

# IEI NEWS

October 2024

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A CENTURY OF SERVICE TO THE NATION

Volume 31

Number 7

## Thirty-sixth National Convention of Agricultural Engineers and National Conference

### Conservation and Management of Engineering Inputs, Farm Mechanization, Agro Processing and Value Addition, Non Conventional Energy Sources, Soil & Water Conservation & Management

Chhattisgarh State Centre, IEI, in association with Swami Vivekananda College of Agricultural Engineering and Technology, Indira Gandhi Krishi Vishwavidyalaya [IGKV], Raipur organized the 36<sup>th</sup> National Convention of Agricultural Engineers in Raipur during 29-30 August 2024 under the aegis of Agricultural Engineering Division Board (AGDB), IEI. A National Conference was also organized concurrently with the National Convention on the theme **Conservation**



**and Management of Engineering Inputs, Farm Mechanization, Agro Processing and Value Addition, Non Conventional Energy Sources, Soil & Water Conservation & Management.**

The inaugural function was started with lighting of the lamp on the dais in the august presence of all dignitaries. Prof (Dr) Sanjay Kumar, Chairman, Chhattisgarh State Centre, IEI delivered the welcome address. Dr Vinay Kumar Pandey, Organizing Secretary and Dean, IGKV, Raipur briefed about the theme of the National Convention. He mentioned the basic objectives of the Convention is to focus on exploring bio inspired solutions, resource optimization, waste management, green and sustainable

agricultural practices. Shri Ramvihar Netam, Hon'ble Minister of Tribal Affairs, Agriculture Development and Farmer Welfare, Government of Chhattisgarh graced the inaugural function as the Chief Guest. Dr Sunil Kumar Ambast, Chairman, Central Ground Water Board, Government of India, Dr Girish Chandel, Vice Chancellor, IGKV and Dr Nutan Kumar Dash,

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### Know-Your-Member (KYM)

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

You are requested to forward your KYM along with the self-attested copy of photo ID proof to the address given below:-

#### Deputy Director (Membership)

The Institution of Engineers (India)

8 Gokhale Road, Kolkata 700020

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

The form is available on IEI Website or scan the code:

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

### Charting India's Path to Net Zero: Insights and Opportunities



India's journey to net-zero emissions by 2070 has been laid out through a compelling vision in the India's Net Zero Roadmap prepared by World Energy Council (WEC) India, which explores two pathways: a Business-As-Usual (BAU) scenario and an ambitious Net-Zero Scenario (NZS). Under the NZS, India's energy landscape undergoes a profound transformation across key sectors—power, industry, and transport. This scenario emphasizes a drastic reduction in coal and oil reliance, with renewable sources like solar, wind, and green hydrogen projected to meet over 50% of India's primary energy demand by 2070. Enhanced energy efficiency measures, coupled with widespread adoption of green technologies, are expected to power this transition, leading India toward a more sustainable future.

The roadmap also highlights the "LiFE" (Lifestyle for Environment) initiative, championing behavioral shifts that promote resource conservation and lower emissions. This wide-ranging approach stresses the need for technological advancements, innovative financing solutions, and robust policy support to overcome investment challenges. Furthermore, the report underlines the importance of up-skilling and re-skilling India's workforce to support the green technology revolution, positioning it as a critical driver for sustainable industry and economic resilience.

The Institution of Engineers (India), is proud to have contributed a comprehensive review to this draft report, India's Net Zero Roadmap, as an Institutional Member of the World Energy Council (WEC) India. IEI's insights emphasize our dedication to supporting India's sustainable energy ambitions and our commitment to leading discussions on climate resilience. We look forward to further exploring these findings at the 39th Indian Engineering Congress to be held in Kolkata this year during 20-22 December 2024, where we'll convene experts to examine the roadmap's implications for India's engineering landscape. Together, let us drive engineering solutions for a sustainable, resilient future.

The e-edition is available at [www.ieindia.org](http://www.ieindia.org)

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IEI NEWS

October 2024

## Conservation and Management of Engineering Inputs, Farm Mechanization, Agro Processing and Value Addition, Non Conventional Energy Sources, Soil & Water Conservation & Management

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Vice President, IEI & Member, AGDB, IEI graced the function as the Guests of Honour. Prof (Dr) Narvendra Singh Chauhan, Chairman, Agricultural Engineering Division Board, IEI presided over the inaugural session. In his address, Prof Chauhan discussed the drawbacks of traditional agricultural system by means of depletion of resources, ecological imbalance etc and advocated for implementing green solution in agriculture to address these challenges. He also highlighted the technological advancement in agriculture including application of IoT, Drone Technology etc. Chief Guest, Shri Netam, in his address, focused on the contribution of the farmers to strengthen the national economy and GDP. He spoke about the importance of development and monitoring of the working conditions of farmers during extreme weather conditions and scarcity of water, water and fertilizer management, importance and contribution of farm mechanization and drone technology and development of medicinal plants and flowers. Guest of Honour, Dr Girish Chandel, Vice Chancellor, IGKV deliberated on the upliftment of the working conditions of farmers and stressed on the application of modern farming machineries. Guest of Honour, Dr Nutan Kumar Dash, spoke



about various aspects of modernization of agriculture with the usage of updated technologies. He spoke about the importance and application of Agro-automation and Drip Technology. He appreciated the advancement of agriculture and presumed that in the coming years agriculture will take the center stage for economic development and prosperity of the country. The vote of thanks was delivered by the Dr Dilip Singh Sisodia, Honorary Secretary, Chhattisgarh State Centre, IEI. A souvenir was released on the occasion in august present of the dignitaries.

On the occasion, Prof Indra Mani, Vice-Chancellor, Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani, Maharashtra; Er Rajkumar Shrivastava, Executive Director & CEO, Shubhi Agrotech Private Limited, Raipur, Chhattisgarh; Dr T B S Rajput, Former Director, Water Technology Centre, Indian Agricultural Research Institute, Indian Council of Agricultural Research, New Delhi were felicitated as eminent engineering personalities for their relentless contributions in the field of agricultural engineering.

Dr Thingujam Bidalakshmi Devi, Scientist, Agricultural Structure and Environmental Control Division, ICAR-Central Institute of Post-Harvest Engineering and Technology Ludhiana, Punjab (in absentia) and Dr Madhuresh Dwivedi, Assistant Professor, Department of Food Process Engineering, National Institute of Technology Rourkela were awarded the IEI Young Engineers Award in Agricultural Engineering for their outstanding contribution in the field of agricultural engineering.

Followed by the inaugural session, the Rathindranath Tagore Memorial Lecture was delivered by Prof B C Mal, Former Vice Chancellor, JIS University, Kolkata, Former Vice Chancellor, CSVTU, Bhilai (CG), Former Professor of Aquacultural Engineering, & Former Head, Agricultural and Food Engineering Department, Indian Institute of Technology Kharagpur on the topic 'Emerging issues of Agricultural Engineering: Research & Development'. In his lecture,

Prof Mal discussed the global challenges of agricultural engineering, steps adopted for food production, farm mechanisation, fuel efficient tractors, gender equality- women involvement in farming, Post Harvest technology, check-basin irrigation system, integrated agri-aqua-culture. Prof Indra Mani delivered the state of art lecture on the topic 'Agri-Drone- A Revolutionary Technology for Sustainable Agriculture' and spoke about the industrial development from food scarcity to food surplus, and futuristic agricultural development by usage of drone technology. Dr C R Mehta, Director, ICAR-Central Institute of Agricultural Engineering, Bhopal, MP delivered a lecture on the topic 'Farm Mechanization in India and Future Challenges'. Dr S P Singh spoke on the topic 'Prospects of Mechanization in Animal Husbandry'. Dr T B S Rajput spoke about Precision Farming and its importance.

The Technical sessions saw paper presentation from bright minds of engineering, followed by the poster presentation session and a state of art exhibition pertaining to farm machineries.

Dr Nutan Kumar Dash, Vice President, IEI was the Chief Guest for the valedictory session and delivered a magnificent address to the dignitaries and students urging all stake holders to excel the development of industrial applications for the growth of agricultural engineering. Prof (Dr) Sanjay Kumar, Chairman, Chhattisgarh State Centre, IEI presided over the session and delivered the welcome address. The vote of thanks was delivered by Dr Dilip Singh Sisodia, Honorary Secretary, Chhattisgarh State Centre, IEI.

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

*Farm mechanization through custom hiring need to be strengthened and promoted as an ideal alternative for small and marginal farmers for timely operations, drudgery reduction and increased productivity; Machineries for mechanization of farm operations (tillage, land leveling, seeding, planting/ transplanting, weeding/intercultural, plant protection, harvesting & threshing and straw management) have been developed and its crop as well as location specific testing is recommended for its acceptability; Mechanization of operations in horticulture crop should be popularized; Mechanized transplanting of rice and its requirements should be standardized at village level for efficient transplanting of rice for its popularization through large scale demonstration; Use of tractor operated conservation tillage seeding machinery system such as Zero Till Seed Drill and Strip Till Drill should be popularized through large scale demonstration during rabi season for its acceptability in different crops; Development work on gender friendly farm equipments/implements should be taken up for different agricultural operations on the basis of anthropometrical observations; Agro processing centres should be setup for primary processing of cereal, pulses, oil seeds crops at village level in different pockets of state to generate employment for rural youths; Processing and value addition of horticulture as well as forest produce has good potential. The technologies are available and should be critically reviewed and small scale site specific demonstration cum extension programme recommended for its acceptability; Processing and value addition of finger millet must be promoted to enrich nutrition and better livelihood of tribal community; The processing and processes technologies for agricultural and horticultural crops should consider the use of by products and wastes to increase profitability. Automation, electronic controls, and new processing methods should be adopted to improve safety, efficiency, and entrepreneurship development; Region-wise assessment of surplus biomass available for conversion to energy to be done and suitable conversion technologies be identified and popularized through demonstration plant for creating awareness and this will help the community in reducing the dependence of electrical and petroleum sources; Solar drying of horticultural produce has enormous potential and technologies are now available in the country. All these be critically reviewed and on site trials should be taken up; Sustainable aquaculture activities like*

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## Resilient Geosynthetic Solutions to Counter Soil Erosion

On 7 October 2024, The Institution of Engineers (India) (IEI) organized a technical webinar on **Resilient Geosynthetic Solutions to Counter Soil Erosion**, in collaboration with Maccaferri Environmental Solutions Pvt. Ltd. This event was the latest in IEI's ongoing Technical Webinar Series, focusing on modern geosynthetic solutions to address soil erosion challenges. This webinar was also supported by the Fédération Internationale du Béton (fib), with which IEI is affiliated as a National Member Group. The event drew widespread interest from engineering professionals, researchers, and industry experts, highlighting a critical issue for infrastructure protection and soil erosion control.

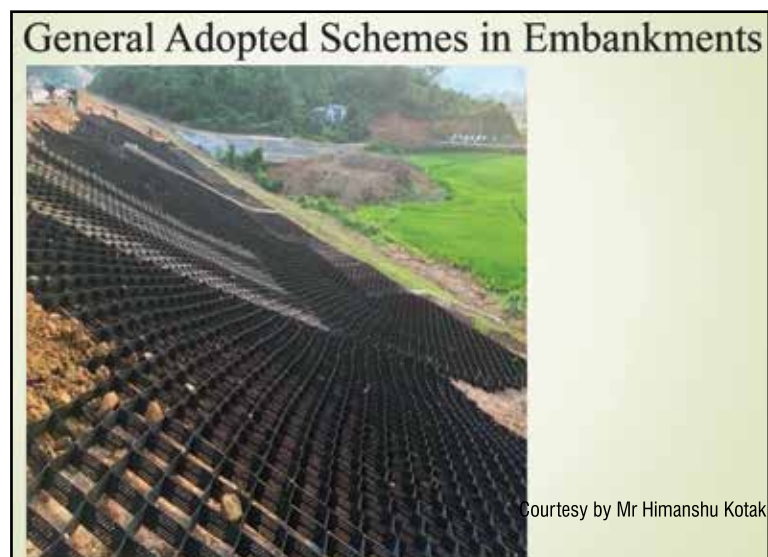
The webinar featured three distinguished speakers, each of whom provided deep insights into various aspects of soil erosion control, supported by advanced geosynthetic solutions.



Mr Himanshu Kotak

Mr Himanshu Kotak, Director and Founder of C-Phi Consult Pvt. Ltd., opened the session with an in-depth analysis of soil erosion mechanisms and common erosion control methods. His presentation highlighted the significant impact of wind, water, and gravity as primary erosive agents and discussed their combined effects on soil detachment and transportation. He

presented case studies illustrating common failures in traditional erosion control schemes, such as stone pitching and concrete-filled geocells. Mr Kotak emphasized the importance of problem identification before selecting



Courtesy by Mr Himanshu Kotak

erosion control measures and showcased bio-engineering solutions, such as vegetative cover and geosynthetic solutions, for ensuring slope stability.



Mr Gianluca Spadaro

The second presentation, led by Mr Gianluca Spadaro, Business Development Manager of the Geosynthetic Unit at Officine Maccaferri S.p.A., Italy, expanded on geosynthetics as a solution to soil erosion. Mr. Spadaro introduced Maccaferri's innovative MacMat Range, a flexible, three-dimensional geosynthetic mat designed for both temporary and permanent erosion control. He also discussed various types of erosion control geosynthetics, including Turf Reinforcement Mats (TRM) and Erosion Control Rolled Materials (ECRM). Additionally, Mr Spadaro emphasized how these solutions reinforce root systems

### 3. MACMAT RANGE

#### Product family

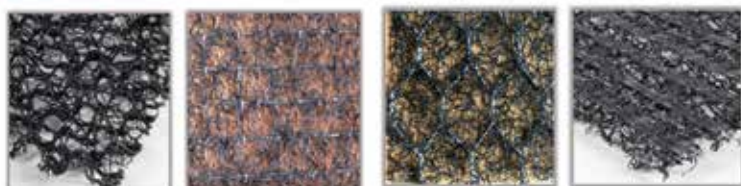
MacMat are geomats made of polypropylene monofilaments tangled together to form a three-dimensional highly flexible 10mm to 20mm thick mat featuring a high ratio of void (higher than 90% on average), that can be reinforced both through synthetic reinforcement geogrids and DT steel mesh (MacMat R).

MacMat provide permanent protection against erosion caused by rain and runoff on slopes and against erosion due to water flow on rivers and channel banks.

The use of MacMat along a slope/bank allows to:

- Protect topsoil from washout
- Boost growth of vegetation
- Increase shear resistance

Courtesy by Mr Gianluca Spadaro



and protect slopes from rainfall-induced erosion, offering examples of successful implementations, including projects in Dar Es Salaam and the Amur Gas Processing Plant.

Dr Ratnakar R Mahajan, Regional Technical Head for India, Southeast Asia,



Dr Ratnakar R Mahajan

and the Pacific at Maccaferri, concluded the session with a technical exploration of erosion control systems. His presentation covered the design of erosion control solutions using the RUSLE (Revised Universal Soil Loss Equation), a formula that predicts soil loss based on factors such as rainfall intensity, soil erodibility, and slope characteristics. Dr Mahajan illustrated how geosynthetics, including MacMat R and hydroseeding technologies, have been

effectively employed in several Indian infrastructure projects, such as the Gandak River Bank and the Villukuri slope stabilization. These solutions protect embankments and riverbanks while promoting vegetation growth and reducing environmental impact.

