

**Artificial** Intelligence and **IoT in Agriculture** and.....

**National Quality** Convention under....

**Innovations and Entrepreneurship Opportunities in** Foundries.....

**Implementation** 

**Reports of 56<sup>th</sup> Engineers**' Day 2023

**Reports of Royal Charter** 

**News-in-Brief** 

**IEI Diary** 

26

A CENTURY OF SERVICE TO THE NATION

Volume 30 Number 7

37th National Convention of Production Engineers and National Seminar

## **Recent Trends and Future Directions** in Production Engineering and **Management: Vision 2030**

West Bengal State Centre, IEI, in association with the Department of Industrial and Systems Engineering, IIT Kharagpur organised the 37th National Convention of Production Engineers during 18-19 August 2023 at Kolkata. A National Seminar was also organised on the occasion on the theme Recent Trends and Future Directions in Production Engineering and Management: Vision 2030. Er Alok Mukherjea, Chairman Emeritus, Flakt Woods graced the inaugural function as Chief Guest. Prof Manoshi Roy Chowdhury, Co-Chancellor, Techno India University was present in the occasion as the Guest of Honour. Er Shivanand Roy,



#### All India Seminar under the aegis of Mechanical Engineering **Division Board, IEI**

### **Role of Mechanical Engineers for Mitigating Climate Change**

Assam State Centre, IEI organized an All India Seminar on the theme Role of Mechanical Engineers for Mitigating Climate Change during 19-20 August 2023 at Guwahati under the aegis of Mechanical Engineering Division Board [MCDB], IEI. The event got off to a flying start on 19 August, 2023 with widespread participation of Corporate Members, engineers from academia and government departments, faculties & students from technical institutions and members of the civil society. The event was inaugurated in the august presence of Hon'ble Governor of Assam, Shri Gulab Chand Kataria, who graced the function as the Chief Guest. Er Pankaj Kr Goswami, Director (Operations), Oil India Limited (OIL) graced the occasion as the Guest of Honour. Prof (Dr) Nripendra Nath Patwari, Chairman, Assam State Centre, IEI



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

### **Reshaping India's S&T Landscape: Women in the Lead**

In India's history, a transformative moment emerges with the "Nari Shakti Vandan Adhiniyam," allocating one-third of legislative seats to women. Bevond politics. this landmark legislation has the potential to reshape India's Science and Technology (S&T) landscape into a symbol of inclusivity and diversity.



Gender disparities have long plagued India's S&T fields, particularly in science, technology, engineering, and mathematics (STEM), where women are significantly underrepresented. The new bill promises to rewrite this narrative.

The under representation of women in STEM isn't just about numbers; it signifies a systemic bias deeply embedded in the system. Women bring unique perspectives, innovative ideas, and valuable solutions. This legislation ensures women's voices and talents no longer remain on the sidelines but become central in shaping India's S&T landscape.

In India's diverse democracy, women often find themselves marginalized in decisions influencing the S&T ecosystem. This transformative legislation not only empowers women in politics but also paves the way for a more diverse technical workforce.

As women engage in politics and policy-making, they tend to prioritize issues disproportionately affecting women, like healthcare, education, and social welfare. Their grassroots experience underscores the transformative potential women bring to the table. With women in legislative bodies, policies promoting gender equality in STEM fields will create a more inclusive environment for women in science and technology.

Additionally, seat rotation ensures that women from diverse backgrounds and regions represent their constituencies, promoting inclusivity and preventing the entrenchment of a select few.

The bill aligns with international commitments, such as the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), emphasizing the elimination of discrimination against women in politics and public life.

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## Recent Trends and Future Directions in Production Engineering and Management: Vision 2030

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President, IEI was present in the occasion and stressed on organizing more technical activities through the State and Local Centres of IEI. The inaugural function was chaired by Dr Seeram Satynarayana, Chairman, Production Engineering Division Board [PRDB], IEI.

The programme was started with the welcome address delivered by Dr Nirmal Das, Chairman, West Bengal State Centre, IEI. In his address, Dr Das mentioned the impact of Industry 4.0 and advancement of digitalization to enhance productivity, efficiency and competitive advantage of the organizations. Chief Guest, Er Aloke Mukheriea, delivered Keynote address on the topic 'Production Management and Tech 2030', Er Mukheriea opined that the advancements in technology will lead to the new opportunities for business to differentiate themselves in the market. Industry 4.0 is characterized by the convergence of digital, physical, and biological systems; Smart Manufacturing system uses advanced technologies to optimize manufacturing processes and supply chains, which involves the integration of production systems with information and communication technologies to create a more efficient and responsive production process: It enables real-time monitoring and analysis of production data, allowing for continuous improvement and optimization of the production process, he added. He mentioned the application of AI in predictive maintenance, quality



control and inventory management. He explained the function of Digital Twins to simulate and optimize the production process to obtain sustainability in production, process control, waste reduction, automation and safety, assembly, packaging, and transportation, improvement in production efficiency and cost reduction by automating repetitive tasks. He felt that the adoption of sustainable practices in production management will be driven by consumer demand, regulatory requirements, and the need to reduce cost. He emphasized on integration of the entire manufacturing process starting from manufacturing to supply chain. He discussed application of Al in paint shop, assembly line, application of robotics in sensor based quality control module, application of Al in power plants, digitization in cement plants, and mentioned India's global position with respect to Global Rank Network Readiness Index. Guest of Honour, Prof Manosi Roy Chowdhury, in her address mentioned that the relentless pursuit in advancement of technology is the driving force to move forward the engineering endeavour. She spoke about the significance of collaboration with industries and institutions with the objective to exchange academic thoughts and strengthen partnership skills for the seamless progress of the nation. She strongly advocated for outcome based education that help the society to grow in a purposeful direction. Dr Seeram Satyanarayana in his address stated that manufacturing is the engine of the nation for creation of wealth and a strong manufacturing base of the country leads to self-reliance. He explained the challenges and constraints for industrial growth and stressed on implementation of digital manufacturing practices, skill development and up gradation of manpower resources that leads to the industry ready requirement of employable workforce. Prof (Dr) Pradip Kumar Roy. Professor, Department of Industrial and Systems Engineering, IIT Kharagpur and Chairman, Production Engineering Division Sub Committee, WBSC, IEI

while briefed about the theme of the National Convention, explained the concept of production systems engineering, problems under uncertainty, scope to improve the production systems with knowledge creation etc. Prof Roy mentioned about the First National Convention of Production Engineers at Kolkata in the year 1985. Prof (Dr) Jhareswar Maiti, Professor, Department of Industrial and Systems Engineering, IIT Kharagpur, who was present on the dais, explained the interface between man, machine and operations. He mentioned the advancements of disruptive technologies, scope and functioning of data driven organizations, customer oriented approach for better product management etc. He explained different aspects of data analytics, industrial safety, and social governance and focussed more on industry-academia interaction. Dr Gautam Sengupta. Vice Chancellor. Techno India University, West Bengal and Member, PRDB, IEI highlighted the contribution of reputed industry leaders and the note of wisdom we have learnt from them. He also discussed the challenges and resistance for implementing I4.0 and I5.0 and stressed on collaboration, integration and industry institute partnership. Prof(Dr) Bijan Sarkar, Professor and Head, Department of Production Engineering, Jadavpur University and Convenor of the event highlighted the customer perspectives for manufacturing and stressed on the development of skill sets and knowledge.

On the occasion, Er Deependra Singh, Chairman and Managing Director, IREL (India) Limited; Prof (Dr) Amitabha Ghosh, Former Director, IIT Kharagpur and Former Professor, IIT Kanpur and Shri Sandipan Chakravortty, Independent Director at Asian Hotels (East Limited), R K Forgings Limited, International Combustion Limited and Neo Metaliks Limited were felicitated as eminent engineering personalities for their immense contribution in the field of Production Engineering. The recipients of IEI Young Engineers Award 2023 in the Production Engineering Division are; Dr Narendra Kumar, Assistant Professor, Department of Industrial & Production Engineering, Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab; Dr Chandan Pandey, Department of Mechanical Engineering, IIT Jodhpur and Mr Bankar Vishnu Rajaram, Manager (S&P-Systems Policies), Yazaki India Private Limited, Pune, Maharashtra. Dr Raju Basak, Honorary Secretary, West Bengal State Centre, IEI proposed the vote of thanks.

Followed by the inaugural session, The F W Taylor Memorial Lecture was delivered by Dr Gautam Sengupta, Vice Chancellor, Techno India University, West Bengal and the G C Sen Memorial Lecture was delivered by Prof (Dr) Pradip Kumar Ray, Emeritus Professor, Department of Industrial and Systems Engineering and Adviser, Vinod Gupta School of Management (VGSoM), IIT Kharagpur. The session was chaired by Prof (Dr) Bijan Sarkar.



Dr Gautam Sengupta delivered the F W Taylor Memorial Lecture on the topic 'Combining Lean, Six Sigma and Agile to Drive Best Value for the Manufacturing Sector in the Post- Pandemic Era'. Dr Sengupta had started his lecture with outlining the life sketch of F W Taylor, the evolution of management theory and the principle of scientific management. He explained scientific management as the systematic study of the relationships between people and tasks for the purpose of redesigning the work process for higher efficiency. He explained the basic logic of scientific management to consider standardization, productivity, and division of labor to increase efficiency. He

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### Artificial Intelligence and IoT in Agriculture and Food Industry 4.0

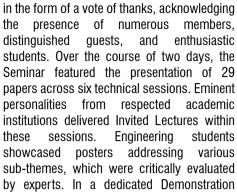
ARTITICIAL INTELLIGENCE AND LOT IN AGRICULTURE AND FOOD INDUSTRY 4.0

The **Rourkela Local Centre** of The Institution of Engineers (India), in partnership with the Department of Food Process Engineering and the Department of Computer Science and Engineering at NIT Rourkela, recently

hosted an All India Seminar with a focused theme: Artificial Intelligence and IoT in Agriculture and Food Industry 4.0. This event was conducted under the auspices of the Interdisciplinary Coordination Committee (ICC), IEI, on 12-13 August 2023 and served as a significant forum to delve into the implications and opportunities surrounding Al and IoT within these critical sectors. The Seminar commenced with a warm welcome by Er Ajay Kumar Goswami, Chairman of the Rourkela Local Centre, IEI. In his

opening remarks, Er Goswami underscored the paramount relevance and significance of Al in the domains of Food and Agriculture. The event saw the presence of distinguished personalities, including Prof. Bibhudutta Sahoo, who is the Head of the Department of Computer Science and Engineering at NIT Rourkela, serving as the Chief Guest. Prof Parag Prakash Sutar, Head of the Department of Food Process Engineering, NIT Rourkela, was the Guest of Honour. Prof Sahoo expounded on the technological advancements reshaping modern agriculture, encompassing everything from robotics and agricultural drones to cutting-edge computer vision software. A Technical

Proceedings publication was unveiled during the event, symbolizing a compilation of the collective expertise shared. Dr. Rama Chandra Pradhan, Honorary Secretary of the Rourkela Local Centre, IEI, expressed gratitude



session, students presented live demonstrations related to agricultural drones, robotics, and automation, revealing innovative applications of Al and IoT. The technical sessions were diligently chaired by renowned experts within the field.

Among the technical sessions, attendees were treated to Invited Lectures on the topics of 'Basics of AI - Machine Learning and Big Data in R&D' and 'Artificial Intelligence-based Mobile Robot Path Planning in an Unknown

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mentioned that Taylor revolutionized the manufacturing industry when it was at a crossroad of decay and malpractices. He mentioned the importance of Taylorism in the manufacturing industry in the post Covid world with Lean, Six Sigma and Agile ways of working to justify Taylor's Scientific Management principles. He opined that Lean, Six Sigma and Agile pathway can be the key to effective, innovative and out-of-the-box resilience planning for ensuring long-term success of any business to carve a path of revival in the post pandemic era. He explained the DMAIC[Define-Measure-Analyze-Improve-Control] and DMADV [Define-Measure-Analyze-Design-Validate] Methodologies for Six Sigma. He explained Agile principle and Agile Life Cycle, Lean structures, Stacey's matrix, values of Agile manifesto, Agile principles and common practices.

Prof (Dr) Pradip Kumar Ray delivered the G C Sen Memorial Lecture on the topic 'Automation in Product Interface Design: Applications in Healthcare Systems'. In his lecture, Prof Ray explained the core competency of the healthcare system and the design and development of an automated interface between human and product, considering number of design aspects. He elaborated the assessment system for human – product – process interface, the methodology for developing an automated system for monitoring and control of the design interface and how to apply the automated system for critical interfaces involving healthcare and other work systems He explained the evaluation system of work system interfaces in the context of biomechanical, physical, physiological and psychological point of view. Prof Ray discussed at a length the work system design in healthcare environment including the design dimensions, organizational parameters, tools and technologies, interface design and measurement of human performance, etc.

Two Plenary Lecture and four Invited Lectures were presented on the occasion. Prof (Dr) Jhareswar Maiti, delivered the Plenary Lecture on the

role of Production Engineers in industrial safety. Prof (Dr) Bijan Sarkar delivered the Plenary Lecture on the topic 'Epistemology of Neoteric Production System' and discussed on Intelligent Le-Agile Manufacturing System, Fractal Manufacturing, Holonic Manufacturing and Bionic Manufacturing System. Prof (Dr) Abhijit Mitra, Director Research, Techno India University delivered Invited lecture on Smart Manufacturing and Supply Chain. Prof (Dr) V K Tewari, Director, IIT Kharagpur delivered Invited Lecture through his virtual presence on the topic 'Influence of Ergonomics in Industrial Production System'. In his lecture, Prof Tewari spoke on advancement in mechanization of production systems and automation, significance of automation and safety for higher production output and efficiency, ergonomic design in work system design and management, cognitive assessment and behaviour study of the workforce for ergonomic design of workplace, more application of simulation, Virtual Reality and Augmented Reality, Data Analytics, Green Ergonomics etc. Prof (Dr) Bijay Bhattacharya, Professor, Department of Production Engineering, Jadavpur University delivered an Invited Lecture on the topic 'Micro machining- New Challenges'. In his lecture, Prof Bhattacharya explained different conventional and nonconventional micromachining processes, micro and nano finishing, principle of micro drilling, micro grinding etc. Prof (Dr) Subhasis Bhaumik, Dean, Planning and Development and Professor, Aerospace Engineering and Applied Mechanics, IIEST Shibpur delivered an Invited Lecture on the topic 'Intelligent, Innovative and Integrated Manufacturing for Make in India' and highlighted the transformation of physical systems to digital systems and approach towards a more safe environment.

During the technical sessions, 37 papers were presented on diversified topics. During the valedictory function, Prof (Dr) Santanu Das, Chairman, Technical Committee and Professor, Mechanical Engineering Department, Kalyani Government Engineering College, WB summed up the proceedings of deliberation. The event was well attended by the professionals, Corporate Members, academicians and students.

## **Self Sustained India: Role of Quality Management**

The Second National Quality Convention, held under the auspices of the Safety and Quality Forum (SQF), The Institution of Engineers India (IEI), took place on 28-29 April 2023, in Hyderabad. This significant event centered around the theme **Self Sustained India: Role of Quality Management** and garnered considerable attention from a diverse audience.



The Convention was graced by esteemed dignitaries, including Shri CH Malla Reddy, Hon'ble Minister for Labour & Employment, Factories & Skill Development, Government of Telangana, who served as the Chief Guest. Shri U Devender Reddy, Chairman of the Labour Welfare and Social & Security Board, Government of Telangana, was the Guest of Honour at the inaugural function. In his address, Shri Reddy underscored the importance of adopting quality management techniques in our daily lives.

Dr Y Sreenivas Rao, an Outstanding Scientist & Director at the Naval Science & Technological Laboratory in Vizag, served as the Keynote Speaker. Dr Rao delivered a compelling lecture on the topic 'Quality & Reliability for Aatmanirbhar Bharat,' shedding light on the paramount role of quality in our day-to-day existence. The speaker elaborated on how reliability plays a pivotal role in quality management within the naval industry and offered detailed insights into the design and development of Military Systems. Furthermore, Dr. Rao delved into the requirements of Quality 4.0 within industries.

