

IEI NEWS

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A CENTURY OF SERVICE TO THE NATION

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Council Elects New President of IEI



Er Shivanand Roy, FIE has been elected as the President of The Institution of Engineers (India) for the session 2022-23 during the 722nd Council Meeting of The Institution held on August 13, 2023 at Hyderabad.

Er Shivanand Roy did Intermediate from Patna Science College and graduated in Civil Engineering from BIT, Sindri.

He joined as an Assistant Engineer, Irrigation Department, Bihar in January 1979 and retired as Engineer-in-Chief No.1, WRD, Government of Jharkhand in 2016.

Career Profile :

Er. Shivanand Roy served in investigation, planning, monitoring, design, quality control, training, vigilance and execution of various irrigation, water supply, flood control and inter-

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All India Seminar under the aegis of Civil Engineering Division Board

Landslide and Land Subsidence in Hilly Areas: Causes, Prevention, Mitigation and Restoration

Himachal Pradesh State Centre, IEI organized an All India Seminar on the theme **Landslide and Land Subsidence in Hilly Areas: Causes, Prevention, Mitigation and Restoration** in collaboration with the Bureau of Indian Standards at Shimla during 01-02 June 2023 under the aegis of Civil Engineering Division Board [CVDB], IEI, in which about 146 Engineers from various departments all over the state and other parts of the country participated.

Himalaya as a whole is prone to natural disasters such as landslides and land subsidence particularly, Himachal Pradesh and Uttarakhand, have been facing these problems frequently in the recent times. Landslides and land subsidence are significant environmental challenges facing the hilly areas of Himachal Pradesh and Uttarakhand. These events



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From the President's Desk.....



With great anticipation, we approach the 56th Engineers' Day—a time when we unite to celebrate the essence of engineering brilliance. On September 15th, The Institution of Engineers (India) observes it as a statutory day across all our 125 State and Local Centres and other entities. This year's resounding theme, "Engineering a Resilient Future: Building Stronger, Smarter, Safer," not only pays homage to the visionary Bharat Ratna Sir Mokshagundam Visvesvaraya but also launches us into a captivating exploration of engineering's boundless horizons.

Engineers stand as vanguards of progress, architects of a world fortified against adversity. With a commitment to withstand the test of time, they forge resilience into every creation. Towers that stand tall amidst the fiercest storms, bridges that span great chasms, and roads that lead to safer journeys—each speaks to the indomitable spirit of engineering, constructing a future of unwavering strength.

But engineering extends beyond the tangible—it's a dance between intelligence and efficiency, where technology unveils endless vistas. Our engineers are the torchbearers of innovation, crafting smarter systems through cutting-edge breakthroughs. From intelligent cities optimizing resources to revolutionary transportation solutions redefining mobility, they guide us toward an era where intelligence reigns supreme.

Resilience, however, transcends the physical; it encompasses our safety and well-being. Engineers emerge as guardians, meticulously designing systems and structures that safeguard lives. Rigorous safety protocols, visionary disaster management strategies, and ground breaking technologies form their arsenal. Their dedication forges a sanctuary where prosperity thrives, and tranquility takes root.

As we chart a course toward a resilient future, sustainability lights our path. Engineers lead this charge, embracing eco-friendly materials, renewable energy solutions, and sustainable practices. They carve a world where nature and progress harmonize, preserving the delicate equilibrium between growth and preservation. Their innovations weave a legacy where future generations inherit a planet replete with resources and flourishing ecosystems.

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Council Elects New President of IEI

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state multi-purpose projects in Bihar and Jharkhand. He also served the Jharkhand Public Service Commission as a member Engineer's interview Boards. Currently, Er. Roy is Member, Dam Safety Review Panel, Government of Jharkhand.