The webinar concluded with an interactive Q&A session, where participants engaged the speakers with questions regarding the application of geosynthetics in erosion control projects. Attendees provided positive feedback, expressing appreciation for the informative and practical insights shared during the session. This technical webinar brought to fore the practices and advanced solutions for tackling critical issues such as soil erosion. The presentations from industry experts provided participants with cutting-edge knowledge, in the area of soil erosion and use of geosynthetics.

### MACRUSLE: EROSION CONTROL DESIGN SOFTWARE

#### MACRUSLE – RUSLE equation

The Revised Universal Soil Loss Equation (RUSLE) predicts sheet and rill erosion on slopes.

RUSLE is a universal formula. Hence it is applicable in any geographical region, but it requires a proper data base allowing the estimation of the various factors.

RUSLE equation is expressed by the following formula:

$$A = R \cdot K \cdot LS \cdot C \cdot P$$

A = estimated average soil loss  
R = rainfall-runoff erosivity factor  
K = soil erodibility factor  
L = slope length factor  
S = slope steepness factor  
C = cover-management factor  
P = support practice factor

In civil engineering projects the C factor represents the impact of the cover and management system.

Cover refers to type and density of vegetation on the given slope.

Management system refers to erosion control techniques applied to the given slope which may consist in Geosynthetics for erosion control.

The C factor for a specific Geosynthetic product should be obtained by extensive test on real slopes under natural rainfall, and/or laboratory tests with a rain simulator and a standard plot in according to the relevant standard (ASTM 6459).

Courtesy by Dr Ratnakar R Mahajan

## Conservation and Management of Engineering Inputs, Farm Mechanization, Agro Processing and Value Addition, Non Conventional Energy Sources, Soil & Water Conservation & Management

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scientific design of fish farms are essential and need to be promoted and exploited as there are huge number water bodies are available in the state of Chhattisgarh; Drip and sprinkler system should be popularized in horticulture field for efficient conservation of water resources and increased production and productivity; The technologies on watershed development, rain water harvesting, water application methods and ground water recharging should be popularized amongst the farming community; Farmers Producer Organizations and start-ups, should be strengthened; The advancements in agricultural technology, such as the integration of IoT, drones, and robotics should be promoted to enable more efficient use of resources, improve crop yield prediction and monitoring, and facilitate precise application of inputs like water, fertilizers, and pesticides; Application of renewable energy sources should be promoted to significantly improve the rural economy and foster sustainable development and creation of employment opportunities through the installation, maintenance, and operation of solar systems. Application of mechanization should be promoted for the disposal efficiency of livestock and poultry farming waste, effectively reduced the pollution discharge, improved the living environment, and laid foundation for the sustainable development for livestock industry; There is a need to promote mechanization and application of AI/IoT, for animal husbandry sector. Livestock farmers can detect the onset of health issues often before clinical symptoms appear. It has the potential

to improve productivity, enhance traceability, assist in disease prevention and provide for animal health and well-being accountability; NextGen tools and technologies should be promoted to revolutionize water and watershed management. By leveraging IoT, GIS, AI, block chain, and drones, a sustainable future can be created where water resources are managed efficiently and equitably; Protected cultivation must be promoted in modern agriculture, offering multifaceted advantages including enhancements in agricultural productivity, food security, environmental sustainability, and socio-economic development in rural communities. Technologies such as playhouses, shade net houses, and hydroponics enable farmers to create controlled environments that optimize crop growth while minimizing risks from adverse weather conditions, pests, and diseases; Drip and sprinkler system should be popularized in horticulture field for efficient conservation of water resources and increased production and productivity; Machine learning algorithms need to be popularized to analyze agricultural problems and subsequently provide meaningful solutions. This can help farmers choose the most appropriate accessories for their work and increase crop yields; Sustainable aquaculture activities like scientific design of fish farms are essential and need to be promoted and exploited the huge number water bodies; Efforts should be made for strengthening the Directorate of Agricultural Engineering recently opened in the state of Chhattisgarh.

## Elevate your status as a Certified Professional Engineer (PE) and International Professional Engineer (IntPE)

### Professional Engineers (PE) Certification by IEI

#### ELIGIBILITY REQUIREMENT

To attain the Professional Engineers (PE) certification through the Institution of Engineers (IEI), you must meet the following eligibility criteria:

1. Hold a BE/BTech or equivalent degree recognized by a Statutory Authority or the Government of India.
2. Have accumulated five years or more of professional experience.
3. Be a member of a recognized professional engineering institution or association.
4. Maintain a satisfactory level of Continued Professional Development (CPD).

For more information and details, please visit the following link :

[https://www.ieindia.org/webui/IEI\\_PE\\_Certification.aspx](https://www.ieindia.org/webui/IEI_PE_Certification.aspx)

### International Professional Engineers (IntPE) Certification by IEI

#### ELIGIBILITY REQUIREMENT

To be eligible for IntPE Certification by IEI, candidates must meet the following criteria:

1. Hold a BE/BTech or equivalent degree recognized by the Statutory Authority or the Government of India.
2. Possess seven years or more of professional experience.
3. Have a minimum of two years of professional experience in a significant engineering activity.
4. Be a member of a recognized professional engineering institution or association.
5. Maintain a satisfactory level of Continued Professional Development (CPD).

For more information and details, please visit the following link :

[https://www.ieindia.org/webui/IEI\\_IntPE\\_Certification.aspx](https://www.ieindia.org/webui/IEI_IntPE_Certification.aspx)

The eligible candidate can submit application in the prescribed format to:

Deputy Director (Technical)  
The Institution of Engineers (India)  
8 Gokhale Road, Kolkata 700020  
For any query and assistance  
please send email to: [pe@ieindia.org](mailto:pe@ieindia.org)



## Sustainable Developments & Technologies

**Gorakhpur Local Centre**, IEI, organized an All India Seminar on the theme **Sustainable Developments & Technologies** during 24-25 May 2024, under the aegis of Interdisciplinary Coordination Committee [ICC], IEI, in association with Institute of Technology and Management (ITM), GIDA, Gorakhpur in the campus of ITM, GIDA, Gorakhpur. The event focused on fostering dialogue about sustainable technologies and their alignment with Sustainable Development Goals (SDGs). The seminar successfully highlighted the intersection of sustainable development and technologies and provided a platform for sharing knowledge, discussing challenges and exploring innovative solutions. The participants left with a renewed commitment towards integrating sustainability into their respective fields and thus fostering a collaborative approach towards achieving SDGs. Two parallel tracks were conducted, covering technical presentations, invited lectures and research paper discussions. The seminar attracted over 100 representatives from various engineering professions and academia, alongside more than 500 engineering students.

The event started with the welcome speech delivered by Dr Pawan Kumar Mishra, Chairman, Gorakhpur Local Centre, IEI. He extended a warm welcome to the Chief Guest, Guests of Honour and all participants and emphasized the significance of sustainable development and the role, engineers can play in driving innovations towards achieving sustainable goals.



Er P K Rai, Chief Signal Engineer, North Eastern Railway, Gorakhpur graced the function as the Chief Guest. In his address, he highlighted the pivotal role that engineers play in promoting sustainable development. He outlined five guiding principles for sustainable development: living within environmental limits, achieving a sustainable economy, promoting good governance, utilizing Information and Communication Technology (ICT), and practicing social responsibility. He concluded by urging participants to safeguard the environment for future generations through thoughtful and sustainable practices. Er J B Rai, President, Madan Mohan Malaviya Engineering College, Gorakhpur Alumni Association, Prof (Dr) Vinay Singh, ABV- IITM, Gwalior, Dr V K Goswami, Wing Commander (Retd), Prof Upendra Nath Roy, National Institute of Technical Teachers Training and Research, Chandigarh and Prof Vivek Kumar, Center for Rural Development and Technology, [CRDT] IIT Delhi graced the function as the Guests of Honour. Er J B Rai in his address, highlighted the issues of atmospheric change, rapid urbanization, technological disruption and the impact of ongoing development. Prof (Dr) Vinay Singh opined for good governance as one of the pillar for sustainable development. Dr V K Goswami, former

Wing Commander shared his thoughts and expertise with the participants and asked the students to come forward to build a better nation with the advancement of new technologies. Prof Upendra Nath Roy opined that sustainable development can be realized only through rural development. Prof Vivek Kumar said that India is committed to pursue sustainable development by means of living in harmony with nature and stressed the need to increase awareness about environmental issues.

Earlier, Er Pavnesh Kumar, Convener of the seminar, briefed about the theme. He highlighted the urgent need for integrating sustainable practices across all technological innovations, role of technology in mitigating climate change, innovations in renewable energy resources, sustainable urban planning, advancement of green technologies etc.

During technical sessions, invited lectures were delivered by academicians and industry experts. Dr Tameshwar Nath, IIT Bhagalpur delivered Invited Lecture on 'Role of Technologies in Sustainable Development'. Wing Commander Dr V K Goswami on the topic 'Role of AI & Remote Sensing in Hydro Spheric Sustainability and Development of Climate Forecasting Models'; Prof Vivek Kumar on 'Role of Technologies in Sustainable Development'; Prof (Dr) Vinay Singh on 'Internship and Blockchain Startup: A Sustainable Approach'; Prof Upendra Nath Roy on 'Technologies for Sustainable Development of Rural India'; Prof Ashutosh Singh, Indian Institute of Information Technology [IIIT] Allahabad on 'Fuzzy Logic-Based Lifetime Enhancement of Wireless Sensors'; Dr Pawan Kumar Mishra, Director, Construction Industry Development Council, New Delhi, delivered Invited Lecture on the topic 'Engineers as Catalysts for Sustainable Development in India'; Er O S Maurya, Former General Manager, Tehri Hydro Development Corporation, Uttarakhand on 'Global Warming' and Er M W Beg, Former Chief Manager, Indian Oil Corporation, Mathura, MP on 'Importance of Renewable Energy in Sustainable Development of Nation'. Further, papers were presented on the topic 'Role of Infrastructure in Sustainable Development in India'; 'Challenges of Modernization and Sustainable Development'; 'Contribution of AI in Sustainable Development'; and 'Need of Skilled Manpower for Sustainable Development in India'.

During the valedictory function, Dr Pawan Kumar Mishra summed up the proceedings of deliberation. Er Ramesh Chandra Pandey, Honorary Secretary, Gorakhpur Local Centre proposed the vote of thanks.

The seminar was a successful platform for discussing sustainable development challenges and technological advancements. Participants left with a renewed commitment to integrating sustainability into their respective fields, and the seminar provided valuable insights into fostering public-private partnerships, raising awareness, and encouraging interdisciplinary research.

Based on the discussions and insights from the seminar, the following recommendations were obtained.

*Promote Interdisciplinary Research: Collaboration across different fields be encouraged to develop holistic solutions towards sustainability challenges; Strengthen Policy Frameworks: Policies and regulations be enhanced to support sustainable technologies and practices; Increase Public Awareness: Awareness about the importance of sustainability through education and outreach programs should be enhanced; Foster Public-Private Partnerships: Strengths of both sectors be leveraged to drive innovation and implement sustainable solutions effectively.*

### 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>

## Revolution in Health Care-AI and IoT

**Tuticorin Local Centre**, IEL, organized an All India Seminar on the theme **Revolution in Health Care-AI and IoT** during 26-27 April 2024 at Tuticorin, under the aegis of Interdisciplinary Coordination Committee [ICC], IEL in association with National Engineering College, Kovilpatti. The event gathered several delegates, dignitaries and experts to discuss the transformative role of Artificial Intelligence (AI) and the Internet of Things (IoT) in healthcare, particularly in diagnostics, treatment and medical technology.

The seminar began with the welcome address delivered by Er A Sivakumar, Chairman, Tuticorin Local Centre, IEL. He welcomed the Chief Guest, Er Emerson Irudayaraj, Director, Sacred Heart Institute of Engineering, Tuticorin; Guest of Honour, Dr Kalidasa Murugavel, Principal, National Engineering College (NEC), and other dignitaries. In his welcome address, Er Sivakumar emphasized the fast pace of technological change, highlighting the significant impact of AI on the healthcare sector.



Chief Guest, Mr Emerson Irudayaraj, inaugurated the event and delivered the inaugural address. In his address, he highlighted the rapid evolution of AI, IoT and networking technologies, particularly in healthcare. He noted the advancement in health gadgets, smart wearable, and robotic surgeries and appreciated the role of IEL in fostering continuous knowledge sharing through such events. Guest of Honour, Dr Kalidasa Murugavel, Principal, NEC in his speech, emphasized the importance to discuss innovations in healthcare technologies and appreciated regarding the appropriateness of the theme. Er I Maria Michael Raj, Former Senior Scientist, Department of Atomic Energy, Heavy Water Board & Convener of the seminar highlighted that the world is changing very fast and this is the right time in adapting the latest technologies including AI, Cloud Computing and IoT. Er Samuel Tensingh, Associate Lecturer, University of Sydney, Australia, delivered the Keynote Address on the topic 'Role of IoT in Healthcare'. He spoke on role

of IoT in healthcare including Remote Patient Monitoring, Robotic Surgery etc. He explained Bioelectronics including use of pacemakers, biosensors, application of implantable bioelectronics, cyber-attacks in IoT devices and cyber security etc. He concluded his lecture with the scope of career advancement in IoT and wireless communication.

During the technical sessions, the speakers focused on advancements in health technologies, data analysis, robotic surgeries, and the challenges posed by ethics and data privacy. Dr D Antony Louis Piriyakumar, Dean (R&D), Cambridge Institute of Technology delivered his presentation on the topic 'Artificial Intelligence in Healthcare' and discussed on the application of Machine Learning, Deep Learning in Healthcare. Dr K Suthendran, Professor, IT, Kalasalingam Academy of Research and Education delivered lecture on 'Demystifying the Future: A Deep Dive into AI for Everyone'. Er R Sheik Muzipur Rahman, Assistant Executive Engineer/Mech Renovation & Modernisation, Tuticorin Thermal Power Station delivered lecture on 'Artificial Intelligence in Health Care'. Dr Celciah J, Department of Information Technology, NEC, Tuticorin delivered presentation on 'Smart Healthcare using AI and IoT'. Technical presentations also include the research avenues in IoT Ecosystem, applications of IoT in healthcare diagnostics and investigation, Knowledge management, application of Industrial Internet of Things, Technology Roadmap of IoT and so on. Dr T Sivageerthi, Honorary Secretary, Tuticorin Local Centre, IEL proposed the vote of thanks.

The seminar successfully brought together thought leaders, engineers, students and professionals to discuss the rapidly changing healthcare landscape. The event provided a valuable platform for sharing ideas, research and recommendations for further integrating AI and IoT in healthcare. It also fostered collaboration among participants, paving the way for future innovations in the field.

Based on the discussions and presentations during the seminar, the following recommendations were emerged.