Er B Brahma Reddy, Chairman of the Telangana State Centre, IEI, presided over the inaugural function and extended a warm welcome to the attendees. Er Dinesh Kumar, Chairman-BoG, SQF-IEI, provided an overview of the objectives of the Quality Convention. Er Praveen Kumar Singh, Director of SQF, IEI, presented an in-depth view of the Convention's purpose. On the eve of the Safety Convention, a Technical volume was released by the Chief Guest and other distinguished guests.

The Convention drew the participation of notable individuals, including Past Presidents, Council Members, Past Vice-Presidents, Past Chairmen, Past Honorary Secretaries, Committee Members of IEI Telangana State Centre,

Corporate Members, as well as around 250 participants, comprising delegates, students, faculties, and other attendees.

The Convention featured four technical sessions during which five Invited talks were delivered, and twelve technical papers were presented. The first technical session, chaired by Er. R N Rajpoot, Former Chairman-BoG, SQF, IEI, included two Invited talks by Mr Rajendra Prasad, Director (Operations) RVNL, and Dr N Sivasubramanian, Chairman of the Madurai Local Centre, IEI, and Member of the BoG, SQF-IEI. Additionally, papers were presented by Dr I Satyanarayana Raju, Council Member, IEI, and Dr H R P Yadav, Former Secretary & Director General, IEI.

In the second technical session, Er A Shyam Mohan delivered an Invited talk. Papers were presented by Er S Gokulakannan, Tamil Nadu Newsprint and Papers Limited, Er L Sakhtivel, OHS Consultant, Er P V Satyavratan, and Mr J Chakraborthy, DGM at GAIL Faridabad. The session was chaired by Mr Shiva Kumar Kushvaha, Regional Officer, Ministry of Road and Transport & Highways, Government of India, Telangana.

During the third technical session, Dr T Rakesh, Scientist-D and Joint Director at BIS, delivered an Invited talk. Three papers were presented in this session by Er M Aruna, Committee Member of Telangana State Centre, IEI; Mr P Narasimha Reddy, ED at Sreenidhi University; and Mr Pradip Kumar, Project Manager at Hindustan Constructions Private Limited. The session was chaired by Er P Surya Prakash, Council Member, IEI.

In the final technical session, Dr R Vijay, Scientist-G and Head of ARCI, delivered the Invited talk. Three papers were presented by Dr G Rameshwar Rao, Director of ESCI & Past Chairman of Telangana State Centre, IEI; Mr A V Seshagiri Rao; and Mr Roshanlal, Managing Director of Sigma One Solutions, and Er P S Shanumantha Rao from Usha International. Er Shyam Prasad Reddy, Council Member, IEI, chaired the session, which also included a panel discussion.

The valedictory function featured Shri Burra Venkatesham, IAS, Principal Secretary of the Backward Classes Welfare Department, Government of Telangana, as the Guest-of-Honour. He emphasized the crucial role that quality plays in our daily lives, intertwining it with spirituality. Er B Brahma Reddy, Chairman of Telangana State Centre, IEI, presided over the function and addressed the audience. Dr S Satyanarayana, Council Member, IEI and Chairman of the Technical Committee, summarized the proceedings of the technical sessions and explained the significance of organizing Quality Conventions. Dr G Venkata Subbaiah, Honorary Secretary of Telangana State Centre, IEI, proposed the vote of thanks, bringing the Convention to a successful conclusion.

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

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India lags behind several countries in female representation in politics and S&T, including Sweden, Norway, and South Africa, where remarkable female representation is achieved without quotas. This historic bill signifies India's significant step toward aligning with global standards of gender equality in politics and the S&T workforce.

In conclusion, the "Nari Shakti Vandan Adhiniyam" represents a pivotal moment, illuminating the path to a more inclusive and diverse technical workforce in India. It demonstrates a commitment to harnessing the full potential of all citizens, irrespective of gender, to contribute significantly to India's progress in science, technology, and innovation. This bill transcends politics; it's about forging a more inclusive and diverse technical workforce in India, where "Nari Shakti" guides the nation toward a brighter future.

## Innovations and Entrepreneurship Opportunities in Foundries for Sustainable Products

Coimbatore Local Centre, IEI, in association with The Indian Institute of Metals, Coimbatore Chapter, and the Department of Metallurgical Engineering at PSG College of Technology, Coimbatore, hosted a Oneday Seminar focused on the theme of Innovations and Entrepreneurship Opportunities in Foundries for Sustainable Products on 27 July 2023 at Coimbatore. This event took place under the aegis of the Metallurgical and Materials Engineering Division Board (MMDB), IEI, and brought together industry experts and thought leaders to explore the advancements and entrepreneurial prospects within the realm of sustainable foundry products.

Dr S Shanmugam, Chairman of Coimbatore Local Centre, IEI, extended a warm welcome during the inaugural function and delivered the presidential address. Mr. K Seenivasa Ragavan, Head of Quality at Aquasub Engineering,



Coimbatore, graced the event as Chief Guest. In his address, he elucidated the innovations in foundries for sustainable products, emphasizing new

product and process development to meet future requirements. Mr. K Krishna Kumar, Assistant Professor in the Department of Metallurgical Engineering at PSG Tech, Coimbatore, and Treasurer of the IIM Coimbatore Chapter, provided an overview of the Seminar. Dr J Krishnamoorthi, Honorary Secretary of Coimbatore Local Centre, IEI, and Professor & Head of the Department of Metallurgical Engineering at PSG Tech, Coimbatore, proposed the vote of thanks.

In the technical session, Mr. K Seenivasa Ragavan delivered a lecture on "Sustainability in Foundries through Recycling of Foundry Materials." He outlined various opportunities within foundries to produce new products by recycling foundry materials and discussed sand reclamation techniques for producing sound, effective castings.

Dr V S Saravanan, Vice President at Indoshell Cast Private Limited, Coimbatore, presented on "New Materials in the Cast Iron Family." He delved into the properties and applications of new materials within the cast iron family, known for their high-quality attributes. Dr. Saravanan underscored the importance of innovation in developing new cast iron materials with exceptional mechanical properties.

Mr Parthi Damodaraswamy, Chief Executive Officer & Managing Partner of Castlegate LLC - Steel Foundry, Coimbatore, shared his expertise on "Importance of Operational Excellence in Product Sustainability." He elucidated the product sustainability cycle and operational excellence in foundries, accompanied by case studies that illustrated techniques for achieving operational excellence.

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### Role of Mechanical Engineers for Mitigating Climate Change

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presided over the function. Prof (Dr) Sudipta De, Professor, Department of Mechanical Engineering, Jadavpur University, Kolkata graced the function as Keynote speaker and addressed the august audience.

Chief Guest, Shri Gulab Chand Kataria, Governor of Assam appealed to all delegates and participants to adopt environment-friendly lifestyle and contribute towards the reduction of carbon emission by individual actions. He also mentioned that the people of India have developed the practice to follow the West in all emerging technologies and practices, be it in the sector of renewable energy or green infrastructure development; transportation or agricultural missions. 'India was historically never a follower; rather it always initiated and led the world in establishing healthy and wholesome lifestyle placing Mother Nature at the top', he categorically mentioned. Guest of Honour, ErPankaj Kr Goswami, in his speech not only highlighted the areas where Mechanical Engineers need to work exclusively, but also vividly explained the efforts of OIL in implementing cutting-edge technologies like hydrogen-driven vehicles, carbon capture and sequestration, and modern hydrocarbon extraction processes.

Keynote speaker, Prof Sudipta De made an interesting audio-visual presentation covering wide array of issues like fossil fuels, green fuels; conventional heating-cooling-ventilation-air conditioning devices versus solar and renewable energy devices; and critical role of mechanical engineers in achieving the Sustainable Development Goals by 2030. He mentioned that technological innovations has improved our living standard, however it has adverse effect too. In his lecture, Prof De discussed at a length Integrated Gasified Carbon Cycle [IGCC] with pre-combustion and post combustion carbon capture, oxyfuel combustion, syngas cooling and separation, significant aspects of renewable and nonrenewable energy, etc.

To commemorate the Seminar, a Technical Volume cum Souvenir was released by Hon'ble Governor. The inaugural function to an end with a formal

vote of thanks by ErPulakSarmah, Honorary Secretary, Assam State Centre, IEI. Followed by the inaugural session, technical sessions were organized to provide ample opportunities for the presentation of papers with adequate discussion. The technical deliberation essentially focused on; Rapidly evolving solar energy technologies; Solar Energy and Rural Economy; Solar floating power stations; Micro Electromechanical Systems- a pollution free option for power generation; Green technology for Sustainability; Electric vehicles technology; Hydrogen Generation, Power Electrolysis; Eco-friendly surface treatments, Methanol fuelled Marine Diesel Engine. During the technical session, papers were presented on relevant sub theme, which include; Hybrid Flywheel (Hy-FLY) Energy Storage System (ESS) for providing Grid Inertia; Numerical Analysis of a Passive air-cooled and Active Water Cooled Photovoltaic Thermal System; Electromagnetic Pollution and its control with Superior Polymeric Materials; A Review of Performance Analysis of Solar Air Heaters with Latent Heat Storage; Review of Solar Thermal and Photovoltaic Energy based Drying Technology; Solar Powered Green Lawn Mower (SPGLM) State of the Art Design and Manufacturing; A Study on Solar Thermal Infrared Energy Drying Systems and Technologies

A panel discussion was organized on the occasion. Recommendations emanated from the technical deliberation include;

Hybrid flywheel (Hy-FLY) energy storage system for providing grid inertia is an innovative method for balancing demand and generation of grid energy, which need to be explored further. The positive environmental effect obtained by introducing renewable energy sources also to be evaluated; The removal of electromagnetic pollution with design of superior polymeric materials for assisting in climate change issues need to be focused; Design of solar power based devices and its positive impact on environmental pollution need to be assessed.

### **Innovation, Implementation and Industrialisation**

The **Kerala State Centre** of The Institution of Engineers (India) convened a One-Day Seminar on August 23, 2023, centered on the theme of **Innovation**, **Implementation**, **and Industrialization**. This event, conducted under the auspices of the Interdisciplinary Coordination Committee (ICC), IEI, was designed to explore how modern engineering and innovative thinking can drive sustainable industrialization, fostering economic growth and job creation.

The program commenced with a warm welcome from Prof (Dr) M Jayaraju, Chairman of the Kerala State Centre, IEI. Er P Balakrishnan Nair, Organizing Convenor, provided an insightful overview of the Seminar's theme and subthemes, setting the stage for the day's discussions.

The Seminar was inaugurated by Dr (Prof) K P Sudheer, Executive Vice President of the Kerala State Council for Science, Technology, and Environment (KSCSTE), Trivandrum. Dr. Sudheer, in his inaugural address, emphasized the crucial role of innovation in driving progress. He noted that the COVID-19 pandemic had spurred new ideas and the formation of startups, leading to enhanced productivity. Dr. Sudheer underlined the value of innovative thinking and encouraged participants to think creatively and explore opportunities beyond conventional boundaries.

In the technical session that followed, experts in various fields shared their insights:

Dr. Nidhi M B, Associate Professor at Mar Baselios College of Engineering and Technology, Trivandrum, discussed 'Green and Smart Manufacturing.' She delved into the perspectives of Smart manufacturing, Green manufacturing, and Industry 5.0, highlighting the need for environmentally conscious industrial practices.

Dr. C George Varghese, Regional Deputy Director (Retired) from the Ministry of Textiles, Government of India, shared his views on 'Rural Industrialization.' He shed light on the role of artisans in rural industrialization and their contribution to the nation's economic development.



Dr. Ajith Prabhu, Chief Scientist at KSCSTE, Trivandrum, presented 'Supply Chain Management in Industry 5.0 – Issues and Challenges.' He stressed the importance of sustainability and resilience in modern operations.

A panel consisting of Dr. (Prof) S Rani, Dr Gopakumar, and Dr Muhammed Arif from the College of Engineering, Trivandrum, discussed 'Biodiesel from Waste Cooking Oil for Transportation/Power Generation Applications.' They explored the potential and applications of alternative fuels.

Dr. V Anil Kumar, DGM at MPA/MME, VSSC, Trivandrum, shared insights on 'Metal Additive Manufacturing for Space – Recent Advances and Future Trends.' He delved into various additive manufacturing techniques and their applications, emphasizing advancements in the aerospace sector.

The Seminar concluded with a valedictory function, featuring Er R Harikumar, Director of the Energy Management Centre, Trivandrum, as the Chief Guest. Er Harikumar stressed the paramount importance of innovation and urged for efforts to create a sustainable and environmentally friendly future through innovative approaches. Er Roy Mathew, Honorary Secretary of the Kerala State Centre, IEI, proposed the vote of thanks, expressing gratitude to all participants and speakers for their valuable contributions to the Seminar's success.

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Environment.' Additionally, a wide array of papers were presented, encompassing relevant sub-themes such as Al and IoT in the Food Sector, Al-based Image Classification in Food Quality Evaluation (Food Quality 4.0), Advancements in Computer Vision and Machine Learning for Food Quality Evaluation, Application of IoT in Agriculture, Development of Polyvinyl Acetate-Based Coating and its Effects on Papaya and Strawberry,

Spatial and Structural Characterization and Mass Modeling of Makhana Savories, and An Application of Image Analysis to Model Changes in Millet Kernel Water Absorption, to name a few. These discussions collectively underscored the evolving landscape of the Agrifood sector, emphasizing the convergence of Big Data, Machine Learning, and Data Science in Research and Development.

## Innovations and Entrepreneurship Opportunities in Foundries for Sustainable Products

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Dr J Anburaj, Associate Professor in the Department of Metallurgical Engineering at PSG College of Technology, Coimbatore, delivered a lecture on "Lightweight and Sustainable Materials for Automotive Applications." He explored existing lightweight materials and their significance, highlighting innovations in developing sustainable new materials to meet property requirements in automotive applications.

Mr P Sureshkumar, Founder & Chief Executive Officer of Agna Inc, Coimbatore, presented on "Entrepreneurship Opportunities in Foundry Business." He discussed various entrepreneurship opportunities, ranging from small to large-scale operations, within the foundry business. Mr Sureshkumar also emphasized potential entrepreneurship avenues for young individuals in various foundry materials and products, shedding light on promising prospects for the youth.

### **IEI Celebrates**

## 56th Engineers' Day 2023

### Theme: Engineering a Resilient Future: Building Stronger, Smarter, Safer

The 56th Engineers' Day was celebrated by the Institution all over the country on September 15, 2023 to commemorate the 163rd birth anniversary of legendary Engineer-Statesman Bharat Ratna Sir M Visvesvaraya. Brief accounts of the celebration as received from various Centres are highlighted hereunder

#### **STATE CENTRES**

#### Gujarat



Gujarat Centre, IEI, in association with Water Management Forum, IEI, INDUS University, Ahmedabad & World Federation of Engineering Organization observed 56th Engineers' Day 2023

on 15 September 2023 in Ahmedabad. Chief Guest of the function, Mr Nilesh Desai, Director, Space Application Centre (SAC), ISRO, Ahmedabad delivered lecture on the topic 'India's Historic Journey to Moon', explained India's Moon Mission 'Chandrayan-3' and Sun Mission 'Aditya-L1 and added the activities of ISRO. Guest of Honour, Er Bharat S Patel, Founder, Chairman & Director, Ydiz Solution & Director, Fetuz Hatcher Private Limited highlighted that engineers stand at the forefront of progress, crafting a future, that is well fortified and unyielding. Prof (Dr) Ishbir Singh, Director, IITE, INDUS University discussed the importance of observing the Engineers' Day. Er Vijay Solanki explained the activities of Water Management Forum, IEI. Prof (Dr) Sandeep Chakravorty, Executive President, INDUS University also addressed the audience. Keynote speaker, Er Niraj A Shah, Automation & Robotics Engineer Entrepreneur, Academician, Mentor, Owner, Arihant Satiate delivered lecture on the theme. Er Pravinkumar Mohanbhai Chaudhari, Chairman and Er Dineshchandra Odhavjibhai Nakrani, Honorary Secretary, Gujarat State Centre, IEI were present during the event.

