their study examined water quality variations in urban Lucknow and highlighted contamination concerns related to fluoride and lead. Dr Arjun Prasad, Assistant Professor, Department of Civil Engineering, BBAU, Lucknow, delivered an Invited lecture on 'Effect of Anisotropic Hydraulic Conductivity on Optimum Cost Design of Barrage'. He discussed a new algorithmic approach for cost optimization in hydraulic structures considering anisotropic soil properties. Er Arshan Ali Khan from IIT Madras, Chennai, delivered an Invited lecture on 'AI-Driven Cyber-Physical Security Framework for Process Industries: A Data-Centric Approach'. He detailed a model integrating IoT data and machine learning for proactive threat detection in industrial systems.



Another team of Mr Shivanku Chauhan, Mr Harvir Singh, Ms Pragya Sharma and Mr Nitish Kumar Singh from ABES Engineering College, Ghaziabad presented a paper titled "From Reactive to Predictive: Smart Technologies in Industrial Process Safety", focusing on AI-driven predictive maintenance and real-time monitoring for hazard prevention. Two more insightful papers were presented by Er Harshit Gupta and Dr Ruchin Jain

from RIMT, Bareilly on 'Blockchain for Ensuring Data Integrity and Security in Process Plant Monitoring Systems' and by Mr Rajat Kumar Kanaujia and Mr Sanjeev Kumar Arya from RIMT on 'Tools and Techniques Used for the Optimization of Process Plant Installations and Facilities', which emphasized HAZOP, SIL and fire detection systems.

Ms Shreya Singh, Department of Plant Science, MJP Rohilkhand University, Bareilly, presented on "Application of Artificial Intelligence in Process Safety Management", illustrating AI's role in predictive maintenance and digital twins for risk mitigation. A collaborative team of Mr Padamjee Omar, Mr Manvendra Singh Chauhan, Mr Shailendra Kumar and Dr Hanumant Sharan Singh from UIET, BBAU, Lucknow delivered a paper titled 'Role of UAVs and Satellite Imagery in Real-Time Fire Detection and Explosion Risk Assessment', exploring drone-based monitoring and GIS integration for hazard mapping.

Mr Ankur Bhatnagar, Department of Computer Science and Engineering, RIMT, Bareilly, presented on 'Cyber Security Challenges in Industrial Control Systems of Process Plants', discussing vulnerabilities in automation networks and counter-strategies using layered defense.

The Seminar concluded with great success and collective commitment toward advancing industrial safety and security practices for a sustainable future.

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>

Corporate Air Ticketing for IEI Members

Corporate Members may book Corporate Air Ticket through M/s EBIX Travels Private Ltd. For details please visit

<https://www.ieindia.org/webui/IEI-AirTickets.html>

Sustainable Urban Development: Green Architectural Engineering and Smart City Planning for a Greener Future

Coimbatore Local Centre, IEI, in association with the Department of Civil Engineering, KPR Institute of Engineering and Technology (KPRIET), Coimbatore, successfully organized an All India Seminar on **Sustainable Urban Development: Green Architectural Engineering and Smart City Planning for a Greener Future** during 08 - 09 May, 2025, under the aegis of Architectural Engineering Division Board [ARDB] at Coimbatore. The Seminar aimed to bring together experts, academicians, professionals and students to deliberate on the pressing challenges and innovations in sustainable architecture, smart city development, waste management and green infrastructure. The event served as a significant platform to share research outcomes and practical approaches for promoting a greener urban future.

The inaugural session commenced with a welcome address by Dr J Krishnamoorthi, Chairman, Coimbatore Local Centre, IEI, who emphasized the importance of bridging the gap between academia and industry to prepare young civil engineers for sustainable urban challenges. Dr K S Elango, Associate Professor, Department of Civil Engineering, KPRIET, outlined the objectives of the seminar, focusing on sustainable materials, smart urban planning and the circular economy. Dr M J Gopinathan, Managing Director, JPG Housing & Projects (P) Limited, Coimbatore, graced the occasion as the Chief Guest and delivered the inaugural address. He highlighted the crucial role of innovative and eco-conscious construction practices in addressing the environmental impact of rapid urbanization. Dr Gopinathan urged professionals to adopt green technologies and sustainable materials to build resilient and climate-friendly cities. The seminar souvenir was released by Dr J Krishnamoorthi in the presence of the dignitaries.

The inaugural function was followed by a Keynote Address by Dr M J Gopinathan on 'Innovative Building Materials'. He elaborated on sustainable materials such as geopolymer concrete, bamboo reinforcement, recycled aggregates and fly ash bricks, emphasizing their benefits in reducing carbon emissions and improving structural longevity.

The technical sessions featured a series of invited expert lectures addressing various dimensions of sustainable urban development. Er G Elangovan, Deputy City Engineer, Coimbatore Municipal Corporation, spoke on 'Smart City for Future – Challenges and Complexities' discussing urban infrastructure modernization, digital governance and sustainable mobility. Ms Anjana Suresh K Nair, Project Coordinator, Green Era Recyclers, Coimbatore, delivered a lecture on 'Circular Economy through Urban

Mining'. She explained the concept of recovering raw materials from urban waste and obsolete infrastructure, promoting circular economy models that reduce environmental burden and promote economic value creation. Mr V Kavinkumar, Assistant Professor II, Department of Civil Engineering, KPRIET, presented on 'Green Buildings for Urban Development', emphasizing the importance of energy efficiency, water conservation and eco-friendly materials in sustainable construction. Dr J Senophiyah Mary, Founder and Environmental Technical Expert, Howest Global, Coimbatore, delivered an engaging lecture on 'Advanced Waste Management for a Greener Future'. She outlined next-generation waste management technologies including composting, bio-methanation and plasma gasification, while stressing decentralized and community-driven waste management approaches. Dr R Loganathan, Climate Tech Advisor, Howest Global, discussed 'Closing the Urban Water TTR0 as a Sustainable Solution for Wastewater Reuse'.



He elaborated on tertiary treatment reverse osmosis systems and their potential for large-scale urban wastewater recycling, addressing challenges in public perception and policy implementation. The second day also featured student paper presentation session, showcasing innovative ideas and research contributions by young engineers. Papers were presented on 'Bubbling Strength: A Study of the Mechanical Behaviour of Air-Entrained Concrete; Bacillus Infused Bio-concrete: Redefining Durability in Modern Construction etc. These

papers reflected the active participation of students in emerging areas of sustainable engineering and urban innovation.

For details of technical sessions, please refer the following link.

<https://shorturl.at/dhMgi>

The Seminar concluded with a valedictory session that summarized the key outcomes and insights from the two-day discussions. Participants appreciated the relevance of the topics and the practical solutions offered by the speakers. The event concluded with expressions of gratitude to the organizing team, speakers and participants for making the seminar a success.

The All India Seminar successfully achieved its objectives by providing a dynamic platform for exchanging ideas on sustainable technologies, eco-friendly construction and urban resilience. The sessions emphasized integrating innovation, environmental consciousness and community participation into engineering practices to shape a sustainable and livable urban future.

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 to participate the Elections of IEI from 2026 onwards.

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
E-mail: datamemb@ieindia.org

The form is available on IEI Website <https://shorturl.at/8Q5tF> or scan the code:



Opportunities and Challenges in AI & ML for Manufacturing Engineers

Bhimavaram Local Centre, IEI, in collaboration with the Department of Mechanical Engineering, SRKR Engineering College successfully organized an All India Workshop on **Opportunities and Challenges in AI & ML for Manufacturing Engineers** during 10 - 11 March, 2025, under the aegis of Mechanical Engineering Division Board [MCDB] IEI at SRKR Engineering College, Bhimavaram. The event aimed to explore the transformative impact of Artificial Intelligence and Machine Learning in the manufacturing sector, with expert talks and focused technical sessions. A total of 62 participants, including industry professionals, faculty members and research scholars, took part in the workshop.

Prof Nookala Gopala Krishna Murthy, Chairman, Bhimavaram Local Centre, IEI delivered the welcome address, followed by a briefing on workshop objectives by Dr I Rama Pavan Kumar Varma, Convener of the workshop. Sri M Anil Kumar, Assistant Professor, Mechanical Engineering Department, SRKR Engineering College, introduced the theme of the workshop and highlighted its significance. Dr K V Murali Krishnam Raju, Principal, SRKR Engineering College and Dr K Suresh Babu, HOD, Mechanical Engineering, SRKR addressed the audience on the occasion.

Prof (Dr) K Brahma Raju, Council Member, IEI delivered an insightful address on the relevance and applications of AI & ML in manufacturing engineering, underscoring current trends and future directions. The session concluded with a vote of thanks by Prof (Dr) Rajesh Siriya, Honorary Secretary, Bhimavaram Local Centre, IEI.



During the technical session, resource persons delivered presentations on 'Quality Control using Computer Vision, Predictive Maintenance and Process Optimization using AI Models', 'Applications of Machine Learning to Real-World Industrial Problems', 'Deep Learning, Regression Analysis, and Neural Networks in Manufacturing', 'Supervised and Unsupervised Learning and their Applications in Engineering', 'Applications of AI in Manufacturing Engineering Processes' and '3D Printing with AI & ML; Overview of Regression and Classification Algorithms'.

The Valedictory Session was chaired by Dr N G K Murthy, Chairman, Bhimavaram Local Centre, IEI who welcomed the attendees and reflected on the workshop's significance. Prof (Dr) K Brahma Raju, Council Member, IEI delivered the valedictory address, sharing insights on future challenges

and opportunities for manufacturing engineers in the AI-ML era. Dr I Rama Pavan Kumar Varma, Convener, expressed gratitude to all speakers and participants for their enthusiastic participation. Prof Dr K Suresh Babu, HOD, Mechanical Engineering, presented a brief report summarizing the sessions and outcomes of the workshop. Dr Ch Hari Krishna, Professor, Sri Vishnu Engineering College for Women, acknowledged the efforts of IEI and encouraged continued focus on AI-ML applications in manufacturing. The session concluded with a vote of thanks by Prof (Dr) Rajesh Siriya.

The All India Workshop was a resounding success, facilitating vibrant discussions and knowledge-sharing on cutting-edge topics in AI and ML relevant to manufacturing engineering.

Adaptation and Impact of Micro-Irrigation in Indian Agriculture

Brahmapur Local Centre, IEI, in association with the Deputy Director of Horticulture, Brahmapur, Ganjam organized a One Day Seminar on **Adaptation and Impact of Micro-Irrigation in Indian Agriculture** under the aegis of Agricultural Engineering Division Board [AGDB] on 29 April 2025 at the Minor Irrigation Office, Brahmapur. The Seminar aimed to explore the role of micro-irrigation in promoting sustainable agriculture, addressing water scarcity and improving crop productivity. The event gathered eminent engineers, scientists, academicians, government officials and students to deliberate on micro-irrigation technologies, their applications and their impact on Indian agriculture.

The welcome address was delivered by Er Bibhudatta Panda, Chairman, Brahmapur Local Centre, IEI and Former Chief Engineer, DoWR, who emphasized the importance of sustainable water management in the context of Indian agriculture. He highlighted micro-irrigation as a transformative approach to enhance water-use efficiency and ensure long-term agricultural resilience.

Er Laxmikanta Tripathy, Former Additional Chief Engineer, Minor Irrigation, introduced the Seminar theme and elaborated on the significance of micro-irrigation in mitigating water scarcity while improving agricultural productivity and farmer livelihoods.



The Chief Guest, Dr Nutan Kumar Dash, Former Vice President, IEI and the pioneer who introduced drip irrigation in Eastern India, delivered an illuminating address highlighting the genesis of micro-irrigation in Odisha and its evolution in national and global contexts. He emphasized judicious utilization of water resources, the adoption of innovative irrigation technologies and the critical role of micro-irrigation in ensuring food security and sustainable agricultural growth. The Guests of Honour, Dr Kanda Jena, Deputy Director, Horticulture, Ganjam and Er Manas Ranjan Behera, Superintending Agriculture Engineer, discussed government initiatives and technical challenges in expanding micro-irrigation networks at the grassroots level. Er K Sibasankar Patra, Convener and Er Asutosh Patra, Co-Convener and Former Joint Director, Department of Agriculture, Government of Odisha, elaborated on policy support and stakeholder involvement in promoting micro-irrigation systems. A Souvenir commemorating the Seminar was released by the Chief Guest and a book titled 'Empowering Farmers through FPO', authored by Er

Laxmikanta Tripathy, was also officially released during the session. The inaugural proceedings were anchored by Er Susree Sulagna, Assistant Executive Engineer, Agriculture and concluded with a vote of thanks

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Urbanization : Opportunities & Challenges

Maharashtra State Centre, IEI, organized a One day Seminar on **Urbanization: Opportunities & Challenges** under the aegis of Architectural Engineering Division Board [ARDB] on 13 April 2025 at Mumbai. The Seminar aimed to provide a platform for discussing critical aspects of urban development, including infrastructure, sustainability, safety and citizen welfare in rapidly urbanizing cities. The event brought together eminent dignitaries, experts and professionals from various sectors to deliberate on challenges and opportunities posed by urbanization.