*Engineering students should be motivated to work with innovative projects on AI, Machine Learning, IoT, and Cloud Computing during under graduate and post graduate programs; Industrial visits should be arranged to share best practices across industries and increase student engagement with real-world applications; Engineering colleges should actively promote the Institutional Membership of IEL to foster stronger interaction with the engineering community and enhance professional development opportunities.*

## Inauguration of IEL Centenary Convention Centre-ESCI

**Engineering Staff College of India (ESCI)**, an autonomous organ of The Institution of Engineers (India), has played a pivotal role in providing advanced training and consultancy services since its establishment in Hyderabad in the year 1981. The Engineering Staff College of India, with a business structure comprising of 12 Engineering Divisions had established itself into a key center for knowledge dissemination and professional development. In addition, the Engineering Staff College of India actively contributes to the engineering community by regularly organizing International Seminars, National Conventions and other prestigious events.

To meet the increasing demand for auditorium with State-of-the art facilities for organising National and International Conferences and Conventions in Hyderabad, ESCI constructed the state-of-the-art, three-story IEL Centenary Convention Centre-ESCI within the premises spanning 71,000 sq. ft. The facility includes a modern auditorium with a seating capacity of 800, indoor



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## Smart Applications of LABVIEW in Electronics Engineering

**Madurai Local Centre**, IEI, organized an All India Seminar on the theme **Smart Applications of LABVIEW in Electronics Engineering** during 01-02 December 2023, under the aegis of Electronics and Telecommunication Engineering Division Board [ETDB], IEI at Sri Vidya College of Engineering & Technology, Virudhunagar. The focus of the seminar was on the application of LABVIEW software in electronics, offering insights into its advantages and practical applications in industries and research. Prof (Dr) P Udhayakumar, Chairman, Madurai Local Centre, IEI, welcomed the gathering, setting the tone for the technical discussions to follow. He extended a warm welcome to the guests, speakers, and participants, introducing the theme and the purpose of the seminar. The event was inaugurated by Dr T Louie Frango, Principal, Sri Vidya College of Engineering & Technology. In his inaugural address, Dr Frango emphasized the importance of integrating advanced tools of LABVIEW in the academic and professional spheres, particularly for electronics engineering students and professionals. His speech highlighted the potential of LABVIEW in simplifying complex processes and enhancing research output. Prof (Dr) P Udhayakumar delivered the Keynote address on the topic 'Overview of LABVIEW'. He said that LABVIEW provides a powerful and integrated environment for the development of various instrumental applications. It is capable to eliminate human errors in data collection and process operations.

The seminar featured a series of technical sessions spread over two days. Dr R Kottaimalai from Electronics and Communication Engineering, Kalasalingam Academy of Research and Education (KARE) delivered a lecture on the topic, 'Basic Building Blocks and Mathematical Operations of LABVIEW' and focused on the basic functionalities like arrays and operations such as Search 1D Array and Sort 1D Array. He explained how LABVIEW simplifies mathematical operations and improves efficiency. Mrs S Maheswari from Electronics and Communication Engineering Department, Sri Vidya College of Engineering & Technology, presented lecture on the topic 'Digital Logic using Boolean Gates, For Loops with Various Examples, Shift Registers, and Conditional While Loops'. The session included practical demonstrations on Logic Gates, For Loop and Shift Register.

Mrs P Stella Mary from Electronics and Communication Engineering

Department, Sowdambika College of Engineering, Arupukotai delivered lecture on 'LABVIEW with IoT'. She highlighted how LABVIEW integrates with Internet of Things (IoT) applications, discussing data collection, edge analytics, and control systems using the CRIO platform. Ms G Merline from Electronics and Communication Engineering Department, Sri Vidya College of Engineering & Technology delivered a lecture on 'LABVIEW in Industries', focusing on its use in testing hardware and facilitating experiments in sectors such as military, aerospace, automotive, and medical devices.



Mrs S Manisha Banu from Electronics and Communication Engineering Department, Sri Vidya College of Engineering & Technology delivered lecture on 'LABVIEW in Telemedicine'. The lecture showcased a model of telemedicine monitoring using LABVIEW and discussed, how it supports real-time patient monitoring, making it highly suitable for remote healthcare applications. Mr V M Kothanda Thiliban from Electronics and Communication Engineering Department, Sri Vidya College of Engineering & Technology delivered presentation on 'LABVIEW

based Projects', where he demonstrated practical applications such as fire detection systems, RFID-based data management and traffic light control using wireless sensors.

Several technical papers and projects related to LABVIEW's real-world applications were discussed, namely 'Detecting Forest Fires with Solar-powered Systems', 'RFID-based Identification and Data Management', 'Data Monitoring using PV Solar Cells', 'Wireless Sensor-based Traffic Light Control Systems' and 'Seven-segment Counters for Industrial Use'.

The valedictory session was presided over by Prof (Dr) P Udhayakumar. Mr V M Kothanda Thiliban summarized the content of the technical sessions and emphasized the importance of the topics discussed. Er A T Baskar, Honorary Secretary, Madurai Local Centre, IEI, delivered the vote of thanks, marking the official conclusion of the seminar with the National Anthem.

The two-day seminar successfully provided participants with in depth knowledge of LABVIEW's applications in electronics engineering, demonstrating its relevance in academia, research, and various industries. The combination of theoretical insights and practical sessions enriched the learning experience of all attendees.

## Inauguration of IEI Centenary Convention Centre-ESCI

*contd. from page 6*

and outdoor exhibition areas, a spacious dining hall, parking space for 200 cars, and backup power through diesel generators.

The first floor of the Centenary Convention Centre features two well-equipped lecture halls designed to support a variety of academic and professional activities, and on the second floor, the ESCI Techno-Hub have been developed, offering modern amenities including two large seminar halls and a co-working space for 180 individuals. This Techno-Hub is tailored to support young engineers, entrepreneurs, and innovators, fostering collaboration and creativity in emerging technologies.

Shri D Sridhar Babu, Hon'ble Minister for IT & Industries, Government of Telangana, had inaugurated the newly built IEI Centenary Convention Centre – ESCI on 26 September 2024, in the presence of Dr G Ranganath,

President IEI & Chairman, BOM-ESCI, Er M Shyamprasad Reddy, Chairman, GC-ESCI and other Council Members. Dr G Rameshwar Rao, Director, ESCI, welcomed the Guests on this occasion.

A three-day prestigious "International Start-up Festival" (IFS-2024) was hosted during 26-28 September 2024 in the newly inaugurated IEI Centenary Convention Centre-ESCI. The event attracted numerous delegates from across the globe and created a vibrant platform for entrepreneurs, innovators, and industry leaders to engage, exchange ideas, and explore emerging trends in the start-up ecosystem. Over the course of the festival, participants had the opportunity to attend insightful sessions, networked with international experts, and showcased innovative solutions, reinforcing the role of Centenary Convention Centre's role as a hub for global collaboration and technological advancement.

## Interfacing Mechanical Engineering with Artificial Intelligence and Machine Learning

**Coimbatore Local Centre, IEI**, organized an All India Seminar on the theme **Interfacing Mechanical Engineering with Artificial Intelligence and Machine Learning** during 10-11 October 2023, under the aegis of Mechanical Engineering Division Board [MCDB], IEI in association with Department of Mechanical Engineering, SNS College of Technology (SNSCT), Coimbatore at Coimbatore. The seminar aimed to explore the integration of AI and ML into mechanical engineering to enhance industrial processes and innovate solutions in manufacturing and other related sectors. Large number of participants, including professionals, researchers, and students, attended the event.

The seminar commenced with a welcome address delivered by Dr J Krishnamoorthi, presently Chairman, Coimbatore Local Centre, IEI. He highlighted the activities of the Institution and underscored the significance of the seminar in the context of modernizing mechanical engineering through AI and ML.

The event was inaugurated by Mr Mohan Seshadri, Consultant & ITIS, Tata Consultancy Services, Bangalore, who discussed the challenges and opportunities in integrating AI in Mechanical Engineering, particularly in Industry 4.0. Dr S Chenthur Pandian, Principal, SNS College of Technology, felicitated the gathering and Dr P Tamilselvam, Vice Principal(Admin) and Dean, Department of Mechanical Engineering, provided an overview of the seminar. Dr C Sowmya Dhanalakshmi, Professor and Head, Mechanical Engineering Department, SNSCT delivered the concluding remarks at the end of the inaugural session.

Mr Mohan Seshadri, in the first technical session, delivered a lecture on the topic 'Essentials of Artificial Intelligence in Mechanical Engineering'. He explained the stages of industrial revolution and also discussed the pivotal role AI plays in modern industries, especially robotics and safety enhancements in the automotive sector. Mr Jai Vishnu Selvaraj, Managing Director, JV Machine Tools and Robotics, Coimbatore, delivered a talk on 'Industrial Robotics Powered by AI' providing insights into the automation of industries and the role of AI-powered robotics. Dr V Ananthanarayanan, Associate Professor, Department of Computer Science and Engineering, Amrita Vishwa Vidyapeetham, Coimbatore, spoke on 'IoT-Based Predictive Analytics and Maintenance in Smart Industries' and explained smart system.

Dr M Elangovan, Professor, Department of Aerospace Engineering, SNS College of Technology, spoke on the topic 'Condition Monitoring of

Machining Processes using Machine Learning' and elaborated Condition Monitoring in machining, where vibration signals are noticed with the help of accelerometer for different stage of wear in cutting tool. He explained application of Machine Learning in different machining processes including drilling, milling and also explained the application of Machine Learning for Condition Monitoring of Compressors, Pumps etc.

Mr G Subin, Application Engineer, Amazon Development Center India Private Limited, Bangalore discussed on 'Generative AI- The Future of Engineering' and explained the usage of Alexa and Google assistance and role of Generative AI in Mechanical Engineering.

Dr P Subashini, Professor, Department of Computer Science and Engineering and Centre for Machine Learning and Intelligence, Avinashilingam Institute for Home Science and Higher Education, Coimbatore, delivered a lecture on 'Prediction, Detection, and Reduction: Magic of AI in Mechanical Applications'. She elaborated application of AI in predictive maintenance, anomaly

detection, and process optimization.

Mr Maheswaran Kathirvel, Project Leader, SACHA Engineering Private Limited, Coimbatore shared his insights on 'AI in Manufacturing' and Dr R Vanithamani, Professor, Department of Biomedical Instrumentation Engineering, School of Engineering, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore delivered talk on 'Revolutionizing Healthcare: Integration of AI into Mechanical Systems for Improved Patient Care'.

The seminar concluded with a valedictory session, where the contributions of speakers and participants were acknowledged. Dr J Krishnamoorthi delivered the closing remarks, summarizing the key insights from the seminar and expressing gratitude to the organizing team and attendees. Certificates were distributed to all participants, marking the successful conclusion of the event.

The seminar successfully explored the potential of AI and ML in transforming mechanical engineering, offering insights into industry advancements, challenges, and future opportunities. The participants gained valuable knowledge on how AI and ML can be integrated into various mechanical processes to enhance efficiency, safety, and innovation.



### Certificate of Practice for Practicing Chartered Engineers

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

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

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

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

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



## Cost-Effective and Emerging Effluent Treatment Technologies

Durgapur Local Centre, IEI, organized an All India Seminar on the theme **Cost-Effective and Emerging Effluent Treatment Technologies** during 07-08 October 2023, under the aegis of Environmental Engineering Division Board [ENDB], IEI, in association with the Chemical Engineering Department, National Institute of Technology Durgapur at Durgapur. The objective of the seminar was to explore innovative, sustainable, and cost effective solutions for industrial effluent treatment. The event attracted engineers, researchers, academicians and industry stakeholders, providing



a platform for exchanging knowledge, networking, and collaboration. The seminar commenced with a welcome address delivered by Er Safikul Islam, Chairman, Durgapur Local Centre, IEI [Session 2021-23], who welcomed the dignitaries, participants and collaborators, expressing his gratitude for their contributions to making the event successful. Convener of the event, Dr Bimal Das, presently Honorary Secretary, Durgapur Local Centre, IEI spoke on the theme and highlighted the importance of effluent treatment technologies in the context of environmental sustainability. Prof (Dr) K C Ghanta, Past Chairman of the host Centre also spoke on the occasion.

Mr S Sarkar, Vice President, Matix Fertilizers and Chemicals Limited, Durgapur, graced the function as the Chief Guest and shared insights into the government's policies and initiatives in effluent treatment technologies and their role in environmental preservation. The Guest of Honour, Dr Sandip Kumar Lahiri, HoD in Charge, Chemical Engineering Department, NIT Durgapur, discussed the importance of sustainable and cost effective solutions for effluent treatment and the role of regulatory frameworks in ensuring environmental compliance. The inaugural session concluded with the vote of thanks delivered by Er Manas Majumder, Honorary Secretary, Durgapur Local Centre, IEI [Session 2021-23].

Dr Amit Ganguly, Chief Scientist, Director's Secretariat cum Technical Cell (DSTC), Skill and Innovation Promotion Group, Energy Research and Technology Group, CSIR-CMERI Durgapur, delivered the Keynote address on Municipal Solid Waste Management. He highlighted the increasing challenges in waste management due to urbanization and emphasized technological innovations like waste-to-energy conversion, recycling and sustainable landfill practices to improve the overall efficiency and reduce environmental impacts. Prof Kaustav Aikat, Department of Biotechnology, NIT Durgapur delivered a Keynote lecture on 'Latest Advances in Effluent Treatment Technologies'. His comprehensive talk covered modern methods for treating industrial effluents with special emphasis on practical applications and research opportunities. Dr Sandip Kumar Lahiri delivered

a Keynote lecture on 'India's Water Crisis and What We can Do'. Dr Lahiri in his lecture focussed on growing disparity in water availability. Mr Pranab Dey, Manager of Training & Development at Matix Fertilizers and Chemicals Limited, Durgapur delivered Keynote speech on 'Cost Effective and Emerging Effluent Treatment Technologies: A Case Study of Fertilizer Industries' and explained the effluent management strategy by the fertiliser industries. Dr Tushar Kanti Bera, Assistant Professor in the Department of Chemical Engineering, NIT Durgapur delivered Keynote lecture on the topic 'Electrical Impedance Tomography [EIT] for Tissue Characterization and Disease Detection: A Safe and Low Cost Imaging Modality in Modern Healthcare' and mentioned that EIT is a non-invasive imaging technique that uses electrical measurements to create images of internal body structures, making it a safe and low cost alternative to traditional imaging modalities.

Further, during the two-day technical sessions, number of papers were presented showcasing research papers and innovative projects on effluent treatment technologies namely 'Kinetic Study of Biomass Char Gasification in CO<sub>2</sub>', 'Electric Vehicle Battery Bank Monitoring and Battery Waste Management using Electrical Impedance Methods', 'Visible Light Driven Conversion of CO<sub>2</sub> into Green Chemicals by Bi<sub>2</sub>MoO<sub>6</sub>/WO<sub>3</sub> Photocatalysts', 'Constructed Wetland for Wastewater Purification: Technology, Challenges and Future Trends', 'Comparative Study between the Nanosilica Extracted from Rice Husk and Rice Straw', 'Wasteland Pipeline Leakage Detection with Electrical Impedance Tomography: A Practical Phantom Study', 'Utilization of Waste Water for Revolutionizing Agriculture by Hydroponics System as a Sustainable Solution for Soilless Farming', 'Reclamation of Spent Lubricating Oil by Eco-friendly Extraction-Flocculation Approach – A Comparative Assessment and Sustainable Solution', 'Microplastic Pollution in Water using Electrical Impedance Spectroscopy' etc. These technical sessions allowed researchers and students to present their innovative ideas and findings on effluent treatment technologies, encouraging collaboration and further exploration.