Notable Executions :

Er. Shivanand Roy completed the long pending Upper Sankh Dam construction (First Reservoir completed after creation of Jharkhand) and Katri Reservoir Scheme with canal system notified for assured irrigation. Er. Roy handled Land acquisition, Forest clearance and inter-state water related issues with firm stand, right from district level to Central Water Commission. He initiated 52 ERM scheme proposals that increased the irrigation achievement of Jharkhand substantially during his tenure as Chief Engineer Design. During execution of duties as vigilance officer and other enquiry assignments, Er. Roy not only booked some kingpins of the system but also saved many engineers from unnecessary torture from the notorious secretariat clutches. At department level, Er. Shivanand Roy simplified fund allotment system and removed unnecessary hurdles in assured carrier progression and promotion of engineers handling all type of pressures.

Association in Engineering and Social Arena :

Er. Shivanand Roy was associated with the Jharkhand Engineering Services Association (JESA) as the President for 3 terms and as the General Secretary also for 3 terms.

Er. Roy has been the Committee member and office bearer of Indian Engineers Federation since 1991.

Er. Roy also served as the Secretary of BIT Sindri Alumni Association and presently he is associated as a Mentor and Guide.

Er. Shivanand Roy was the Chairman, Jharkhand State Centre of the Institution during the session 2014-2016 and has been the member of Civil Engineering Division Board (CVDB) of the Institution since 2014 till the current session i.e. 2018-2023. He has been the member of different Committees of the Institution. Also served as the Chairman, Interdisciplinary Coordination Committee (ICC), Member, Election Grievances Redressal Committee (EGRC) and the Member, Board of Examinations (BOE).

Notable Contributions to IEI :

Er. Shivanand Roy is a man of great heart and in his first Council in 2015,

he supported the proposal of the then President to regularise services of on temporary staff of one Centre for his 15 years satisfactory service. In line with that, Er. Roy requested the Council to apply this for all temporary staff working in various State and Local Centres for more than 15 years. Through his voice, many staff got regularised in IEI Services.

Er. Shivanand Roy is also credited with focused efforts in promoting regional languages by publishing "Abhiyantu Bandhu" - a multi lingual yearly Journal of engineering papers twice in 2016 and in 2020.

Under his Chairmanship in Bye-Laws Committee, Er. Roy invited suggestions from Hon'ble Council Members, comprehensive recommendations were jotted down through 3 offline and 2 online meetings for consideration of the august Council.

During his Chairmanship / Immediate Past Chairmanship tenure of Jharkhand State Centre, the Centre was awarded the 'Best State Centre Award' of IEI for three consecutive years 2015-16, 2016-17 and 2017-18.

Er. Roy authored more than 100 papers in Seminars, Conferences and other publications of IEI.

Er. Shivanand Roy convened, organised and chaired several Seminars, Workshops, Conventions and Conferences.

Strengths :

Er. Shivanand Roy led many projects and events as team leader throughout his career. He has been proactive in organising events and in encouraging talent through campus talks in different engineering campuses. He can work as a motivator and a guide for budding engineers. Er. Roy is committed to a strong work deadline etiquette. He has the skill to handle conflict resolution. Many real-life pressure engineering projects were led by him in an appropriate manner. Er. Roy has a strong intent to learn and grow with fellow engineers. He visited several irrigation projects like Sardar Sarovar Project, Indira Sagar Dam, Omkareshwar Dam, Nagarjuna Sagar Dam, Srisailem Dam, Kadam Dam, Bhakhra Nangal Dam, Farrakha Dam, Khadagwasta Dam, Hirakund Dam, Krishna Raj Sagar Dam, Indira Canal etc to study and enhance knowledge base.

Er Shivanand Roy has been elected as the President of The Institution of Engineers (India) for the session 2022-23 at its 722nd (Special) Council Meeting which is a testimony and recognition of his sterling and long standing contribution to the Institution and the engineering profession.