The Seminar commenced with the lighting of the ceremonial lamp by the Chief Guest, Shri Bhushan Gagrani, Municipal Commissioner Brihanmumbai Municipal Corporation [BMC]; Guest-of-Honor, Er Vivek Phansalkar, Commissioner of Mumbai City Police and Keynote Speaker, Dr Niranjan Hiranandani, Founder and Chairman, Hiranandani Group in the presence of the Conveners and office bearers of Maharashtra State Centre, IEI.

Er H M Rajee, Past Chairman, Maharashtra State Centre, IEI, welcomed the gathering, introducing the theme of the seminar. The Convener, Ar Er D G Patil, briefed the audience about the objectives of organizing the seminar.

Dr Niranjan Hiranandani emphasized that seminars like these provide valuable ideas for government agencies to improve city infrastructure and services. He highlighted the importance of efficient road networks, educational facilities, hospitality sectors and township development in urban surroundings, while stressing citizen safety as a critical aspect of urbanization. Er Vivek Phansalkar stressed the need for safety of women, children and girls, alongside cleanliness, public open spaces and solid waste management. He highlighted the role of public participation in urban governance. Shri Bhushan Gagrani highlighted Mumbai's infrastructural requirements, including Metro, bus and private transport networks, along with bridges, flyovers and underpasses. He underscored the importance of public sector investment, availability of competent engineers, architects and urban planners and the significant budget allocation by BMC for city infrastructure. The inaugural session concluded with a vote of thanks proposed by Er Milind Lakshmikant Patil, Honorary Secretary, Maharashtra State Centre, IEI.



During the technical sessions, Dr Ratoola Kundu, Assistant Professor, Tata Institute of Social Sciences, Mumbai, delivered a presentation on the topic 'Cities for All: Inclusive Cities', highlighting the importance of equitable and accessible urban spaces for all, especially marginalized communities. The speaker explained, how inclusive planning and participatory governance can bridge the social and economic divides in urban development. The session also addressed the challenges in housing, mobility and service delivery for underserved populations.

Mr S J Vijay, Founder & Chairman, Salmon Leap Ventures, hoM Mission India and SpaCyPhy delivered an insightful lecture on 'Game-Changing Construction Methods That are Transforming the Way We Build', focusing on 3D Monolithic Modular Precast Technology and its advantages in speed, sustainability and cost-efficiency.

Mr Autif Sayyed, Project Lead for Green Buildings-South Asia at the International Finance Corporation [IFC], spoke on 'Future-Proofing Urban Buildings', emphasizing sustainability, resilience and energy efficiency in construction, noting green buildings still comprise only 5% of new constructions in India. He further explored key barriers to adoption and spoke on IFC's green building tools and stressed the role of supportive policies and incentives in driving broader adoption.

Mr Yogesh Kajale, Senior Vice President, B G Shirke Construction Technology Private Limited delivered a presentation on 'Technology in Mass Housing', highlighting precast technology, automation and efficient project management for affordable urban housing. He mentioned that innovative construction methods and technologies being implemented to meet the growing demand for affordable urban housing.

Ms Sheetal Bhilkar, Founder, Urja Building Services Consultants Private Limited (UBSC) and Mr Mandar Bhilkar, Director, UBSC, presented on the "Importance of MEP Services", emphasizing Mechanical, Electrical, Plumbing and Firefighting systems as essential for sustainable urban infrastructure.

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Adaptation and Impact of Micro-Irrigation in Indian Agriculture

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proposed by Er Pradeep Kumar Patra, Honorary Secretary, Brahmapur Local Centre, IEI.

Various Keynote Addresses and Technical Sessions were conducted during the day. During the first technical session on the topic 'Automation on Efficient Use of water', Er Laxmikanta Tripathy delivered presentation on 'Linkage of Mega Lift Projects with Drip Irrigation' and a case study on 'National Adaptation Fund for Climate Change'. Dr S K Nath, Senior Scientist, KVK II, Ganjam delivered lecture on 'Low Cost Drip Irrigation Models'. Ms Alisha Routa, Environmental Science Department, Berhampur University spoke on 'Advancing Indian Agriculture: The Role of Micro-Irrigation in Water Efficiency and Sustainability'. During the second technical session on the topic 'Micro-Irrigation Techniques', paper was presented on 'Use of Solar Energy in Micro-Irrigation Systems'. During the third technical

session on the topic 'Case Studies of Adaptation', Shri Samir Kumar Nahak, a progressive farmer shared his insights on drip irrigation and Shri Niadri Bihari Jena, AGM, Sujay Irrigations Private Limited discussed market-led irrigation solutions, applications and components of micro-irrigation systems.

An interactive open house discussion followed, engaging professionals, academicians and field officers. The discussion focused on Challenges in micro-irrigation maintenance, Water conservation strategies, Drought mitigation and adaptation and Collaborative efforts for sustainable irrigation.

The Seminar emphasized the need for policy formulation for micro irrigation capacity building at grass root level; integration with renewable energy sources; Institutional support through FPOs; organization of cluster based programme with the farmers; etc.

Effects of Climate Change on Aviation Business and Economics

Sunabeda Local Centre, IEI, in association with Samanta Chandrasekhar Institute of Technology and Management [SCITM], Semiliguda organized a One Day Seminar on **Effects of Climate Change on Aviation Business and Economics** under the aegis of Aerospace Engineering Division Board [ASDB] on 21 June 2025 in association with Samanta Chandrasekhar Institute of Technology and Management [SCITM] at SCITM, Semiliguda. The Seminar provided a platform for academicians, engineers and industry professionals to deliberate on the challenges and opportunities posed by climate change in the aviation sector, focusing on both operational and economic impacts. The event witnessed participation from number of delegates, including representatives from HAL and other institutions.



The Seminar commenced with the welcome address by Er Premananda Maity, Chairman, Sunabeda Local Centre, IEI who highlighted the significance of addressing climate change impacts on aviation, especially in Koraput district. Er Rudra Prasana Das, Convener and Technical Committee member, elaborated the Seminar theme, emphasizing how climate change affects aviation operations and economic viability. Mr Krushna Singh, Chairman, SCITM College, explained the direct and indirect impacts of climate change on aviation, including flight delays, airport closures, infrastructure damage, regulatory compliance challenges and long-term effects on tourism and business operations.

The Chief Guest, Er Hara Kumar Mohanty, Director, Directorate General of Aeronautical Quality Assurance [DGAQA] Sunabeda, addressed physical Risks, regulatory and economic risks, operational efficiency, technological

innovations, operational improvements, carbon offsetting and trading and climate risk management in aviation. Er Sanjaya Kumar Bishoyi, Honorary Secretary, Sunabeda Local Centre, IEI proposed the vote of thanks and highlighted both the advantages and challenges of climate change effects on aviation business and economics.

During the technical sessions, experts from the relevant fields shared their insights. Er Alok Narain, Deputy Manager (Testing), HAL, Sunabeda delivered lecture on 'The Impact of Climate Change on Aircraft Performance'; Er Pradeep Kumar Dash, Senior Manager (Planning), HAL, Sunabeda on 'Sustainable Aviation Technologies'; Er Manoj Kumar Patanaik, Senior Manager (Tooling), HAL, Sunabeda on 'The Future of Flight in Changing Climate'; Er Anjana Nayak, Manager (IT), HAL, Sunabeda on 'Environmental Justice in Aerospace' and Er Dr Rajesh Kumar Dora, Director, SCITM Semiliguda on 'The

Role of Aerospace Engineering in Achieving Net-Zero Emissions'. Each session provided valuable insights into emerging technologies, sustainable practices and innovative approaches to mitigating climate change impacts on the aviation sector.

The Seminar successfully facilitated knowledge exchange on climate change and its effects on aviation business and economics. The deliberations highlighted the need for technological innovation, sustainable operational practices and policy interventions to build resilience in the aviation industry. The Seminar concluded with a vote of thanks by Er Sanjaya Kumar Bishoyi, FIE, acknowledging the support of speakers, participants and organizing committees for making the event a grand success.

Biofuels like Ethanol and Biodiesel towards Energy Security and Environmental Protection

Bareilly Local Centre, IEI, organized a One Day Seminar on **Biofuels like Ethanol and Biodiesel towards Energy Security and Environmental Protection** under the aegis of Chemical Engineering Division Board [CHDB]

on 12 May 2025 at Rajshree Institute of Management & Technology, Bareilly. The Seminar aimed to address the growing energy demands and environmental challenges faced by India and the role of biofuels in providing sustainable alternatives to fossil fuels. It brought together academicians, researchers, industry experts and students to explore innovations, challenges and the roadmap for biofuel adoption in India.

The Seminar commenced with a warm welcome by Dr Hitesh Gangwar, Organizing Secretary and Assistant Professor, Mechanical Engineering Department, Rajshree Institute of Management & Technology, Bareilly, who highlighted the relevance of biofuels in ensuring energy security and environmental protection. Prof (Dr) Pankaj Sharma, Chairman, Bareilly Local Centre, IEI inaugurated the seminar by emphasizing the importance of

biofuels in reducing dependence on imported oil, lowering greenhouse gas emissions and promoting sustainable development.



Dr Varun Verma, Head and HOD, Civil Engineering Department, Rajshree Institute of Management & Technology, Bareilly, highlighted the objectives of the Seminar, emphasizing the significance of knowledge exchange among participants for advancing clean energy solutions.

Dr C P Gagnwar, Principal, Rajshree Polytechnic, Bareilly, delivered the Keynote address on 'Industrial Applications of Advanced Materials and Manufacturing Techniques'. He explained how advanced materials and modern manufacturing techniques are revolutionizing industrial sectors, enhancing efficiency, durability and sustainability, while enabling high-precision production and supporting environmental objectives. The session addressed the issue that as industries evolve, the synergy between

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Urbanization : Opportunities & Challenges

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Dr Anand Achari discussed 'Sustainability' in architectural design and urban development. He emphasized the importance of embedding sustainable principles into architectural planning and practice.

Mr Jashwant B Mehta, Chairman, Advisory Board and Managing Trustee of the Eye Bank Co-ordination & Research Centre discussed 'Challenges and Opportunities in the Rehabilitation of Slum Dwellers', emphasizing practical regulations and logical approaches for effective rehabilitation. Mr Rajesh Gajjar, Managing Director, GMD Consultants, presented on 'Mumbai's Transportation Infrastructure', focusing on polycentric development and improved connectivity to reduce congestion. He focused on the concept of polycentric development and explored strategies to tackle city's growing infrastructural challenges while promoting sustainable and inclusive development.

Ar Dr Rajiv R Mishra, Principal, Sir J J College of Architecture, Mumbai, spoke on 'Walkable Urbanism', advocating for pedestrian-friendly urban planning to promote sustainable development.

The valedictory session was graced by Chief Guest, City Architect Premnath. Ar Dr Rajiv Mishra, graced the session as the Guest of Honour. The convener, Ar Er D G Patil, summarized the seminar proceedings. The Chief Guest and Guest-of-Honor, during their concluding remarks, reinforced the importance of innovative urban planning. The session concluded with a vote of thanks by Er Milind Lakshmikant Patil, Honorary Secretary, Maharashtra State Centre, IEI.

The One-Day Seminar successfully provided a platform for meaningful discussions on the future of urban development in India. Through a series of expert lectures and interactive sessions, the seminar highlighted innovative solutions for infrastructure, sustainability, safety and inclusive urban growth, reaffirming the pivotal role of engineers, architects and planners in shaping India's cities.

Upgradation of Membership

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), 8 Gokhale Road, Kolkata 700020

✉ dd.membership@ieindia.org

Biofuels like Ethanol and Biodiesel towards Energy Security and Environmental Protection

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advanced materials and cutting –edge manufacturing processes plays a crucial role in driving competitiveness, technological advancements and global industrial growth.

Dr Rajeev Suman, Department of Industrial & Production Engineering, G B Pant University, Uttarakhand, spoke on 'Environmental Benefits and Sustainability Impacts of Emerging Technologies', highlighting how renewable energy, green manufacturing and innovative technologies contribute to environmental protection. Dr Vishal Saxena, Assistant Professor, Mechanical Engineering, Mahatma Jyotiba Phule Rohilkhand University [MJPRU] Bareilly, discussed on 'Modern Production Technologies and Manufacturing Systems', emphasizing automation, robotics and smart systems in improving industrial efficiency and sustainability. Dr Chhavi Sharma, Assistant Professor, Department of Electronics & Communication Engineering, MJPRU, Bareilly, delivered lecture on the topic 'Assessment of Economic Viability and Feedstock Availability for Sustainable Production Systems', stressing cost-effectiveness, resource optimization, and green technology adoption. She explained that assessing economic viability and feedstock availability are crucial for successful implementation of sustainable production systems.

Dr Hitendra Gagnwar, Assistant Professor, Department of Chemical Engineering, Rajshree Institute of Management & Technology, Bareilly, spoke on 'Production Technologies and Industrial Automation', explaining how automation enhances precision, scalability and efficiency in modern manufacturing. Mr Harish Gupta, Rajshree Institute of Management & Technology, Bareilly, deliberated on 'Industrial Applications of Automation, AI and Robotics', emphasizing real-time data analysis, predictive maintenance and smart manufacturing techniques. Er Desh Deepak and Dr Anuj Verma, Rajshree Institute of Management & Technology, Bareilly, delivered a session on 'Industrial Applications in Modern Manufacturing and Engineering', highlighting automation, precision machining and technological innovations for sustainable and competitive industrial growth.