During the valedictory function, Mr Pranab Samanta, Principal Scientist, CSIR-CMERI, Durgapur delivered a Keynote address on the topic 'Technology Intervention in Sustainable Development Growth' and focussed on an in-depth understanding of sustainable development and its critical role in addressing global challenges. Dr Arup Kumar Mandal, Organizing Secretary delivered the concluding remarks.

The Seminar successfully brought together experts and stakeholders to discuss emerging technologies for effluent treatment, emphasizing the importance of sustainability, innovation, and collaboration. The knowledge shared during the event is expected to contribute to advancements in effluent treatment practices in India and globally.

The event concluded with a renewed commitment to find out cost effective and environment friendly solutions for effluent treatment, emphasizing the role of research, technology development and regulatory support to achieve this goal.

### 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 made 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>.

## Causes for Failure of Bridges & Remedies

Uttar Pradesh State Centre, IEI, in collaboration with Uttar Pradesh State Bridge Corporation Limited, organized a One Day Seminar on the theme **Causes for Failure of Bridges & Remedies** on 04 November 2023 under



the aegis of Civil Engineering Division Board [CVDB] at Lucknow. The seminar attracted professionals from various engineering backgrounds who discussed crucial issues related to bridge failures and their mitigation. Er Ajay Chauhan, IAS, Principal Secretary, Public Works Department, UP graced the occasion as the Chief Guest. In his address, Er Chauhan emphasized the importance of standardizing bridge designs and regular inspection using a

standard checklist. He raised concerns about the rising number of accidents on bridges and the need for preventive measures to enhance bridge safety. Shri Vinay Gupta, Managing Director, Tandon Consultants Private Limited, New Delhi graced the occasion as the Keynote speaker. Dr Gopal Rai, CEO, M/s Dharendra Group of Companies, New Delhi delivered lecture on the topic 'Retrofit and Rehabilitation Technique' and elaborated, how the lifespan of weak bridges can be extended through fiber wrapping techniques. Mr Anjani Kumar Shukla, Managing Director, M/s Eskom Buildcon, Varanasi delivered a presentation on the topic 'Causes for Failure of Bridge and Remedies', stressing the need for proactive approaches to avoid such incidents. Er A K Jain, Engineer-in-Chief, UP PWD & HOD, emphasized the significance of regular maintenance and technical audits of existing bridges to ensure their safety and longevity. Shri Rakesh Singh, Managing Director, Uttar Pradesh State Bridge Corporation Limited delivered presentation on the topic 'Causes for Failure of Bridges and Remedies'. Earlier, Er Masarrat Noor Khan, Chairman, UPSC, IEI, extended a warm welcome to all the delegates and guests and explained the seminar's theme. Er V B Singh, President-Elect, IEI [Session 2024-25] spoke on the theme of the Seminar. During the valedictory session, Mr SM Garg, Joint Managing Director, Setu Nigam addressed the audience. Shri Vinod Kumar Srivastava, Engineer-in-Chief, [Rural Roads], PWD and Shri Ashok Kumar Aggarwal, Engineer-in-Chief [Design and Planning] were also present on the occasion.

## Advanced Alloys Characterization and Its Applications

Kanchepuram Local Centre, IEI, organized an All India Workshop on the theme **Advanced Alloys Characterization and Its Applications** during 20-21 November 2023, under the aegis of Metallurgical and Materials Engineering Division Board [MMDB], IEI, in collaboration

with the Department of Mechanical Engineering, St. Joseph's Institute of Technology, Chennai at Chennai. This two-day event brought together experts, academicians, and students to discuss the latest advancements in alloys and their characterization techniques. Dr S Balasivanandha Prabhu, Professor and Head, Department of Mechanical Engineering, College of Engineering Guindy, Anna University, Chennai graced the function as the Chief Guest. Prof (Dr) S Ramesh, Chairman, Kanchepuram Local Centre, IEI presided over the function. Dr D Elil Raja, Professor and Head, Department of Mechanical Engineering, St Joseph's Institute of Technology outlined the importance of the workshop in advancing the knowledge and applications of emerging alloys. Chief Guest, Dr S Balasivanandha Prabhu, in his address, emphasized the significance of leveraging material knowledge and advanced characterization techniques to engineer novel alloys such as High Performance Steel, Bulk Metallic Glass and High Entropy Alloys. He provided insights into the practical applications of these advanced materials in various industries and encouraged the students to engage in research and innovation in this field. Dr Prabhu set the tone for the technical sessions by discussing the importance of advanced alloys in modern engineering applications and their characterization through various techniques.

The workshop featured a series of technical sessions, when the resource persons focussed on different aspects of alloy characterization and

applications. Dr S Balasivanandha Prabhu delivered lecture on 'Types of Advanced Alloys' and 'Advanced Alloys Availability and Usage'.

Dr R Damodaram and Dr S Santosh, Assistant Professors, Department of Mechanical Engineering, SSN College of Engineering, Chennai were the resource persons of four technical sessions, held on the topic 'Advanced Alloy Characterization'. Dr V Muthukumar, Professor in Mechanical Engineering, Saveetha Engineering College, Chennai also discussed on 'Applications of Advanced Alloys'. The workshop saw the presentation of several invited papers, each exploring different facets of advanced alloys and their applications. Speakers provided detailed technical lectures

that covered theoretical frameworks, practical case studies, and recent research findings in the field of alloy development and characterization.

The workshop concluded with the vote of thanks, delivered by Dr S Karthikeyan, presently Honorary Secretary, Kanchepuram Local Centre, IEI who thanked all the participants, speakers, and organizers for their contributions to the success of the seminar. He reiterated the importance of continued research and collaboration in the field of metallurgical and materials engineering, especially in the context of developing advanced alloys for future technologies. The All India Workshop provided a valuable platform for knowledge sharing and networking among professionals, researchers, and students. The workshop successfully highlighted the advancements in the field of alloys and fostered discussions on how these materials could revolutionize various industries in the future.



## Surface Engineering and Micro Machining

**Agra Local Centre, IEI**, in association with the Department of Mechanical Engineering, BSA College of Engineering & Technology, Mathura (BSACET) organized a One Day Workshop on the theme **Surface Engineering and Micro Machining** on 11 May 2024 under the aegis of Production Engineering



Division Board [PRDB] at Mathura. The workshop focused on the latest advancement in surface engineering and micro machining technologies. The event was started with the welcome address delivered by Er Rajneesh

Kumar Yadav, Honorary Secretary, Agra Local Centre, IEI. He provided an overview of IEI, its roles and its contributions to society and academics. He also discussed the importance of such workshops in bridging the gap between theoretical knowledge and practical applications. The event was inaugurated by Mr Umashankar Agrawal, Chairman, BSACET. In his address, he encouraged students and participants to embrace the technological advancements. He highlighted the significance of surface engineering and micro machining in modern manufacturing processes, emphasizing how these technologies are vital for achieving precision and innovation. Prof (Dr) Basant Kumar Bhuyan from Manav Rachna International Institute of Research and Studies, Faridabad explained the fundamentals of surface engineering and micro machining, emphasizing the creation of intricate, highly accurate micro-products from various engineering materials. Dr Dhairya Pratap Singh, Assistant Professor, Mechanical Engineering Department, BSACET explained the degree of accuracy and tolerances of micro machining. Mr Varun Chhabra, Head, Mechanical Engineering Department, BSACET explained the limitations of conventional machining and the scope of application of Micro machining. Mr Sudhir Kumar Bajpayee, Assistant Professor, Mechanical Engineering Department, BSACET discussed on the accuracy, precision and flexibility of micro machining.

## Transforming the Electrical Technology with AI

**Tamilnadu State Centre, IEI**, in collaboration with the Department of Electrical and Electronics Engineering, Thiagarajar Polytechnic College, Salem, organized a One Day Seminar on the theme **Transforming the Electrical Technology with AI** on 12 October 2023 under the aegis of Electrical Engineering Division Board [ELDB] at Salem. The event saw enthusiastic participation from students, faculty and industry professionals. Er K N Sivaraju, Honorary Secretary of Tamilnadu State Centre [Session 2021-23] delivered the welcome address. Dr N I Maheshwari, Convener of the event spoke on the theme. Chief Guest, Er A Sekar, Council Member, IEI in his speech, shared his vast experience and insights into the role of Artificial Intelligence in revolutionizing electrical technology. He emphasized the importance of AI in driving future developments in electrical engineering and how it is reshaping industries. Er N Senthil Kumar, Honorary Secretary, Salem Local Centre, IEI [Session



2021-23] addressed the audience as the Guest of Honour. His speech focused on the technological advancements in AI and their applications across various sectors, particularly in electrical engineering. He encouraged students to engage deeply with AI technologies and explore its potential. Dr V Karthikeyan, presently Chairman of Tamilnadu State Centre, delivered special address, emphasizing the recent developments in Artificial Intelligence across multiple fields. He highlighted AI's transformational potential, specifically in electrical technology and shared key trends and future possibilities in the domain.

The One-day seminar was a successful event that provided a platform for exchanging knowledge and ideas between students, faculty and professionals. With its focus on AI's integration into electrical technology, the seminar facilitated deep learning and encouraged innovative research, leaving participants with valuable insights into the future of electrical engineering.

## Powder Metallurgy and Smart Materials

**Rourkela Local Centre, IEI**, organized a One Day Workshop on the theme **Powder Metallurgy and Smart Materials** on 02 August 2024, at Rourkela under the aegis of Metallurgical and Materials Engineering Division Board. Er Santosh Kumar Polaki, Chairman, Rourkela Local Centre, IEI, delivered the welcome address and emphasized the significance of powder metallurgy as a cost effective process for producing complex, near-net shape materials with fine microstructures. He mentioned that powder metallurgy is a method for preparing alloys from metal powder with complex shape with high accuracy, fine microstructure and uniform composition of fabricated alloys. Convener of the event, Dr Swadhin Patel, introduced the central theme, highlighting the role of smart materials in modern manufacturing. Chief Guest of the event, Prof Debashis Chandra, Head, Department of Metallurgical and Materials Engineering, NIT Rourkela, delivered the Keynote address, discussing advancements in powder metallurgy, its applications and the

processing techniques for mechanical alloying. Dr Bhabani Shankar Meher, SLM Technology Private Limited and Dr Pankaj Shrivastava, Research Associate, Materials Group, BARC, Mumbai delivered presentations on the occasion. The sessions focused on innovations in powder metallurgy, its industrial applications and the synthesis of nanostructured materials.



## Soft Computing and Machine Learning

**Durgapur Local Centre**, IEI, in association with the Department of Computer Science and Engineering, Academy of Technology, [AOT], Hooghly organized a One Day Symposium on the theme **Soft Computing and Machine Learning** on 05 October 2023 under the aegis of Computer Engineering Division Board [CPDB] at Academy of Technology, Hooghly. The symposium aimed to bring together experts in the field to discuss recent advancements and foster interdisciplinary collaboration in the fields of soft computing and machine learning.

The event began with a warm welcome extended by Er Safikul Islam, Chairman, Durgapur Local Centre, IEI [Session 2021-23], who greeted the Chief Guest, Guests of Honour, speakers, and participants. In his address, Er Islam highlighted the pivotal role of soft computing and machine learning in contemporary engineering, explaining how these technologies are revolutionizing intelligent systems, automation and data-driven decision-making. His speech set the tone for the day's proceedings by emphasizing the importance of these emerging technologies. Prof Prasenjit Das, Head of the Computer Science and Engineering Department at AOT provided a comprehensive overview of the Symposium's theme. Prof Das further explained the objective of the event to facilitate discussions and disseminate knowledge to the intended audience regarding the profound significance of Soft Computing and Machine Learning.

The Chief Guest for the event was Dr Sripati Mukhopadhyay, Former Professor and Head, Department of Computer Science and Engineering, Burdwan University. In his Keynote speech, Dr Mukhopadhyay underscored the relevance of the symposium in today's rapidly evolving technological landscape. He explained the significance of soft computing and machine learning in modern engineering and its potential to shape the future. His presentation on 'Data Mining: Association Rule Mining' delved into fundamental techniques and objectives of data mining, providing valuable insights into the subject.

Prof (Dr) Paramartha Dutta, Professor, Department of Computer and System Science, Visva-Bharati University graced the function as the Guest of Honour. In his role as an invited speaker, he delivered a talk on the fundamentals of Artificial Intelligence and Machine Learning. Dr Dutta provided a solid foundation on the concepts of AI and ML, explaining their transformative impact on modern engineering and technology.

Invited Speaker, Dr Subhasis Dasgupta, Research Staff, San Diego Supercomputer Center, University of California, San Diego, delivered an enlightening presentation on 'Knowledge Management for Scientific Applications Using Polystore' and explained the importance of Knowledge Management in the context of Machine Learning. He elucidated, how different models and frameworks can be employed to effectively capture, organize and disseminate knowledge, particularly within the scientific contexts.

Invited Speaker, Dr SK Hafizul Islam, Assistant Professor, Computer Science and Engineering, IIT Kalyani, presented a comprehensive lecture on 'Introduction to Bitcoin Cryptocurrency and provided a comprehensive overview of electronic cash system, Distributed Ledger Technology and its significance in the context of cryptocurrencies.

Invited Speaker, Dr Koushik Mondal, Principal System Engineer, IIT, ISM, Dhanbad, delivered an insightful talk on 'Being Unbiased with Fake News: Designing Models Using Deep Learning' and discussed, how Deep Learning techniques can be harnessed to address the issues of fake news and helps to promote unbiased reporting.

The symposium concluded with a vote of thanks delivered by Mr Manik Nath Bandyopadhyay, Past Honorary Secretary of Durgapur Local Centre, IEI who expressed gratitude to all speakers, delegates and participants for their valuable contributions, which made the event a grand success. The symposium successfully facilitated knowledge exchange on cutting-edge technologies and participants left with deeper insights into the applications of soft computing and machine learning.



## One Day Seminar under the aegis of Computer Engineering Division Board

### Cyber Security: Safeguarding the Digital Frontier

**Madhya Pradesh State Centre**, IEI, in association with the Corporate Institute of Science and Technology (CIST), Bhopal organized a One Day Seminar on the theme **Cyber Security: Safeguarding the Digital Frontier** on 17 January 2024 under the aegis of Computer Engineering Division Board [CPDB] at CIST Campus, Bhopal. The event attracted a diverse group of attendees, including corporate members, practicing engineers, faculty members, research scholars and students.