One Day Seminar under the aegis of Production Engineering Division Board

Recent Trends in Ergonomics

Coimbatore Local Centre, IEI organized a One Day Seminar on the theme **Recent Trends in Ergonomics**, in association with the Department of Production Engineering, PSG College of Technology, Coimbatore on 29 April 2023 under the aegis of Production Engineering Division Board [PRDB], IEI. The inaugural function began with the welcome address delivered by Dr M Senthilkumar, Professor & Head, Department of Production Engineering, PSG College of Technology & Past Honorary Secretary, Coimbatore Local Centre, IEI. Dr G Madhan Mohan, Professor, Department of Production Engineering, PSG College of Technology gave an overview of the Seminar. Mr C Vigneswaran, Assistant Professor, Department of Production Engineering, PSG College of Technology, introduced the Chief Guest, Dr A Surendrakumar, Professor & Head, Department of Farm Machinery and Power Engineering, Agricultural Engineering College and Research Institute, Tamil Nadu Agricultural University. Dr Surendrakumar, in his lecture, detailed the principles of ergonomics. He said that ergonomics aims to prevent occupational injuries by reducing exposure to awkward postures in the

workplace. Dr J Krishnamoorthi, Honorary Secretary, Coimbatore Local Centre, IEI, proposed the vote of thanks.



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Challenges and Opportunities in Condition Monitoring and Diagnostics of Mechanical Systems Using Machine Learning

Coimbatore Local Centre, IEI organized an All India Seminar on the theme **Challenges and Opportunities in Condition Monitoring and Diagnostics of Mechanical Systems Using Machine Learning**, in association with the Department of Mechanical Engineering, Dr N G P Institute of Technology (Dr NGPITECH), Coimbatore during April 26-27, 2023 under the aegis of Mechanical Engineering Division Board [MCDB], IEI at Coimbatore. Dr K Leo Dev Wins, Professor, Department of Mechanical Engineering, Karunya Institute of Technology and Sciences, Coimbatore graced the function as Chief Guest. Prof Wins encouraged the participants and students to equip themselves with enough knowledge about the new challenges and opportunities in condition monitoring through this seminar. He also highlighted the importance of condition monitoring in industrial sectors. Dr S U Prabha, Principal of Dr NGPITECH, spoke about the importance and opportunities of condition monitoring in mechanical systems in the emerging world of automation. Prof Wins delivered his presentation on the topic 'Condition Monitoring - Challenges in Industry 4.0' and he explained the important features of condition monitoring with artificial intelligence in industrial sectors.



Dr T Mohanraj, Assistant Professor, Department of Mechanical Engineering, Amrita Vishwa Vidyapeetham, Coimbatore delivered lecture on the topic 'Machine Tool Condition Monitoring – Machine Learning Approach'. Dr S Nandhakumar, Head of the Department, Department of Mechanical Engineering, Dr NGPITECH delivered lecture on the topic 'Machine Tool Condition Monitoring - Using IoT and Digital Twins'. Dr M Saimurugan,

Associate Professor, Department of Mechanical Engineering, Amrita Vishwa Vidyapeetham, Coimbatore delivered lecture on 'Decision Tree Approach for Condition Monitoring and explained the next generation approach in industrial applications of condition monitoring using decision tree algorithm. Dr A Murugarajan, Professor and Head, Department of Robotics and Automation, Sri Ramakrishna Engineering College, Coimbatore presented lecture on 'Sensors for Condition Monitoring' and discussed on the usage of information and importance of sensors for condition monitoring in different industrial applications.

Further, during the technical sessions, technical papers were presented on different topics, namely, Acoustic Signal Analysis for I C Engine Condition Monitoring, A Framework for Intelligent Condition-based Maintenance of Rotating Equipment using Mechanical Condition Monitoring, Review on Condition Monitoring of Rotating Machines, Significance of Condition Monitoring in Mechanical System, An Investigation on Stability of VS Controlled 2 DoF Robot Manipulator using NN Method, Recent Progress on Mechanical Condition Monitoring and Fault Diagnosis. A Souvenir was released on the occasion. Earlier, Dr J Krishnamoorthi, Honorary Secretary, Coimbatore Local Centre, IEI welcomed the gathering.

The Seminar acted as a brainstorming session for all engineers in order to upgrade them to the next level of technological development. The event focussed on identifying failures with condition monitoring and Machine Learning approach for sustaining the overall efficiency and organizational productivity.