#### Punjab & Chandigarh



Punjab & Chandigarh State Centre, IEI in association with Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, Punjab observed 56th Engineers' Day 2023 on 15 September 2023 in Chandigarh. Prof (Dr) Bhola

Ram Gurjar, Director, National Institute of Technical Teachers Training and Research (NITTTR), Ministry of Education, Government of India graced the occasion as Chief Guest and Er Parvindra Tiwari, Project Head (Civil Engineering), Airport Authority of India (AAI), Hisar, Haryana was the Guest of Honour. Earlier, Dr Labh Singh Bhari, Chairman, Punjab & Chandigarh State Centre, IEI welcomed the members and distinguished guests. Keynote speaker, Dr Jatinder Madan, Professor and Head, Department of Mechanical Engineering, Chandigarh College of Engineering & Technology, Chandigarh delivered lecture on the topic 'Smart Lifestyle Influencing Technologies'. Er Sukhvir Singh Mundi, Council Member, IEI addressed the gathering and shared insightful thoughts on the theme. Er Swinder Singh, Honorary Secretary, Punjab & Chandigarh State Centre, IEI proposed the vote of thanks at the end of the event.

#### **Tripura**



Tripura State Centre, IEI observed 56th Engineers' Day 2023 on 15 September 2023 in Agartala and a Seminar was organized on the theme. The Seminar was graced by Chief Guest of the function, Prof (Dr)

Abhay Kumar, Director, Indian Institute of Information Technology (IIIT), Agartala, who had focussed to inculcate innovative ideas of engineering students for resilient engineering education system. Guest of Honour, Er Nanda Basumatary, Chief General Manager & Head of Agartala Gas-based Power Station, North Eastern Electric Power Corporation (NEEPCO) Limited discussed about hydro power and sustainable generation technologies, which are considered as safer and viable options for future power sector. Special Speaker, Er Mihir Kanti Gop, Chief Planner, Tripura Urban Planning & Development Authority (TUDA), Government of Tripura spoke on resilient design strategies for construction, global housing technology and light house project of Agartala. Special Speaker, Dr V C Padmanaban, Assistant Professor, Department of Bio Engineering, National Institute of Technology Agartala discussed on climate resilience and environmental sustainability. water resource management through engineering advancements and digital resilience. The programme was presided over by Dr Subhadeep Bhattacharjee, Chairman, Tripura State Centre, IEI. Dr Mrinal Kanti Deb Barma, Honorary Secretary, Tripura State Centre, IEI delivered the welcome address. Dr Amaresh Sarkar, Joint Honorary Secretary (Pub), Tripura State Centre, IEI proposed the vote of thanks at the end of the event.

#### **LOCAL CENTRES**

#### Agra



Agra Local Centre, IEI, in association with the Institute of Engineering & Technology (IET), Khandari Campus, Agra observed the 56th Engineers' Day 2023 on 15 September 2023 in Agra.

Prof Ajay Taneja, Pro Vice Chancellor, Dr Bhimrao Ambedkar University, Agra graced the occasion as Chief Guest and Prof Manu Pratap Singh, Director, IET Khandari as Guest of Honour. Er Anil Kumar Goyal, Chairman, Agra Local Centre, IEI welcomed all the participants. Er Rajnesh Kumar Yadav, Honorary Secretary, Agra Local Centre, IEI narrated the life and works of Sir M Visvesvaraya. Prof Taneja in his address mentioned that the engineers stand at the forefront of progress, crafting a future that is well fortified and unyielding. He said that the engineers are the architects of resilience, working tirelessly to build structures that withstand the test of time. Er Rajnesh Kumar Yadav proposed the vote of thanks at the end of the event.

#### **Ahmednagar**



Ahmednagar Local Centre, IEI observed 56th Engineers' Day 2023 on 18 September 2023 in Ahmednagar. Er Indraneel Dhaneshwar, Vice President – Motors Business, CG Power and Industrial Solutions Limited, Ahmednagar graced the

occasion as Chief Guest and highlighted the role of engineers in Chandrayan Mission. Er Arvind Pargaonkar, Director Manufacturing, Schneider Electric India Private Limited delivered the Keynote address on the theme and focussed on the advancement in technology and its effect on mankind. Er Manohar Mukund Anekar, Chairman, Ahmednagar Local Centre, IEI presided over the program. Earlier, Er Abhay Krishnarao Raje, Honorary Secretary, Ahmednagar Local Centre, IEI welcomed the audience and introduced the theme.

#### Aligarh



Aligarh Local Centre, IEI observed 56th Engineers' Day 2023 on 15 September 2023 in Aligarh. Chief Guest, Er Praveen Sharma, MD, M/s Bishen International, TalaNagri, Aligarh shared his valuable insights on

Engineers' Day and discussed the work and contributions made by engineers to the country. Guests of Honour, Prof Mohd Khalid, President, AMU Teachers' Association, AMU, Aligarh shared valuable insights on the life of engineers and Prof Arshad Umar, Principal, University Polytechnic (Boys), AMU, Aligarh expressed his views on Engineers' Day. Dr Hasan Irtaza, Department of Civil Engineering, Aligarh Muslim University (AMU), Aligarh outlined the life sketch and contribution of Sir M Visvesvaraya in the field of engineering and technology. Prof Izharul Haq Farooqi, Chairman, Department of Civil Engineering, ZHCET, AMU, Aligarh delivered lecture on the theme. Earlier, Dr (Mrs) Salma Shaheen, Chairperson, Aligarh Local Centre, IEI delivered the welcome address.

#### **Aurangabad**



Aurangabad Local Centre, IEI observed 56th Engineers' Day 2023 on 15 September 2023 in Aurangabad. Er Santosh R Tirmanwar, Executive Director, Godavari Marathwada Irrigation Development Corporation (GMIDC), Aurangabad

graced the occasion as Chief Guest and Er Ramchandra V Mhaisekar, Ex Superintending Engineer, M J P, Aurangabad delivered Keynote address on the theme. The event witnessed the presence of Dr Smita Lalit Kasar, HoD, Computer Science & Engineering Department, MIT College of Engineering, Aurangabad; Er Girish Magare, Director, Electroplast Private Limited, Aurangabad; Er Gajanan P Deshmukh, Founder & Proprietor, Ideal Group, Aurangabad; Er Vrushali R Gadekar, Superintending Engineer, PWD, Aurangabad and Er Pushpagandh V Gaikwad, Director, Swaraj Engineering, Aurangabad. Dr Uttam Baburao Kalwane, Chairman, Aurangabad Local Centre, IEI highlighted the activities of Aurangabad Local Centre, IEI and Dr Ravindra R Deshmukh, Honorary Secretary, Aurangabad Local Centre, IEI presented the life sketch of Bharat Ratna Sir M Visvesvaraya and proposed the vote of thanks at the end of the event.

#### Bareilly



Bareilly Local Centre, IEI observed 56th Engineers' Day 2023 on 15 September 2023 in Bareilly. Er Suraj Pal Singh, Chief Engineer, Irrigation Department, Bareilly graced the occasion as Chief Guest and Mr

Sharad Chandra Gupta, Senior General Manager (Production), IFFCO, Aonla, Bareilly, was the Guest of Honour. Er Sanjay Kumar Tiwari, Chief Engineer, PWD, Bareilly was present on the occasion. Er Raj Goel, Chairman, Bareilly Local Centre, IEI presided over the function and delivered the welcome address. Er Sovan Mohanty, Assistant Professor, Electronics & Communication Engineering, Sree Ram Murti Smarak College of Engineering and Technology [SRMSCET], Bareilly delivered the thematic address. He said that smart building involves integrating cutting-edge technologies like artificial intelligence, IoT and data analytics into infrastructure. He further added that in smart cities, interconnected systems enhance efficiency, reduce energy consumption and improve overall quality of life. He highlighted that engineers are pioneers in developing safety standards and protocol for industries such as nuclear power, aviation and transportation. Er Ashish Agrawal, Lecturer, SSVGI, Bareilly mentioned that engineering a resilient future signifies a commitment to sustainable practices, minimizing environment impact and creating solutions for a brighter and more secure tomorrow. Dr Chhavi Sharma, Assistant Professor, MJP Rohilkhand University, Electronics and Communication Engineering, Bareilly explained that engineering a resilient future embodies innovation, sustainability and adaptability and added that the engineers are able to tackle the challenges from climate change to technology to create a stronger, safer and smarter world. Er Pradeep Kumar Madhwar, Honorary Secretary, Bareilly Local Centre, IEI proposed the vote of thanks at the end of the event.

#### Bathinda



Bathinda Local Centre, IEI in association with Yadvindra Department of Engineering, Pujabi University, Guru Kashi Campus, Talwandi Sabo observed 56th Engineers' Day 2023 on 15 September 2023 in

Bathinda. On this occasion, Prof (Dr) Jagtar Singh, Chairman, Bathinda Local Centre, IEI welcomed all and shed light on the biography of Bharat Ratna M Visvesvaraya. Chief Guest of the event was Er Rajeev Parmar, GM Projects, HMEL, Guru Nanak Dev Refinery, Ram Mandi, Bathinda. Dr Jasbir Singh Hundal, Director, Punjabi University, Guru Kashi Campus, Damdama Sahib, Talwandi Sabo graced the occasion as the Special Guest.

#### Bhimavaram



Bhimavaram Local Centre, IEI, in association with the Department of Civil Engineering, S R K R Engineering College (SRKREC), Bhimavaram observed 56th Engineers' Day 2023 on 15 September 2023 in Bhimvaram, Chief

Guests Mr J Venkata Krishna, D.E, Quality Control Sub-Division, Bhimavaram and Mr Bh Ravi Prasad Raju, A E Irrigation, Yendagandi Division delivered lectures on the theme. Earlier, Er Karanam Suresh Babu, Chairman, Bhimavaram Local Centre, IEI welcomed the Chief Guests, dignitaries and participants. The event witnessed the presence of Prof (Dr) K Brahma Raju,

Council Member, IEI; Dr M Jagapath Raju, Principal, SRKREC and Dr A C S V Prasad, HoD, Civil Engineering Department, SRKREC, Prof Nookala Gopala Krishna Murthy, Honorary Secretary, Bhimavaram Local Centre, IEI.

#### Coimbatore



Coimbatore Local Centre, IEI, observed 56th Engineers' Day 2023 on 15 September 2023 in Coimbatore. Prof (Dr) S Shanmugam, Chairman, Coimbatore Local Centre, IEI welcomed the Chief Guest Er Mahesh Pachpor, Director

(Operations), Asia Pacific Flowserve Corporation and the gathering. Er G Madhan Mohan, Joint Honorary Secretary, Coimbatore Local Centre, IEI highlighted on the workings of Bharat Ratna Sir M Visvesvaraya. Er Pachpor, in his thematic address, explained different smart engineering perspectives with few case studies. He further discussed on different resilient engineering solutions and mentioned that education, innovations and technology are the fundamentals for resilience. Prof (Dr) J Krishnamoorthi, Honorary Secretary, Coimbatore Local Centre, IEI proposed the vote of thanks at the end of the event.

#### Dhanbad



Dhanbad Local Centre, IEI, in association with the Civil Engineering Department (CED), BIT Sindri, Dhanbad observed 56th Engineers' Day 2023 on 15 September 2023 in Dhanbad. Dr Maya Rajnarayan Ray, CED, BIT,

Sindri presented the life sketch of Sir M Visvevaraya and Dr Vikrama Pandey, Professor, CED, BIT, Sindri spoke on the theme. The event witnessed the presence of Mr J Kumar, Joint Secretary, Technical Education, Government of Jharkhand; Dr Pankaj Roy, Director, BIT Sindri; Dr S K Gupta, Professor, Department of Environmental Science & Engineering, IIT ISM, Dhanbad; senior Fellow & Members of IEI and students from IIT ISM Dhanbad. Prof (Dr) Biswajit Paul, Honorary Secretary, Dhanbad Local Centre, IEI and Dr M K Chandra, Past Honorary Secretary, Dhanbad Local Centre, IEI were present on the occasion.

#### Durgapur



Durgapur Local Centre, IEI observed 56th Engineers' Day 2023 on 15 September 2023 in Durgapur. The event witnessed the presence of Chief Guest, Prof Arvind Choubey, Director, National

Institute of Technology Durgapur and Guests of Honour, Prof Saikat Chatterjee, Director, Sanaka Educational Trust's Group of Institutions, Durgapur, Prof Sanjay S Pawar, Principal, Dr B C Roy Engineering College, Durgapur and Prof Alok Satsangi, Director, NSHM Knowledge Campus Durgapur. Keynote Speaker of the session was Dr Rajesh Prasad Barnwal, Principal Scientist, CSIR-CMERI. The programme was started with the opening remarks delivered by Er Manas Majumder, Honorary Secretary, Durgapur Local Centre, IEI. Er Safikul Islam, Chairman, Durgapur Local Centre, IEI presided over the function and welcomed all. Prof Arvind Choubey discussed on the application and future prospects of Industry 4.0. Prof Saikat Chatterjee shared his valuable insights about the merits and demerits of Artificial Intelligence and ChatGPT. Prof Sanjay S Pawar mentioned that engineers are problem solvers and innovators, build and maintain the national infrastructure, built environment and the supporting

systems on which society and economy depend. Prof Alok Satsangi explained the resilience shift due to the rapid global impacts of Covid 19, the consequences across every aspect of the work which supports it, provided an opportunity for us to consider the transformation as we emerge from this crisis. Dr Rajesh Prasad Barnwal delivered the Keynote lecture on the topic 'Attack-Resilient Modern Al Systems: Some Scientific Insights' and focused on Al technologies for implementing several sophisticated automations in almost all facets of the industries. He explained about various threats to modern Al Systems through real-life examples, discussed possible defences and invited for coming together to work on open challenging problem of Alenabled systems to make them more resilient in future. Er Manas Majumder proposed the vote of thanks at the end of the event.

#### Gorakhpur



Gorakhpur Local Centre, IEI, in association with KIPM College of Engineering and Technology, Gorakhpur and Malaviya Alumni Association observed 56th Engineers' Day 2023 on 15

September 2023 in Gorakhpur. Prof B B Singh, Former Principal, Madan Mohan Malaviya Engineering College, Gorakhpur delivered the thematic address and outlined the life sketch of Sir M Visvesvaraya. Er J B Rai, President, Malaviya Alumni Association emphasized the moral value and dedication of engineers. Er S B R Mishra, Former Superintending Engineer, UP Irrigation Department explained the capabilities, knowledge and skill of our ancient engineers. Er R P Tiwari, Former Engineer-in-Chief & Head of the Department, UP Irrigation Department highlighted the development of engineering in different areas and the contribution of engineers in making the modern India. Prof Alok Roy, Former Head of Civil Engineering Department, Kamla Nehru Institute of Technology, Sultanpur and Former Director General, ITM, Maharajganj, UP motivated young engineers and engineering students to set an example in the society. At the end of the event, Er Pawan Kumar Mishra, Chairman, Gorakhpur Local Centre, IEI proposed the vote of thanks.

#### Gwalior



Gwalior Local Centre, IEI observed 56th Engineers' Day 2023 on 15 September 2023 in Gwalior. The event witnessed the presence of the Speakers, Er K K Saraswat, Civil Engineer (Retired), Er Anuj Pratap

Singh, Director, Azakyti Energy and Dr C S Malvi, Professor, Department of Mechanical Engineering, Madhav Institute of Technology & Science (MITS), Gwalior. Earlier, Er Radha Kishan Khetan, Chairman, Gwalior Local Centre, IEI welcomed all. Dr (Ms) Chhavi Singhal, Joint Secretary, Gwalior Local Centre, IEI proposed the vote of thanks at the end of the event.

#### **Jodhpur**



Jodhpur Local Centre, IEI, in association with Satish Kunti Goyal Foundation observed 56th Engineers' Day 2023 on 15 September 2023 in Jodhpur. Chief Guest of the function was Shri K N Vyas,

Ex-Chairman, Atomic Energy Commission & Secretary, Department of Atomic Energy. Guest of Honour of the function was Shri Pankaj Kumar Singh, Divisional Railway Manager, Jodhpur. Er H C Soni, Ex-Director, Atomic Energy Commission was present on the dais and addressed the audience. Earlier, Er M M Agarwal, Chairman, Jodhpur Local Centre, IEI welcomed the guests and the dignitaries present in the program. Er Resham

Ram Hooda, Honorary Secretary, Jodhpur Local Centre, IEI proposed the vote of thanks at the end of the event.