The seminar concluded with a vote of thanks by Er Hitesh Gangwar, Organizing Secretary, expressing gratitude to all speakers, participants and organizing members for making the seminar a grand success. The event successfully provided a platform for knowledge sharing, highlighting the critical role of biofuels, advanced manufacturing and sustainable technologies in achieving energy security and environmental protection.

IEI Celebrates

58th Engineers' Day 2025

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

The 58th Engineers' Day was celebrated by the Institution all over the country on September 15, 2025 to commemorate the 164th birth anniversary of legendary Engineer-Statesman Bharat Ratna Sir M Visvesvaraya. Brief accounts of the celebration as received from various Centres are highlighted hereunder.

STATE CENTRES

Bihar



Bihar State Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Patna. Er Bijay Kumar Singh, MLC, Chairman, National Cooperative Housing

Federation of India and Bihar Housing Cooperative Federation, graced the occasion as the Chief Guest. Er Jai Prakash Narayan, Chairman, Bihar State Centre, IEI emphasized how resilient engineering has made society stronger, smarter, and safer. Er Neel Mani Rangesh, Honorary Secretary, Bihar State Centre, IEI outlined the life sketch of Sir M Visvesvaraya. Dr Uday Kant Mishra, Vice Chairman, Bihar State Disaster Management Authority and Advisor (infra) to the Chief Minister; Prof Santosh Kumar, former Professor, NIT Patna; Er Vijay Goel, Regional Executive Director, NTPC, ER-1 and Er N K P Sinha, Past Chairman, Bihar State Centre, IEI were present during the event. Keynote speaker, Dr M P Singh, Computer Science and Engineering Department, NIT Patna highlighted the era of rapid innovation, while Guest of Honour, Er Vijay Goel shared insights on the theme. Er Ajoy Kumar Sinha, Council Member, IEI, was also present.

Jammu & Kashmir



Jammu & Kashmir Centre, IEI, in collaboration with the J&K Coordination Committee of Engineering Graduates Associations, observed the 58th Engineers' Day on 15 September 2025 in Srinagar. Hon'ble Chief

Guest, Jenab Omar Abdullah, Chief Minister of J&K, lauded engineers' contributions to regional development and assured career progression. Jenab Nasir Aslam Wani, Advisor to the CM, and MLA, Jenab Ahsan Ahmad Pardesi also addressed the gathering. The technical session featured expert talks by Dr Yasir Altaf, Assistant Professor, IUST Kashmir; Dr Janib Ul Bashir, Assistant Professor, NIT Srinagar and Er Imran Sufi, Project Manager, JaKeGA while the Keynote lecture was delivered by Er Wajahat Hafiz Dedmari, a noted structural engineer and seismic retrofitting expert on structural safety.

Telangana



Telangana State Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Hyderabad. Special Guest Er Mohan Naik, Engineer-in-

Chief, R&B Department, Government of Telangana, addressed the gathering, highlighting engineering's role in infrastructure and national growth. Dr I Satyanarayana Raju, Council Member, IEI & Past Chairman, Telangana State Centre, IEI, delivered an insightful address on the life and achievements of Sir M Visvesvaraya. Four technical papers were presented and the sessions were chaired by Dr Niranjana Prasad, Senior Defence Scientist, DLRL, DRDO and Committee Member of the centre.

Tripura

Tripura State Centre, IEI, in association with the Public Works Department, Government of Tripura, celebrated the 58th Engineers' Day on 15 September 2025, at Agartala. The day began with a Mass Rally from Ujjayanta Palace,



flagged off by the Chief Guest, Shri Kishor Barman, Hon'ble Minister, Higher Education, Panchayat etc. Department, Government of Tripura. This was followed by fruit distribution at Atal Bihari Vajpayee Regional

Cancer Centre and garlanding of Sir Visvesvaraya's statue at the IEI Tripura premises. At Pragna Bhawan, the event featured floral tributes and a Blood Donation Camp inaugurated by Chief Guest of the session, Prof (Dr) Manik Saha, Hon'ble Chief Minister of Tripura, who also inaugurated the technical seminar. The Chief Minister emphasized engineers' vital role in national development. Guests of Honour included Shri J K Sinha, IAS, Chief Secretary; Shri Abhishek Singh, IAS, Secretary, Power, Rural Development etc, Department and Shri G K Dinkarrao, IAS, Secretary, Public Works Department. Prof (Dr) S K Patra, Director, NIT Agartala, delivered the Keynote address. Er Susanta Dutta, Head, School of Logistics, Communication and Waterways, SIPARD who also served Tripura PWD, was present on the occasion.

LOCAL CENTRES

Anpara



Anpara Local Centre, IEI, in collaboration with MEIL Anpara Energy Limited, celebrated the 58th Engineers' Day on 15 September 2025 at Anpara, with active participation from the engineers including

Corporate and Non-Corporate Members. The event was graced by Er Anand Kumar Singh, Station Head & COO, MEIL Anpara, as the Chief Guest, and Er Santosh Kumar Dubey, AM, O&M Head, MEIL Anpara, as the Guest of Honour. The programme began with floral tributes to Bharat Ratna Sir M Visvesvaraya, by Er Dudh Nath Yadav, Chairman, Anpara Local Centre, IEI, who also highlighted Sir Visvesvaraya's life and his pivotal role in engineering-led nation-building. Er Vivek Shrivastava, Senior DGM,

MEIL Anpara and Convener, delivered a Keynote address emphasizing Sir Visvesvaraya's integrity and innovation. Er Vikas Kumar Singh, Manager, MEIL Anpara, spoke on the role of deep technologies, AI and IoT in achieving long-term development goals. The Chief Guest encouraged engineers to focus on sustainable innovation.

Bareilly

Bareilly Local Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Rajshree Institute of Management and Technology, Bareilly. Chief Guest of the event was Brig T Lalit Mohan, Chief Engineer, MES, Bareilly and Guest of Honour was Shri Rajendra Kumar Agarwal, Chairman, Rajshree



Institute of Management and Technology, Bareilly. Key presentations were delivered by Er Sudhir Kumar Gupta, Past Chairman of the host Centre, Dr Chhavi Sharma, Professor, Department of Electronics & Communication Engineering, MJP Rohilkhand University. Dr Ruchit Jain, highlighted deep tech's role in national transformation and cyber security.

Bathinda

Bathinda Local Centre, IEI, celebrated the 58th Engineers' Day on 13 September 2025 at Bathinda. The event was graced by Dr R K Bansal, Director, Punjab Institute of Technology, Nandgarh, as



the Chief Guest, and Er Sukhjot Singh Sidhu, Deputy Chief Engineer, PSPCL, as the Guest of Honour. Dr Manpreet Kaur, Assistant Professor, Electronics and Communication Engineering Department, YDOE Talwandi Sabo, delivered a Keynote address highlighting the impact of deep technologies and engineering excellence in driving India's future. Dr Jagtar Singh Sivia, Immediate Past Chairman of the Centre addressed the gathering. Engineers, academicians and students gathered to pay tribute to Bharat Ratna Sir M Visvesvaraya, reaffirming their commitment to nation-building through engineering excellence and innovation. The event concluded with a collective resolve to inspire future generations of engineers.

Bhimavaram

Bhimavaram Local Centre, IEI, organized a lecture on 'Leadership in the Technology-Driven World' on the occasion of 58th Engineers' Day on 15 September 2025 at the



Department of Mechanical Engineering Seminar Hall, SRKR Engineering College, Bhimavaram. The event was graced by Dr G Ravi Kiran Sastry, Dean, Research & Consultancy, National Institute of Technology Andhra Pradesh, Tadepalligudem, who served as the Chief Guest and Keynote speaker. In his insightful address, Dr Sastry emphasized that leadership in a technology-driven era is not just about managing teams but about inspiring them to embrace innovation with responsibility. The session was well received by faculty, students and professionals alike.

Bokaro Steel City

Bokaro Steel City Local Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Bokaro Steel City. The event was inaugurated by the Chief Guest, Shri Priya Ranjan, Executive Director (Works), SAIL-Bokaro Steel



Plant. Shri S C Patra, CGM (I&A & Telecommunication), graced the occasion as the Guest of Honour, highlighting Sir Visvesvaraya's exemplary administrative and managerial skills and emphasizing the relevance

of Deep Tech and Quantum Computing in today's engineering landscape. Shri B K Prasad, Chairman, Bokaro Steel City Local Centre, IEI spoke on Sir Visvesvaraya's legacy in engineering excellence. Technical papers on the theme, were presented by Er Sudhanshu Sekhar, DGM (C&IT) and Er Chandra Shekhar, DGM (CRM 3), SAIL-BSL.

Coimbatore



Coimbatore Local Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at PSG College of Technology, Coimbatore. Chief Guest, Er Abishek Jayaraman, Deputy General Manager - Quality,

Precision Engineering and Systems, -/c, L&T, Coimbatore delivered a Keynote lecture on the theme, emphasizing the role of advanced technologies in nation-building. Er V Sreevidya, Professor and Head, Department of Civil Engineering, Sri Krishna College of Engineering and Technology, Coimbatore; Er R Balachandran, Former Professor, Adama Science and Technology University, Ethiopia; Er V Lawrance, Former General Manager, Tamil Nadu State Transport Corporation Limited, Coimbatore; Er C Natarajan, Principal, Hindusthan Institute of Technology, Coimbatore; Er C Shanmugasundaram, Senior Manager - Engineering (Aerospace & Defense Group), CIRCOR Flow Technologies India Private Limited, Coimbatore and Er C Sabarinathan, Professor and Head, Department of Automobile Engineering, Hindusthan College of Engineering and Technology, Coimbatore; Er R Navarasam, Assistant Professor, Department of Food Technology, Hindusthan College of Engineering and Technology, Coimbatore; Er K Balamurali, Assistant Professor, Department of Civil Engineering, Karunya Institute of Technology and Sciences, Coimbatore; Er S Arun Kumar, Assistant Professor, Department of Electronics and Communication Engineering, Kumaraguru College of Technology, Coimbatore; Er Jayakrishnan Nampoothiri, Assistant Professor, Department of Production Engineering, PSG College of Technology, Coimbatore and Er C Rajaravi, Associate Professor, Department of Agriculture Engineering, Hindusthan College of Engineering and Technology, Coimbatore were present on the occasion.

Dhanbad



Dhanbad Local Centre, IEI, in collaboration with TEXMiN, IIT ISM Dhanbad, celebrated the 58th Engineers' Day on 15 September 2025 at TEXMiN, IIT ISM Dhanbad with a technical session on the theme. The event

commenced with an inaugural session graced by Prof M K Singh, Acting Director, IIT ISM Dhanbad along with Prof (Dr) S K Singh, Past Chairman, Dhanbad Local Centre, IEI; Er Rajendra Prasad, Past Honorary Secretary, Dhanbad Local Centre, IEI and Prof Biswajit Paul, Honorary Secretary, Dhanbad Local Centre, IEI who also presented a life sketch of Bharat Ratna Sir M Visvesvaraya and introduced the theme. The Keynote address was delivered by Dr Somnath Chattopadhyay, HoD, Department of Mechanical Engineering, IIT ISM Dhanbad, who emphasized the critical role of deep technologies in shaping India's future.

Gwalior



Gwalior Local Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Gwalior, Dr C S Malvi, Chairman, Gwalior Local Centre, IEI emphasized the role of

engineers in national progress. Keynote speaker, Er P K Bhargava, Past Chairman of the Centre highlighted the legacy of Bharat Ratna Sir M Visvesvaraya and his contributions to India's development. Er Vinay Kumar Shukla, Organizing Secretary, spoke on the role of planned economy and engineering-led growth. Er Lekh Raj Sharma, Merchant Navy, elaborated on IEI's pivotal contributions to research, innovation and its recognition as a SIRO by the Government of India. Dr Chhavi Saxena, Honorary Secretary of the centre concluded the event with a vote of thanks, stating that deep tech is India's present and future and engineers must lead with innovation, vision and commitment to drive the nation's transformation.

Kollam



Kollam Local Centre, IEI, in association with the IEI Students' Chapter at Musaliar College of Engineering & Technology (MCET), Pathanamthitta, celebrated the 58th

Engineers' Day 2025 during 10 – 12 September 2025, with a series of vibrant events. The celebrations commenced with "INNOVECTA" quiz and elocution competitions. On 12 September 2025, Shri P I Sheik Pareeth, IAS (Retd), Managing Director, KSCADC Limited, delivered a technical talk on 'Challenges on Coastal Protection', offering crucial insights into environmental engineering. The programme was inaugurated by Prof Manju R, HoD, Civil Engineering, MCET.