The seminar focused on the critical importance of Cyber Security, which entails protecting computers, servers, networks, and electronic systems from unauthorized access, data breaches, and malicious activities. Various measures and technologies were discussed to ensure the confidentiality, integrity, and availability of information and resources in the digital realm. Key lectures were delivered on topics including Common Cyber Threats, Security Challenges in Windows password attacks, etc. Attendees gained insights into different types of cyber security threats, countermeasures, encryption techniques, email spoofing, and virus attack prevention strategies.

It was emphasized that while technology enhances daily life, it also poses risks, especially concerning data privacy and security. Participants were advised to regularly review and manage permissions granted to applications, particularly regarding access to sensitive data. Overall, the seminar provided a valuable platform for knowledge sharing and collaborative efforts in bolstering cyber security measures, fostering awareness, and promoting a safer digital environment for all stakeholders.



The seminar commenced with a welcome address by Er Rajesh Bisaria, Chairman, Madhya Pradesh State Centre, IEI, who set the tone for the event by emphasizing the importance of cyber security in today's digital era. He highlighted how safeguarding the digital infrastructure is a collective responsibility and laid out the agenda for the seminar. Dr Bharat Gupta, Director, CIST, Bhopal and Dr Mukesh Kumar Mishra, Honorary Secretary, Madhya Pradesh State Centre, IEI also spoke on the occasion.

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## Threat Hunting and Digital Forensics: Tools and Techniques

Coimbatore Local Centre, IEI, in collaboration with the Department of Information Technology, PSG College of Technology (PSGCT) Coimbatore, organized a One Day Seminar on the theme **Threat Hunting and Digital Forensics: Tools and Techniques** on 23 December 2023 under the aegis of Computer Engineering Division Board [CPDB] at PSGCT, Coimbatore. The Seminar aimed to highlight the tools and methodologies used in cyber threat hunting and digital forensics, providing a platform for industry professionals, students and researchers to share knowledge and insights.

The seminar began with a welcome address by Prof (Dr) Madhan Mohan Gopalsamy, Honorary Secretary, Coimbatore Local Centre, IEI, who warmly welcomed the participants and set the tone for the day's sessions, emphasizing the importance of cyber security in the modern digital landscape. Dr K. Umamaheswari, Professor and Head, Department of Information Technology, PSGCT, addressed the august audience on the occasion. Dr K Anitha Kumari, Associate Professor, Department of Information Technology, PSGCT briefed about the objective of the event. Mr Ashok Kumar Mohan, Founder and CEO, Kriyavan Cyber Forensic Service Private Limited, Madurai delivered the Keynote address on the topic 'Kickstarter to Digital Forensics' and discussed the tools used in forensic investigations and their role in detecting and analyzing cyber

threats. His address shed light on how modern technologies aid forensic experts in assessing the impact of cyber-attacks and threats.

In the second Keynote address, Mr M Maharaj, Founder and Global Head, BC BUZZ Technologies Private Limited, Coimbatore, spoke on 'AI-Powered Defense: Navigating the Evolving Tools & Methodologies in Threat Hunting'. He focused on how artificial intelligence is transforming threat detection and response in the cybersecurity field. Mr Maharaj emphasized the growing need for professionals skilled in threat hunting and discussed the expectations of the industry regarding fresh graduates in this domain.

During Technical Session, Dr R Senthil Prabha, Assistant Professor, Department of IT, PSGCT discussed on cryptography and security. Dr N Hema Priya, Assistant Professor, Department of IT, PSGCT explained Block Chain, Biometrics and Cyber Security.



The One Day Seminar successfully provided a platform for knowledge exchange between academia, students and industry experts. The focus on cutting-edge tools and methodologies in cyber security and digital forensics along with the valuable contributions from speakers and paper presenters, made the event a rich learning experience for all participants. The seminar fostered awareness about the evolving landscape of cyber threats and highlighted the importance of continued research and innovation in the field.

### Upgradation of Membership

- ❖ Existing Associate Members are requested to upgrade their Membership to the grade of MIE and FIE as per the eligibility criteria
- ❖ Existing Members are requested to upgrade their Membership to the grade of Fellow as per the eligibility criteria

For details, please contact

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

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### Chartered Engineer Certification

The Members who have not availed the Chartered Engineer Certificate [CEng(I)], are requested to apply through online:  
<https://www.ieindia.org/WebUI/iei-Memb.aspx#chartered-engineering>

## Cyber Security: Safeguarding the Digital Frontier

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Mr Vaibhav Srivastav, Assistant Inspector General (Crime) and AIG (Administration), MP State Cyber Crime, Bhopal graced the occasion as the Chief Guest and delivered Invited Lecture on the topic 'Common Cyber Threats'.

Notable Guests of Honour in the seminar, Er G S Palnitkar, Former Engineer-in-Chief, M.P. PWD; Er M J S Tuls, Former Chief Engineer, PHED; Er S S Shrivastava, Former Chief Engineer, PHED and Er Sanjeev Skulikar, Principal Engineer, Railways, provided perspectives on the evolving nature of cyber security and the significant role engineers and professionals play in safeguarding the integrity of digital infrastructure. Throughout the day, speakers from the police department's Cyber Cell and academia conducted expert sessions focusing on cyber security. Discussions centered on implementing measures and technologies to uphold the confidentiality, integrity, and availability of information and resources. Cybersecurity professionals emphasized the importance of safeguarding against

evolving cyber threats. Mr Anuj Samadhiya, In-charge, Technical Cell, State Cyber Police Headquarters, Bhopal delivered Invited Lecture on the topic 'Emerging Technologies and Security Challenges in Cyber Fraud'. Dr Saurabh Tiwari, OSD, Office of the Commissioner, Directorate of Technical Education, Government of M P, delivered Invited Lecture on 'Cyber Security and Awareness'; Er Aman Kumar, Cyber Security Consultant delivered Invited Lecture on 'Windows Security and Social Media Privacy'; and Prof Yogendra Kashyap, HoD (CS) CSIT, Bhopal delivered Invited Lecture on 'Security Measures in the Digital Age'.

The sessions provided valuable insights into addressing challenges in today's digital landscape. Attendees gained knowledge on best practices and strategies to mitigate cyber risks effectively. The event served as a platform for collaboration between law enforcement and academic experts in combating cybercrime.

## Green Manufacturing of Steel

**Durgapur Local Centre**, IEI, in association with the Department of Mechanical Engineering, Dr B C Roy Engineering College, Durgapur organized a One Day Seminar on the theme **Green Manufacturing of Steel** on 21 August 2024 at Durgapur under the aegis of Mechanical Engineering Division Board. Dr Sanjay S Pawar, Principal, Dr B C Roy Engineering College graced the occasion as the Chief Guest and Prof (Dr) Chandan

delivered an insightful presentation on the topic 'An Overview of Green Steel Manufacturing for a Sustainable Tomorrow', highlighting emerging technologies like hydrogen-based production and electric arc furnaces (EAFs). Chief Guest, Dr Sanjay S Pawar in his address emphasized the critical role of manufacturing industry and highlighted the importance of



Chattoraj, Professor and Head, Department of Mechanical Engineering, Dr B C Roy Engineering College, Durgapur was the Guest of Honour. The seminar focused on the urgent need for the steel industry to adopt sustainable practices, particularly in reducing greenhouse gas emissions and moving towards green steel production. Keynote speaker, Prof (Dr) Projjal Basu, Department of Metallurgical Engineering, Kazi Nazrul University, Asansol

inspiring future generations of engineers to focus on sustainability. Guest of Honour, Prof Chattoraj shed light on Green manufacturing within the framework of UN SDGs, emphasizing its' significance in achieving long term environmental objectives. invited speakers, Dr Arup Kumar Mandal, Assistant Professor, Department of Metallurgical and Materials Engineering, NIT Durgapur and Mr Nilay Gupta, Chief General Manager (I/c), Services, Durgapur Steel Plant discussed green iron-making technologies and the challenges of transitioning to sustainable manufacturing in the steel industry. The seminar emphasized the importance of collaboration between engineers, policymakers, and industry stakeholders to achieve sustainable development and reduce the environmental

footprint of steel production. Earlier, Prof (Dr) Chandan Koner, Chairman, Durgapur Local Centre, IEI delivered the welcome address. He briefed that the Seminar aimed to foster dialogue and collaboration among engineers, policymakers and stakeholders to find out innovative solutions to face the critical global challenges. Mr Debasish Guha, Convener, expressed his gratitude with a vote of thanks.

## Fog Computing using Industry 5.0



**Tiruchirappalli Local Centre**, IEI in association with the Department of Computer Science and Engineering, University College of Engineering, BIT Campus, Tiruchirappalli organised an One Day Workshop on **Fog Computing Using Industry 5.0** on 23 August 2024 under the aegis of Computer Engineering Division Board at University College of Engineering, BIT Campus, Tiruchirappalli. The event focused on the integration of Fog Computing with Industry 5.0 technologies. The workshop began with the

inaugural address delivered by Prof (Dr) S Ravimaran, Chairman, Tiruchirappalli Local Centre, IEI. Keynote Speaker of the Workshop, Dr U Srinivasulu Reddy, Associate Professor, Department of Computer Application, NIT Tiruchirappalli, provided insights into the Architecture of Fog Computing system. He explained the transformative potential of Industry 5.0 technologies how Fog Computing can play a pivotal role in enabling Smart manufacturing and efficient data processing. Mr Antony Rajesh, Solution Architect, HP India Software Operations Private Limited Bengaluru, discussed real-world applications in smart cities and healthcare. The interactive sessions explored challenges and opportunities in Fog Computing, along with future trends like AI-driven data processing and blockchain security. Participants appreciated the hands-on experience and engaging discussions

on cutting-edge developments. Dr S Senthilkumar, Assistant professor, Department of Computer Science and Engineering, University College of Engineering, BIT Campus, Tiruchirappalli delivered the concluding remarks. During the technical sessions, speakers discussed cutting edge developments, integration of Fog Computing with Edge Computing, advancements in AI driven data Processing, role of Blockchain in enhancing the security of Fog Networks.



IEI Celebrates

# 57<sup>th</sup> Engineers' Day 2024

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

The 57<sup>th</sup> Engineers' Day was celebrated by the Institution all over the country on September 15, 2024 to commemorate the 163<sup>rd</sup> 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

### Arunachal Pradesh



Arunachal Pradesh State Centre, IEI, observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at North Eastern Regional Institute of Science and Technology (NERIST). Dr Pukhrambam

Devachandra Singh, Honorary Secretary, Arunachal Pradesh State Centre, IEI welcomed the guests and introduced the theme of the day. Chief Guest of the session, Prof Narendranath S, Director, NERIST, deliberated on the need for sustainable technologies. Prof Sarsing Gao, Dean (Academic), NERIST graced the occasion as the Guest of Honour. Speaker of the day was Dr Gaurav Purohit, Scientist at CSIR-CEERI, Pilani. The program saw active participation from faculties, students and professionals and concluded with a message from Dr P Devachandra Singh, urging collective efforts for a greener future.

### Bihar

Bihar State Centre, IEI, observed Engineers' Day on 15 September 2024 at Patna. Sri Jai Prakash Narayan, Chairman, Bihar State Centre, IEI welcomed the guests and dignitaries. Prof Bimal Chandra Mal, Former VC, CSVT University, Bhilai and JIS University, Kolkata and also former Head, Department of Agricultural and Food Engineering, IIT Kharagpur and Dr Rishav Singh, Assistant Professor, Dept of Computer Science and Engineering, IIT Patna, graced the occasion as Chief Guest and Keynote Speaker respectively. Er Neel Mani Rangesh, Honorary Secretary, Bihar State Centre, IEI proposed the vote of thanks at the end of the session.



### Jammu & Kashmir



Jammu & Kashmir State Centre, IEI, observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at Srinagar. The event, held under the patronage of Er Iftikhar Ahmad Hakim, Chairman, Jammu & Kashmir State Centre, IEI and coordinated by Dr Jahangeer Ali, Honorary Secretary, Jammu & Kashmir State Centre, IEI. The Guest of Honour, Dr Sajad Hussain Din, Principal, SSM College of Engineering, Jammu & Kashmir emphasized the crucial role of engineers in sustainable development and the importance of integrating AI and modern

technologies to address societal challenges. Keynote Speaker Prof M Arif Wani, Department of Computer Sciences, University of Kashmir provided an insightful presentation on the event's theme, exploring AI-driven solutions for sustainability.

### Odisha



Odisha State Centre, IEI, celebrated 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at Bhubaneswar. Prof (Dr) Sudhansu Sekhar Dash, Chairman, Odisha State Centre, IEI, delivered the

welcome address and Er Sangram Keshari Pattnayak, Honorary Secretary, Odisha State Centre, IEI narrated the life sketch of Sir M Visvesvaraya. The Hon'ble Chief Guest of the session was Smt Surama Padhy, Speaker of the Odisha Legislative Assembly. Chief Speaker of the event was Prof Dhanush Dhari Misra, Chairman, Research Council, CSIR-CIMFR, Dhanbad. Smt Padhy in her address, appreciated the role of engineers in societal development and urging them to lead with innovation, sustainability and ethical practices. Prof Misra in his address, highlighted the critical role of sustainable engineering practices enhanced by AI driven technologies in addressing modern challenges. The event concluded with a vote of thanks by Er Sangram Keshari Pattnayak, reinforcing the commitment of the engineering community to a sustainable future.

### Sikkim

Sikkim State Centre, IEI, observed 57<sup>th</sup> Engineers' Day 2024 on 13 September 2024, at Bardang. Prof (Dr) Narvendra Singh Chauhan, Chairman, Sikkim State Centre, IEI delivered the welcome address, highlighting the importance of engineers in coming together to share innovative ideas for societal improvement. On the occasion, Shri Lhendup Lepcha, the first Civil Engineer of Sikkim, was present on the dais. Er Sonam Palden Barfungpa, Principal of ATTC Polytechnic presented a lecture on the topic 'Improving the Quality of Technical Education'. Er Lochan Kumar Adhikari, Vice Principal of ATTC Polytechnic also delivered a presentation on the occasion.



### Tripura



Tripura State Centre, IEI, celebrated 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at Agartala. The celebration began with garlanding and floral tribute

to Sir M Visvesvaraya's statue by Prof (Dr) Manik Saha, Chief Minister of Tripura and other dignitaries. Dr Subhadeep Bhattacharjee, Chairman, Tripura State Centre, IEI presided over and delivered the welcome address. Chief Guest of the session, Er Animesh Debbarma, Minister of Science, Technology & Environment, Government of Tripura in his address mentioned that engineers are often problem solvers and innovators, who take on challenges to improve the world. Special Speakers of the session were Er Shibendu Debbarma, Additional Director, Software Technology Parks of India, Government of India and Dr Suman Deb, Assistant Professor, Department of Computer Science and Engineering, NIT Agartala. Dr Mrinal Kanti Deb Barma, Honorary Secretary, Tripura State Centre proposed the vote of thanks.