#### Kanyakumari



Kanyakumari Local Centre, IEI, in association with Udaya School of Engineering, Vellamode, Nagercoil observed 56th Engineers' Day 2023 on 15 September

2023 in Nagercoil. Er Sajeev Jeba King, HOD, Electronics & Communication Engineering Department, Udaya School of Engineering, Nagercoil, Dr S Jothibasu, Principal, Udaya School of Engineering, Nagercoil and Er R K Nivendran, HoD, Aeronautical Engineering Department, Udaya School of Engineering, Nagrercoil spoke on the theme. Dr M Marsaline Beno, Dean (Research), St Xavier's Catholic College of Engineering and Honorary Joint Secretary, Kanyakumari Local Centre, IEI focused on the achievements of Sir Visvesvaraya and requested the budding engineers to adopt them in the competitive engineering world. Er S Natarajan, Honorary Secretary, Kanyakumari Local Centre, IEI explained the importance in observing Engineers' Day. Dr S Arumuga Perumal, Chairman, Kanyakumari Local Centre, IEI informed that engineering a resilient future is a critical endeavour that involves designing and implementing solutions to withstand and adapt a wide range of challenges and uncertainties including environmental changes, economic fluctuations and more. He explained about sustainable infrastructure, climate adaptions, renewable energy, smart technology, bio diversity conservation, etc.

#### **North Bengal**



North Bengal Local Centre, IEI observed 56th Engineers' Day 2023 on 15 September 2023 in Jalpaiguri. The event began with the welcome address delivered by Er Chinmoy Ghosh, Honorary Secretary, North Bengal

Local Centre, IEI. Er Dipak Kumar Kole, Assistant Professor, Department of Computer Science and Engineering, Jalpaiguri Government Engineering College, Jalpaiguri read out the life sketch of Sir M Visvesvaraya. Speaker of the day, Er Samar Thapa, Lecturer in Environmental Sciences, ASRB, New Delhi delivered lecture on the theme and explained that resilience shift

is committed to understanding how crisis can reveal both weaknesses and strengths of the systems on which we rely. Prof (Dr) Sudip Mukherjee, Chairman, North Bengal Local Centre, IEI presided over the function. Er G K Panda, Past Chairman, North Bengal Local Centre, IEI proposed the vote of thanks at the end of the event.

#### Tirunelveli



Tirunelveli Local Centre, IEI observed 56<sup>th</sup> Engineers' Day 2023 on 21 September 2023 in Tirunelveli. Prof (Dr) R Velayutham, Chairman, Tirunelveli Local Centre, IEI delivered the welcome address. Speaker of the

session, Er S K Syed Ahmed, Partner, Bharat Builders and Consultants, Tirunelveli, Tamilnadu delivered lecture on the theme of the day. Er Jimmi Carten M, Honorary Secretary, Tirunelveli Local Centre, IEI proposed the vote of thanks at the end of the event.

#### **Upper Assam**



Upper Assam Local Centre, IEI in association with Eastern Asset Oil India Limited [IOCL], Digboi, Assam observed 56th Engineers' Day 2023 on 15 September 2023 in Digboi. Shri Sanjay Verma,

Executive Director, Easter Asset Oil India Limited graced the occasion as Chief Guest and Shri Parash Thakur, General Manager, Eastern Asset Oil Limited as Guest of Honour. Shri Bhairab Bhuyan, Upper Assam Local Centre, IEI delivered address on the occasion. The technical session was chaired by Shri Dibakar Bhattacharjee, Former General Manager, IOCL and co-chaired by Shri Arunav Baruah, GM (Logistics), Oil India Limited. Papers were presented on different topics, namely Enhancing Tubulars Thread Cutting Process of Drill Pipe as per API-7-2 Standard with CNC Lathe Machine; Data Analytics and its' Role in Industries; Pulsed Neutron Logging: A Technology to Evaluate the Matured Fields; OIL Initiative Towards Zero Liquid Discharge; Emerging Trens in Power Trading; Best Practices in Gas Lift etc. Er Debajeet Sarma, Honorary Secretary, Upper Assam Local Centre, IEI proposed the vote of thanks.

### **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:
- 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.
- 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

## International Professional Engineers (IntPE) Certification by IEI

#### **ELIGIBILITY REQUIREMENT**

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

- 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.
- 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:

 $https://www.ieindia.org/webui/IEI\_IntPE\_Certification.aspx$ 

The eligible candidate can submit application in the prescribed format to:
The PE Cell, The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700020
For any query and assistance, please send email to: pe@ieindia.org

### **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, 2023. A brief accounts of celebration, as received from various Centres, are reported hereunder.

#### **STATE CENTRES**

#### Gujarat



Gujarat State Centre, IEI, in association with Water Management Forum, IEI & World Federation of Engineering Organization observed Royal Charter Day 2023 on 09 September 2023 through online mode and a technical talk was organized

on the same on 'Sustainable Development Goals of United Nations - A Way Forward for Sustainable Water Resources'. Mr H U Kalyani, Immediate Past Chairman, Gujarat State Centre, IEI & Chairman - BOG, Water Management Forum, IEI delivered the welcome address and highlighted the importance of this webinar, and discussed the importance of Royal Charter in respect to IEI. Keynote Speaker of the session was Dr Anupam Kumar Singh, Principal, Adani Institute of Infrastructure Engineering, Ahmedabad. Theme Speaker, Dr I Satyanarayana Raju, Council Member, IEI & Member - BOG, WMF delivered lecture on the topic 'A Way Forward for Sustainable Water Resources' and explained about water resources, distribution of earth water, per capita water availability, water scenario in India, etc and by sustainable practices, how we can preserve the environment, protect biodiversity, mitigate climate change, eradicate poverty, foster long term economic growth and added that sustainable development makes the resources available for the use of future generations. Er Dineshchandra Odhavjibhai Nakrani, Honorary Secretary, Gujarat State Centre, IEI proposed the vote of thanks at the end of the event.

#### Tripura



Tripura State Centre, IEI observed Royal Charter Day on 09 September 2023 in Agartala. A Round Table Discussion was organised on the occasion on the topic 'Royal Charter and IEI'. The event witnessed the

presence of eminent panellists, namely Er R K Majumder & Er Tapan Lodh, Former Chairmen, Tripura State Centre, IEI; Er Chinmay Debnath, Former President of IEI and Er Susanta Dutta, Past Honorary Secretary, Agartala Local Centre, IEI. The programme was presided over by Dr Subhadeep Bhattacharjee, Chairman, Tripura State Centre, IEI. Earlier, Dr Mrinal Kanti Deb Barma, Honorary Secretary, Tripura State Centre, IEI delivered the welcome address.

#### **LOCAL CENTRES**

#### Agra

Agra Local Centre, IEI, in association with the ACE College of Engineering and Management (ACE CE & M), Agra observed Royal Charter Day 2023 on 09 September 2023 int Agra. Chief Guest of the event was Er



Devendra Singh Chaudhary, Past Chairman, Agra Local Centre, IEI. Mr Sanjay Garg, Chairman, and Er Akhil Goel, Secretary, ACE College of Engineering & Management, Agra were present in the function. Earlier. Er Anil

Kumar Goyal, Chairman, Agra Local Centre, IEI welcomed the Chief Guest, guest & participants. Er Rajnesh Kumar Yadav, Honorary Secretary, Agra Local Centre, IEI discussed about Royal Charter and its significance and proposed the vote of thanks at the end of the event.

#### **Ahmednagar**



Ahmednagar Local Centre, IEI observed Royal Charter Day 2023 on 14 September 2023 in Ahmednagar. Dr D B Karanjule, Joint Honorary Secretary, Ahmednagar Local Centre, IEI discussed

the brief history and background of Royal Charter. Er Abhay Krishnarao Raje, Honorary Secretary, Ahmednagar Local Centre, IEI delivered lecture on 'Technical and Safety Features in Modern Indian Cars'.

#### Aligarh



Aligarh Local Centre, IEI observed Royal Charter Day 2023 on 15 September 2023 in Aligarh. Chief Guest Er Praveen Sharma, MD, M/s Bishen International Tala Nagri, Aligarh shared his views about Royal Charter

Day and discussed the contributions made by the engineers for nation building. Guest of Honour, Prof Mohd Khalid, President, Aligarh Muslim University Teachers' Association, AMU, Aligarh shared his valuable insights on the life of the engineers. Prof Mohammad Kamil, Chairman, Department of Petroleum Studies, Aligarh Muslim University, Aligarh delivered lecture on 'Importance of Royal Charter Day'. Earlier, Dr (Mrs) Salma Shaheen, Chairperson, Aligarh Local Centre, IEI delivered the welcome address and introductory remarks.

#### **Bareilly**



Bareilly Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 in Bareilly. In the beginning, the welcome address was delivered by Er Raj Goel, Chairman,

Bareilly Local Centre, IEI. Er Pradeep Kumar Madhwar, Honorary Secretary,

Bareilly Local Centre, IEI explained the history of Royal Charter and the incorporation of Royal Charter to IEI. The day shed light on the pivotal role of engineering in shaping our world and the institution's commitment to fostering innovation, collaboration, excellence in engineering, and ensuring a brighter tomorrow. The event witnessed the presence of Speakers Er K B Agrawal, Past Chairman, Bareilly Local Centre, IEI and Mr Suresh Sundrani, Past Chairman, Bareilly Local Centre, IEI. Er Pradeep Kumar Madhwar proposed the vote of thanks at the end of the event.

#### **Bhimavaram**

Bhimavaram Local Centre, IEI, in association with S R K R Engineering College, Bhimavaram observed Royal Charter Day 2023 on 09 September 2023 through virtual mode. Speaker of the session, Er Karanam Suresh Babu, Chairman, Bhimavaram Local Centre, IEI highlighted the importance of Royal Charter Day and background of Royal Charter. Earlier, Rajesh Siriyala, Programme Coordinator welcomed the Speaker and the participants. Prof Nookala Gopala Krishna Murthy, Honorary Secretary, Bhimavaram Local Centre, IEI proposed the vote of thanks at the end of the event.

#### **Bokaro Steel City**



Bokaro Steel City Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 in Bokaro. Chief Guest, Er Y N Singh, Immediate Past Chairman,. Bokaro Steel City Local

Centre, IEI spoke about the importance of Royal Charter and explained its significance. Guest of Honour, Mr B K Prasad, Chairman (Elect), Bokaro Steel City Local Centre, IEI highlighted the activities of IEI and its growth since 1920 and also mentioned the benefits & privileges of being a Corporate Member of IEI. Earlier, Er Navin Prakash Srivastava, Chairman, Bokaro Steel City Local Centre, IEI welcomed the dignitaries and highlighted the background of incorporation of IEI under Royal Charter and the activities of IEI. Er Sunil Kumar, Honorary Secretary, Bokaro Steel City Local Centre, IEI proposed the vote of thanks at the end of the event.

#### Coimbatore



Coimbatore Local Centre, IEI, in association with the Department of Metallurgical Engineering, PSG College of Technology, Coimbatore & The Indian Institute of Metals (IIM), Coimbatore Chapter observed Royal Charter Day 2023 on 12 September 2023 in Coimbatore. Prof (Dr) S Shanmugam,

Chairman, Coimbatore Local Centre, IEI welcomed the Guest Speaker of the session, Dr R Bhima Rao, Former Chief Scientist, CSIR – Institute of Minerals and Materials Technology, Bhubaneswar & Council Member, IEI. Prof (Dr) Krishnamoorthi J, Honorary Secretary, Coimbatore Local Centre, IEI & Professor and Head, Department of Metallurgical Engineering, PSG College of Technology addressed the audience. Dr Bhima Rao delivered lecture on the theme 'Rare Earth Minerals and Metals' and highlighted different minerals and their deponents available in India. He briefed the major steps in extraction of Ce, Li, Ga and a few common rare earths. He also mentioned the functions of IMMT, Bhubaneswwar and Cochin Minerals and Rutile Limited (CMRL), Aluva.

#### Faridabad

Faridabad Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 through online mode. Er Kuldip Raj Gupta, Chairman, Faridabad Local Centre, IEI delivered the welcome address and highlighted

the importance of Royal Charter Day. Expert Speaker, Er I S Oberoi, Managing Director, A D Global Synergies Private Limited, Delhi told that this day not only commemorate a significant milestone in our Institution's history, but also reflect upon engineering excellence that has shaped our country, region and profession. He emphasized that the engineers are at the forefront to address the significant issues, which include sustainability, renewable energy, digitalization and infrastructure development.

#### Gorakhpur



Gorakhpur Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 in Gorakhpur. Er Pawan Kumar Mishra, Chairman, Gorakhpur Local Centre, IEI welcomed the Keynote Speaker of the event, Er M W Beg, Former

Chief Manager, Indian Oil Corporation & Past Chairman, Gorakhpur Local Centre, IEI and the audience. Er Mishra highlighted the achievements of IEI with incorporation of Royal Charter. He focussed the benefits of Corporate Membership of IEI and provisions of Professional Engineers and Chartered Engineers. Er Ramesh Chandra Pandey, Honorary Secretary, Gorakhpur Local Centre, IEI proposed the vote of thanks at the end of the event.

#### Gwalior



Gwalior Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 in Gwalior. Er Radha Kishan Khetan, Chairman, Gwalior Local Centre, IEI welcomed the participants and discussed the brief

history of Royal Charter. Shri Vinay Kumar Shukla, Former Manager, National Fertilizers Limited & Organizing Secretary, Gwalior Local Centre, IEI discussed the significance of the recognition of Royal Charter to IEI. Er A S Bais, Retired Colonel, Indian Army and Dr Chhavi Saxena, Director, Global Education Consultant Services Overseas, Er Balbir Sikarwar, Executive Engineer, Gwalior Municipal Corporation and Er R K Datey, Former Executive Director, MPPGCO spoke on the occasion.

#### **Jodhpur**



Jodhpur Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 in Jodhpur. A Seminar was organized on the theme on the theme 'Chartered Engineers: The Nation

Builders'. Keynote Speaker of the session, Acharya (Er) Dariya Singh Yadav, Former Chairman, Board of Technical Education, Rajasthan stated that engineers are the assets of a nation with adequate skills and abilities for nation building, creating infrastructure for economic development, build factories, roads for transportation for goods and their work affecting the socio-economic well-being of a nation. Earlier, Er M M Agarwal, Chairman, Jodhpur Local Centre, IEI welcomed the Keynote Speaker, dignitaries and discussed the brief history and background of Royal Charter. Er Resham Ram Hooda, Honorary Secretary, Jodhpur Local Centre, IEI proposed the vote of thanks at the end of the event.

#### Kanyakumari

Kanyakumari Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 in Kanyakumari. Dr S Arumuga Perumal, Chairman, Kanyakumari Local Centre, IEI delivered the welcome address and discussed



the importance of Royal Charter. Er S Nataraian. Honorary Secretary, Kanyakumari Local Centre, also discussed the ΙΕΙ significance of Royal Charter. Chief Guest, Er Venkat Subramanian.

Staff Engineer, Envision Digital, Singapore delivered special address on 'Harnessing the Power of IoT and Edge for Smart City Application'.

#### Meerut

Meerut Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 through virtual mode. Er Raineesh Kumar, Past Chairman, Meerut Local Centre, IEI welcomed all and discussed the history and background of Royal Charter, Keynote Speaker, Dr Pragati Sharma, Associate Professor and Head, Department of EEE, Phonics Group of Institution, Roorkee delivered lecture on 'WIET, 6G & IoNT' and discussed on wireless energy transmission. Er Raj Pal Agarwal, Honorary Secretary, Meetut Local Centre, IEI proposed the vote of thanks at the end of the event.

#### Muzaffarpur



Muzaffarpur Local Centre. IEI observed Royal Charter Day 2023 on 12 September 2023 in Muzaffarpur and a lecture was delivered on the topic 'Value Education in Engineering'. Er Anjani

Kumar Srivastava, Chairman, Muzaffarpur Local Centre, IEI delivered the welcome address and explained the importance of Royal Charter provided to IEI to promote general advancement of engineering amongst its members and persons attached to IEI. He highlighted that grant of Royal Charter was an honour in the history of IEI, as first recognition extended to a professional body which had its origin and functions in India and further added that engineers who are taught human values have been known to display strong work ethics, which in turn enhance their performance as engineers. Chief Speaker, Prof C B Rai, Dean Academics, MIT Muzaffarpur highlighted that professionals with good work ethics display higher ethical standards towards their organization. Dr MK Jha, Principal, MIT told that value education plays an importance role in helping engineer to make right decisions in difficult situation and stressed that coming generations of engineers will inculcate human values in their personal and professional lives. Corporate Members, Faculty Members and Student Members attended this event. Er Sanjay Kumar Choudury, Honorary Secretary, Muzaffarpur Local Centre, IEI proposed the vote of thanks at the end of the event.