The two-day deliberation principally focussed on; Understanding the importance of condition monitoring, Impact assessment of condition monitoring in industrial applications, significance of the maintenance of machines using IoT based condition monitoring, impact of condition monitoring in machine tool operations, identification and decrease of idle time of the machines, enhancing industrial productivity, identification of different Machine Learning approaches.

The topics covered during the various technical sessions of the seminar include: Condition Monitoring –Challenges in Industry 4.0; Machine Tool Condition Monitoring –Machine Learning Approach; Machine Tool Condition Monitoring –Using IoT and Digital Twins; Decision Tree Approach for Condition Monitoring; Sensors for Condition Monitoring.

Recent Trends in Ergonomics

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In the first technical session, Dr A Surendrakumar delivered a lecture on the topic 'Trends and Challenges in Agricultural Ergonomics'. He explained the agricultural ergonomics and its significance in enhancing productivity, safety, and well-being in the agricultural sector. He further discussed the challenges faced by agricultural workers in terms of physical strain, repetitive tasks, and exposure to hazardous conditions. He explained with case studies the successful implementation of ergonomic interventions in agricultural practices to improve productivity and worker satisfaction.

In the second technical session, Dr R Naveen Kumar, Associate Professor, Department of Mechanical Engineering, Kongu Engineering College, Perundurai, discussed the topic 'Research Opportunities in Human Factor and Ergonomics (HFE)'. He started his deliberation with the overview of

current research trends and emerging areas in HFE, namely wearable technologies, human-robot interaction, virtual/augmented reality, and cognitive ergonomics. The lecture also discussed the exploration of research avenues in HFE, which aim to optimize work environments and reduce occupational hazards. It covered topics such as physical ergonomics, anthropometry, and biomechanical examination.

Further, five technical papers were presented during another two technical sessions on emerging topics, namely: Development of Digitalized Supermarket Trolley, Portable Kashaya or Decoction Making Machine, A Review on Industry 5.0 for Manufacturing Applications, Review on Recent Trends in Additive Manufacturing Technology; and Recent Trends in Digital Twin Technology.

Emerging Trends in Aero Engine Technologies

Gwalior Local Centre, IEI organized an All India Seminar on the theme **Emerging Trends in Aero Engine Technologies** during 13-14 May 2023 in Gwalior under the aegis of Aerospace Engineering Division Board [ASDB], IEI. The programme started with the welcome address delivered by Er Radha Kishan Khetan, Chairman, Gwalior Local Centre, IEI. He briefed the distinguished audience about the theme and explained the need to preserve the environment and follow regulations while boosting the performance of aircraft engines with the key areas of action as propulsion and autonomous system development. He highlighted the fact that the aerospace industry is being influenced by the environmental issues and the cost of operations.

Chief Guest of the function, Col A S Bais discussed the topic 'Next Generation Innovations in Indian Army'. Col Bais mentioned the function and scope of Safran Helicopter Engines and Aircraft Engines, the world's leading aero engine manufacturer with innovative and reliable propulsion systems. Moreover, it has focus on decreasing fuel consumption and maintenance costs, while designing more eco-responsible systems. Safran Aircraft Engine, in collaboration with GE, has adopted the Revolutionary Innovation for Sustainable Engines (RISE) program to develop a new generation of engines for short- and medium-haul planes, he said. Safran aims to reduce fuel consumption by 20% compared to LEAP with an engine compatible with 100% sustainable fuel or hydrogen in order to move towards carbon neutrality by 2050, he added further.



The Keynote Speaker, Er Ankit Shukla, Lead Engineer, Infosys, Aero Engine Division, delivered lecture on the topic 'Design Advancement in Aero Engine Sector'. The speaker explained about the advancement in design of the Aero engine sector and the need to preserve the environment and follow the regulations to improve the efficiency of aircraft engines. He explained that Aircraft engines, with optimum capacity utilization, produce more power with less fuel- consumption, generate less noise and reduce the emission levels. This can be achieved by enhancing the efficiency of combustion engines and simultaneously exploring electric and hybrid propulsion systems. Benefits of research and technology in propulsion will shorten engine development cycle, reduce engine weight, increase engine performance, reduce engine fuel consumption, enhance reliability, reduced emissions and noise, increase component life and reduce maintenance requirements, he added. The speaker further highlighted aero-acoustics as a principle design factor to facilitate Urban Air Mobility and design of Drones.