Kozhikode



Kozhikode Local Centre, IEI, celebrated the 58th Engineers' Day on 16 September 2025 at Kozhikode. Dr Gireesan P, Chairman, Kozhikode Local Centre, IEI highlighted the importance of the day. Dr Asokan O,

Committee Member of the centre gave a brief on Sir Visvesvaraya's life and contributions. The guest speaker, Prof (Dr) P C Rehu Raj, former Principal, Government Engineering College, Kozhikode, delivered an insightful talk on the theme, emphasizing AI, quantum computing and R&D's role in national advancement. Active veteran members Dr Balagopal T S Prabhu, Er N Ravindranathan, Er K Premanandan and Er C V Sudheedran were present during the event.

Ludhiana



Ludhiana Local Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Ludhiana. The event was graced by Sh Aditya Dachalwal, IAS,

Commissioner, Municipal Corporation, Ludhiana & CEO, Smart City Ludhiana, as the Chief Guest, along with Sh P S Khaira, Additional Commissioner, Municipal Corporation Ludhiana. The programme witnessed the participation of senior and retired engineers, industrialists, academicians and students. The technical celebration included four expert sessions. Dr Rajwinder Singh

Bansal, HoD, Civil Engineering Department, RGN Phagwara, spoke on the influence of deep tech on India's technological growth, while Dr Munish Jindal, CEO, Hover Robotics and Co-founder of MentorX, elaborated on deep tech innovations transforming industries. Student speakers Mehak Kaur and Amandeep Singh shared their perspectives on the theme. Dr Arvind Dhingra, Chairman, Ludhiana Local Centre, IEI acknowledged the valuable contributions of all dignitaries and participants.

Madurai



Madurai Local Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Madurai, with a technical session on the theme. Prof (Dr) P Udhayakumar, Chairman, Madurai Local Centre, IEI introduced and honoured

the Chief Guest, Er C Gigin Durai, Project Lead, Startup TN, Government of Tamil Nadu. In his Keynote address, Er Gigin Durai elaborated on India's evolving deep tech ecosystem, highlighting national missions like India AI, Bharat 6G Vision and the National Quantum Mission, as well as the transformative role of digital innovations such as UPI and Bharat Net. Er J Sarathkumar Sebastin, Assistant Professor, Department of Aeronautical Engineering, Kalasalingam Academy of Research and Education (KARE), Krishnankovil, Dr G Lavanya, Assistant Professor (SI Gr) & Head, Department of Civil Engineering, Anna University, University College of Engineering, Ramanathapuram and Er G Sivapriya, Assistant Professor, EEE Department, Ramco Institute of Technology, Rajapalayam were present on the occasion.

Nashik



Nashik Local Centre, IEI, celebrated the 58th Engineers' Day on 16 September 2025 at Nashik. A special session titled 'Designing Your Future: Success Mantras' was delivered by Er Madhur

Patil, COO, Technoforce and Founder & CEO, Integra Skid System, who shared inspiring insights on career development and personal growth. The event saw the gracious presence of Er Manish Mahendra Kothari, presently President-Elect, IEI, Er Santosh S Mutha, Council Member, IEI and enthusiastic participation from engineering students and professionals, reflecting the spirit of innovation and excellence that defines the engineering fraternity.

North Bengal



North Bengal Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Jalpaiguri Government Engineering College [JGEC], Jalpaiguri. Er Sandipan Ganguly, Assistant

Professor, Department of Civil Engineering, JGEC presented a brief life sketch of Sir Visvesvaraya. The theme speaker, Er Jhuma Dutta, Assistant Professor, Department of Computer Science and Engineering, JGEC emphasized the transformative impact of AI, quantum computing, robotics and sustainable engineering, stressing that ethical innovation and interdisciplinary collaboration are essential for future progress. The event saw the participation of corporate members and concluded with a vote of thanks delivered by Prof (Dr) Amitava Ray, Chairman, North Bengal Local

Centre, IEI, marking a fitting tribute to engineering excellence and national advancement.

Palghat

Palghat Local Centre, IEI, celebrated the 58th Engineers' Day with great enthusiasm on 15 September 2025 at Palakkad. Er S Jayakrishnan, ADRM, Southern Railways, Palakkad presented a life sketch of Sir Visvesvaraya. Chief Guest, Prof Dr K K Saju, Vice Chancellor, Kannur University, delivered an inspiring Keynote on the theme, outlining national initiatives and growth potential in Deep Tech. Guest of Honour Er Dinesh Kumar Ujjainia, Chief Engineer & Executive Director, CPWD, IIT Palakkad, emphasized the crucial role of engineers in nation building. Er P K Vasisht, CMD, Instrumentation Limited also graced the occasion.



Rourkela

Rourkela Local Centre, IEI, in association with SAIL, Rourkela Steel Plant celebrated the 58th Engineers' Day on 15 September 2025 at Gopabandhu Auditorium, HRD Centre, RSP. A technical session was arranged on the topic 'Nuclear Power in Energy Transition and Role of AI'. Chief Guest of the event was Er Biswaranjan Palai, Executive Director (Works), SAIL, RSP and Guests of Honour were Er Sudip Pal Chowdhury, Executive Director (Projects), RSP and Dr Alok Mishra, Country Director, Westinghouse Electric India Private Limited. Dr Mishra also delivered the Keynote address. He mentioned that Deep Techs are shaping the landscape of reliable carbon free nuclear energy and are centered on several ground breaking innovations and advanced technologies. Er C R Mohapatra, Director-in-Charge, Bhilai Steel Plant & former Chairman of the Centre and Prof (Dr) Saroj Kumar Patel, Professor & Head, Department of Mechanical Engineering, National Institute of Technology Rourkela also graced the occasion.



Udaipur

Udaipur Local Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Udaipur. Er Piyush Javeria, Honorary Secretary, Udaipur Local Centre, IEI, emphasized the role of innovation and engineering in building a self-reliant India. Er Purushottam Paliwal, Chairman, Udaipur Local Centre, IEI welcomed the Keynote speaker Er Rajkumar Jain, Vice



President, Engineering & Head, QNX India, Hyderabad, who highlighted the impact of QNX real time operating system and its use across industries. Homage was paid to Sir Visvesvaraya by Er R C Kumawat, Past Chairman, Udaipur Local Centre, IEI. Prof Saptarshi Basu, Professor, Indian Institute of Science, Bangalore and Dr Aditi Sengupta, Assistant Professor, Indian Institute of Technology, IIT ISM Dhanbad also graced the occasion.

Vallabh Vidyanagar

Vallabh Vidyanagar Local Centre, IEI, in association with IETE and IEEE celebrated the 58th Engineers' Day on 19 September 2025 at the B & B Institute of Technology, Vallabh Vidyanagar. The celebration began with a warm welcome and thematic introduction, followed by a thought-provoking Keynote address by the Chief Guest, Dr Dhaval Pujara, Director, School of Technology, Pandit Deendayal Energy University (PDEU), Gandhinagar. Dr Pujara emphasized that India stands at the threshold of a "Techade," driven by innovations in AI, Quantum Computing, Blockchain, and Renewable Energy, and called for interdisciplinary collaboration, skill enhancement and ethical engineering. An interactive session followed, engaging faculty, professionals and students in dynamic discussions. The event was concluded on an inspiring note, reaffirming engineers' role as key drivers of sustainable and inclusive progress.



Visakhapatnam

Visakhapatnam Local Centre, IEI, celebrated the 58th Engineers' Day on 15 September 2025 at Visakhapatnam. Dr G Padmavathi, Council Member, IEI delivered a tribute talk on the occasion. Guest of Honour, Sri J Subba Rao, Director - Operations, SIONC Pharmaceuticals Private Limited, emphasized engineers' role in the pharma sector. Distinguished Guest, Dr Abraham Varughese, Outstanding Scientist and Director, Naval Science and Technological Laboratory [NSTL] delivered a Keynote on defense technology and deep tech integration. Chief Guest, Dr Jitendra Sharma, Managing Director & Founder CEO, Andhra Pradesh Med Tech Zone [AMTZ], highlighted innovation in indigenous healthcare technology. Prof (Dr) K Venkata Subbaiah, Senior Professor, Mechanical Engineering, Andhra University; Dr R V S Subrahmanyam, Scientist G (Retd), Naval Science and Technological Laboratory (NSTL), DRDO and Prof (Dr) B R Sarath Kumar, Professor and Head of the Department of Artificial Intelligence & Machine Learning, Raghu Engineering College also graced the occasion. The event concluded successfully, reinforcing the vital role of engineers in national development and technological leadership, with wide participation from academia, industry and media.



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>.

IEI Celebrates Royal Charter Day

The Institution of Engineers (India) was incorporated by Royal Charter on September 9, 1935 by King and Emperor George V at the Court at Buckingham Palace, London and remains the only professional body in India to be accorded this Honour. This endowed the Corporate Members of the Institution with the right to use the title 'Chartered Engineer' after their names, implying that they are qualified engineers deemed worthy to hold a Charter. The 'Royal Charter Day' was celebrated by IEI all over the country on September 9, 2025. A brief accounts of celebration, as received from various Centres, are reported hereunder.

STATE CENTRES

Goa



Goa State Centre, IEI, observed Royal Charter Day on 09 September 2025 at Goa. Er Anwar Isaac Khan, Chairman, Goa State Centre, IEI emphasized the significance of the Royal Charter and its enduring relevance to the engineering profession in India. He highlighted the responsibilities of the Chartered Engineers and IEI's role in maintaining professional standards. This was followed by a Keynote address delivered by Er Chandrashekar Prabhudessai, Past Chairman, Goa State Centre, IEI, who reflected on the Institution's legacy, the transformative impact of the Charter and urged young engineers to actively participate in IEI's mission. The event fostered pride, unity and renewed commitment among members to uphold the Institution's values.

Tamilnadu

Tamilnadu State Centre, IEI, organized the Royal Charter Day on 09 September 2025 through online mode. Chief guest, Dr E Bhaskaran, Joint Director (Engineering) and General Manager, Department of Industries and Commerce, MSME Department, Government of Tamil Nadu, delivered a lecture titled '10 STEPS TO BECOME A STARTUP' and highlighted various government schemes supporting startups and MSMEs in Tamil Nadu, including funding through the Innovation Voucher Programme, STARTUP TN and TANSIM, skill development under Naam Mudalvan, and business registration processes. The session also covered marketing assistance through GeM and export facilitation via export promotion councils. Dr Bhaskaran emphasized the importance of leveraging these programme to reduce investment costs and enhance profitability for start-ups and entrepreneurs.

Telangana

Telangana State Centre, IEI, celebrated Royal Charter Day on 09 September 2025 through online mode, with enthusiastic participation from corporate members and dignitaries. The Keynote address was delivered by Dr I Satyanarayana Raju, Council Member, IEI and Past Chairman of the centre, who highlighted the historical significance of the Royal Charter.

Tripura



Tripura State Centre, IEI, organized a seminar on 'Significance of Royal Charter' on 09 September 2025 at Agartala, in observance of Royal Charter Day 2025. The Keynote speaker, Prof (Dr)

Swapan Bhaumik, Former Vice President, IEI, highlighted the significance of the Royal Charter. Prof Bhaumik stressed the Charter's role in promoting engineering advancement, knowledge dissemination and upholding technical excellence. He called Royal Charter Day a proud legacy for the Indian engineering community, reinforcing its vital contribution to national progress and societal well-being.

LOCAL CENTRES

Agra



Agra Local Centre, IEI, in association with the Faculty of Engineering, DEI Dayalbagh, Agra, celebrated Royal Charter Day 2025 on 09 September 2025 in Agra. The programme commenced with the

lighting of the lamp by Chief Guest Prof (Dr) D K. Chaturvedi, HOD, Leather Technology, Faculty of Engineering, DEI Dayalbagh, Agra, along with Dr Ashok Yadav, Past Chairman, Agra Local Centre, IEI, Dr Anurag Kulshrestha, Honorary Secretary, Agra Local Centre, IEI and Er Lakshman Singh, Retd Executive Engineer, UP Irrigation Department. Dr Anurag Kulshrestha highlighted the history and significance of the Royal Charter 1935, its Bye-laws, Regulations and Code of Ethics that guide IEI in promoting engineering studies and national development. Dr Chaturvedi, in his address, emphasized the role of engineers in employment generation, digitization, skilled labour migration and societal vision for future targets. Dr Ashok Yadav spoke on consulting engineers' roles, pollution control, electric vehicles and environmental sustainability, while Er Lakshman Singh reflected on Sir M Visvesvaraya's contributions and life improvement through engineering.

Ahilyanagar



Ahilyanagar Local Centre, IEI, organized a tree plantation programme at Ahilyanagar on 09 September 2025 to commemorate Royal Charter Day. Mr Sampat Barskar, Chairman, Tree Conservation Committee,

Ahilyanagar Municipal Corporation, graced the event as the Chief Guest and in his address, emphasized that tree plantation should be transformed into a social movement to conserve nature and sustain life on Earth. He also appreciated IEI's initiative in promoting environmental awareness. Er Arvind Pargaonkar, Vice President, Schneider Electric India and Er Arti Bhushan Chaudhary, Past Chairman, Ahilyanagar Local Centre, IEI also shared their thoughts on the importance of environmental protection and engineers' role in sustainable development. Earlier, Er Bharatbhushan Padmakar, Chairman, Ahilyanagar Local Centre, IEI highlighted IEI's legacy as the largest multidisciplinary professional body of engineers in India.