#### North Bengal



North Bengal Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 int Jalpaiguri. A Seminar was organised on the topic on the theme 'Quality Assurance Quality Control'. Speaker of the session was Er Chinmoy

Ghosh, Honorary Secretary, North Bengal Local Centre, IEI. Prof (Dr) Sudip Mukherjee, Chairman, North Bengal Local Centre, IEI proposed the vote of thanks at the end of the event.

#### **Ranipet**

Ranipet Local Centre, IEI observed Royal Charter Day 2023 on 15 September 2023 int Ranipet. Er M Salai Manalan, Chairman, Ranipet Local Centre, IEI delivered the welcome address and explained in details about



the establishment of Royal Charter, its importance and the history. In the technical session, Dr Priya V, Associate Professor Sr, VIT, Vellore delivered lecture on the topic 'Best Practices for Responding & Recovering from Cyber Incidents' and

explained different aspects of cyber security, cyber security threats, cyberattacks in energy industry, malware attack on power grid, Industry 4.0 & its relevance in cyber security, Cyber Kill Chain Model etc.

#### Roorkee

Roorkee Local Centre, IEI, in association with the Indian Water Resources Society (IWRS) observed Royal Charter Day 2023 on 02 September 2023



in Roorkee. The event began with a welcome address delivered by Dr Ashish Pandey, Chairman, Roorkee Local Centre, IEI. On the occasion, Padam Shri Uma Shankar Pandey delivered lecture on 'Traditional

Water Conservation Techniques', highlighted on water conservation and management and opined that every individual in society should contribute in this regard.

#### Rourkela

Rourkela Local Centre, IEI observed Royal Charter Day 2023 on 09 September 2023 through hybrid mode. The event began with the welcome address by Er Santosh Kumar Polaki, Chairman (Elect), Rourkela Local Centre, IEI. Dr Rama Chandra Pradhan, Honorary Secretary, Rourkela Local Centre, IEI introduced the bio-data of the Speaker, Prof (Dr) Singam Jayanthu, Department of Mining Engineering, National Institute of Technology Rourkela. Prof Jayanthu explained in detail about the establishment of Royal Charter of IEI, its significance, role of Chartered Engineers of IEI and the future expectations from Corporate Members in nation building in line with sustainable development goals. He provides the responsibility to promote the general advancement of engineering amongst its members and persons attached to Institution and highlighted that IEI is a 'Body Corporate' protected under Article 372 of the Constitution of India. Dr Rama Chandra Pradhan proposed the vote of thanks at the end of the event.



## **News-in-Brief**

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

#### **STATE CENTRES**

#### Maharashtra

Organized the First Prof R K Katti Memorial Lecture in association with Indian Society of Structural Engineers, Civil Engineering Department, IIT Bombay, Mumbai, Indian Geotechnical Society, Mumbai Chapter on 25 March 2023 in Mumbai. Eminent Speaker, Er Dr Dinesh Katti, Jorden A Engberg Presidential Professor Civil, Construction & Environmental Engineering, University of North Dakota, Fargo, USA delivered lecture on 'Revisiting Mechanics of Swelling Clays Atom by Atom'. His discourse underscored the utility of montmorillonite clay minerals in various engineering applications and elucidated how nano clay materials, when combined with polymers, could significantly enhance polymer strength. In addition to Er. Dr. Dinesh Katti's illuminating lecture, Er. R. K. Jha, Chief Transportation and Communication Planner at CIDCO and Consultant for MSRDC and MTHL, shared his insights in a talk titled 'Reminiscences on the Genesis of Twin City'. He shed light on the extensive geotechnical activities undertaken by CIDCO Limited and delved into the geotechnical engineering mapping accomplished by the late Prof. R. K. Katti during his tenure at IIT Bombay and DIDCO.

#### Telangana

Organized a webinar on 'Er L Venkata Krishna Iyer, Er K V Srinivasa Rao & Mr M L Swamy 22<sup>nd</sup> Endowment Lecture on 'Contract Management and Alternative Dispute Resolution' on 18 March 2023. Eminent Speaker of the session was Mr B S Narayana Reddy, Former Engineer-in-Chief, I & CAD Department, Government of Erstwhile Andhra Pradesh.

Organized National Survey Day on the topic 'Digitalization of Surveying and ULPIN' on 10 April 2023 through online mode. Chief Guest of the event was Dr Rajashekar K, Deputy Director General (Retd) NIC, DIETY, MCIT, Government of India.

On 14 April 2023, Engineers Memorial Day 2023 was observed in Hyderabad, commemorating Bharat Ratna Sir Mokshagundam Visvesvaraya Vardanthi. The event saw the participation of Er B Brahma Reddy, Chairman of Telangana State Centre, IEI, Dr G Venkata Subbaiah, Honorary Secretary, Telangana State Centre, IEI, Dr I Satyanarayana Raju, Council Member, IEI, and other esteemed Committee members who paid their tributes to Bharat Ratna Sir M Visvesvaraya.

The Er G Prabhakar  $2^{nd}$  Endowment Lecture, focused on 'Tall Buildings Issues and Concerns', took place on 15 April 2023, in Hyderabad. The event was graced by Prof N V Ramana Rao, Director of the National Institute of Technology Warangal, who delivered an insightful Endowment Lecture.

On 22 April 2023, the World Earth Day was celebrated with a discussion on 'Invest in our Planet', conducted through an online medium. The Chief Guest for the event was Dr M Velan, Adjunct Faculty – Professor at the Indian Institute of Information Technology, Design and Manufacturing, with the session being moderated by Dr Kulkarni Shashikanth.

With continued commitment to education and knowledge-sharing, the Er Koka Krishna Mohan Rao 33<sup>rd</sup> Endowment Lecture was held on 23 April 2023. The topic of focus was 'Private Research and Development in India', with Er Ramdas M Kumbala, Director-Technology at Hindustan UAV Systems Private Limited, serving as the esteemed speaker.

#### **Tripura**

On 18 April 2023, in collaboration with the Tribal Research and Cultural Institute, Government of Tripura, the state observed World Heritage Day in Agartala. A seminar was conducted, focusing on the topic of 'Heritage Changes due to Climate Change'. The event was graced by the presence of Prof Satyadeo Poddar, Honorable Vice Chancellor of Maharaja Bir Bikram University, Agartala, who served as the Chief Guest. Prof Poddar highlighted the town planning concepts from the Harappan civilization and their potential relevance to contemporary civil engineering. The Guest of Honor, Mr Ananda Hari Jamatia, Director of the Tribal Research and Cultural Institute. Government of Tripura, discussed the detrimental effects of acid rain and soil erosion on heritage structures. Special Speaker Dr Sumanta Chakraborti, Registrar of Maharaja Bir Bikram University, Agartala, delved into the impact of climate change on world and local heritage sites, emphasizing the importance of their preservation, conservation, and protection. Furthermore, Mr Veeramoni T, Senior Project Manager at BBR India Private Limited, expressed his views on how heritage conservation plays a pivotal role in mitigating global warming.

On 20 July 2023, a Technical Talk was organized in Agartala on the theme 'Importance of Sustainability in Engineering Design'. The event featured Special Speakers, Prof D K Baidya, Director of NIT Silchar and Professor of Civil Engineering at IIT Kharagpur, and Prof Dipanjan Basu, Professor of Geotechnical Engineering in the Department of Civil and Environmental Engineering at the University of Waterloo, Canada. They delivered lectures highlighting the significance of sustainability in engineering design.

On 24 July 2023, National Thermal Engineer Day was observed, accompanied by a seminar on 'Thermal Management Techniques for Industrial Applications' in Agartala. Prof (Dr) Sekhar Datta, Principal of Tripura Institute of Technology, Narsingarh, graced the program as the Guest of Honour. Prof Datta underscored the critical role of advancements in the thermal energy sector for national growth. Special Speaker Dr P Karuna Purnapu Rupa, Associate Professor and Head of the Department of Material Science & Engineering at Tripura University, discussed metal hybrid-based cooling systems. Additionally, Dr Arindam Banerjee, Associate Professor and Head of the Department of Electronics & Communication Engineering at ICFAI Technical School, FST, ICFAI University, Tripura, provided insights into thermal effects and management in VLSI circuits.

#### **LOCAL CENTRES**

#### Ahmednagar

On 24 April 2023, Ahmednagar, in partnership with Mahatma Phule Agricultural University, Rahuri, and the District Legal Services Authority, observed Earth Day. The event featured a symposium on 'Invest in Our Planet'. Mr Sudhakar Yarlagadda, Principal District Judge, Ahmednagar, encouraged responsible use of natural resources. Dr P G Patil, Vice Chancellor of Mahatma Phule Krishi Vidyapeeth, discussed concerns regarding air and water pollution due to greenhouse gas emissions and pesticides. He advocated for organic farming, plastic recycling, and outlined university projects. Dr S D Gorantiwar, Director of Research at Mahatma Phule Krishna Vidyapeeth, emphasized the adverse effects of overexploitation of natural resources and environmental pollution. He urged the adoption of UN - Sustainable Development Goals and practices like reduced pesticide use, energy-efficient products, and precision agriculture.

#### Aligarh

A technical visit to the 3.3 MW Ground Mounted Solar Power Plant of Aligarh Muslim University was organized on 23 February 2023, in Aligarh. The objective of this visit was to familiarize members with solar power technology, solar energy generation, the functioning of solar power plants, solar power grids and inverters, energy conversion from DC to AC, and real-time monitoring of solar power via inverter systems.

#### **Bhimavaram**

On 28 February 2023, in collaboration with the Department of Computer Science and Design, IEI Students Chapter, S R K R. Bhimavaram, a celebration of National Science Day took place in Bhimavaram. Mr Nukala Viswa Teja, Scientist-SC at ISRO, Sriharikota, graced the event as the Chief Guest and delivered a lecture on the significance of science, technology, engineering, and mathematics.

#### Coimbatore

An Technical Lecture was held in collaboration with the Department of Production Engineering, PSG College of Technology, Coimbatore, on 17 March 2023. Guest Speaker Mr S T Ravichandran, System Engineer at Bosch Global Software Technology, Coimbatore, presented on the topic of 'Two-Dimensional and Three-Dimensional Stack Up Analysis in DFMA'. His discussion emphasized the importance of tolerance allocation in engineering drawings and its impact on manufacturing costs. He explained Monte Carlo simulation and the 3-dimensional loop method used in stack-up analysis and illustrated the practice of gap analysis with two case studies. Dr M Senthilkumar, Dr S Saravanan, and Dr R Rajesh, faculty members from PSG College of Technology, Coimbatore, also addressed the audience.

On 6 April 2023, a Webinar was organized in collaboration with the Department of Electronics and Communication Engineering at Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. The topic was 'Emerging Routing Technologies for Internet', and the Guest Speaker was Dr M S K Manikandan, Associate Professor at the Department of Electronics and Communication Engineering, Thiagarajar College of Engineering, Madurai. Dr Manikandan discussed routing technologies, the scope of professional certifications, and the practical use of routers in academic institutes and industries.

#### Kadapa

A Technical Seminar on 'Internet of Things (IoT)' was organized on 24 February 2023. The speaker for this session was Er T L Bhaskar, Senior Project Manager (IT Analyst) at TCS, Hyderabad. Er Bhaskar provided insights into IoT applications in healthcare, automobiles, decentralized communication, and control systems.

On 27 March 2023, a Technical Seminar on 'Safety Precautions in the Power Sector' was conducted in Kadapa. The session was delivered by Er N Bramhananda Reddy, Chairman of the Kadapa Local Centre, IEI. Er Reddy highlighted the various uses of electricity in our lives and emphasized the importance of electrical safety, addressing issues such as short circuits, overheating, overloading, and improper wiring. He strongly advocated for the use of ISI certified appliances, quality electrical fuses, miniature circuit breakers, earth leakage circuit breakers, and adherence to safety standards to prevent accidents.

In collaboration with the Department of Electrical Engineering at JNTUA College of Engineering, Pulivendula, a workshop on 'QGIS Software' was organized on 29 March 2023. Er P Manisha, Assistant Professor in the Department of Civil Engineering, JNTUA College of Engineering, Pulivendula, and Workshop Convener, provided an introduction to the theme. The resource person for the event, Mr Y Govardhan Reddy, CE, Surveyor at SSLR, RDO Office, Pulivendula, explained the features of QGIS (Quantum Geographic Information System) software and its applications in creating,

editing, visualizing, analyzing, and publishing geospatial information. He highlighted the software's advantages in map-making and spatial analysis.

#### Kanyakumari

A technical lecture on 'Future Technologies in Electric Vehicles' was organized in collaboration with the Institution of Engineering Technology (IET), Nagercoil Local Network, on 31 October 2022, in Kanyakumari. The Chief Guest of the event, Er R L Geoffer Jaish, Test Specialist at Siemens, Bangalore, and Vice Chairman of IET KKLNYP, delivered a lecture on the theme. Er. Jaish discussed the different stages of fuel emission norms and the evolving landscape of electric vehicles.

#### Kochi

On 12 January 2023, a webinar on the 'Analysis of Personal Factors Influencing Electrical Occupational Accidents' was conducted. The speaker for this virtual session was Dr Tiju Baby, Research Professor in Industrial and System Engineering at Geongsang National University, Republic of Korea.

On 19 January 2023, another webinar on the 'Assessment of Land Subsidence and Associated Causes in a Rapidly Developing Himalayan Town Joshimath' was organized. Dr Sunil P S, Associate Professor in the Department of Marine Geology & Geophysics at Cochin University, was the speaker. Dr Sunil provided a detailed overview of the land subsidence situation in Uttarakhand, covering various types of landslides, including rotational, transitional, block, rockfall, topple, debris flow, debris avalanche, earthflow, and creep.

On 21 February 2023, a webinar on 'Energy Conservation in Dairy Industries' was organized. The speaker for the session was Er Vijayakumaran K M, an Energy Consultant, Lead Auditor ISO 5001:2018, and Former Managing Director of MILMA Malabar Milk Union. Er Vijayakumaran discussed dairy processing and the implementation of energy conservation measures in different dairy units in the northern part of Kerala.

#### Kota

A Technical Lecture on 'Recovery of Zinc from Steel Making Waste Flue Dust' was organized on 12 February 2023, in Kota. The Chief Guest for the event was Er Govind Ram Mittal, Entrepreneur and Founder President of the SSI Association, Kota. Shri Prem Chand Jain Bajaj, MD of Bajaj TMT, Kota, served as the Guest of Honour. The speaker for the event was Er Prakash S Bagga.

On 13 March 2023, another Technical Lecture was organized on 'Computer-Aided Engineering and Its Effectiveness in the Product Development Process'. The Guest Speaker, Er Parul Gupta from Kohler Power India Private Limited, Pune, elaborated on the application of Computer-Aided Engineering, Finite Element Analysis, Engine Body Simulation, Computational Fluid Dynamics, Multi-Body Dynamics, System Modeling, and their effectiveness in the product development process.

#### **North Bengal**

A Lecture Meeting on 'Assessment and Impacts of Soil Moisture on Indian Agricultural Systems' was organized on 21 March 2023, in Jalpaiguri. The theme speaker for the session was Er Swalpa Kumar Roy, Assistant Professor in the Department of Computer Science and Engineering at Jalpaiguri Government Engineering College, Jalpaiguri. Er Roy emphasized the significance of soil moisture as a critical variable for crop production systems and agricultural research. He discussed the impact of agricultural drought on agricultural productivity and socio-economic growth, while also explaining the influence of Field Capacity (FC) and Permanent Wilting Point (PWP) on soil moisture content.

On 29 March 2023, a Lecture Meeting was held, focusing on 'Blockchain Technology: Its Applications & Services'. The theme speaker for the session was Er Jhuma Dutta, Assistant Professor in the Department of Computer

Science and Engineering at Jalpaiguri Government Engineering College. Er Dutta provided insights into Blockchain technology, describing it as an encrypted, distributed database that records data—a digital ledger of transactions and contracts, independently recorded and accessible across multiple computers. She highlighted the transformative potential of Blockchain in the business sector.