Er Anurag Tiwari, Associate Director, Ultra-genic Research Technology, delivered presentation on the topic 'Overview of Aerospace industry'. He briefed about various AI Technologies used in Aero Engine industries with their benefits and challenges. Dr (Ms) Manisha Singh, AMITY University in her lecture titled 'Technology used in Aero Engine' explained about Honeywell Flight Efficiency to improve the flight efficiency and reduce carbon emissions of aero engines. As an Enterprise Performance Management (EPM) solution, Honeywell is able to streamline the entire flight efficiency program, often replacing multiple-point solutions and connects the stakeholders across the entire organization to provide a unified source for all operations-related data. Er Prabhat Bhargawa, Past Chairman, Gwalior Local Centre, IEI delivered his lecture on the topic 'Green and Smart Engines'. He spoke

about different ranges of turbine engines, major helicopter manufacturers worldwide, namely, Airbus Helicopters, Bell Helicopter, Leonardo, Avicopter, Sikorsky, Russian Helicopters, Hindustan Aeronautics Limited (HAL), Korea Aerospace Industries, etc. He also discussed on the manufacturing of new-generation rotorcrafts, including the Airbus Helicopters H160, Bell 505, Leonardo AW189K, Avicopter AC352, Russian Helicopters Ka-62, KAI LCH/LAH, Tiger, NH90, H225M, AW101, etc.

Er P K Jain delivered his presentation on the topic 'Sustainable Aviation' and explained the application of Green Engines and Green Aviation. He addressed the technological and socio-economic issues, the aviation industry is facing to meet the environmental challenges. Air travel continues to see very high growth especially in major developing nations and emerging economies; Global aviation contributes two percent of global Green House Gas (GHG) emissions and supports eight percent of the world economic activity in terms of GDP, he said. As a result of massive increase in air travel by 2025, it is estimated that the total CO₂ emission from commercial aviation may reach 1.5 billion tonne; The amount of nitrogen oxides (NOx) around airports may rise from 2.5 million tonne in 2000 to 6.1 million tonne by 2025; Because the majority of aircraft emissions are injected into the upper troposphere and lower stratosphere, the resulting impacts of burning fossil fuels at altitude is approximately double that due to burning the same fuels at ground level, he explained. Ms Poonam Rathore delivered her lecture on 'Principles of Flight'. She explained principle of Aerofoil, Air Chord, Chord line, Mean Camber Line, Relative Wind, Angle of Attack, Angle of Incidence, Flight Path, Center of Pressure, Center of Lift etc. Er P K Singhal, Past Chairman, Gwalior Local Centre, IEI explained the challenges and constraints in using AI in Aerospace systems. Er V K Shukla, Past Honorary Secretary, Gwalior Local Centre, IEI discussed the basics of aero engines and the impact of Data Analytics in Aerospace systems. He mentioned that aviation players face immense pressure arising from aviation maintenance related to maintaining dispatch reliability, lowering maintenance costs, and enhancing the safety of the craft. Adding to this, the speaker explained the issues associated with the legacy systems used to operate aircraft systems, which do not provide a holistic picture into the health of an aircraft, where data is not updated real-time, and where functions are performed in silos, and all these makes a very challenging scenario even for the most seasoned aviation players. Er Naresh Nagariya discussed on the topic 'The Helicopter Dynamics'. Mr Rohit Jain discussed the emerging trends in Aero-Engine Technologies. The iterative design process involves a program. This program generates a certain number of outputs that must meet certain constraints. Additionally, a designer is involved in this process. He explained that the designer fine-tunes the feasible region by selecting specific outputs or making changes to input values, ranges, and distribution. He further emphasized on development of domain knowledge, design analysis tools, manufacturing technology tools, Design tools, software expertise etc. Dr (Ms) Sulochana Wadhawani, Honorary Secretary, Gwalior Local Centre, IEI, proposed the vote of thanks.