Bareilly



Bareilly Local Centre, IEI, observed Royal Charter Day 2025 on 09 September 2025 at Bareilly to mark the historic occasion. Prof (Dr) Pankaj Sharma, Chairman, Bareilly Local Centre, IEI emphasized the significance

of the Royal Charter in the present era of technological transformation and nation-building, highlighting IEI's role in advancing engineering, professional ethics and innovation. The event witnessed active participation of distinguished speakers, members, engineers, faculty and students, who deliberated on the role of engineers in sustainable development, digital transformation and emerging technologies shaping India's growth. The discussions reflected the Institution's values and its contributions toward professional competence and societal development.

Bathinda

Bathinda Local Centre, IEI, celebrated Royal Charter Day virtually on 09 September 2025 with active participation from engineers, academicians and students. Prof (Dr) Tara Singh Kamal, Past Vice President, IEI graced the occasion as the Chief Guest and highlighted the 1935 Royal Charter's pivotal role in institutionalizing engineering professionalism in India. Keynote speaker, Er Gurpreet Bharti, Assistant Professor, Electronics and Communication Engineering Department, Yadavindra College of Engineering, Talwandi Sabo, emphasized IEI's contributions to professional ethics, CPD and the importance of industry-academia collaboration. Dr Jagtar Singh, Immediate Past Chairman, Bathinda Local Centre also present on the occasion.

Bhilai

Bhilai Local Centre, IEI, celebrated Royal Charter Day 2025 on 13 September 2025 at Bhilai. On this occasion, Shri Hridaya Mohan, Ex-Executive Director (MM), SAIL, Bhilai Steel Plant and Dr Ajay Tripathi, Professor & Head, Government Engineering College, Raipur, graced the



function as Special Guests and addressed the gathering. The celebration was attended by members of IEI, faculty, students and professionals from different disciplines, who actively participated in the proceedings. The programme concluded with expressions of gratitude to the dignitaries and participants, marking the day as a memorable and inspiring occasion for the engineering fraternity.

Bhimavaram

Bhimavaram Local Centre, IEI, organized a webinar on 'Empowering Startups in Aerospace and Defence - Towards Atmanirbhar Bharat' on the occasion of observation of Royal Charter Day through online mode on 09 September 2025. The Chief Guest and Keynote Speaker, Dr Enti Ranga Reddy, Council Member, IEI & Chairman and Managing Director, Legend Technologies (India) Pvt Ltd, Bangalore, delivered an insightful address highlighting the importance of startups in achieving self-reliance in the aerospace and defence sectors. He shared valuable knowledge, perspectives and real-world examples on how innovative ventures can significantly contribute to India's vision of Atmanirbhar Bharat, inspiring participants to explore opportunities in these critical fields. Earlier, Dr Nookala Gopala Krishna Murthy, Chairman, Bhimavaram Local Centre, IEI emphasized the significance of celebrating Royal Charter Day by promoting engineering knowledge and professional growth. The event witnessed enthusiastic participation from members, engineers and students who benefitted from the deliberations.

Bokaro Steel City



Bokaro Steel City Local Centre, IEI, celebrated Royal Charter Day on 09 September 2025 at Bokaro Steel City. The event was graced by the Chief Guest, Shri Kundan Kumar, Chief

General Manager (Town Administration), SAIL, Bokaro Steel Plant. Er Bijay Kumar Prasad, Chairman, Bokaro Steel City Local Centre, IEI highlighted the historical significance of the Royal Charter. Shri Nitesh Ranjan, DGM, Environment Control and Sustainability, Bokaro Steel Plant, presented a paper on the occasion, emphasizing the role of IEI in promoting lifelong learning, professional excellence and offering memberships. The event witnessed active participation from prominent IEI members, reinforcing IEI's commitment to engineering excellence and professional development.

Coimbatore



Coimbatore Local Centre, IEI, in association with the Department of Metallurgical Engineering, PSG College of Technology Coimbatore and The Indian Institute of Metals (IIM), Coimbatore

Chapter, celebrated 'Royal Charter Day' on 09 September 2025 with a technical lecture on 'Product Development & Value Engineering in Mining and Power Transmission Applications'. The event featured a lecture by Er Kannapiran Natarajan, General Manager - Technical (India Operations), Hofmann Engineering Pty Limited, Australia, who shared insights on product identification, development and value engineering with practical case studies on gears, gearboxes and track pads. Er Natarajan elaborated on design improvements, 3D scanning, welding techniques and material microstructures to enhance durability and efficiency in industrial components.

Dhanbad



Dhanbad Local Centre, IEI, celebrated Royal Charter Day 2025 on 09 September 2025 with a technical session on 'Machine Learning / Deep Learning and its Applications', held at IIT ISM Dhanbad. The event

was inaugurated in the presence of Prof Dheeraj Kumar, Deputy Director, IIT ISM and Chairman, Dhanbad Local Centre, IEI alongside dignitaries including Dr Manoj Kumar, Assistant Professor and Keynote speaker; Prof H B Mishra, Assistant Professor; Prof Biswajit Paul, Honorary Secretary, Dhanbad Local Centre, IEI; Er N Ansari and Er S Gangopadhyay, Senior Members, Dhanbad Local Centre, IEI. Er N Ansari gave an insightful introduction to Royal Charter Day, followed by Dr Manoj Kumar's engaging keynote address exploring the concepts, trends and practical applications of Machine Learning and Deep Learning. The session witnessed enthusiastic participation from students and faculty of IIT ISM Dhanbad.

Ghaziabad



Ghaziabad Local Centre, IEI, celebrated Royal Charter Day 2025 on 09 September 2025 at Ghaziabad. The event was graced by the Chief Guest, Prof (Dr) Vinod Kumar, Ex-Professor,

IIT Roorkee and Ex-Vice Chancellor, Jaypee University of Information Technology, Himachal Pradesh. Prof (Dr) S C Gupta, Chairman, Ghaziabad Local Centre, IEI emphasized the importance of the Royal Charter in inspiring engineers toward nation-building. Dr Vinod Kumar highlighted IEI's legacy and urged engineers to adopt advanced technologies such as AI, Quantum Computing and Robotics to tackle challenges like climate change and energy security.

Gorakhpur



Gorakhpur Local Centre, IEI, celebrated Royal Charter Day on 09 September 2025 at Gorakhpur, in association with M-ARC Engineering Service Private Limited, Gorakhpur. The event was graced by the Chief

Guest, Er Mirza Waseem Beg, Former Chairman, Gorakhpur Local Centre, IEI; Guest-of-Honor, Er J B Rai, President, Malviya Alumni Association and Keynote Speaker, Er Ajay Srivastava, Civil Engineer and Executive Committee Member. In his Keynote address, Er Ajay Srivastava reflected on the legacy of IEI and emphasized Royal Charter Day as a symbol of engineering excellence and future progress through innovation. Er J B Rai highlighted IEI's role in fostering professional ethics, innovation and nation-building. Er M W Beg explained the historical significance of the Royal Charter granted by King George V in 1935, which enabled engineers in India to be recognized as Chartered Engineers.

Gwalior



Gwalior Local Centre, IEI, celebrated Royal Charter Day on 09 September 2025 at Gwalior. Er R K Khetan, Immediate Past Chairman, Gwalior Local Centre, IEI elaborated on the historic

grant of the Royal Charter to IEI. Er Vinay Kumar Shukla, explained the legacy of Royal Charters, tracing their origin to the 13th century and emphasizing IEI's unique position as the only Indian professional body incorporated by Royal Charter. Er K K Saraswat, Retired PHE Executive, discussed notable historical charters, including those granted to the East India Company and the University of Cambridge.

Kancheepuram



Kancheepuram Local Centre, IEI, in association with the Department of Mechanical Engineering, St Joseph's College of Engineering, Chennai Student Chapter, celebrated Royal Charter Day on 09

September 2025 at Chennai. The event was graced by Dr Karthikeyan S, Honorary Secretary, Kancheepuram Local Centre, IEI and Associate Professor, Sathyabama Institute of Science and Technology, who addressed the students on the vision, mission and professional benefits of IEI membership. Dr L Balamurugan, Head of Mechanical Engineering and Faculty Advisor and Principal, Dr Vaddi Seshagiri Rao, focused on creating awareness about professional development, industry collaboration and global recognition through IEI. Key highlights included the importance of professional membership, networking, industry exposure and opportunities for research and certifications through IEI. The session emphasized the evolving role of mechanical engineers in multidisciplinary innovation and inspired students to engage actively with professional bodies for holistic growth.

Kollam



Kollam Local Centre, IEI, observed Royal Charter Day on 09 September 2025 at Valia Koonambaikulathamma College of Engineering and Technology (VKCET),

Thiruvananthapuram. Ms Kaikeyee A K, Faculty Advisor, IEI Student Chapter (VKCET), highlighted the significance of the day. Dr Benny Joseph, Principal, VKCET, emphasized the role of technical sessions in aligning student learning with industry standards. Dr Madusoodanan Pillai K, Chairman, Kollam Local Centre, IEI spoke on the history and importance of the Royal Charter and its impact on engineering education in India. A technical talk on 'Lean Manufacturing Practices' was delivered by Dr Anu V Thomas, Professor and Vice Principal, TKMCE, focusing on waste reduction, process improvement and sustainability.

Madurai

Madurai Local Centre, IEI, celebrated Royal Charter Day on 09 September



2025 at Madurai. Prof (Dr) P Udhayakumar, Chairman, Madurai Local Centre, IEI introduced the Chief Guest, Er I Maria Michael Raj, Former Scientific Officer/G and Technical Services

Manager, Heavy Water Board, Department of Atomic Energy. In his Keynote address, Er Raj highlighted the historical importance of the Royal Charter granted to IEI. He emphasized engineers' roles in tackling modern challenges like sustainability, digitalization and infrastructure.

Muzaffarpur

Muzaffarpur Local Centre, IEI, celebrated Royal Charter Day on 09 September 2025 at Muzaffarpur by organizing a colloquium on the topic 'Role of AI in Sustainable Urban Development: Challenges and Opportunities for Engineers', attended by corporate members, faculty and engineering students. Dr Ramjee Prasad Gupta, Chairman, Muzaffarpur Local Centre, IEI, emphasized the historical significance of the Royal Charter granted in 1935, which entrusted IEI with the responsibility of advancing engineering in India. The Chief Speaker, Dr M K Jha, Principal, MIT Muzaffarpur, shared insights into the history and legacy of IEI. Keynote speakers Prof Sweeta Kumar and Prof Vijay Kumar, Assistant Professors, Department of Information Technology, MIT Muzaffarpur, elaborated on how Artificial Intelligence can drive sustainable urban growth and the emerging roles for engineers.

Nashik



Nashik Local Centre, IEI, celebrated Royal Charter Day on 13 September 2025 at Nashik. Er Vedant Rathi, Honorary Secretary, Nashik Local Centre, IEI delivered an informative lecture on

the history and significance of the Royal Charter, highlighting its grant on 09th September 1935, which established IEI as the only professional body in India incorporated by Royal Charter. The session served as a reminder of IEI's foundational role in promoting engineering excellence, professional ethics and its long-standing commitment to the advancement of engineering knowledge in India since its establishment in 1920.

North Bengal

North Bengal Local Centre, IEI, observed Royal Charter Day 2025 on 09 September at Jalpaiguri Government Engineering College, Jalpaiguri. A Seminar was organized on the topic 'Artificial Intelligence in Civil



Infrastructure: Building Smarter, Safer, Sustainable Futures'. Er Shrayasi Datta, Honorary Secretary gave an overview on the theme, followed by a lecture emphasizing AI's transformative impact on civil infrastructure. Er Chinmoy Ghosh highlighted how AI and machine learning enhance efficiency and sustainability across project lifecycles using data from sensors and drones. Er Samir Das, Member of the Centre, elaborated on AI's role in structural health monitoring through real-time sensor data to detect early signs of failure. Prof (Dr) Amitava Ray, Chairman of the Centre, delivered the concluding remarks.

Palghat



Palghat Local Centre, IEI, celebrated Royal Charter Day on 09 September 2025 at Palghat. Er A V Rajappan, Chairman, Palghat Local Centre, IEI, emphasized the historical and professional significance of the Royal Charter granted to IEI in 1935. The Keynote address was delivered by Prof C Somasekharan, Former Principal, NSS College of Engineering, Palakkad and Past Chairman of Palghat Local Centre, IEI. Prof Somasekharan also highlighted IEI's post-independence growth into a national and international organization with over 2 lakh members. An engaging discussion followed his address.

Tiruvallur

Tiruvallur Local Centre, IEI, celebrated Royal Charter Day on 09 September 2025 at Tiruvallur, with active participation from engineering students, faculty members, IEI coordinators and professional engineers. Dr G Ganesan, Ex-Officio of the Centre, delivered the Keynote address, emphasizing the lasting significance of the Royal Charter and its role in guiding IEI's mission to advance education, research and interdisciplinary collaboration. The event concluded with a renewed call for dedication to the engineering profession and commitment to the ideals of the Institution.