#### Ranipe

On 22 December 2022, a webinar on 'Green Electronics' was conducted. The speaker for this virtual session was Er. A. Mohammed Mian, Associate Professor in Electronics and Communication Engineering at C Abdul Hakeem College of Engineering and Technology, Melvisharam. The webinar covered various aspects of e-waste generation, types of electronic waste, worldwide waste generation trends, harmful elements in e-waste, traditional disposal methods, and the importance of green electronics, including lean design principles in electronics.

#### Rourkela

World Intellectual Property Day was celebrated on 26 April 2023, in Rourkela, with a seminar on 'Women and IP: Accelerating Innovation and Creativity.' The speaker of the session, Dr Ravi Avvari, Assistant Professor in the Department of Biotechnology and Medical Engineering at the National Institute of Technology Rourkela, elaborated on human intellectual creativity in science and technology throughout history, from the invention of fire to wheeled vehicles, vaccine design, and intangible asset mining. He delved into the knowledge-based economy, intellectual property creations from creative thinking, and the significant aspects of intellectual property laws, including the Patent Act of 1970 and the Copyright Act of 1957.

#### Thanjavur

World Environment Day was observed on 26 July 2022, in Thanjavur, with a seminar on 'Only One Earth.' The guest speaker for the session was Er S Vijay Ananth, Technical Director-MEP & Environmental Engineering Consultant at INSEED Engineering Consultants, Dubai, UAE.

#### Tirunelveli

A seminar on 'Recent Advancements in Pavement Engineering' was organized on 10 April 2023, in Tirunelveli. The Chief Guest and Resource Person, Dr S Bright Singh, from the Civil Engineering Department at Mepco Schlenk Engineering College, Sivakasi, delivered the keynote address. Dr Singh explained various pavement design methods and advanced materials used in pavement construction and testing.

#### Udaipur

An Expert Lecture on 'Future Engineers' was held on 04 March 2023, in Udaipur, in association with the Institute of Engineering and Technology, Mohanlal Sukhadia University. The Keynote Speaker for the session was Er. Chandra Prakash Jain, Chairman of Udaipur Local Centre, IEI.

#### Vallabh Vidyanagar

A seminar on 'Startup and Entrepreneurship' took place on 16 February 2023, in Vallabh Vidyanagar, with the objective of raising awareness among students about startup, innovation, creative thinking, and entrepreneurship. The speaker for the event was Dr Rajubhai Rathod, Professor in the MBA Department at S P University, Vallabh Vidyanagar. The seminar focused on the development of business ideas, accessing global markets, and the role of startups and entrepreneurship in job creation, innovation, and economic growth.

#### Visakhapatnam

National Science Day was celebrated on 28 February 2023, with the theme 'Global Science for Global Wellbeing.' The speaker for the session was Prof (Dr) Rao Tatavarti, Distinguished Professor and Director at Gayatri Vidya Parishad Institutes, Visakhapatnam. The lecture emphasized the latest indigenous and innovative engineering and technological inventions to address current challenges, such as air pollution, viral outbreaks, and hospital-acquired infections.

## **Empanelment as Advocate/ Attorneys & Chartered Accountant for 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 **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.** 

### **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 made in Demand Draft/ Multi-city Cheque in favour of "The Institution of Engineers (India)" payable at Kolkata.

The hard copy of application should reach to:-

#### The 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.



## The Institution of Engineers (India) IEI Industry Excellence Award 2023 for Start-up Initiatives

**Request for Participation** 

The engineering sector is experiencing remarkable growth with Government and private funding, presenting immense commercial potential on a global scale. Technology and innovation are the driving forces behind a vibrant MSME ecosystem, with start-ups acting as a perennial source of inspiration.

We cordially invite start-up organizations in Engineering, Consultancy Services, Construction, Healthcare, Utility Services, IT & Telecommunication, and related domains to apply for the prestigious IEI Industry Excellence Award 2023. To be eligible, applicant organizations must be duly registered with DPIIT, IN-SPACe, ISRO, Ministry of MSMEs, Government of India, and relevant State Industrial Development Corporations.

The IEI Industry Excellence Award 2023 aims to recognize and celebrate innovative start-ups that demonstrate exceptional promise and positive impact on society. By participating in this prestigious award, you not only stand a chance to gain industry recognition but also open doors to new opportunities, partnerships, and potential investors.

To participate, submit your applications using the specified format available at https://www.ieindia.org/webui/IEI-Activities.aspx#industryexcellence-award. The application deadline is 31st October 2023.

Send two hard copies and one soft copy (Pen drive/CD) to:

The Director [Technical] The Institution of Engineers (India) 8 Gokhale Road Kolkata 700 020

We eagerly await your participation in this celebration of ingenuity and entrepreneurship.



## The Institution of Engineers (India) Notification for

#### **R&D Grant-in-Aid**

To promote appropriate technology, assist in building up design & research talents and, most importantly, to help in nurturing potential R&D venture amongst engineering students pursuing Diploma/UG/PG/PhD courses, The Institution of Engineers (India) had instituted the R&D Grant-in-Aid program way back in 2001.

Every year, the Institution invites applications for funding industry-oriented R&D projects and research initiatives aimed at improving the life-style of common people from engineering students pursuing full time Diploma/UG/PG/PhD engineering program in AICTE/UGC/NAAC approved Institutions/ Colleges/Universities. The application form and guidelines are available in our website https://www.ieindia.org. The projects should be carried out under the guidance of faculty members who are Corporate Members of IEI. Membership criteria for student(s), guide(s) and Institution(s) are as follows:

Project Category	Student/Applicant Membership	Guide(s) Membership	Institutional Membership
1. Diploma	Exempted [Membership of Student Chapter is desirable]	AMIE/MIE/FIE	Not Mandatory
2. UG (BE/BTech/ AMIE/Equivalent)	'Student Member' (SMIE)	AMIE/MIE/FIE	Applicant's Institute should preferably be an Institutional Member with NBA / NAAC Accreditation or valid NIRF Rank
3. PG (ME/MTech/ Equivalent)	AMIE/MIE/FIE	MIE/FIE	Applicant's Institute should preferably be an Institutional Member with NBA / NAAC Accreditation or valid NIRF Rank
4. PhD	AMIE/MIE/FIE	MIE/FIE	Applicant's Institute should preferably be an Institutional Member with NBA / NAAC Accreditation or valid NIRF Rank

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

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

Kindly go through the guidelines (visit link https://www.ieindia.org/webui/IEI-Activities.aspx#RnD-Initiative) before filling up the application.

## The Institution of Engineers (India)

8 Gokhale Road, Kolkata-700020

25 October 2023

#### 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 "Engineers Bhawan", 2 Bahadur Shah Zafar Marg, New Delhi 110002 on 26 November 2023 at 1000 hrs to consider the following recommendations of the Council vide its 723rd Meeting held on 24-25 Sep 2023 at Guwahati:

#### 1. RECOMMENDATIONS FOR AMENDMENT IN REGULATIONS

(Suggested amendments have been marked in bold and those to be deleted have been marked striked-out).

#### **EXISTING CLAUSE**

## 2. Every class of members of the Institution, save only the Honorary Fellows and the Honorary Life Fellows, shall be deemed to be attached to the State Centre within the geographical boundaries of which he usually resides or is in employment or practices or carries on business.

Every class of members of the Institution save only Honorary Fellow and the Honorary Life Fellow residing or in employment or practising or carrying on business within the geographical boundaries of a Local Centre shall be attached to that Local Centre also.

Temporary absence for a period not exceeding six months shall be exempted from the operation of this Regulation. The Council shall, however, have the discretion to exempt any member from this provision if he shows sufficient reason why he should be attached to a State Centre or a Local Centre as the case may be other than the one to which he would be attached by its operation. A Member so exempted shall not, however, hold any office in the Institution as representative of the State Centre or the Local Centre as the case may be, to which he is then permitted to be attached.

Members residing or in employment or practising or carrying on business abroad or whose address are in the care of Army Post Office shall be attached to Headquarters.

3.(a)(viii) The Committee of a State Centre or a Local Centre may, if thought necessary, co-opt not more than two outstanding engineering personalities who shall be Corporate Members of the Institution residing or practising within the geographical boundaries of the State Centre or the Local Centre as the case may be on the recommendation of a Committee to be appointed by the Committee of the State Centre or the Local Centre comprising three Past Chairmen of the State Centre or the Local Centre as the case may be. They shall have right to vote on all matters in the Committee of the Centre.

In case three Past Chairmen are not available in the Centre, the Committee may comprise of the available Past Chairmen along with Fellows attached to the Centre who themselves are not the members of the Committee of the Centre.

4. (f) A Member of the State / Local Centre who does not attend three consecutive meetings of the Committee in a session without valid reasons will automatically cease to be a Member of the Committee from the date of the fourth Meeting. However in genuine cases, the Chairman and Honorary Secretary of the State/ Local Centre Committee are empowered to exempt the Member from such Regulation and allow him to continue. Ex-officio members stand exempted from the provisions of this Regulation.

#### RECOMMENDED AMENDMENT

2. Every class of members of the Institution, save only the Honorary Fellows and the Honorary Life Fellows, shall be deemed to be attached to the State Centre within the geographical boundaries of which he usually resides or is in employment or practices or carries on business.

Every class of members of the Institution save only Honorary Fellow and the Honorary Life Fellow residing or in employment or practising or carrying on business within the geographical boundaries of a Local Centre shall be attached to that Local Centre also.

Temporary absence for a period not exceeding six months shall be exempted from the operation of this Regulation. The Council shall, however, have the discretion to exempt any member from this provision if he shows sufficient reason why he should be attached to a State Centre or a Local Centre as the case may be other than the one to which he would be attached by its operation. A Member so exempted shall not, however, hold any office in the Institution as representative of the State Centre or the Local Centre as the case may be, to which he is then permitted to be attached.

Members residing or in employment or practising or carrying on business abroad or whose address are in the care of Army Post Office shall be attached to Headquarters.

Transfer to any other Centre can be allowed only after receipt of request with valid reason from the concerned member.

To become office bearer / committee member or council member from particular state or local centre he/she must be a member of that Centre for at least one preceding year from date of announcement for election.

3.(a)(viii) To be deleted

4. (f) A Member of the State / Local Centre who does not attend three consecutive meetings of the Committee in a session without valid reasons and in spite of issuance of warning notice, will automatically cease to be a Member of the Committee from the date of the fourth Meeting. The cessation of the member shall be communicated to the concerned member by the Honorary Secretary. However in genuine cases, if the member intimated in advance the reason of absence on registered email id addressing to the Chairman and Honorary Secretary of the State/ Local

6. (d) Only Corporate Members attached to a State Centre or a Local Centre shall be entitled to attend the Annual General Meeting of the State Centre or the Local Centre. The business of the Annual General meeting shall be to receive the Audited Accounts and the Annual Report, and appoint Auditors and fix their remuneration and the Report on the composition of the Committee.

7. (a) Before Annual General Meeting in the year in which the election is due, the Committee of each State Centre and Local Centre shall elect one of its members who is a Fellow to be the Chairman of the Committee of the State Centre or Local Centre for two ensuing sessions, subject to the provisions of Regulation 3(e) and before the date of inviting nominations by the Board of Scrutineers in the election process to the committee of the State Centre or Local Centre as the case may be.

The person so elected shall take office as the Chairman of the state Centre or the Local centre at the Annual General Meeting of the State or Local Centre as the case may be and as a member of the council if so permitted under the Bye-Law, at the next ensuing Annual General Meeting of the Institution.

Provided however, that a person who takes office as the Chairman of a State or a Local centre at an Annual General Meeting of the State Central or the Local Centre, as the case may be, held after the Annual General Meeting of the Institution under the provisions of Regulations 6(b) or 14, shall take office as an ex-officio Member of the Council at the next Annual General meeting of the Institution or earlier as may be decided by the council.

Provided further that in case of a Local Centre having less than 400 Corporate Members, the Committee shall elect a Member or a Fellow as its Chairman.

8. (a) (i) Before Annual General Meeting in the year in which the election is due, the Committee of each State Centre, subject to Regulation 3(c)(ii), shall also elect one of its members to be the Honorary Secretary of the Committee for two ensuing sessions, subject to the provisions of Regulation 3 (e) and before the date of inviting nominations by the Board of Scrutineers, in the election process to the committee of the respective State Centre and he shall not be eligible for further election as an Honorary Secretary of any state Centre after laying his office as Honorary Secretary completing his term of office partly or fully. The person so elected shall take office as Honorary Secretary of the State Centre at the Annual General Meeting of the State Centre. An Honorary Secretary of a State Centre shall not be eligible for further election.

8.(b)(i) Before Annual General Meeting in the year in which the election is due, the Committee of each Local Centre, subject to Regulation 3(c)(ii) shall also elect one of its members to be the Honorary Secretary of the Committee for two ensuing sessions, subject to the provisions of Regulation 3(e) and before the date of inviting nominations by the Board of Scrutineers in the election process to the committee of the respective Local Centre and he shall not be eligible for further election as an Honorary Secretary of any Local Centre after laying his office as Honorary Secretary completing his term of office partly or fully. The person so elected shall take office as Honorary Secretary of the Local Centre at the Annual General Meeting of the Local Centre. An Honorary Secretary of a Local Centre shall not be eligible for further election.

10. (a) Vacancies at the beginning of any Session or occurring in the Committee during any sessions may be filled up by the Committee of a State Centre or a Local Centre as the case may be, by co-option. Such co-opted Members shall have voting right in the Committee but shall not be eligible to be a Chairman, an Honorary Secretary or a Joint Secretary of the State

Centre Committee are empowered to exempt the Member shall stand exempted from such regulation and allow him to continue. Ex-officio members stand exempted from the provisions of this Regulation.

6. (d) Only Corporate Members attached to a State Centre or a Local Centre shall be entitled to attend the Annual General Meeting of the State Centre or the Local Centre. The business of the Annual General meeting shall only be to receive the Audited Accounts and the Annual Report, and appoint Auditors and fix their remuneration and the Report on the composition of the Committee.

7. (a) Before Annual General Meeting in the year in which the election is due, the Committee of each State Centre and Local Centre shall elect one of its members who is a Fellow to be the Chairman of the Committee of the State Centre or Local Centre for two ensuing sessions, subject to the provisions of Regulation 3(e) and before the date of inviting nominations by the Board of Scrutineers in the election process to the committee of the State Centre or Local Centre as the case may be.

#### Such election meeting of the Committee shall be held in physical mode.

The person so elected shall take office as the Chairman of the state Centre or the Local centre at the Annual General Meeting of the State or Local Centre as the case may be and as a member of the council if so permitted under the Bye-Law, at the next ensuing Annual General Meeting of the Institution.

Provided however, that a person who takes office as the Chairman of a State or a Local centre at an Annual General Meeting of the State Central or the Local Centre, as the case may be, held after the Annual General Meeting of the Institution under the provisions of Regulations 6(b) or 14, shall take office as an ex-officio Member of the Council at the next Annual General meeting of the Institution or earlier as may be decided by the council.

Provided further that in case of a Local Centre having less than 400 Corporate Members, the Committee shall elect a Member or a Fellow as its Chairman.

8. (a) (i) Before Annual General Meeting in the year in which the election is due, the Committee of each State Centre, subject to Regulation 3(c)(ii), shall also elect one of its members to be the Honorary Secretary of the Committee for two ensuing sessions, subject to the provisions of Regulation 3 (e) and before the date of inviting nominations by the Board of Scrutineers, in the election process to the committee of the respective State Centre and he shall not be eligible for further election as an Honorary Secretary of any state Centre after laying his office as Honorary Secretary completing his term of office partly or fully. The person so elected shall take office as Honorary Secretary of the State Centre at the Annual General Meeting of the State Centre. An Honorary Secretary of a State Centre shall not be eligible for further election. Such election meeting of the Committee shall be held in physical mode.

8.(b)(i) Before Annual General Meeting in the year in which the election is due, the Committee of each Local Centre, subject to Regulation 3(c)(ii) shall also elect one of its members to be the Honorary Secretary of the Committee for two ensuing sessions, subject to the provisions of Regulation 3(e) and before the date of inviting nominations by the Board of Scrutineers in the election process to the committee of the respective Local Centre and he shall not be eligible for further election as an Honorary Secretary of any Local Centre after laying his office as Honorary Secretary completing his term of office partly or fully. The person so elected shall take office as Honorary Secretary of the Local Centre at the Annual General Meeting of the Local Centre. An Honorary Secretary of a Local Centre shall not be eligible for further election. Such election meeting of the Committee shall be held in physical mode.