From the President's Desk.....

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We're equally thrilled to share a recent feat that places India at the global forefront. On August 23rd, 2023, India scripted history as Chandrayaan-3—a testament to our prowess—soft-landed on the moon's South Pole. With its Lander and Rover configuration, India proudly claims its spot as the fourth country to achieve this milestone, joining the ranks of the US, China, and the erstwhile Soviet Union. India's achievement echoes even more powerfully as we become the first to reach the moon's Southern expanse.

As we step into this momentous celebration, I urge all engineers to join the festivities and carry forth the torch of engineering excellence. Let's collectively propel our profession into a brighter tomorrow, inspired by the legacy of Sir Mokshagundam Visvesvaraya.

Energy and Environment

Jharkhand State Centre, IEI organized One Day Workshop on the theme **Energy and Environment** on 19 March 2023 under the aegis of Interdisciplinary Coordination Committee [ICC] in Ranchi. The One Day Workshop covered the latest emerging technologies, to provide an excellent opportunity and platform for mutual sharing of knowledge, expertise & experience amongst all the stakeholders i.e. designers & suppliers, academicians, researchers, engineers, consultants, architects, students and builders associated with the long term improvements in Energy &



Environment. The workshop primarily consisted of inaugural sessions, panel discussions, and technical sessions. The main fields covered and addressed in the workshop are: Energy & Environment, Sustainable HVAC and Architecture, Green Buildings, Energy Sustainability for Healthcare and Hospitality and associated case studies. The host Centre organized the Workshop with an objective to educate the engineers about the latest developments. The program aimed to promote an understanding of and evaluate the importance of energy savings. The program was organised in association with ISHRAE, Ranchi Chapter.

Dr Rana S Chakravarty, Ex Director (Marketing), HEC & Chief General Manager (Environmental Engineering), MECON Limited, Ranchi graced the function as Chief Guest. Er M K Sharma, General Manager (E&M), CCL, Ranchi was the Guest of Honour. Keynote speaker of the session was Er K K Mitra, RD(East) ISHRAE. Dr Manoj Kumar, Honorary Secretary, Jharkhand State Centre, IEI and Er Prakash Kumar, President, ISHRAE Ranchi Chapter, were present on the occasion. The programme was attended by about 80 eminent engineers from various disciplines and organisations namely MECON, CCL, CMPDIL, SAIL, HEC & Jharkhand State Government. Several Past Chairmen, Past Honorary Secretaries, members of Executive Committee also attended the same.

The inaugural session began with the welcome address, delivered by Er M I Alam, Chairman, Jharkhand State Centre, IEI. He emphasized the importance of balancing industrial growth with energy conservation in HVAC systems and building construction. He opined that each and every citizens of the India must aware about how to use energy efficient equipment, how to save the energy for their own future safety and many more ways while using AC in their homes. Citizens should adhere to all the rules, regulations, and policies implemented by the Government of India to promote sustainable growth. This was followed by the speech by Er Harun Ansari, President Elect, ISHRAE Ranchi Chapter. Er Prakash Kumar, President ISHRAE Ranchi chapter also addressed the audience.

The Keynote speaker, Er K K Mitra, RD (East) ISHRAE and CEO (East), Lloyd Insulation speaks about the importance of insulations in achieving energy savings. He also introduced the recent developments in the field of HVAC & Insulations.

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Net Zero: Alternate Fuel for Marine Propulsion

Punjab & Chandigarh State Centre, IEI organized One Day Seminar on the theme **Net Zero: Alternate Fuel for Marine Propulsion** on 25 April 2023 under the aegis of Marine Engineering Division Board, IEI in Chandigarh. The programme was organised in collaboration with the Institute of Marine Engineers (India), Chandigarh Chapter, Institution for Innovation Industrial Engineering and Entrepreneurship, Mumbai, Merchant Navy Officers Association (MNOA), Chandigarh and The Company of Master Mariners (India), Chandigarh. The Seminar aimed to discuss the innovations and solutions for achieving net-zero emissions in the maritime industry.