## Uttar Pradesh



Uttar Pradesh State Centre, IEI, observed the 57<sup>th</sup> Engineers' Day on 15 September 2024 at Engineers Bhawan, Lucknow. The event commenced with a welcome address delivered

by Er Satya Prakash, Chairman, Uttar Pradesh State Centre, IEI. Chief Guest, Shri Daya Shankar Singh, Transport Minister, Government of Uttar Pradesh, inaugurated the program and recognized the contribution of engineers for national progress and infrastructural development. He emphasized the importance of innovation and technical expertise in building a modern, sustainable transportation system. Guest of Honour, Shri Amit Kumar Ghosh, IAS, Additional Secretary to the Government of India, emphasized engineers' pivotal role in national development. Keynote Speaker of the session, Shri Uday Borvankar, Director General, RDSO in his lecture appreciated the relentless effort made by the engineers in improving safety, efficiency and sustainability. Er V B Singh, President (Elect), IEI, [session 2024-25] discussed about Sir M Visvesvaraya's legacy, highlighting his contributions to the major projects of the country. The event concluded with vote of thanks by Er Vijaya Pratap Singh, Honorary Secretary, Uttar Pradesh State Centre, IEI.

## LOCAL CENTRES

### Agra



Agra Local Centre, IEI, celebrated the 57<sup>th</sup> Engineers' Day on 15 September 2024 at Agra. Er Shyam Singh, General Manager, BSNL Agra graced the function as the Chief Guest. In his address, Er

Singh mentioned that AI is the key in optimizing resources with the objective to ensure maximum efficiency and minimum wastage. Er Anil Kumar Goyal, Chairman, Agra Local Centre, IEI welcomed the guests and dignitaries. Er Rajneesh Kumar Yadav, Honorary Secretary, Agra Local Centre, IEI, highlighted Sir M Visvesvaraya's contributions in dam construction and hydro power generation and emphasized the crucial role of engineering in addressing global challenges and advancing sustainability through AI. The celebration concluded with the vote of thanks delivered by Er Rajneesh Kumar Yadav, Honorary Secretary, Agra Local Centre.



### Allahabad

Allahabad Local Centre, IEI, observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at Allahabad. Er Rajendra Prasad Upadhyay,

Chairman, Allahabad Local Centre, IEI welcomed all. A special message regarding Engineers Day from Dr G Ranganath, President, IEI was played on the occasion followed by speeches of the distinguished guests. Er Jai Kirti Singh, Honorary Secretary of Allahabad Local Centre proposed the vote of thanks at the end of the event.

### Alwar



Alwar Local Centre, IEI, observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at Alwar. Er Ashok Kumar Gupta, Chairman, Alwar Local Centre, IEI, presided over the function and delivered welcome

address. Chief Guest of the event was Shri Sudhir Pandey, Superintending Engineer, Rajasthan State Electricity Board and the Keynote Speaker was Er Subhash Chandra Joshi, Past Chairman, Alwar Local Centre, IEI. Er R C Sharma, Honorary Secretary, Alwar Local Centre, IEI also spoke on the theme.

### Bathinda



Bathinda Local Centre, IEI, observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at Bhatinda. Er Kartar Singh Brar, Chairman, Bathinda Local Centre, IEI, welcomed the participants

and paid tribute to Sir M Visvesvaraya. Chief Guest, Mr Tarun Kumar Batra, Chief General Manager, National Fertilizers Limited (NFL), Bathinda and Special Guest, Dr R K Bansal, Director, Punjab Institute of Technology, Nandgarh, addressed the gathering, emphasizing the importance of engineering. Dr Jagtar Singh, Former Chairman, Bathinda Local Centre was also present on the occasion. The event concluded with a vote of thanks by Dr Harsimran Singh, Honorary Secretary, Bathinda Local Centre, IEI.

### Gorakhpur



Gorakhpur Local Centre, IEI, in association with Institute of Technology & Management, GIDA, Gorakhpur, observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at

Gorakhpur. The Chief Guest of the session was Er J B Rai, President, Malviya Alumni Association, Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur and Guests of Honour of the session were Er Manoj Kumar Sharma, Project Manager, UP Projects Corporation Limited and Er M W Beg, Former Chairman, Gorakhpur Local Centre, IEI. Er Pawan Kumar Mishra, Chairman, Gorakhpur Local Centre, IEI welcomed the participants and discussed on Sir M Visvesvaraya's legacy. He further explained the event's theme, stressing the convergence of AI and engineering for sustainability. The event concluded with a vote of thanks by Er Ramesh Chandra Pandey, Honorary Secretary, Gorakhpur Local Centre, IEI.

### Gwalior



Gwalior Local Centre, IEI, observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024, at Gwalior. The event began with a welcome address delivered by

Er Prabhat Kumar Bhargava, Past Chairman, Gwalior Local Centre, IEI. Chief Guest, Col A S Bais [Retired], Indian Army, highlighted the role of



engineers in driving innovation and sustainability through AI technologies. Keynote speaker Er C S Malvi, Professor and HOD, Mechanical Engineering Department, MITS Gwalior, discussed AI's transformative impact on resource management and sustainable engineering practices. Er Vinay Kumar Shukla, Past Honorary Secretary of Gwalior Local Centre elaborated on AI's role in optimizing renewable energy, agriculture and urban infrastructure.

#### Jodhpur



Jodhpur Local Centre, IEI, in collaboration with the Satish Kunti Goyal Foundation observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024 at Jodhpur. The event was graced by Maharaja Gaj Singh, Maharaja of Jodhpur

as Chief Guest. Prof Avinash Kumar Agarwal, Director, IIT Jodhpur was present on the dais. Shri R S Soni, Ex-OSD Director, BARC was the Keynote Speaker. Maharaja Gaj Singh, in his address, highlighted the crucial role of engineers in nation-building through innovative designs. Earlier, Er M M Aggarwal, Chairman, Jodhpur Local Centre, IEI, delivered the welcome address, while Er Resham Ram Hooda, Honorary Secretary, Jodhpur Local Centre, IEI proposed the vote of thanks at the end of the function.

#### Kadapa



Kadapa Local Centre, IEI, celebrated 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024, at Kadapa. Prof (Dr) V Adinarayana Reddy, Chairman, Kadapa Local Centre, IEI presided over the function and paid tribute to

Sir M Visvesvaraya's exemplary contribution. Chief Guests of the event were Shri R Sreenivasula Reddy, R K Infra, Kadapa and Smt R Madhavi Reddy, MLA, Kadapa. Dr K Raghunath, Director, RLC for GATE, Bangalore and Dr S Varadarajan, Professor, Electronics and Communication Engineering, SV University College of Engineering, Tirupati were the Guests of Honour. Dr Varadarajan was also the theme speaker on the occasion. The function concluded with a vote of thanks by Er A Venkateswarlu, Honorary Secretary, Kadapa Local Centre.

#### Kanpur



Kanpur Local Centre, IEI, in collaboration with Harcourt Butler Technical University (HBTU), Institution of Electronics & Telecommunication

Engineers (IETE), Kanpur Centre, IEEE, U P Section, and the Association of Professional Graduate Civil Engineers, Kanpur observed the 57<sup>th</sup> Engineers' Day on 15 September 2024, at Kanpur. Er Rakesh Vashney, Director Technical, Kanpur Electricity Supply Company Limited (KESCO), was the Chief Guest and Dr Niraj Sinha, Department of Mechanical Engineering, Professor, IIT Kanpur was the Guest of Honour. Dr Mukesh Kumar Singh, Chairman, Kanpur Local Centre, IEI, welcomed the dignitaries and participants. The program concluded with a vote of thanks by Er Ram Autar Dixit, Honorary Secretary, Kanpur Local Centre, IEI.

#### Ludhiana

Ludhiana Local Centre, IEI, observed 57<sup>th</sup> Engineers' Day 2024 on 15 September 2024. The event witnessed the gracious presence of the Special Guest, Er Sanjay Kanwar, Superintending Engineer, Smart City Project,



Ludhiana and Guest of Honour, Dr Rakesh Sharda, Project Coordinator, ICAR-Central Institute of Post Harvest Engineering and Technology, Ludhiana. Dr Arvind Dhingra, Chairman, Ludhiana Local Centre,

IEI, presided over. The welcome address was delivered by Er Surinder Singh, Honorary Secretary, Ludhiana Local Centre, IEI. Dr Arvind Dhingra, Chairman, Ludhiana Local Centre, IEI in his address, highlighted the role of AI-driven technologies in fostering sustainability. Guest of Honor, Dr Rakesh Sharda, discussed the rapid evolution of AI technologies, emphasizing their potential risks and benefits. Two Expert Lectures were delivered on the occasion. Dr Amit Kamra, GNDEC Ludhiana in his lecture highlighted the importance of AI driven technologies for sustainability. Dr Rajwinder Singh Bansal, HOD, Civil Engineering Department, RIET Phagwara discussed the intricacies of deployment of AI driven technologies for sustainability.

#### Rourkela

Rourkela Local Centre, IEI, observed the 57<sup>th</sup> Engineers' Day on 15 September 2024, in collaboration with SAIL, Rourkela Steel Plant at Rourkela. Er Santosh Kumar Polaki, Chairman, Rourkela Local Centre, IEI, delivered the welcome address. The Chief Guest, Er Atanu Bhowmick, Director In-Charge, SAIL, Rourkela Steel Plant, spoke about the significance of Engineer's day. Guests of Honours on the occasion were Er Biswaranjan Palai, CGM In-Charge, Iron and Acting Executive Director (Works), Rourkela Steel Plant and Prof Pradip Sarkar, Director In-Charge, NIT Rourkela. Dr Lalit Das, IPS, former Special Director General of Police, Odisha was the Guest of Honour cum Keynote Speaker. The vote of thanks was delivered by Dr Ajit Behera, Honorary Secretary, Rourkela Local Centre, IEI.

#### Upper Assam

Upper Assam Local Centre, IEI, observed the 57<sup>th</sup> Engineers' Day on 15 September 2024, in collaboration with Oil India Limited, Duliajan, Assam. Er Bhairab Bhuyan, Chairman, Upper Assam Local Centre, IEI delivered



the welcome address. Shri Sanjay Verma, Resident Chief Executive, Oil India Limited was the Chief Guest and Smt Priyanka Kataria, Joint General Manager, RITES Limited was the Guest of Honour. Dr Bhabesh Nath, Professor, Department of

Computer Science and Engineering, Tezpur University delivered Keynote speech on the topic 'Driving Sustainability with Engineering Solutions embracing the latest AI Driven Technologies'. Er Devanga Gaurav Borah, Deputy Manager (Production), Assam Petrochemicals Limited, Namrup delivered presentation on the topic 'IoT for Sustainability'. The program concluded with a vote of thanks delivered by Er Kishore Kumar Das, Honorary Secretary, Upper Assam Local Centre, IEI.

## Discount at the Samsung e-store for IEI Corporate Members

Exclusive access to the Samsung e-store for IEI Corporate Members. This shall enable the Corporate Members to procure the Samsung Products in a discounted rate. The Samsung e-store can be accessed at [www.samsung.com/in/multistore/iei](http://www.samsung.com/in/multistore/iei) using your Membership No. and email id/Mobile.

# 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, 2024. A brief accounts of celebration, as received from various Centres, are reported hereunder.

## STATE CENTRES

### Arunachal Pradesh



Arunachal Pradesh State Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at North Eastern Regional Institute of Science & Technology (NERIST), Nirjuli, Arunachal Pradesh. Prof Narendranath

S, Director, NERIST, graced the event as the Chief Guest and Dr Chandan Tamuly, Senior Principal Scientist, CSIR-NEIST, Itanagar, as the Guest of Honour and technical expert. Dr Sarsing Gao, Dean of Academics, NERIST was the Special Invitee. In his welcome address, Dr Pukhrambam Devachandra Singh, Honorary Secretary, Arunachal Pradesh State Centre, IEI, highlighted the significance of Royal Charter Day. Dr Pranab Kishore Dutta, Joint Secretary, Arunachal Pradesh State Centre, IEI, proposed the vote of thanks.

### Tripura



Tripura State Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Agartala. The special speakers of the programme were Prof (Dr) Swapan Bhaumik, Former Vice President, IEI

and Dr Ushashee Nandy, Tripura Government Law College, Agartala. The programme was presided over by Dr Subhadeep Bhattacharjee, Chairman, Tripura State Centre, IEI. Earlier, the welcome address was delivered by Prof Mrinal Kanti Deb Barma, Honorary Secretary, Tripura State Centre, IEI.

### Uttar Pradesh

Uttar Pradesh State Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at The Institution of Engineers (India), UP State Centre, Lucknow. The event



inaugurated with the lighting of the lamp by the Chief Guest, Prof (Dr) Bharat Raj Singh, Director General, School of Management Science, Technical Campus, Lucknow. Er V B Singh, President [Elect], IEI

[Session 2024-25] presided over the function. Er Masarat Noor Khan, Immediate Past Chairman, Uttar Pradesh State Centre elaborated on the historical background of IEI. The program concluded with a vote of thanks delivered by Honorary Secretary, Er Vijaya Pratap Singh, Uttar Pradesh State Centre, IEI.

## LOCAL CENTRES

### Agra



Agra Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Agra. The event was presided over by Er Anil Kumar Goyal, Chairman, Agra Local Centre, IEI. Er

Pritam Singh, AGM BSNL, New Delhi was the Chief Guest. Er Rajneesh Kumar Yadav, Honorary Secretary, Agra Local Centre, IEI, spoke on the history of IEI. Chief Guest, Er Pritam Singh addressed the challenges faced by the next generation of engineers, urging them to adapt to advanced technologies for sustainability. Er Bhagwan Das Rawat, AGM, BSNL, Agra briefed about the legal issues in technological advancement and their implementation. The program concluded with a vote of thanks by Er Rajneesh Kumar Yadav, Honorary Secretary, Agra Local Centre, IEI.

### Allahabad



Allahabad Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Allahabad. The Corporate Members of the host centre shared their views on importance of Royal Charter day. Earlier, Er Rajendra Prasad Upadhyay,

Chairman, Allahabad Local Centre welcomed all. At the end, Er Jai Kirti Singh, Honorary Secretary, Allahabad Local Centre, IEI delivered vote of thanks.

### Coimbatore

Coimbatore Local Centre, IEI, observed Royal Charter Day 2024 on 10 September, 2024 at Coimbatore, in association



with the Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore. Prof (Dr) Madhan Mohan

Gopalasamy, Honorary Secretary, Coimbatore Local Centre, IEI, delivered the welcome address and highlighted the significance of Royal Charter Day. Dr S Balasubramanian, Professor & Head, Department of Chemical Engineering, KPR Institute of Engineering and Technology addressed the audience. Mr Arjun Moorthy, Founder & Director, Robbell Materials Research Centre (OPC) Private Limited, Salem discussed the latest trends in photovoltaic cell technology, explaining their construction, processes and future prospects in the field. Ms L Dharani, Assistant Professor, Department of Chemical Engineering, KPR Institute of Engineering and Technology delivered the concluding remarks.



## Dhanbad



Dhanbad Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Dhanbad. Er Surya Prakash, CEO, Texmin, IIT-ISM, Dhanbad delivered lecture on the topic 'Innovation Start Up Eco Systems in Mining'. Prof (Dr) Biswajit Paul, Honorary Secretary, Dhanbad Local Centre, IEI, deliberated on the significance of Royal Charter Day. Er Sanjay Kumar Singh, General Manager, Bharat Coking Coal Limited (BCCCL) delivered the concluding remarks. The program saw active participation from students, faculty and professionals, contributing to a dynamic discussion on innovation in mining.