10. (a) Vacancies at the beginning of any Session or occurring in the Committee during any sessions may be filled up by the Committee of a State Centre or a Local Centre as the case may be, by **co-option nomination**. Such co-opted nominated Members shall have voting right in the Committee on all issues but not for the election of Chairman and Honorary Secretary of or Local Centre as the case may be. They should not have served in the committee continuously for more than 3 tenure in any capacity.

the State/ Local Centre and they shall not be eligible to be a Chairman, an Honorary Secretary or a Joint Secretary of the State or Local Centre as the case may be. They should not have served in the committee continuously for more than 3 tenure in any capacity.

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 appoint Corporate Members from the State Centre or Local Centre to constitute a Committee in accordance with Regulation 3 and such appointed Committee shall constitute the Committee of the State Centre or the Local Centre with the same powers and responsibilities, as if they had been duly elected in the ordinary course. The Committee so appointed 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 as per provisions of Regulations shall appoint Corporate Members from the State Centre or Local Centre to constitute a Committee in accordance with Regulation 3 and such appointed Committee shall constitute the Committee of the State Centre or the Local Centre with the same powers and responsibilities, as if they had been duly elected in the ordinary course. The Committee so appointed 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.

#### PROCEDURES FOR ELECTIONS

#### PROCEDURES FOR ELECTIONS

- 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 nominated to contest any election shall declare along with his consent 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.
- (e) No Corporate member holding any office of profit in the Institution or any of its Centres shall be eligible to seek elections to the Council and/ or any Committee of State or Local Centre.
- (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.

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.

(g) Any member aggrieved by any matter arising out or of in connection with conduct of election under Regulation 24, will make a representation not later than 15 days of the declaration of the result, to the President. The President may examine or may entrust to the Election Grievance Redressal Committee for necessary investigation and report to the President within sixty days of receipt of the grievance. The President in turn will communicate his decision within ninety days from the date of complaint. The decision of the President will be final and binding on all concerned.

- 23. (a) No change
- (b) A Member **nominated willing** to contest any election shall declare along with his **consent 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) No Change
- (d) No Change
- (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.
- (f) No Change

(g) To be deleted

(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.

Any member aggrieved by any matter arising out of in connection with conduct of Elections under Regulations 25 and 26 may make a representation to the Secretary and Director General within 15 days of declaration of the result, for being placed before the Election Grievance Redressal Committee for its consideration.

However, the Election Grievance Redressal Committee members shall not take part in the election in question.

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 30 days from the date of receipt of grievance by the Secretary and Director General.

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.

#### Election from Divisions to the Committee of the State / Local Centres

25.(e) Members retiring from the Committee after completion of three full tenure at a stretch shall not be eligible for re-election. However, they shall be eligible for re-election after a break of one term.

25. (f) The BOS shall after web voting print the report for the result of the voting. It shall be signed by the members of the BOS present and the same along with connected papers shall be submitted to the Chairman of the Centre and forward a copy of the report to the Honorary Secretary of the Centre and also to the Secretary and Director General of the Institution for necessary action.

The Honorary Secretary shall immediately thereafter communicate official results of the election to the Secretary and Director General.

Simultaneously, Board of Scrutineers shall announce the names of the winning candidates.

25.(g) The Chairman of the State Centre or Local Centre shall announce the result of the voting at the Annual General Meeting of the State Centre or Local Centre as the case may be.

50. All the assets belonging to Autonomous Organ/each Forum established by the Council shall vest with the Institution.

(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.

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 **15 30** days of declaration of the result, for being placed before the Election Grievance Redressal Committee for its consideration.

However, the Election Grievance Redressal Committee members shall not take part in the election in question.

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 30 60 days from the date of receipt of grievance by the Secretary and Director General 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.

#### **Election from Divisions to the Committee of the State / Local Centres**

25.(e) Members retiring from the Committee after completion of three full tenure **in any capacity completing 6 years continuously** at a stretch shall not be eligible for re-election. However, they shall be eligible for re-election after a break of one term.

25. (f) The BOS shall after web voting print the report for the result of the voting. It shall be signed by the members of the BOS present and the same along with connected papers shall be submitted to the Chairman of the Centre and forward a copy of the report to the Honorary Secretary of the Centre and also to the Secretary and Director General of the Institution for necessary action.

The Honorary Secretary shall immediately thereafter communicate official results of the election to the Secretary and Director General.

Simultaneously, Board of Scrutineers shall announce the names of the winning candidates, by putting such list on display.

25.(g) The Chairman of the State Centre or Local Centre shall **also** announce the result of the voting at the Annual General Meeting of the State Centre or Local Centre as the case may be.

50. All the assets belonging to Autonomous Organ/each Forum as well as each State/ Local Centre established by the Council shall vest with the Institution.

#### 2. EXTENSION OF TERM OF THE COMMITTEE OF IEI DELHI STATE CENTRE

The Council at its 721st meeting held on 24-25 Jun 2023 at Durgapur principally approved the extension of term of the Committee of IEI Delhi State Centre by one more session upto 2023-24. The extension of the term of the Delhi State Centre Committee is linked with Regulations 3(c)(i), 7 and 8.

The Bye-Laws Committee of IEI at its  $68^{th}$  meeting held on 01 Sep 2023 recommended that the above shall be granted as one time exemption of Regulations 3(c)(i), 7 and 8 as per Council decision. The Committee felt that Bye-Laws amendment is not required.

The Council at its 723<sup>rd</sup> meeting held on 24-25 Sep 2023 at Guwahati approved the recommendations of the Bye-Laws Committee and decided that a Special General Meeting of Corporate Members be convened to take approval on the decision of the Council to extend the term of the IEI Delhi State Centre Committee by one more session upto 2023-24, including its Chairman and Honorary Secretary.

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 1000 hrs on 23 November 2023.

# The Institution of Engineers (India) SPECIAL GENERAL MEETING FORM OF PROXY

I,	of	Engineering Division being a Corporate Member of the above Institution
hereby appoint	of	Engineering Division or failing him
	of	Engineering Division as my proxy at Special General Meeting of the Institution to be
held on the d d	ay of 2023 and at any poll held	d in connection therewith. As witness my hand day of
		Signature
		Class of Membership of IEINoNo

## The Institution of Engineers (India)

8 Gokhale Road, Kolkata-700020

25 October 2023

#### 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 "Engineers Bhawan", 2 Bahadur Shah Zafar Marg, New Delhi 110002 on 26 November 2023 immediately after the Special General Meeting for the following purpose:

To consider the recommendations of the Council vide its 723rd meeting held on 24-25 Sep 2023 at Guwahati as enumerated below:

#### **RECOMMENDATIONS FOR AMENDMENT IN BYE-LAWS**

(Suggested amendments have been marked in bold and those to be deleted have been marked striked-out)

EXISTING CLAUSE	RECOMMENDED AMENDMENT
4. (c) The Council may, if considered necessary, also co-opt as members of the Council for next session not more than four outstanding engineering personalities who are Corporate Members of the Institution on the date of ensuing Annual General Meeting, upon the recommendations of a Committee of five members comprising of the President, the President-elect and three available preceding Past Presidents.	4. (c) To be deleted
*5. (a) The Council shall in its last meeting prior to Annual General Meeting, elect the President from amongst the Fellows in the Council excluding the Past Presidents and the members co-opted under Bye-Law 4(c), 12(a), 12(b) and 13. The term of the office of the President shall be for one session only.  The co-opted/nominated members in the Council shall be eligible to vote for the office of the President.  (b) Notwithstanding anything contained in the Bye-Laws, considering the unprecedented circumstances due to pandemic COVID-19 in the year 2020, the election to the office of the President scheduled to be held in 2020	5. (a) The Council shall in its last meeting prior to Annual General Meeting, elect the President from amongst the Fellows in the Council excluding the Past Presidents and the members co-opted under Bye-Law 4(c), 12(a), 12(b) and 13. The President shall be elected by rotation from North, West, East and South zone consisting of State/ Local Centres falling under the geographical boundaries of the following States/ Union Territories of India:  North Zone — Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Ladakh, Punjab & Chandigarh, Rajasthan, Uttarakhand, Uttar Pradesh.  West Zone — Madhya Pradesh, Chhattisgarh, Goa, Gujarat, Maharashtra.
stands postponed by one year and the term of the office of the President elected in 2019 would be for two sessions.	East Zone – Andaman & Nicobar, Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur, Mizoram, Meghalaya, Nagaland, Odisha, Sikkim, Tripura, West Bengal.  South Zone – Andhra Pradesh, Karnataka, Kerala, Puducherry, Tamilnadu, Telangana.  Any offshoot of any State/Union Territory will be in the same zone. This rotation will start from the Session 2022-23 with the East Zone

The term of the office of the President shall be for one session only.

The co-opted/nominated members vide Bye-Laws 12(a), 12(b) and 13 in the Council shall be eligible to vote for the office of the President.

- (b) Notwithstanding anything contained in the Bye-Laws, considering the unprecedented circumstances due to pandemic COVID-19 in the year 2020, the election to the office of the President scheduled to be held in 2020 stands postponed by one year and the term of the office of the President elected in 2019 would be for two sessions.
- 9. In the event of the President being unable to perform the duties of his office due to death, resignation or any other cause, or in the case of his prolonged absence from India for any reason, the senior most member of the Council shall assume all the duties of the President till the Council elects a President from amongst themselves in accordance with the provisions of Bye-Law 5 for the residual part of the session provided however, that the residual part of the session is not less than two months. The seniority of members of the Council shall be based upon the continuous number of years that the members concerned have been on the Roll as Corporate Members.
- 9. In the event of the President being unable to perform the duties of his office due to death, resignation or any other cause, or in the case of his prolonged absence from India for any reason, the senior most member of the Council Immediate Past President shall assume all the duties of the President till the Council elects a President from amongst themselves in accordance with the provisions of Bye-Law 5 for the residual part of the session provided however, that the residual part of the session is not less than two four months. The seniority of members of the Council shall be based upon the continuous number of years that the members concerned have been on the Roll as Corporate Members.
- 10. The President shall be ex-officio member of all Boards and Committees of the Institution.
- 10. The President and the Secretary and Director General shall be exofficio member of all Boards and Committees except Division Boards of the Institution.
- 12. (b) The Council may also fill by co-option the vacancies caused by election of one member of the Council as President under Bye-Law 5 and by reason of one or two of the elected members of the Council being member or members of the Council as immediate Past President under Bye-Law 4(a)(ii).
- 12. (b) The Council may also fill by co-option the vacancies caused by election of one member of the Council as President under Bye-Law 5 and by reason of one or two of the elected members of the Council being member or members of the Council as immediate Past President under Bye-Law 4(a)(ii).
- 19. The Council shall meet as often as the business of the Institution may require, but not less than four times a year. At every meeting of the Council twenty members shall constitute a quorum and at a meeting of the Council held after adjournment partly or wholly, members present shall form the quorum.
- 19. The Council shall meet as often as the business of the Institution may require, but not less than four times a year. At every meeting of the Council twenty members shall constitute a quorum and at a meeting of the Council held after adjournment partly or wholly, members present shall form the quorum.

A meeting of the Council at which a quorum is present shall be competent to exercise all or any of the powers or discretions vested in or exercisable by the Council, notwithstanding any vacancy in the body. If at any meeting there is no quorum, the Council shall stand adjourned for twenty-four hours and shall meet at the same place on expiry of twenty-four hours and transact the business of the meeting with the members present as the quorum.

A meeting of the Council at which a quorum is present shall be competent to exercise all or any of the powers or discretions vested in or exercisable by the Council, notwithstanding any vacancy in the body. If at any meeting there is no quorum, the Council shall stand adjourned for twenty-four one hour hours and shall meet at the same place on expiry of twenty-four one hour hours and transact the business of the meeting with the members present as the quorum.

29. (iii) He shall be responsible for preparation of the Headquarters budget for approval of the Finance Committee and the Council, for keeping all accounts of the Institution, for having them duly audited at the end of the Financial Year in compliance with the Finance Manual and Rules framed by the Finance Committee and the Council from time to time. He shall also be responsible for management of the finances and other business of the Institution in accordance with the Charter, the Bye-Laws, the Regulations and Laws and Statutes of the country and as per direction and decision of the Council. During the period between two consecutive meetings of the Council, he shall act as per the direction of the President and subsequently report such actions to the Council. He shall immediately report any violation or irregularities, whether financial or otherwise, which comes to his knowledge to the President and subsequently to the

29. (iii) He shall be in administrative charge of all the employees of the Institution at the Headquarters and at the State and Local Centres of the Institution. He shall appoint, subject to approval of the Council, all employees of the Institution and allot their work and duties. He shall be responsible for the conduct of correspondence and office work of the Headquarters, maintain the Roll of all classes of members and their addresses, authorized to sign in the vakalatnama and all papers related to the legal matters or any litigation in general or any complaint letter on behalf of the **Institution**; he shall attend all meetings of the Council and shall have the business transacted thereat correctly and fully recorded and reported; he shall supervise the publications and the examinations of the Institution; he shall have the charge of the libraries/information centres of the Institution; he shall have the charge of all the properties of the Institution save only the funds and moneys in the custody of banks and he shall conduct the ordinary business of the Institution in accordance with the Charter, the Bye-Laws, the Regulations and the directions of the Council and the President.

Finance Committee and the Council and shall be accountable for failure to do so.

> 32. (b) (i) A Special General Meeting of the Corporate Members may be called at any time by the Council at such place as the Council may decide for the purpose.

32. (b) (i) A Special General Meeting of the Corporate Members may be called at any time by the Council at such place as the Council may decide for the purpose.

- (ii) The Council shall also be bound to call a Special General Meeting whenever a requisition signed by at least five hundred Corporate Members is made and delivered to the Secretary and Director General specifying the matter to be moved at such Special General Meeting and shall cause the notice of the Special General Meeting to be issued within ninety days of the receipt of the requisition by the Secretary and Director General. At such Special General Meeting only the special matters of which notice has been given or such questions as necessarily arise thereof shall be considered.
- (c) (i) An Extraordinary General Meeting of Corporate Members may be called at any time by the Council at such place as the Council may decide for the purpose.
- (ii) The Council shall also be bound to call an Extraordinary General Meeting whenever a requisition signed by at least five hundred Corporate Members is made and delivered to the Secretary and Director General specifying the matter to be moved at such an Extraordinary General Meeting and shall cause the notice of the Extraordinary General Meeting to be issued, within ninety days of the receipt of requisition by the Secretary and Director General.

These provisions shall not, however, apply to Bye-Law 2 which shall be operated only according to its own provisions.

- 34. At least twenty-five days notice shall be given of all General Meetings of Corporate Members. This period of twenty-five days shall be exclusive of the day on which the notice is deemed to be given, but inclusive of the day for which the notice is given. In the case of a Special General Meeting and an Extraordinary General Meeting convened the instrument for appointing a proxy as described in Bye-Law 41 shall accompany the notice.
- 35. Service of a notice shall be deemed to be effected by properly addressing, pre-paying and posting the letter containing the notice. The accidental omission to give notice of a General Meeting of Corporate Members to or the non-receipt of notice of such a meeting by any Corporate Member entitled to receive notice shall not invalidate the proceedings of that meeting.
- 38. If within thirty minutes after the time appointed for a Special General Meeting or an Extraordinary General Meeting, or at any point of time during a Special General Meeting or an Extraordinary General Meeting, the requisite quorum is not present, the meeting shall be dissolved and the Chairman with the consent of the meeting, and if so directed by the meeting, shall adjourn the meeting by twenty-four hours. The adjourned meeting shall be held at the same place on expiry of twenty-four hours and the Corporate Members present at the adjourned meeting shall form the quorum. No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which adjournment took place. It shall not be necessary to give any notice of an adjournment or of the business to be transacted at any adjourned meeting.
- 87. Corporate Members shall be attached to one Division only based on their educational qualifications approved by the Council and the field of engineering in which they practice at the time of their admission to the Institution, but if so qualified for attachment to more than one Division, a Corporate Member shall be allowed to select and change to the Division to which he would like to be attached. The Council may, however, at its discretion, allow the transfer of a Corporate Member from one Division to another provided he establishes to its satisfaction that he deserves such transfer on account of change in the field of his practice of engineering subsequent to his election as a Corporate Member.