Vallabh Vidyanagar

Vallabh Vidyanagar Local Centre, IEI, celebrated Royal Charter Day 2025 on 09 September 2025 through online platform, attended by a wide audience of academicians, professionals, engineers and students across the state. The expert session on 'Advance Excel' was delivered by Dr Sheshang Degadwala, Professor & Head, Computer Engineering Department, Sigma University, Vadodara, who demonstrated Excel's advanced functionalities including VLOOKUP, INDEX-MATCH, Pivot Tables, data visualization tools and Macros. The session featured live demonstrations, practical examples and an interactive Q&A segment. The event successfully combined technical learning with the commemoration of IEI's prestigious legacy.

IEI AWARDS

CALL FOR PAPERS

The Steel Authority of India Ltd (SAIL) had instituted two Awards, namely, **SAIL AWARD** and **DR M VISVESVARAYA AWARD** to be given away every year during the Indian Engineering Congress to author/s of the articles adjudged best on selected topics.

The topics for the year 2025 are given hereunder.

SAIL AWARD

Hydrogen-Based Steelmaking for Decarbonization

DR M VISVESVARAYA AWARD

Digitization and Digital Twins for Process Simulation

The Coal India Ltd (CIL) had instituted an Award to perpetuate the memory of **Late J G Kumaramangalam**, its first Chairman to be awarded every year during the Indian Engineering Congress to author/s of the articles adjudged best on a selected topic. The topic for the year 2025 is given below.

COAL INDIA (J G KUMARAMANGALAM MEMORIAL) AWARD

"Energy Efficiency"

The articles preferably restricted to 3000 words along with good quality photographs may be submitted along with a Declaration Form to award@ieindia.org within **November 14, 2025**

The template of the paper and the Declaration Form are enclosed, which are also available under the following link: <https://shorturl.at/vGxdc>

Intending contributors are requested to send the soft copy of the paper by e-mail to award@ieindia.org (with subject heading "Papers for SAIL Award /Dr M V Award/Coal Award") and submit four printed copies of their articles to :

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

News-in-Brief

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

STATE CENTRES

Jharkhand

Celebrated its 64th Foundation Day on 02 August 2025 at Ranchi, graced by eminent dignitaries. Chief Guest, Er VB Singh, President, IEI lauded the Centre's active participation while highlighting national-level initiatives and reforms undertaken by IEI. Dr Jegannathan Chokalingam, Vice-Chancellor, Sarla Birla University, was present on the dais as the Special Guest, underlined the indispensable role of engineers in research, innovation and sustainable development. Guest of Honour, Er Gopal Singh, former CMD, CCL, emphasized the rapid membership growth while highlighting the contribution of engineers to India's economic progress. Dr Mahesh Kumar Gupta, Chairman, Jharkhand State Centre, IEI, praised the legacy and achievements of the Centre, which has been recognized as one of the best at national level. The event witnessed gracious presence of Er Shivanand Roy, Past President, IEI and participation by the Committee Members.

Karnataka

In association with Atria University, organized a webinar on 'Science of Climate Change' on 10 June 2025, delivered by Dr Madhavan Nair Rajeevan, Vice Chancellor, Atria University, Bengaluru & Former Secretary, Ministry of Earth Sciences, Government of India. Er M Nagaraj, Chairman, Karnataka State Centre, IEI emphasized the role of science and engineering in addressing environmental challenges. In his Keynote address, Dr Rajeevan explained that climate change is largely driven by the enhanced greenhouse effect caused by human activities, particularly the burning of fossil fuels leading to excessive greenhouse gas emissions and global warming.

Organized a lecture on 'Microporous Material for Storm Water Management & Noise Mitigation' on 07 July 2025 in hybrid mode, delivered by Dr K N Shivakumar, Professor, Mechanical Engineering, Director of Centre for Composite Material Research and Chief Technologist – ARIS, USA. In his Keynote address, Dr Shivakumar explained the unique properties of microporous materials, and their effective application in stormwater management for filtration and adsorption of pollutants, including heavy metals, organics and microplastics. The event was attended by members, professionals and academicians and was received with great enthusiasm.

Organized a webinar on 'Hydrogen Fuel of the Future for Decarbonization & Sustainability' on 24 July 2025, in association with the National Design and Research Forum (NDRF), delivered by Er K K Mahajan, Lead Auditor, ISO 9001-2015 QMS, Approved Energy Conservation Trainer (PCRA/EESL/BEE) and Retd Sr Executive, Tata Chemicals Limited. Er M Nagaraj, Chairman of the host Centre highlighted the relevance of clean energy. Dr Alok Nath De, Council Member, IEI provided an introduction to the subject. Er Mahajan elaborated on hydrogen availability, its current dependence on fossil fuels and the resulting carbon emissions contributing to climate change. He explained the Government of India's 'Hydrogen Mission 2023', emphasizing green hydrogen production via renewable energy, R&D in electrolyser manufacturing and India's potential to achieve Atma Nirbhar in energy.

Tripura

Organized a seminar on 'Future Prospects of Hydro Power in Tripura: Challenges and Opportunities' on 18 August 2025 at Agartala, commemorating the 8th M L Dasgupta Memorial Lecture. Er Biswajit Basu, Managing Director, Tripura State Electricity Corporation Limited, graced the occasion as the Guest of Honour and Keynote Speaker, providing an in-depth analysis of the state's hydroelectric scenario. He highlighted the status of Tripura's only operational hydroelectric plant, the Dumbur Hydro

Project, its post-2024 flood challenges, ongoing projects and the role of hydroelectricity in the state's renewable energy ambitions. The seminar provided a comprehensive platform for knowledge sharing, professional learning and promoting sustainable energy development in the state.

Organised as seminar in association with the Public Works Department (R&B), Government of Tripura, on 'Quality Control and Safety Aspects in Building Construction' on 26 August 2025, commemorating the 7th N K Sinha Memorial Lecture, held at Agartala. The life and contributions of Late Er Nihar Kanti Sinha and eminent civil engineer and former Engineer-in-Chief & Secretary, PWD, were highlighted by Er Sudip Chakraborty, Executive Engineer, PWD (PMGSY), Govt of Tripura. The seminar was graced by Er Rajib Debbarma, Chief Engineer, PWD (R&B), as Guest of Honour. Dr Gopi Nandan Dey, Assistant Professor, Department of Civil Engineering, NIT Agartala, delivered a comprehensive lecture covering concrete durability issues, quality control measures across construction stages, material testing standards, use of supplementary cementitious materials, reinforcement detailing and safety aspects including NBC 2016 guidelines and construction site safety protocols. The event provided an excellent platform for knowledge sharing and professional development in civil engineering.

West Bengal

Commemorated the Late Haridas Nandy Memorial Function on 05 August 2025 at Kolkata, in a befitting manner. Prof (Dr) N R Bandyopadhyay, Former Chairman of the Centre & Former Chair, CATE, IEI, presented the life sketch of Late Haridas Nandy and apprised the audience about the theme of the memorial lecture. Shri Subrata Chandra, Senior Corporate Fellow Member of IEI, introduced the guest speaker, Dr Aditya Kumar Lohar, Chief Scientist and Head of the Additive Manufacturing Research Group, CSIR-CMERI, Durgapur. Dr Lohar delivered an insightful lecture on 'Advances in Metal Casting Technology: Challenges and Trends', discussing process intricacies, defect mitigation, advancements in Austempered Ductile Iron (ADI) for wear-resistant components, semi-solid casting processes and the emerging hybrid integration of additive manufacturing with conventional casting.

Organised a lecture meeting, in association with the Institute of Marine Engineers – India (IMEI), Kolkata Branch on 08 August 2025 at Kolkata, on the topic 'Technological Changes and Psychological Angle in Shipping', attended by around 70 participants, including cadets from IMU Kolkata Campus. During the event, Shri Kiron Hoon, Chairman of Shri Harinath Hoon Educational Trust and Founder of Hoon Maritime Institutes, was felicitated for his significant contributions to maritime education. Smt Sugandha Ramkumar, Principal, I Can Fly International School, delivered lecture on 'Road Map to Self-Love'. Shri Ramkumar Vishvanath, Principal, Hoon Maritime Institute, delivered a detailed lecture on 'Technologies that are Changing Shipping', highlighting innovations such as Blockchain, Autonomous Ships and 3D Printing.

LOCAL CENTRES

Ahilyanagar

Organized a lecture on 'Experimental Heat Transfer Analysis of Helical Cone Coil Heat Exchanger' on 06 August 2025 at the Centre premises, delivered by Dr Susheel M Magar, Head and Associate Professor, Department of Mechanical Engineering, Dr Vithalrao Vikhe Patil College of Engineering, Ahilyanagar. Dr Magar explained that the curvature ratio and contact of shell fluid with coil surfaces significantly influence thermal performance, pressure drop and pumping power, while presenting comparative studies on conical helical coils, straight helical coils and spiral coil heat exchangers

through experimental analysis. He highlighted that five exchangers were developed in their laboratory and based on results, conical helical coils demonstrated superior performance, leading to multiple publications - two in International Journals, two in International Conferences and one in a National Conference. The session witnessed active participation from academicians, industry professionals and students.

Organized a technical lecture on 'Face Anti-spoofing and Face Liveness Detection by Machine Learning and CNN Classifier' on 25 August 2025 at the Centre premises, delivered by Prof Dr (Ms) Pratibha Gayke, Assistant Professor, Department of Information Technology, Dr Vithalrao Vikhe Patil College of Engineering, Ahilyanagar. In her detailed presentation, Dr Gayke highlighted the growing vulnerability of face recognition systems to spoofing attacks using photos, videos and 3D masks, which pose serious risks in authentication. She explained how advanced Convolutional Neural Network (CNN) classifiers, integrated with image processing and machine learning techniques, can analyse texture, motion and depth cues to strengthen liveness detection and ensure robust biometric security. The interactive session saw enthusiastic participation from academicians, industry professionals and students, who actively raised queries answered by the speaker.

Bareilly

Organized a Webinar Faculty Development Programme on 'Recent Advancements in Civil Engineering - Smart, Sustainable & Immersive; AR/VR and Autonomous Vehicle Technologies in Next-Gen Civil Engineering and Urban Infrastructure Mapping: A Geo-Informatics Approach' on 04 August 2025, in association with the Department of Civil Engineering, Rajshree Institute of Management & Technology, Bareilly. Prof (Dr) Pankaj Sharma, Chairman, Bareilly Local Centre, IEI highlighted the importance of innovations in shaping sustainable urban development and fostering collaboration among academia and industry. Prof (Dr) Akhilesh Kumar Maurya, Professor, Department of Civil Engineering, IIT Guwahati delivered an insightful presentation on the integration of AR/VR and autonomous vehicle technologies in civil engineering, explaining their role in immersive design simulations, real-time collaboration and error minimization in infrastructure projects. Prof (Dr) Chandan MC, Assistant Professor, Department of Water Resources & Ocean Engineering, NIT Karnataka, spoke on the Geo-Informatics approach for urban infrastructure mapping, emphasizing how GIS, remote sensing, GPS and spatial data analytics are revolutionizing urban planning and utility management. The programme witnessed active participation from faculty members, professionals and researchers.

In association with the Department of Civil Engineering, Rajshree Institute of Management & Technology, Bareilly, organized a Faculty Development Programme on 'Recent Advancements in Civil Engineering' through virtual platform on 05 August 2025. Prof (Dr) Pankaj Sharma, Chairman, Bareilly Local Centre, IEI emphasized the importance of integrating modern technologies for sustainable development and heritage preservation. Prof (Dr) Ketan Kumar Nandi, Assistant Professor, Department of Civil Engineering, S R University, Warangal, delivered an insightful lecture on 'Application of Cloud Computing in River Corridor Management', explaining how cloud technologies can manage vast datasets from IoT sensors, GIS platforms and hydrological models to enhance monitoring, flood risk management, ecological conservation and sustainable water resource planning. Prof (Dr) Nidhi M, Assistant Professor, Department of Civil Engineering, NIT Puducherry, presented on "Structural Health Monitoring of Slender Masonry Heritage Structures", highlighting the need for advanced digital and engineering techniques to preserve culturally significant minarets, spires, towers and similar heritage assets vulnerable to seismic activity, wind and material degradation.

Organized a webinar on 'Recent Advancements in Geospatial Engineering' on 06 August 2025, in association with the Department of Civil Engineering, Rajshree Institute of Management & Technology, Bareilly. Prof (Dr) Pankaj Sharma, Chairman, Bareilly Local Centre, IEI highlighted the significance

of geospatial technologies in shaping sustainable infrastructure and smart development. Prof (Dr) R D Garg, Assistant Professor, Department of Civil Engineering, Indian Institute of Technology Roorkee, delivered the Keynote lecture, emphasizing how the integration of GIS, remote sensing, GPS and advanced data analytics is revolutionizing environmental monitoring, disaster management, resource planning and urban governance. He elaborated that geospatial engineering is at the forefront of creating smarter, safer and more sustainable communities, urging engineers, policymakers and planners to adopt these innovations for future-ready solutions.