## Ghaziabad



Ghaziabad Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Ghaziabad. Prof (Dr) Arindam Basu, Director-General, NITRA graced the occasion as the Chief Guest. Er Jagdish Kumar, Former GM (CNS), AAI was the Guest of Honour. The event commenced with the welcome address by Dr Satish Chandra Gupta, Chairman, Ghaziabad Local Centre, IEI. Guest of Honour, Er Jagdish Kumar spoke on safety in the airport industry, focusing on airports, airplanes and signalling systems. The Chief Guest, Dr Basu, reflected on the rich legacy of The Institution of Engineers (India) and its contribution to engineering education and nation-building. The event concluded with a vote of thanks by Er Punit Goel, Honorary Secretary, Ghaziabad Local Centre, IEI.

## Gorakhpur



Gorakhpur Local Centre, IEI, in association with Institute of Technology & Management, GIDA, Gorakhpur, observed Royal Charter Day 2024 on 09 September 2024 at Gorakhpur. Er S K Agrawal, Former President, Chamber of Industries, Gorakhpur graced the occasion as the Chief Guest and Er J B Rai, President, Malviya Alumni Association, as the Guest of Honour. Er M W Beg, Former Chairman, Gorakhpur Local Centre, IEI, served as the Keynote Speaker and the resource person. Dr Pawan Kumar Mishra, Chairman, Gorakhpur Local Centre, IEI, welcomed the distinguished guests and participants from academia and industry. In his speech, Dr Mishra highlighted the significance of Royal Charter Day. The event concluded with the vote of thanks given by Er Ramesh Chandra Pandey, Honorary Secretary, Gorakhpur Local Centre, IEI.

## Gwalior



Gwalior Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Gwalior. The event commenced with a welcome address by Chairman Er Radha Kishan Khetan, Chairman, Gwalior Local Centre, IEI, who emphasized the significance and benefits of IEI membership. Prof (Dr) P K Singhal, Past Chairman, Gwalior Local Centre, IEI elaborated on the history of Royal Charter.

## Ludhiana



Ludhiana Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Ludhiana. The event featured Shri Deepak Bhalla, Senior Officer, District Bureau of Employment & Enterprises (DBEE), as the expert speaker. Er Surinder Singh, Honorary Secretary, Ludhiana Local Centre, IEI, welcomed the guests and participants. Dr Arvind Dhingra, Chairman, Ludhiana Local Centre, IEI, elaborated on the significance of the Royal Charter. The event concluded with a formal vote of thanks from Er Surinder Singh, marking a successful celebration of the day aimed at encouraging innovation and professional growth.

## Madurai



Madurai Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Madurai. Prof (Dr) P Udhayakumar, Chairman, Madurai Local Centre, IEI, delivered the welcome address. Er A T Baskar, Honorary Secretary, Madurai Local Centre, IEI introduced the Chief Guest of the session, Er R Narayanasamy, Past Honorary Secretary, Madurai Local Centre, IEI, delivered a lecture highlighting the historical significance of the Royal Charter. The event concluded with a vote of thanks by Er A T Baskar.

## Muzaffarpur

Muzaffarpur Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Muzaffarpur. A Colloquium was organised on the topic 'Value of Engineering in Day-to-Day Life'. Dr Aseem Kumar Thakur, Chairman, Muzaffarpur Local Centre, IEI, delivered the welcome address, explaining the significance of the Royal Charter. The Chief Speaker, Er Ajoy Kumar Sinha, Council Member, IEI, shared his insights on the continuous betterment of IEI. Er Lok Ranjan, Honorary Secretary, Muzaffarpur Local Centre, IEI delivered the vote of thanks.

## Neyveli



Neyveli Local Centre, IEI, observed Royal Charter Day 2024 on 11 September 2024 at Neyveli. On the occasion, a Keynote address delivered by Er A Eraniyan, Chief General Manager, NLCIL and Honorary Secretary, Neyveli Local Centre, IEI. Er T Sindhubabu, Chief General Manger, NLCIL, in his speech, elaborated on the role of Chartered Engineers in modern engineering practices. The event provided valuable insights into the Royal Charter's enduring relevance and the contributions of IEI to the engineering profession.

## North Bengal



North Bengal Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Jalpaiguri. Er Shrayasi Datta, Honorary Secretary, North Bengal Local Centre, IEI, provided

an introduction to the theme, emphasizing the importance of understanding soil erosion and implementing conservation practices. Er Prithwish Roy, Member, North Bengal Local Centre, IEI, explained that soil erosion involves the removal of soil particles through natural or human activities, while soil conservation focuses on protecting the soil to prevent this erosion. Past Chairmen of the host Centre also shared their views on Royal Charter Day on the occasion. The program concluded with a vote of thanks by Er Shrayasi Datta.

#### Rourkela

Rourkela Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 in hybrid mode. The program began with a welcome address delivered by Er Santosh Kumar Polaki, Chairman, Rourkela Local Centre, IEI. Dr Nutan Kumar Das, Vice President, IEI, graced the occasion with his online presence. Dr Ajit Behera, Honorary Secretary, Rourkela Local Centre, IEI introduced the speaker, Prof Singam Jayanthu, Department of Mining Engineering, NIT Rourkela, who emphasized about the Royal Charter's importance in fostering the development of engineering knowledge among its members. The event concluded with a vote of thanks by Dr Ajit Behera, Honorary Secretary, Rourkela Local Centre, IEI.

#### South Gujarat



South Gujarat Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024. The event began with the welcome address delivered by Dr Suryawanshi

Shiwanand Rohidas, Chairman, South Gujarat Local Centre, IEI, who briefed attendees on the Centre's activities and encouraged participation in technical initiatives. The event concluded with a vote of thanks by Er Sandeep Dangi, Honorary Secretary, South Gujarat Local Centre, IEI.

#### Tiruchirappalli

Tiruchirappalli Local Centre, IEI, observed Royal Charter Day 2024 in collaboration with Indian Institute of Welding, Tiruchirappalli Branch; Computer Society of India, Tiruchirappalli Chapter; Safety & Quality Forum IEI; Indian Welding Society, Southern Zone; Indian Institute of

Metals, Tiruchirappalli Chapter; Indian Institution of Industrial Engineering Tiruchirappalli; Indian Institution of Plant Engineers Trichy Chapter; Kumari Arivial Peravai Kanyakumari and Indian Society for Non-destructive Testing, Trichy Chapter, organized an online lecture on 10 September 2024.

#### Tuticorin

Tuticorin Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Tuticorin. The event was presided over by Er I Maria Michael Raj, Past Chairman, Tuticorin Local Centre, IEI, who welcomed the participants and highlighted the significance of the Royal



Charter. Chief Guest of the session, Er Suresh Thomas Mathew, Director, Universal Services, provided a detailed overview of IEI's establishment, history and its vital function as the oldest and largest professional body in India. The event concluded with a vote of thanks by Dr T Sivageerthi, Honorary Secretary, Tuticorin Local Centre, IEI.

#### Upper Assam

Upper Assam Local Centre, IEI, observed Royal Charter Day 2024 on 09 September 2024 at Duliajan, Assam. The event commenced with the welcome address by Er Kishore Kumar Das, Deputy General Manager



(Civil), Frontier Basin, Oil India Limited & Honorary Secretary, Upper Assam Local Centre, IEI. Shri Diganta Kumar Gogoi, General Manager, Field Communication, Oil India

Limited delivered a Keynote speech as the Chief Guest, marking the importance of this day. Shri Chinmay Sarma, Chief General Manager (Instrumentation), Oil India Limited, addressed the gathering as the Special Guest, highlighting the Royal Charter's significance in establishing IEI's prestigious recognition as a global professional engineering body. The event concluded with a vote of thanks by Er Kishore Kumar Das.



## The Institution of Engineers (India)

# IEI Industry Excellence Award 2024

### Request for Participation/Sponsorship

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

Applications 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 2024. The last date of receipt of application for the Award 2024 is **19 November 2024**. 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)

8 Gokhale Road, Kolkata-700020

31 October 2024

## Notice of Special General Meeting of the Corporate Members under Bye-Law 32 (b)(i)

Notice is hereby given that a Special General Meeting of the Corporate Members of The Institution of Engineers (India) will be held at **Sir R N Mookerjee Auditorium of The Institution of Engineers (India) West Bengal State Centre located at 8, Gokhale Road, Kolkata - 700020** on **25 November 2024** at **1800 hrs** for the following purpose:

To consider the recommendations of the Council vide its 727<sup>th</sup> meeting held on 21-22 Sep 2024 at Hyderabad:

EXISTING REGULATION	RECOMMENDED AMENDMENT
14. In the event of a State Centre or Local Centre failing to hold its Annual General Meeting in accordance with Regulation 6, the President shall cause the election of a regular Committee to be held within 90 days from the last day of the month of October of the year in which the election was due. For the conduct of the election, the President shall nominate a Board of Scrutineers as per provisions of Regulations. The Committee so elected shall take office at the Annual General Meeting of the State Centre or Local Centre to be held not later than the last day of the month of February of the succeeding calendar year or on a day as may be determined by the President. The President shall also specify the day before which the Annual General Meeting of the State Centre or the Local Centre shall be held and the term of office of the Committee so appointed shall be for the remainder period of that session(s), notwithstanding violation of provisions of the Bye-Law and Regulation.	14. In the event of a State Centre or Local Centre failing to hold its Annual General Meeting in accordance with Regulation 6, the President shall cause the election of a regular Committee to be held within 90 days from the last day of the month of October of the year in which the election was due. For the conduct of the election, the President shall nominate a Board of Scrutineers <b>(hereinafter called BOS) comprising five Corporate Members attached to the respective Centre. The members of the BOS or their respective relatives shall not be permitted to contest the elections for that tenure. The BOS shall act according to Regulation 25. For any reason, if the above referred election is not completed within the stipulated time, the President shall constitute the Committee of the State Centre or the Local Centre by appointing corporate members from the State Centre or the Local Centre, as the case may be, in accordance with Regulation 3. The constituted committee by the President shall have the same powers and responsibilities, as if it had been duly elected as per provisions of regulations. The Committee so elected/ constituted shall take assume office at the Annual General Meeting of the State Centre or Local Centre to be held <del>not later than the last day of the month of February of the succeeding calendar year or on a day as may be determined by the President. The President shall also specify the day before which the Annual General Meeting of the State Centre or the Local Centre shall be held and</del> Provided however, that if the constitution of the committee of the State Centre or Local Centre by appointing corporate members from the State Centre or the Local Centre by the President be taken place after the Annual General Meeting of the State Centre or Local Centre, the Committee so constituted shall assume office at the next Annual General meeting of the State Centre or Local Centre or earlier as may be decided by the President. The term of office of the Committee so elected/ constituted <del>appointed</del> shall be for the remainder period of that session(s), notwithstanding violation of the provisions of the Bye-Law and Regulation.</b>
<b>PROCEDURES FOR ELECTIONS</b> 23. (a) Election from Divisions under Regulation 3(a)(v) in the State Centre Committee and election to the Council from the State Centre under Bye-Law 4(a)(iii), when due in the same year, shall be held simultaneously by the same Board of Scrutineers using common procedures under the provisions of Regulations 25 and 26. (b) A Member willing to contest any election shall declare along with his nomination to stand for election, details of criminal proceedings in any court of law and proceedings by the Council or the Ethics Control Board against him, if any. (c) The Board of Scrutineers shall have the powers to reject any nomination as provided in Regulations 25 & 26 as also the powers to disqualify a candidate pursuant to any declaration under Regulation 23(b) if the candidate has been adjudged guilty by the Council. (d) In the year in which elections under Regulation 3(a)(v) and Bye-Law 4(a)(iii) are due, the Secretary and Director General, not later than 31st of May shall supply to each State Centre or Local Centre concerned, the list of Corporate Members attached to the respective State or Local Centre and who are entitled to vote.	<b>PROCEDURES FOR ELECTIONS</b> 23. (a) Election from Divisions under Regulation 3(a)(v) in the State Centre Committee and election to the Council from the State Centre under Bye-Law 4(a)(iii), when due in the same year, <b>shall may</b> be held simultaneously by the same Board of Scrutineers using common procedures under the provisions of Regulations 25 and 26. (b) (No change) c) The Board of Scrutineers shall have the powers to reject any nomination as provided in Regulations 25 & 26 <b>after recording the reason(s) for the same with due communication to the concerned candidate</b> as also the powers to disqualify a candidate pursuant to any declaration under Regulation 23(b) if the candidate has been adjudged guilty by the Council. ((d) (No change)

<p>(e) No Corporate member holding any office of profit in the Institution or any of its Centres, Autonomous Organ and Fora shall be eligible to seek elections to the Council and/ or any Committee of State or Local Centre.</p> <p>(f) Notwithstanding anything provided for in Regulations 24, 25 and 26, the Council shall have the authority to decide and order to conduct the elections as per the changed procedure before doing away with existing procedure and adopting any new procedure in place of those provided for in Regulations 24, 25 and 26.</p> <p>The procedure for conduct of election, i.e. its operational part, shall be as contained in the "Procedure for Conduct of Elections" as approved by the Council from time to time and duly notified for information of Corporate Members through IEI's Newsletter/Web.</p> <p>(g) Deleted</p> <p>(h) The Council shall constitute an Election Grievance Redressal Committee. The Committee shall consist of five members one from each zone. The term of the Committee will be for two years. In any meeting, three members will form the quorum.</p> <p>Any member aggrieved by any matter arising out of in connection with conduct of Elections under Regulations 24, 25 and 26 may make a representation to the Secretary and Director General within 30 days of declaration of the result, for being placed before the Election Grievance Redressal Committee for its consideration.</p> <p>However, the Election Grievance Redressal Committee members shall not take part in the election in question.</p> <p>The Election Grievance Redressal Committee shall investigate/ conduct an enquiry/ interpret the Bye-Law or Regulation, etc as the case may be and communicate its decision to the aggrieved member within 60 days from the date of declaration of the election result. The matter will be appealable within fifteen days from the date of decision of the Committee. The President will be the Appellate Authority and his decision will be final.</p> <p>(i) NA</p>	<p>(e) (No change)</p> <p>(f) (No change)</p> <p>(g) (No change)</p> <p>(h) The Council shall constitute an Election Grievance Redressal Committee. The Committee shall consist of five members <b>at least</b> one from each zone. The term of the Committee will be for two years. In any meeting, three members will form the quorum.</p> <p>Any member aggrieved by any matter arising out of/ in connection with conduct of Elections under Regulations 24, 25 and 26 may make a representation to the Secretary and Director General within 30 days of declaration of the result, for being placed before the Election Grievance Redressal Committee for its consideration.</p> <p>However, the Election Grievance Redressal Committee members shall not take part in the election in question.</p> <p>The Election Grievance Redressal Committee shall investigate/ conduct an enquiry/ interpret the Bye-Law or Regulation, etc as the case may be and communicate its decision to the aggrieved member <b>and also to the Secretary and Director General</b> within 60 days from the date of declaration of the election result. The matter will be appealable within fifteen days from the date of <b>communication of the</b> decision of the Committee. The President will be the Appellate Authority and his decision will be final and binding.</p> <p><b>(i) The e-voting data related to all IEI elections shall be deleted after 90 days from the date of the AGM of the Institution.</b></p>
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By Order of the Council  
Sd/-  
**Maj Gen (Dr) M J S Syali, VSM (Retd)**  
Secretary and Director General

**Note:** If a Corporate Member is unable to attend the meeting, he may fill the Form of Proxy with name of his representative. The Form of Proxy is to be signed and to be returned to the Secretary and Director General, The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700020 to reach him not later than 1800 hrs on 22 November 2024.