Such transfer from one Division to another will be permitted only once and the transferred Corporate Member shall not be allowed to contest elections under provision of Regulation 24, 25 or 26 for ensuing two years.

- (ii) The Council shall also be bound to call a Special General Meeting whenever a requisition signed by at least five hundred one percent of the total strength of Corporate Members as on date is made and delivered to the Secretary and Director General physically or online through email id registered with IEI specifying the matter to be moved at such Special General Meeting and shall cause the notice of the Special General Meeting to be issued within ninety days of the receipt of the requisition by the Secretary and Director General. At such Special General Meeting only the special matters of which notice has been given or such questions as necessarily arise thereof shall be considered.
- (c) (i) An Extraordinary General Meeting of Corporate Members may be called at any time by the Council at such place as the Council may decide for the purpose.
- (ii) The Council shall also be bound to call an Extraordinary General Meeting whenever a requisition signed by at least five hundred one percent of the total strength of Corporate Members as on date is made and delivered to the Secretary and Director General physically or online through email id registered with IEI specifying the matter to be moved at such an Extraordinary General Meeting and shall cause the notice of the Extraordinary General Meeting to be issued, within ninety days of the receipt of requisition by the Secretary and Director General.

These provisions shall not, however, apply to Bye-Law 2 which shall be operated only according to its own provisions.

- 34. At least **twenty-five fifteen** days notice shall be given of all General Meetings of Corporate Members. This period of **twenty-five fifteen** days shall be exclusive of the day on which the notice is deemed to be given, but inclusive of the day for which the notice is given. In the case of a Special General Meeting and an Extraordinary General Meeting convened the instrument for appointing a proxy as described in Bye-Law 41 shall accompany the notice.
- 35. Service of a notice shall be deemed to be effected by sending email to the registered email id and/or by Whatsapp message on registered mobile no. and by display at the website properly addressing, pre-paying and posting the letter containing the notice. The accidental omission to give notice of a General Meeting of Corporate Members to or the non-receipt of notice of such a meeting by any Corporate Member entitled to receive notice shall not invalidate the proceedings of that meeting.
- 38. If within thirty minutes after the time appointed for a Special General Meeting or an Extraordinary General Meeting, or at any point of time during a Special General Meeting or an Extraordinary General Meeting, the requisite quorum is not present, the meeting shall be dissolved and the Chairman with the consent of the meeting, and if so directed by the meeting, shall adjourn the meeting by **twenty-four two** hours. The adjourned meeting shall be held at the same place on expiry of **twenty-four two** hours and the Corporate Members present at the adjourned meeting shall form the quorum. No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which adjournment took place. It shall not be necessary to give any notice of an adjournment or of the business to be transacted at any adjourned meeting.
- 87. Corporate Members shall be attached to one Division only based on their educational qualifications approved by the Council and the field of engineering in which they practice at the time of their admission to the Institution, but if so qualified for attachment to more than one Division, a Corporate Member shall be allowed to select and change to the Division to which he would like to be attached. The Council may, however, at its discretion, allow the transfer of a Corporate Member from one Division to another provided he establishes to its satisfaction that he deserves such transfer on account of change in the field of his practice of engineering subsequent to his election as a Corporate Member. Such transfer from one Division to another will be permitted only once except when the transferred Corporate Member is willing to return to the Division to which he was originally attached at the time of his admission to the Institution and the transferred Corporate Member shall not be allowed to contest elections under provision of Regulation 24, 25 or 26 for ensuing two years.

JURISDICTION	JURISDICTION
any dispute between the Institution and a member of any class involving	120. Only an appropriate Court in Kolkata within whose jurisdiction the Headquarters of the Institution is situated shall have jurisdiction to adjudicate any dispute between the Institution and a member of any class involving interpretation or operation of the Bye-Laws, Regulations of the Institution and decisions of the Council

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 1000 hrs on 23 November 2023.

# The Institution of Engineers (India) EXTRAORDINARY GENERAL MEETING FORM OF PROXY

l,	of	Engineering Division being a Corporate Member of the above Institution
hereby appoint	of	Engineering Division or failing him
of		Engineering Division as my proxy at Extraordinary General Meeting of the Institution
to be held on the day of	2023 and at any po	oll held in connection therewith. As witness my hand day of
2023.		
		Signature
		Class of Membership of IEI

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

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

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

#### The Director (Membership)

The Institution of Engineers (India) 8 Gokhale Road, Kolkata 700020

Email: datamemb@ieindia.org

The form is available in IEI Website:

https://www.ieindia.org/WebUI/ajax/Downloads/WebUI PDF/HIGHLIGHTS DOCUMENT-3332.pdf

## IEI DIARY



Thirty-eighth National Convention of Architectural Engineers on "Decarbonizing Cities-Harmonizing Buildings, Mobility and Infrastructure"

Indore, November 19-20, 2023

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

#### **Civil Engineering Division**

All India Seminar on "Advancement in Irrigation, Drinking Water Supply, Factory use and Sanitation Projects using Pressurized System"

Jabalpur, November 25-26, 2023

The Honorary Secretary, IEI, Jabalpur Local Centre, Vishvesvaraya Marg, South Civil Lines, In front of Old RTO Office, Jabalpur 482001 [2: 0761-2678929, E-mail: jabalpurlc@ieindia.org]

#### **Computer Engineering Division**

All India Seminar on "Deep Learning in the Medical Field Opportunities and Challenges for Advancement" Coimbatore, November 02-04, 2023

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore, Tamilnadu 641004 [28: 0422-2580733, E-mail: coimbatorelc@ieindia.org, Website: www.ieicoimbatore.org]

## International Conference on "Sustainable Governance and Economic Development through IT Enabled Industry 5.0"

Kolkata, November 23-24, 2023

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

## All India Seminar on "Security Issues In Cloud Computing with Artificial Intelligence Intervention: Challenges & Opportunities"

Ranchi, December 09-10, 2023

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO: Doranda, Ranchi 834002 [28: 0651-3510412, E-mail: jharkhandsc@ ieindia.org; Website: ieijscjharkhand.org]

### All India Workshop on "High Performance Computing in Health Care and Big Data Analytics"

Kattankulathur, February 05-06, 2024

The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology, Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamilnadu 603203 [28: 044-2745 2270]

## All India Workshop on "Advanced Code Wizardry Uncovering Secrets for Designing and Architecting Impactful Applications"

Kattankulathur, March 04-05, 2024

The Honorary Secretary, IEI, Kattankulathur Local Centre, SRM Institute of Science and Technology, Mahatma Gandhi Road, Potheri, SRM Nagar, Dist Chengalpattu, Kattankulathur, Tamilnadu 603203 [28: 044-2745 2270]

#### **Electrical Engineering Division**

Thirty-eighth National Convention of Electrical Engineers on "Systemic Electric vehicle Adoption in India including EV Charging - Implementation Roadmap, Regulatory Framework, Infrastructure Development, Technical Challenges & Case Studies"

Shimla, November 24-25, 2023

The Honorary Secretary, IEI, Himachal Pradesh State Centre, Engineers Bhawan, Nigam Vihar, Shimla 171002 [28: 0177-2623736, E-mail: hpsc@ieindia.org, Website: hpiei.org]

### International Conference on "Green Hydrogen and Clean Energy"

Nagpur, February 10-11, 2024

The Honorary Secretary, IEI, Nagpur Local Centre, North Ambazari Road, Nagpur 440010, [26: 0712-2525617, E-mail: nagpurlc@ieindia.org]

Thirty-ninth National Convention of Electrical Engineers on "Green Hydrogen, Electric Vehicle and Energy Storage System"

Chennai, May 24-25, 2024

The Honorary Secretary, IEI, Tamil Nadu State Centre, No. 19, Swami Sivananda Salai, Chepauk, Chennai 600005 [2: 044-25360614/9962950333, E-mail: tnsc@ieindia.org, Website: www.ieitnsc.org]

#### **Electronics and Telecom. Engg. Division**

## All India Workshop on "Internet of Things and Al a Multidisciplinary Approach"

Bhimavaram, November 16-17, 2023

The Honorary Secretary, IEI, Bhimavaram Local Centre, First Floor, General Emenities Building, SRKR, Engineering College, PO Chinnaamiram, Dist, West Godavari, Bhimavaram 534204 [2:08816-233522, E-mail: bhimavaramlc@ieindia.org

One Day Workshop on "**5G Volte**" Agra, November 18, 2023

The Honorary Secretary, IEI, Agra Local Centre, IEI, Room No-G3, Faculty of Engineering & Technology, Agra College, Agra 282002 [ 28: 812689221, Email: agralc@ieindia.org]

#### **Environmental Engineering Division**

#### All India Seminar on "Advanced Instrumentation for Assessment of Soil Health Indicators, Pollution and Greenhouse gas Emission from Soil"

Coimbatore, November 16-17, 2023

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore, Tamilnadu 641004 [28: 0422-2580733, E-mail: coimbatorelc@ieindia.org, Website: www.ieicoimbatore.org]

#### **Mechanical Engineering Division**

## One Day Seminar on 'Reimagining Indian Manufacturing Industry',

Lucknow, November 05, 2023

## All India Seminar on "Driving Hydrogen Fuel Cells into the Mainstream and Its Application"

Hosur, November 09-10, 2023

The Honorary Secretary, IEI, Hosur Local Centre, Adhiyamaan College of Engineering, Hosur 635109 (Email: hosurlc@ieindia.org, website: http://ieihlc.org]

#### All India Seminar on "Solar Energy"

Bareilly, November 29-30, 2023

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

### One Day Seminar on "Renewable Energy Development in India"

Bhopal, November 30, 2023

The Honorary Secretary, IEI, Madhya Pradesh State Centre, Dr M Vishveshwariya Marg, P.O. Habibganj, Bhopal, [28: 0755-2505787/2502987; Email: mpsc@ieindia.org; Website: http://mpsciei.org]

## One Day Seminar on 'Energy and Environment with Special Reference to HVAC & R Industries',

Ranchi, December 09, 2023

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, PO: Doranda, Ranchi 834002 [28: 0651-3510412, E-mail: jharkhandsc@ ieindia.org; Website: ieijscjharkhand.org]

## One day Seminar on 'Smart Factories: Transforming Manufacturing through Automation and Al'

Coimbatore, December 09, 2023

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

## All India Seminar on "Emerging Trends of Digital Manufacturing using 3D Printing and Flexible Manufacturing System"

Ranchi, January 27-28, 2024

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

## Thirty-ninth National Convention of Mechanical Engineers on "Innovations in Mechanical Engineering, Sustainable Manufacturing Technologies, Design and Energy Systems"

Chandigarh, September 06-07, 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]

#### 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/]

#### Metallurgical & Materials Engineering Division

Thirty-sixth National Convention of Metallurgical & Materials Engineers on "Green Composites, the Newgeneration Sustainable Composite Materials: Specific Features and Applications"

Kolkata, November 17-18, 2023

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

#### **Production Engineering Division**

Thirty-eighth National Convention of Production Engineers on "Green and Bio-inspired Manufacturing — The Wav Forward"

Bareilly, May 02-03, 2024

The Honorary Secretary, IEI, Bareilly Local Centre, 44, Camphor Estate Colony, Near Champhor Hospital, Rampur Road, C B Ganj, Bareilly 243502, Uttar

Pradesh [Mobile: 9634953691, Email: bareillylc@ieindia.org]

#### **Interdisciplinary Coordination Committee**

All India Seminar on "Green Technologies for Sustainable Development"

Pune. November 04-05, 2023

The Honorary Secretary, IEI, Pune Local Centre, 1332 Shivajinagar, Jangli Maharaj Road, Pune 411 005 (2002-25533376/25520239/25530150, Email: punelc@ieindia.org, website: http://ieipune.org/

One Day Seminar on "Innovation Conclave" Durgapur, November 05, 2023

The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B-Zone, Durgapur 713205, [2:0343-2564770, E-mail: durgapurlc@ieindia.org; Website: www.ieidurgapurlc.orgl

All India Seminar on "Innovation and Technology Inclusion Program in Manufacturing and Asset Management for Steel Industry"

Jamshedpur, November 27-28, 2023

The Honorary Secretary, IEI, Jamshedpur Local Centre, Subarnarekha Link, Sakchi, Jamshedpur 831 001(2:0657-2234316, Fax: 0657-2230159, Email: jamshedpurlc@ieindia.org)

## One Day Seminar on 'Accelerators Incubation Opportunities for Students Faculties Early Stage Entrepreneurs'

Bhopal, November 28, 2023

The Honorary Secretary, IEI, Madhya Pradesh State Centre, Dr M Vishveshwariya Marg, P.O. Habibganj, Bhopal, [☎: 0755-2505787/2502987; Email: mpsc@ieindia.org; Website: http://mpsciei.org]



# The Institution of Engineers (India) IEI Industry Excellence Award 2023

### **Request for Participation**

The IEI Industry Excellence Award has been instituted to recognize industry leaders for their innovation, excellence in engineering operations and thereby, to lead their industry in 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: <a href="https://www.ieindia.org/webui/IEI-Activities.aspx#industry-excellence-award">https://www.ieindia.org/webui/IEI-Activities.aspx#industry-excellence-award</a>) are invited from prospective applicants for IEI Industry Excellence Award 2023. The last date of receipt of application for the Award 2023 is 31st October 2023. Interested applicants are requested to send their applications (Two hard copies & One soft copy in Pendrive/CD) to the below mentioned address.

#### **Director [Technical]**

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



# The Institution of Engineers (India) IEI Engineering Education Excellence Award Request for Participation

The IEI Engineering Education Excellence Award has been instituted to recognize leading Engineering Educational Institutions and encourage for better and more effective engineering education across the country. The engineering education sector has witnessed significant development, setting benchmarks for others to follow. Universities and institutions have expanded their scope beyond pedagogy and now engage in R&D activities, consultancy, patents, publications, skill development 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 2023. The deadline for submitting of applications for the Award 2023 is 31st October 2023. Interested applicants are requested to submit their applications (Four hard copies & One soft copy in Pendrive/CD) to the below mentioned address.

#### **Director (Technical)**

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



## 38th INDIAN ENGINEERING CONGRESS

Jabalpur, December 27-29, 2023

Theme: Reimagining Tomorrow: Shaping the Future through Disruptive and Interdisciplinary Technologies

Organized by

The Institution of Engineers (India)

Hosted by: Jabalpur Local Centre

Venue: Hotel Royal Orbit, Jabalpur

For further details, please follow the website: https://www.38iec.org



## The Institution of Engineers (India)

## **IEI Industry Excellence Award 2023**

## for Overseas Organisation

**Request for Participation** 

#### **Discover IEI:**

Welcome to The Institution of Engineers (India) or IEI – your gateway to engineering excellence and worldwide collaborations. With strong ties to esteemed international bodies, IEI stands as a beacon of innovation on the global stage. For more details, visit www.ieindia.org.

#### **Introducing the IEI Industry Excellence Award:**

To recognize industries' crucial role in shaping society and the economy, IEI instituted these awards in 2008. They honor remarkable innovation, excellence in engineering operations, and unwavering commitment to high standards.

#### Join Us in Celebrating Excellence:

We take immense pride in the global industrial achievements – productivity, quality, safety, and performance assurance that have earned industries a significant place worldwide. At IEI, we firmly believe that industry leaders like you hold the key to shaping a brighter future on a global scale.

#### Why Participate?

Elevate Your Status: Gain national and international acclaim for your exceptional achievements.

Lead the Charge: Set new excellence standards and inspire industries worldwide.

Unlock Opportunities: Forge invaluable connections with like-minded global leaders.

Champion the Profession: Participate and uphold engineering's prestige and integrity.

How to Participate: Visit <a href="https://www.ieindia.org/webui/IEI-Activities.aspx#industry-excellence-award">https://www.ieindia.org/webui/IEI-Activities.aspx#industry-excellence-award</a> and apply easily. Be part of a global celebration of engineering brilliance!

Join the Prestigious Ranks: Don't miss the chance to shine on the world stage. Unleash your organization's potential and celebrate engineering excellence with us.



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**President: Er Shivanand Roy** 

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