Bokaro Steel City

Organized a technical paper presentation on 'Learning how Artificial Intelligence Future will Change the World' on 20 August 2025 at Bokaro, delivered by Er Tarun Srivastava, DGM (TA), SAIL, BSL. The session was highly engaging and demonstrated deep technical understanding, as Er Srivastava explained complex concepts of Artificial Intelligence in a clear and accessible manner. His presentation comprehensively covered the current status of AI, its market potential, wide-ranging benefits, challenges of job displacement and the need for continuous skill adaptation to keep pace with rapid technological shifts. The lecture offered valuable insights into how AI is reshaping industries, work culture and society at large, sparking meaningful discussions among the participants. The programme provided an excellent platform for knowledge sharing on a technology that is rapidly transforming the future.

Coimbatore

Organized a technical visit to the PSG GRD Museum of Science and Technology, Neelambur, Coimbatore on 23 August 2025. The museum visit provided an enriching exposure to India's scientific and technological progress through its various galleries. In the Energy Gallery, members explored models of electricity generation, solar power and renewable energy sources, while the Mobility Gallery showcased the evolution of vehicles from vintage cars to modern electric and autonomous vehicles. The Simulator Gallery offered hands-on experiences such as crash test simulations and medical tools, whereas the Science Gallery allowed participants to conduct simple experiments in chemistry, physics and biology. The Space Gallery highlighted India's milestones from Aryabhata to Chandrayaan and Mangalyaan missions, creating a sense of pride and inspiration. Participants also visited the Industry X.O, AR-VR, Mini Theater, Observatory and EV Lab galleries, where they gained insights into robotics, artificial intelligence, virtual reality, telescopes and electric vehicles. The visit proved highly informative and inspiring, enhancing awareness of sustainable technologies and fostering enthusiasm for innovation and future-ready solutions among all participants.

Gorakhpur

Organized a webinar on 'Role of 5G Technology in Empowering India's Digital Landscape' on 07 June 2025 at Gorakhpur in association with the Institute of Technology and Management (ITM), Gorakhpur. Dr Narendra Kumar Singh, Chairman, Gorakhpur Local Centre, IEI highlighted the growing significance of 5G in India's digital transformation. The Chief Guest and Keynote Speaker, Er B Brahma Reddy, Former Secretary & Director General, IEI and Immediate Past Chairman, Telangana State Centre, IEI, delivered an insightful talk on the transformative potential of 5G in smart cities, healthcare, manufacturing, education and agriculture, while stressing the importance of indigenous R&D for building a self-reliant digital ecosystem. Dr Pawan Kumar Mishra, Retired Senior Officer, NITI Aayog, introduced the speaker, acknowledging his remarkable contributions to engineering and digital innovation. An interactive Q&A session followed, where Er Reddy addressed queries from professionals, faculty and students on 5G deployment challenges and opportunities.

Kanpur

Organized a technical lecture on 'Evidence Based Valuation for Commercial Properties' on 02 August 2025, through online mode, in association with the All India Valuers Association (AIVA), Kanpur. Guest Speaker, Er Deepti Kumari, Registered Valuer, Lucknow in her insightful address, explained how evidence-based valuation employs factual data, including recent property sales and income potential, to determine fair market value. She highlighted key methodologies such as the Sales Comparison Approach, Income Approach, Capitalization Rate (Cap Rate) and Discounted Cash Flow (DCF), stressing the importance of integrating physical, locational and economic factors in valuation. The lecture emphasized how combining advanced data analytics with traditional valuation practices provides a more accurate framework for investment, lending and portfolio management in the commercial real estate sector. The event saw enthusiastic participation from a large number of corporate members, student members of IEI and members of AIVA.

Kozhikode

Organized a Technical Presentation on 18 August 2025 at Hotel Paramount Tower, Calicut. Dr Nithin Raj P, Manager, Metallurgy – Research and Development, Peekay Steel Castings Private Limited, Calicut, delivered an engaging lecture on the topic 'From Furnace to Future: Leveraging Advanced Technologies for Superior Steel'. His presentation covered in detail the stages of steel production, methoding, molding, casting defects and advancements such as rapid and virtual prototyping, 3D-printed molds and next-generation molding materials. The lecture proved to be highly informative, sparking active discussions among participants.

Madurai

Organized their 45th Anniversary Celebration Meeting on 19 July 2025 at Madurai. The event was graced by Mr A Kodeeswaran, President, Madurai District Tiny & Small Scale Industries Association (MADITSSIA), as the Chief Guest. In his address, Mr Kodeeswaran lauded the achievements of Madurai Local Centre, IEI over the last 44 years and congratulated the office bearers and corporate members for their dedicated efforts. He emphasized the importance of collaboration between MADITSSIA and Madurai Local Centre, IEI to address societal and industrial challenges in and around Madurai, while encouraging practicing engineers to contribute actively. He also highlighted entrepreneurship and startup opportunities in Madurai, sharing valuable case study examples, and extended best wishes for the continued growth of the IEI Centre in the years ahead.

Organized a Lecture Meeting on 29 July 2025 at Madurai. The event featured Dr G Selvabharathi, Professor, Department of Civil Engineering, SSM Institute of Engineering and Technology, Dindigul, as the Chief Guest and Keynote speaker, who delivered an insightful lecture on advanced technologies in water and wastewater treatment, highlighting innovative methods such as membrane filtration, advanced oxidation processes, electrocoagulation, biological nutrient removal and nanotechnology-based solutions. He emphasized the significance of energy-efficient systems, automation and smart monitoring in improving treatment performance, while presenting case studies from industrial, municipal and rural applications to illustrate practical benefits.

Palghat

Organized a Technical Session on 'Hydrogen: Opportunities and Challenges' on 22 August 2025 at Palakkad. Dr Krishna Sesa Giri, Associate Professor, Department of Mechanical Engineering, IIT Palakkad. Dr Giri delivered a comprehensive lecture highlighting hydrogen as a versatile and sustainable energy carrier, discussing its potential in reducing global emissions, applications across industries and India's vision of establishing substantial green hydrogen capacity by 2050. The address was followed by an interactive discussion with the participants.

Silchar

Organized a lecture meeting on 'Cyber Security Awareness' on 30 July 2025 at Silchar. Er Dibakar Bhattacharjee, Chairman, Silchar Local Centre, IEI expressed concern over rising cyber scams affecting society and emphasized the need for mass awareness. The invited speaker, Dr Partha Pakray, Associate Professor, Department of Computer Science and Engineering, NIT Silchar, delivered a detailed lecture on 'Think Before You Click: Essentials of Cyber Security Awareness' and explained various forms of cyber frauds and urging vigilance for safe digital practices. He stressed cyber security as both a technological and social responsibility and advised contacting the cybercrime helpline (1930) when needed.

Sunabeda

Organized a special technical talk on 'Strategic Management' on 11 August 2025 at Sunabeda. Er Sarmistha Das, Manager (Planning), Hindustan Aeronautics Limited (HAL), Sunabeda highlighted the importance of being a learning organization, particularly in the aerospace industry, which is rapidly evolving with technological advances such as AI, automation, additive manufacturing, digital twins and 3D printing. Er Manas Ranjan Subudhi, Chief Manager (Indigenization), HAL, Sunabeda, delivered an insightful talk on achieving business goals through systematic environmental analysis, goal-setting, strategy development and effective implementation across organizations. Er Sanjaya Kumar Bishoyi, Honorary Secretary, Sunabeda Local Centre, IEI emphasized the significance of the "5 Ps of Strategy - Plan, Ploy, Pattern, Position and Perspective", which provide leaders with a comprehensive toolkit to analyze strategies from multiple dimensions and identify hidden opportunities while avoiding inconsistencies. The session provided valuable insights into strategic thinking and its practical relevance for aerospace and allied industries.

Tiruchirappalli

In collaboration with several 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 Arival Peravai Kanyakumari and Indian Society for Non-Destructive Testing Trichy Chapter,

organized an online lecture on 11 March 2025. Speaker, Er Malaya Rout, Director, Data Science, Exafluence, OMR, Okkiam, Thuraipakkam, Chennai delivered an insightful and engaging lecture on the theme 'From AI to Gen AI' sharing his expertise on data science applications, technological advancements and industry trends, which drew active participation and interaction from attendees. The event was well attended by professionals, engineers and academicians, making it a highly successful and knowledge-enriching technical session.

organized an online lecture on 18 March 2025. Speaker, Prof Som Ashutosh, General Manager, AKGEC Skills Foundation, Ajay Kumar Garg Engineering College, Delhi–Meerut Expressway delivered an informative and engaging lecture on the topic 'Automation and Robotics in Welding' that highlighted key aspects relevant to the professional bodies and participants. The event witnessed the active participation of 66 members, including engineers, professionals and academicians.

organized a lecture on 01 April 2025 in hybrid mode. Speaker, Dr B Shanmugarajan, Senior Deputy General Manager, Welding Research Institute, Bharat Heavy Electricals Limited, Tiruchirappalli delivered lecture on 'Laser based Joining of Exotic Materials - Experience Sharing'. focussed on advancements in welding technology and industrial applications, was highly engaging and provided valuable insights to the participants. The event witnessed the participation of 79 members, including engineers, professionals and academicians, making the programme a well-received and knowledge-enriching technical activity.

organized an online lecture on 06 May 2025 on 'Aerospace Technology enables the fulfillment of SDGs'. Speaker of the session was Dr N Sivasubramanian, Senior Scientist/Chief General Manager (Retd), ISRO Trivandrum, Immediate Past Chairman, Madurai Local Centre, IEI and Member, Board of Governors, Sustainable Development Forum, IEI.

Organized an online lecture on 13 May 2025. Speaker, Dr P S Kumar, Group CEO & Executive Director, Prithivi Grow Care Private Limited, Chennai. delivered an insightful lecture on 'SDGs - Smartest Ways of Air Conditioning', engaging participants with his knowledge and practical perspectives. The lecture provided a valuable platform for knowledge sharing and professional development among engineers, reinforcing the centre's commitment to promoting technical learning and excellence in the engineering community.

In association with the Safety Quality Forum, IEI New Delhi, organized a lecture on 'ABC in Life through Safe Behaviour' on 20 May 2025 in hybrid mode. Speaker of the session was Dr Baskaran Thangavelu, Former Chairman, BIS Sectional Committee on Safety of Machinery, Former Managing Director/CEO of NBPPL (a JV of NTPC & BHEL), Tirupati, and Former General Manager (Head/Corporate HSE), BHEL, New Delhi (2018–2020). He shared his vast professional experience, emphasizing the importance of safety management in machinery design, standards and compliance to ensure industrial safety and sustainability. The programme was highly informative and interactive, benefitting both online and offline participants.

In association with Quality Forum, IEI, New Delhi and the Indian Institute of Welding, Tiruchirappalli Branch, organized an online lecture programme on 24 June 2025. Speaker, Dr Bipin Bihari Sharan, Former LEAD, Manufacturing Operations Defence, Tata Motors and Consultant in EHS and Operational Excellence, Jharkhand on the topic 'Transitioning from Compliance to Commitment in the Safety Excellence Journey'. delivered an insightful and highly engaging lecture, sharing practical knowledge and best practices with participants. The programme provided an excellent platform for professional learning, knowledge sharing, and networking among engineers, reinforcing the centre's commitment to technical advancement and excellence.

In association with the Quality Forum, IEI, New Delhi, Indian Institute of Welding, Tiruchirappalli Branch and The Indian Society of Non-Destructive Testing, Tiruchirappalli Chapter, organized an online lecture programme on 29 July 2025. Speaker, Er Karthikeyan Jawahar, Six Sigma Black Belt, PGCPM (IIM I), CFP, Director, Karma Innovations & Solutions Private Limited, Coimbatore delivered a highly insightful lecture on the theme

'Empowering Indian manufacturing using Digital Radiography and Industrial Computerised Tomography' sharing his expertise on innovation-driven solutions, strategic approaches and quality management practices that are shaping industries in the present era. The lecture was well received and sparked an engaging interaction with the participants.

In association with Quality Forum, IEI, New Delhi, successfully conducted an online technical programme on 22 July 2025. Speaker, Prof Dr T Saravana Kumar, Director, Dev Innotech LLP, Karur. delivered an engaging and informative lecture on 'Sustainable Textile Materials and Applications', providing valuable insights into his area of specialization and fostering active interaction with participants. The event provided a meaningful platform for knowledge sharing, professional development and networking among engineers, reflecting the centre's continued commitment to promoting technical learning and excellence in the engineering community.

Tirunelveli

Organized a seminar on 'The Age of AI' on 01 August 2025 at Tirunelveli. The event was graced by Er M Gowtham, Founder and Managing Director of Macbeez, Tirunelveli, as the Chief Guest, and Er Sunil Prabakar, Senior Solution Architect (AI/LLM), Omega Healthcare, as the Guest of Honour. In his address, Er Gowtham elaborated on the significance of 'The Age of AI', highlighting the rapid integration of artificial intelligence technologies in society, economy and daily life, marking a transition from the Information Age to an era where AI empowers machines to learn, reason and make decisions. Er Sunil Prabakar provided an insightful discussion on machine learning, neural networks, AI algorithms and hardware accelerators, emphasizing AI's transformative role in innovation and industry.