## The Institution of Engineers (India)

### SPECIAL GENERAL MEETING

### FORM OF PROXY

I, ..... of ..... being a Corporate Member of the above Institution hereby appoint ..... of ..... or failing him ..... of ..... as my proxy at Special General Meeting of the Institution to be held on the ..... day of ..... 2024 and at any poll held in connection therewith.

As witness my hand ..... day of ..... 2024.

Signature.....

Class of Membership of IEI..... No.....



# The Institution of Engineers (India)

8 Gokhale Road, Kolkata-700020

31 October 2024

## Notice of Extraordinary General Meeting of the Corporate Members under Bye-Law 32(c)(i)

Notice is hereby given that an Extraordinary General Meeting of the Corporate Members of The Institution of Engineers (India) will be held at **Sir R N Mookerjee Auditorium of The Institution of Engineers (India) West Bengal State Centre** located at **8, Gokhale Road, Kolkata - 700020** on **25 November 2024** immediately after the Special General Meeting for the following purpose:

To consider the recommendations of the Council vide its 727<sup>th</sup> meeting held on 21-22 Sep 2024 at Hyderabad:

EXISTING BYE-LAW	RECOMMENDED AMENDMENT
QUALIFICATIONS FOR MEMBERSHIP	QUALIFICATIONS FOR MEMBERSHIP
<b>Honorary Fellows</b> 45. 'Honorary Fellows' shall be the President of India, the Vice President of India, the Prime Minister of India and Governors of States or equivalent Heads of States and Union Territories as may be invited by the Council to be Honorary Fellows for the period of their respective tenures of office.	<b>Honorary Fellows</b> 45. 'Honorary Fellows' shall be the President of India, the Vice President of India, the Prime Minister of India, <b>the Governors, Union Ministers of India, and Governors Chief Ministers</b> of States or equivalent Heads of States and Union Territories as may be invited by the Council to be Honorary Fellows for the period of their respective tenures of office.

By Order of the Council  
Sd/-

**Maj Gen (Dr) M J S Syali, VSM (Retd)**  
Secretary and Director General

**Note:** If a Corporate Member is unable to attend the meeting, he may fill the Form of Proxy with name of his representative. The Form of Proxy is to be signed and to be returned to the Secretary and Director General, The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700020 to reach him not later than 1800 hrs on 22 November 2024.

## The Institution of Engineers (India)

### EXTRAORDINARY GENERAL MEETING

#### FORM OF PROXY

I, ..... of ..... being a Corporate Member of the above Institution hereby appoint .....  
..... of ..... or failing him ..... of .....  
..... as my proxy at Extraordinary General Meeting of the Institution to be held on the ..... day of ..... 2024  
and at any poll held in connection therewith.

As witness my hand ..... day of ..... 2024.

Signature.....

Class of Membership of IEI..... No.....

## Superannuation from IEI

Mr Santanu Pal, an employee of the Institution HQ was superannuated from the services of IEI on 31 October 2024. He joined the Institution on 04 April 1994 and rendered his services to the Institution over a period of 30 years.

IEI wishes Santanu Pal and his family a happy and healthy life in the future.



Mr Dhiren Sen, an employee of the Institution HQ was superannuated from the services of IEI on 31 October 2024. He joined the Institution on 01 July 1986 and rendered his services to the Institution over a period of 40 years.

IEI wishes Dhiren Sen and his family a happy and healthy life in the future.





# 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 2024

Sl. No.	Name of the Course	Scheduled Dates
1.	Enhancing structural durability with advanced waterproofing solutions	04 - 08 Nov 24
2.	Geometric dimensioning and tolerancing	04 - 06 Nov 24
3.	Stochastic Optimization Techniques for Real-World Engineering Problems	04 - 06 Nov 24
4.	MS SQL Server 2019 Database Administration	04 - 07 Nov 24
5.	Mobile Application Development using REACT NATIVE	04 - 08 Nov 24
6.	Design and Optimization of IoT-Based Smart Irrigation System	04 - 08 Nov 24
7.	Hands-on training on GIS Applications- Arc GIS	05 - 07 Nov 24
8.	Hydro Turbines, Governing & its Protection Systems	05 - 08 Nov 24
9.	Comprehensive Course for Workmen's Inspectors, Pit-Safety Committee Members & Electrical Supervisors	06 - 08 Nov 24
10.	Process Excellence & People Excellence	06 - 07 Nov 24
11.	Energy Conservation/Energy Saving in Process Industries & Manufacturing Units	11 - 14 Nov 24
12.	Challenges & Opportunities in EVs, Charging Stations and Grid Infrastructure - Latest EV Govt. Policies	12 - 15 Nov 24
13.	Sustainability Auditing of Urban Lakes Restoration and Management Practices	13 - 15 Nov 24
14.	Introduction to Radar & EW Systems	13 - 15 Nov 24
15.	Hands-on training in ANSYS for simulating Structural, fluid, and FSI problems	18 - 21 Nov 24
16.	SAP S4 HANA Administration	18 - 21 Nov 24
17.	Cyber Security Policies & Crisis Management Plan	18 - 22 Nov 24
18.	Instrumentation and Seismic Analysis of Gravity Dams with Software Applications	18 - 20 Nov 24
19.	Rejuvenation of Water bodies and Rainwater harvesting	19 - 22 Nov 24
20.	Mindful Living, Productive Working: A Training Program for Stress Management and Work-Life Integration	19 - 21 Nov 24
21.	Stress Management and Work-Life Integration for Engineers and Scientists	19 - 22 Nov 24
22.	Transmission Line Construction (Survey, Design of lines and construction practices)	19 - 22 Nov 24
23.	Conservation of Depleting Mineral Resources	20 - 22 Nov 24
24.	Good Manufacture Practices (GMP)	20 - 22 Nov 24
25.	Exploring AVEVA E3D Design: Revolutionizing Engineering and Design	25 - 29 Nov 24
26.	Modernization of Irrigation Systems Using Latest Technologies	25 - 29 Nov 24
27.	Effective Business Communication (Mastering the Art of Clear and Impactful Messaging)	26 - 28 Nov 24
28.	CERC Regulations Including Tariff Regulations	26 - 29 Nov 24
29.	Recycle and Reuse Options of Waste Water	27 - 29 Nov 24

For detail information please contact:

### Engineering Staff College of India

Old Bombay Road, Gachibowli, Hyderabad – 500 032  
Landline : 040-66304100 & Mobile: +91 7337319038  
Email : [mis@escihyd.org](mailto:mis@escihyd.org) / URL : <https://escihyd.org>



# IEI DIARY



## Aerospace Engineering Division

Thirty-seventh National Convention of Aerospace Engineers on **"Innovation in Aerospace Engineering"** Ranchi, November 23-24, 2024

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

## Agricultural Engineering Division

One Day Seminar on **"Potential and Effectiveness of Micro irrigation System for raising Productivity"** Bhubaneswar, December 08, 2024

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

## Architectural Engineering Division

All India Seminar on **"Bio Mimicry in Architectural Engineering"** Chennai, December 27-28, 2024

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

Thirty-ninth National Convention of Architectural Engineers on **"Smart & Intelligent Building Architecture"** Jodhpur, November 16-17, 2024

The Honorary Secretary, IEI, Jodhpur Local Centre, Gaurav Path, Jodhpur 342011, Rajasthan [☎: 0291-2432708, E-mail: jodhpurcl@ieindia.org]

All India Seminar on **"Trends In Advanced Building Construction And Innovative Building Materials"** Rourkela, March 01-02, 2025

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

## Chemical Engineering Division

One Day Seminar on **"Chemical Recycling of Plastic Wastes via Homogeneous Catalysis CRPWHC2024"** Rourkela, November 16, 2024

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

Thirty-ninth National Convention of Chemical Engineers on **"R&D Activities in Minerals and Metallurgical Industries for Today's Society"** Bhubaneswar, November 09-10, 2024

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

One Day Workshop on **"Innovative Small Scale Startup on Petroleum Processing and Petro Chemicals"**

Bhubaneswar, January 12, 2024

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

## Computer Engineering Division

Thirty-seventh National Convention of Computer Engineers **"Applications of AI and Machine Learning"** Chandigarh, November 22-23, 2024

The Honorary Secretary, IEI, Punjab and Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [☎: 0172-2775418, Fax: 0172-2540133, Email: pcsc@ieindia.org]

## Civil Engineering Division

All India Seminar on **"Advanced Civil Engineering Approach Towards Geo-Environmental Problems"** Jalpaiguri, December 02-03, 2024

The Honorary Secretary, IEI, North Bengal Local Centre, Engineers' House, Jalpaiguri Government, Engineering College Campus, PO Jalpaiguri, Government Engineering College, Dist. Jalpaiguri, Pin 735102 [☎: 03561-255468 [E-mail : nbcl@ieindia.org]

International Conference on **"Focusing on Global Partnership for Sustainable Development and Circular Economy through Technology"** Kollam, December 05-06, 2024

The Honorary Secretary, IEI, Kollam Local Centre, 3rd Floor, Chemical Engineering Block, TKM College of Engineering, Kricode, Kollam 691005, Kerala [E-mail: kollamlc@ieindia.org, Website: www.ieikollamlc.org]

One Day Workshop on **"Sustainable Water Harvesting and Waste Water Treatment"** Rourkela, December 21, 2024

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

One Day Workshop on **"Utilisation of Construction Demolition and Industrial Waste in Construction Industry"** Neyveli, February 15, 2025

The Honorary Secretary, IEI, Neyveli Local Centre, Block 17, Neyveli 607801, Dist Cuddalore, Tamilnadu [Ph: 04142-210510; E-mail: neyvelilc@ieindia.org, Website:www.ieineyveli.org]

## Electrical Engineering Division

All India Seminar on **"An Overview of The Present and Future Outlook of Electric Vehicles in India Approaches and Perspect"** Kanchepuram, November 05-06, 2024

The Honorary Secretary, IEI, Kanchepuram Local

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

All India Seminar on **"Advancing Digital Innovations for Sustainability in Energy Environment Health and Agriculture"** Durgapur, November 23-24, 2024

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

## Electronics & Telecom Engg Division

All India Seminar on **"Emerging Technologies for 5G/6G Wireless Communication using AI/ML"** Bhubaneswar, November 16-17, 2024

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

## Environmental Engineering Division

One Day Seminar on **"Energy Environment URJAVARAN"** Ranchi, November 17, 2024

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

One Day Seminar on **"Industrialization and Mission LIFE IML 2024"** Rourkela, December 07, 2024

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

All India Seminar on **"The Global and Local Dimensions of Climate Change Mitigation and Adaptation in Practice"** Coimbatore, January 23-24, 2025

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

All India Seminar on **"EEHVACR"** Ranchi, February 08-09, 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]

## Marine Engineering Division

One Day Seminar on **"Empowering Maritime Workforce Through Enhanced Training and Effective Regulation"** Bhubaneswar, January 04, 2024

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

## Mechanical Engineering Division

### International Conference on "Advances in Foundry and Forming Technology"

Ranchi, November 18-19, 2024

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

### All India Seminar on 'Integrating Industry 4.0 and Circular Economy: A Path to Sustainable Industrial Transformation in India'

Jaipur, November 23-24, 2024

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

### All India Seminar on "Heat Transfer and Fluid Flow Analysis in Mechanical System"

Madurai, January 23-24, 2025

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

### Fortieth National Convention of Mechanical Engineers on "Recent Advances in Mechanical Engineering"

Durgapur, August 23-24, 2025

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

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

Thiruvananthapuram, September 23-24, 2026

The Honorary Secretary, IEI, Kerala State Centre, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram 605033 [☎: 0471-2322991, 8078027563; E-mail: keralasc@ieindia.org; Website: www.ieitvm.org]

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

Belapur, September 17-18, 2027

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

## Metallurgical & Materials Engg. Division

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

Patna, November 10, 2024

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

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

Chennai, December 06-07, 2024

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

### All India Seminar on "Iron and Steel Industry Enhancing Efficiency Sustainability"

Ranchi, December 15-16, 2024

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

## Mining Engineering Division

### Thirty-fourth National Convention of Mining Engineers on "Mining of Fossil Fuels Challenges and Prospects"

Neyveli, November 29-30, 2024

The Honorary Secretary, IEI, Neyveli Local Centre, Block 17, Neyveli 607801, Dist Cuddalore, Tamilnadu [☎: 04142-210510, E-mail: neyvelilc@ieindia.org; Website: www.ieineyveli.org]

### One Day Seminar on "Slop Stability of Particulate Dump Yard and Industrial Focus of Interest"

Rourkela, January 11, 2025

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

## Production Engineering Division

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

Hyderabad, November 22-23 2024

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

### All India Seminar on "Digital Manufacturing"

Chennai, February 21-22, 2025

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

### Thirty-ninth National Convention of Production Engineers on "Recent Advancement and Challenges on the Fabrication of Semiconductor Chips in India"

Madurai, May 23-24, 2025

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

## Textile Engineering Division

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

Chennai, November 16, 2024

The Honorary Secretary, IEI, Tamil Nadu State Centre,

No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [☎: 044-25360614 / 9962950333, E-mail: tnsc@ieindia.org; Website: www.ieitnsc.org]

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

Chennai, December 13, 2025

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

### One Day Seminar on "Textile Machinery and Equipment Design"

Rourkela, December 15, 2024

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

## Interdisciplinary Coordination Committee

### All India Seminar on "Emerging Trends in Artificial Intelligence and its Social Impacts"

Thiruvananthapuram, November 14-15, 2024

The Honorary Secretary, IEI, Kerala State Centre, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram 605033 [☎: 0471-2322991, 8078027563; E-mail: keralasc@ieindia.org; Website: www.ieitvm.org]

### One Day Seminar on "Advanced Machining Processes for manufacturing Bio-Medical Devices"

Coimbatore, November 29, 2024

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

### All India Seminar on "Transforming Industry and Infrastructure: The Role of Automation and AI"

Coimbatore, December 19-20, 2024

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

## National Languages Promotional Committee

### One Day Workshop on "Solid Waste"

Kochi, November 23, 2024

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

### One Day Seminar on "Opportunities and Applications of Artificial Intelligence in Electronics Sector"

Coimbatore, December 12, 2024

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





# The Institution of Engineers (India)

## IEI Engineering Education Excellence Award 2024

### Request for Participation/Sponsorship

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 programs, 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 2024. The deadline for submitting of applications for the Award 2024 is **19 November 2024**. 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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**&**

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