Organized a technical seminar on 'Water Resources Development in India: Challenges and Opportunities' on 14 August 2025 at Tirunelveli. The Chief Guest and resource person of the session was Mr N Vivekanandan, Scientist, Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Central Water and Power Research Station (CWPRS), Pune. Mr Vivekanandan delivered a Keynote address on water resource development in India, discussing challenges and opportunities in water management, power generation and irrigation. He also provided guidance on project and research proposals supported by NPCI and NTPC, encouraging engineers to develop innovative solutions for water resource and agricultural issues. The event was highly appreciated for its excellent organization and the valuable insights shared, fostering professional learning and knowledge exchange among participants.



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IEI DIARY



Agricultural Engineering Division

All India Seminar on **"The Role of Advanced Machinery in Postharvest Management from Farm to Market Efficiency"**

Coimbatore, November 06-07, 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 **"Engineering Sustainable Approaches to Advance Cereal Crop Production and Ensure Food Security"**

Coimbatore, November 14, 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 **"Watershed Development and Management Programmes: Monitoring and Evaluation"**

Ahilyanagar, January 8-9, 2026

The Honorary Secretary, IEI, Ahilyanagar, Abhiyanta Bhavan, Survey No. 243, Behind Haral Hospital, Kalyan Road, Ahilyanagar 414001 [☎: 0241-2323359, E-mail: ahmednagarlc@ieindia.org]

Aerospace Engineering Division

Thirty-eight National Convention of Aerospace Engineers on **"Advancing AI 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 [☎: 0427-2332544, E-mail: salemc@ieindia.org, Website: www.ieisl.com]

International Conference on **"Sustainable Aerospace Technologies"**

Bhopal, February 26-27, 2026

The Honorary Secretary, IEI, Madhya Pradesh State Centre, Dr M Visvesvaraya Marg, PO: Habibganj, Bhopal 462024 (M. P.), [☎: 0755-2474572, E-mail: mpssc@ieindia.org, Website: www.mpsscibhopal.in]

Civil Engineering Division

All India Seminar on **"Advanced Civil Engineering Practices for Sustainable Infrastructure Development ACED2025"**

Lucknow, November 28-29, 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]

All India Seminar on **"Sustainable Building Practices And Innovations In Green Construction For A Resilient Future"**

Kanchipuram, November 10., 2025

The Honorary Secretary, IEI, Kanchipuram Local Centre, IEI, Jerusalem College of Engineering Campus, Velachery Main Road, Narayanapuram, Pallikaranai, Chennai 600100 [Mobile: 9789924739, Whatsapp No. 8870531609, E-mail: kanchipuramc@ieindia.org, Website: www.ieindia.org]

One Day Seminar on **"Strategies for Reducing Carbon Footprint in Construction Industry"**

Faridabad, January 28, 2026

The Honorary Secretary, IEI, Faridabad Local Centre,

2nd Floor, Bank Building, J C Bose University of Science and Technology (YMCA), Sector 6, Faridabad 121006, [☎: 01292245008, E-mail: faridabadlc@ieindia.org, Websites : www.ieifbdlc.in]

Computer Engineering Division

One Day Seminar on **"Agentic AI: Autonomous Intelligence for the Future"**

Pune, November 15, 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]

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

Agartala, January 16-17, 2026

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

Electrical Engineering Division

One Day Seminar on **"Application of Gen-AI in Engineering Technology"**

Durgapur, November 04, 2025

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

All India Seminar on **"Innovation And Sustainability in the Power Sector and Electricity Market"**

Chandigarh, November 07-08, 2025

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

All India Workshop on **"Solar PV Driving India's Renewable Energy Mission through Innovation Integration And Opportunities"**

Bhimavaram, December 02, 2025

The Honorary Secretary, IEI, Bhimavaram Local Centre, First Floor, General Amenities Building, SRKR Engineering College, PO: Chinnaamiram, Dist -West Godavari, Bhimavaram 534204, [☎: 08816-233522, E-mail: bhimavaramc@ieindia.org]

All India Seminar on **"Electrical Vehicle and Charging System Transforming Tomorrows Mobility"**

Navi Mumbai, January 30, 2026

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]

All India Seminar on **"Distributed Generation Power Quality Navigating Grid Integration Challenges"**

Coimbatore, February 12, 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]

Electronics & Telecomm. Engineering Division

All India Seminar on **"Advanced Wireless Sensor Network-Based Transforming Smart Agricultural Systems: Leveraging Artificial Intelligence (AI) and Machine Learning (ML) Applications"**

Coimbatore, November 26-27, 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]

All India Seminar on **"IoT and Sensors Embedded IoT"**

Bareilly, November 28-29, 2025

The Honorary Secretary, IEI, Bareilly Local Centre, Engineers' Bhawan, 44 Camphor Estate Colony, Near Camphor Hospital, Rampur Road, C B Ganj, Bareilly 243502, Uttar Pradesh [Mobile : 9634953691, E-mail : bareillylc@ieindia.org, Website: www.blcieindia.in]

Fortieth National Convention of Electronics and Telecommunication Engineers on **"IoT and Sensor Embedded IoT Driving Smart Connectivity"**

Faridabad, December 03-04 2025

The Honorary Secretary, IEI, Faridabad Local Centre, 2nd Floor, Bank Building, J C Bose University of Science and Technology (YMCA), Sector 6, Faridabad 121006, Ph. : 01292245008, E-mail: faridabadlc@ieindia.org, Websites : www.ieifbdlc.in]

One Day Seminar on **"Electronics and Telecommunication in Medical Application"**

Bareilly, December 20, 2025

The Honorary Secretary, IEI, Bareilly Local Centre, Engineers' Bhawan, 44 Camphor Estate Colony, Near Camphor Hospital, Rampur Road, C B Ganj, Bareilly 243502, Uttar Pradesh [Mobile : 9634953691, E-mail : bareillylc@ieindia.org, Website: www.blcieindia.in]

All India Seminar on **"Flexible Nanoelectronics for Sensing and Biomedical Applications"**

Agartala, January 29-30, 2026

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

Environmental Engineering Division

One Day Workshop on **"Smart Air Leveraging Cloud and AI to Combat Ultrafine Air Pollution PM.1 and PM1.0 for a Safer Environment"**

Tiruchirappalli, January 08, 2025

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

All India Seminar on **"Energy Efficiency in Heating Ventilations and Air Conditioning"**

Ranchi, February 8-9, 2026

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO: Doranda, Ranchi 834002 [☎: 0651-3510412, E-mail: jharkhandsc@ieindia.org; Website: ieijscjharkhand.org]

Marine Engineering Division

Thirty-seventh National Convention of Marine Engineers on **"Environmental Protection and Port Safety"**

Vijayawada, November 13-14, 2025

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

Mechanical Engineering Division

All India Seminar on "Additive Manufacturing for Enhanced Productivity"

Agartala, November 14-15, 2025

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

International Conference on "Advancements in Aerospace, Mechanical and Materials Engineering"

Vijayawada, February 01-02, 2026

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, E-mail: apsc@ieindia.org, Website: www.ieiapsc.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]

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

Fortieth National Convention of Production Engineers on "Sustainable Smart Manufacturing for Circular 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]

Interdisciplinary Coordination Committee

One Day Workshop on "Technical and Allied Activities of IEI, Purpose, Norms, Guidelines, Procedures, Reporting etc"

Ranchi, November 09 2025

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO: Doranda, Ranchi 834002 [☎: 0651-3510412, E-mail: jharkhandsc@ieindia.org; Website: ieijscjharkhand.org]

National Languages Promotional Committee

All India Seminar on "AI Powered Augmented Reality and Virtual Reality Technologies"

Coimbatore, January 07-08, 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]



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 November 2025

Sl. No.	Name of the Course	Scheduled Dates
1.	Risk Management	03 - 05 Nov 25
2.	Heating, Ventilation and Air Conditioning (HVAC) Systems in different Industries	03 - 06 Nov 25
3.	Best Earthing Practices and Safety Measures in EHV Substation	04 - 07 Nov 25
4.	Cyber Security & Cyber Hygiene for IT / OT Officers	05 - 07 Nov 25
5.	Application of IoT, Remote Sensing, UAV Technologies in Mining	10 - 12 Nov 25
6.	LiDAR Technology for Irrigation & Agriculture Sector	10 - 12 Nov 25
7.	Challenges & Opportunities in EVs, Charging Stations and Grid Infrastructure - Latest EV Govt. Policies	10 - 13 Nov 25
8.	Firewall & VPN Security Administration	10 - 14 Nov 25
9.	Precision Machining with MASTERCAM (CNC Programming): Mastering 2D & 3D Programming	10 - 14 Nov 25
10.	Water Audit and Software-Tools and Techniques	12 - 14 Nov 25
11.	FDP on Intellectual Property Rights (IPR) and Patenting	12 - 14 Nov 25
12.	AI Tools to Enhance Work Productivity (ChatGPT & Copilot Integration with MS Office Applications)	12 - 14 Nov 25
13.	E-Tendering and Condition of Contract for EPC /Turnkey projects	17 – 19 Nov 25
14.	Steam Boilers and Turbine System Operations (Maintenance, Troubleshooting, Heat Recovery and Optimization)	17 - 20 Nov 25
15.	ISO 9001:2015 QMS - Effective Implementation & Internal Auditor Training	17 - 20 Nov 25
16.	Contract Management and Arbitration in Engineering Projects	17 - 20 Nov 25
17.	Metallurgy for QC and Design Engineers	18 - 20 Nov 25
18.	Transmission-Line Construction (Survey, Design of lines and construction practices)	18 - 21 Nov 25
19.	3–Day Conference on "Sustainable Practices in Mining"	19 - 21 Nov 25
20.	Evaluating Sustainability in Renewable Energy Systems	19 - 20 Nov 25
21.	Root Cause Analysis	24 - 26 Nov 25
22.	Conjunctive Groundwater Studies & Their Impact in Irrigation Projects	24 - 26 Nov 25
23.	Programme Validation and Testing in Embedded System	24 - 27 Nov 25
24.	Pollution Prevention and Environmental Management Strategy	25 - 27 Nov 25
25.	CERC Regulations Including Tariff Regulations	25 - 28 Nov 25
26.	FDP on ICT Tools & E-Content Development	26 - 28 Nov 25

For detailed information please contact:

Engineering Staff College of India

Old Bombay Road, Gachibowli, Hyderabad – 500 032

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The Institution of Engineers (India)

IEI Industry Excellence Award 2025

Request for Participation

The IEI Industry Excellence Award has been instituted to recognize industry leaders for their innovation, excellence in engineering operations and thereby, to lead their industry in a competitive manner. The benchmarks created by the industries in India have included productivity, quality, safety and performance assurance thereby giving India the rightful place in the global markets. Realizing that such industries can provide the leadership to a large number of other industries in the country, it has been considered appropriate by the IEI Council to institute the IEI Industry Excellence Awards in the year 2008.

Applications in specified format (visit link: <https://www.ieindia.org/webui/IEI-Activities.aspx#industry-excellence-award>) are invited from prospective applicants for IEI Industry Excellence Award 2025. The last date of receipt of application for the Award 2025 is **16 November 2025**. Interested applicants are requested to send their applications (Two hard copies & One soft copy in Pendrive/CD) to the below mentioned address.

Deputy Director (Technical)

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



The Institution of Engineers (India)

IEI Engineering Education Excellence Award 2025

Request for Participation

The IEI Engineering Education Excellence Award has been instituted to recognize leading Engineering Educational Institutions and encourage for better and more effective engineering education across the country. The engineering education sector has witnessed significant development, setting benchmarks for others to follow. Universities and institutions have expanded their scope beyond pedagogy and now engage in R&D activities, consultancy, patents, publications, skill development programme, industry interface, and the implementation of the New Education Policy (NEP), contributing to India's global prominence. Recognizing that such institutions can lead and inspire numerous others in the country, the IEI Council has decided to establish the IEI Engineering Education Excellence Awards.

Prospective applicants are invited to submit their applications in the specified format

(visit link: <https://www.ieindia.org/webui/IEI-Activities.aspx#engineering-education-excellence-award>) for the IEI Engineering Education Excellence Award 2025. The deadline for submitting applications for the Award 2025 is **16 November 2025**. Interested applicants are requested to submit their applications (Four hard copies & One soft copy in Pendrive/CD) to the below mentioned address.

Deputy Director (Technical)

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IEI NEWS

ISSN 0971-3352

Owner : The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700 020
Printer : Maj Gen (Dr) MJS Syali, VSM (Retd), Secretary & Director General
Publisher : Maj Gen (Dr) MJS Syali, VSM (Retd), Secretary & Director General
Published from : 8 Gokhale Road, Kolkata 700 020
Printed from : M/s Florence Offset Process Pvt. Ltd.
6A S N Banerjee Road, Kolkata 700013
Editor : Maj Gen (Dr) MJS Syali, VSM (Retd), Secretary & Director General

President : Er VB Singh

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