Prof Dr S K Sharma, Professor Emeritus, Panjab University, Chandigarh, graced the occasion as Chief Guest. Prof (Dr) T S Kamal, Former Vice President, IEI was the Guest of Honour. Chief Guest, Prof Sharma spoke on the topic 'Carbon Capture, Usages and Storage' and discussed the functional domain of smaller modular atomic reactors, energy efficiency measures and hybrid propulsion. Vice Admiral HS Malhi, AVSM, VSM, (Retd), former CMD MDL, Mumbai, spoke about achieving zero-emission targets with nuclear energy and stressed the importance of being ready to face the future challenges. Cdr Dr Bhaskar M Bhandarkar, Chairman,



Marine Engineering Division Board, IEI, Er Sukhbir Singh Mundi, Immediate Past Chairman, Punjab & Chandigarh State Centre, IEI and Mr Arun Kumar Agarwal, Chairman, IME, Chandigarh were also present on the occasion. Earlier, Dr Labh Singh Bhari, Chairman, Punjab & Chandigarh State Centre, IEI, delivered the welcome address. Captain T S Bhatia, President of MNOA, Chandigarh, provided an overview of the seminar's theme and emphasized that it addressed various challenges and opportunities in adopting green fuels in the marine sector. As India strives to become a net zero emitter by 2070, mariners too wish to contribute our bit in achieving the goal. Green growth is the need of the hour and each of us should promote and protect the environment by adopting green practices, he opined.

The event featured four technical sessions, including a panel discussion led by Extra Master Captain Prabhat Nigam and his team. Dr Rajender M Belokar, Professor in the Department of Production & Industrial Engineering, PEC Chandigarh chaired the Technical Sessions.

Key speaker, Sardar Harinder Singh Cheema, spoke about his patented Hydrogen Gas Burner for having a smoke-stack less boiler and achieving absolute net-zero pollution. He said that converting a hydrogen-ready boiler from natural gas to hydrogen will take around an hour and involve changing a couple of components such as the burner. It is envisaged that Gas-Safe engineers will be trained to work with hydrogen by a qualification scheme similar to that available today for LPG.

Key speaker, Dr Nitin Agarwala, Indian Navy, discussed on LNG as fuel for marine propulsion. He said that more container ships and cruise ships, are being produced to run on liquefied natural gas (LNG), which emits approximately 25% less CO₂ than conventional marine fuels while providing

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Landslide and Land Subsidence in Hilly Areas: Causes, Prevention, Mitigation and Restoration

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are often triggered by heavy rainfall, seismic activity, or human activities such as construction and deforestation. These events can cause significant damage to infrastructure, property, and human lives. Landslides are the rapid movement of rock, earth, or debris down a slope, and can cause extensive damage to infrastructure, property, and human life. In contrast, land subsidence is the sinking or settling of the ground surface, which can lead to structural damage to buildings and other infrastructure.

In recent years, there have been reports of land subsidence in the hilly areas of Himachal Pradesh and Uttarakhand, particularly in the District Chamba in HP and Joshimath in Uttarakhand. The causes of these events are complex and can vary from region to region. However, some common factors include geological factors, rainfall patterns, deforestation, and human activities such as mining and construction. To prevent landslides and land subsidence, it is important to adopt a multi-pronged approach that includes measures such as forest conservation, proper land use planning, regulation of construction activities, and early warning systems. Proper drainage systems and slope stabilization techniques can also be used to mitigate the effects of landslides. Further, restoration of the affected areas after a landslide or land subsidence event is equally important. This can include repairing damaged infrastructure, relocating people from high-risk areas, and reforestation.

The National Seminar on Landslides and Land Subsidence in the Hilly Areas of Himachal Pradesh and Uttarakhand aims to bring together experts and stakeholders from various sectors to share their experiences and best practices related to preventing and mitigating landslides and land subsidence. Through the adoption of a declaration outlining key recommendations, the conference seeks to provide a roadmap for policymakers and practitioners to address this critical issue in hilly areas of the Country. It is hoped that the conference will contribute to the development of effective strategies for preventing and mitigating landslides and land subsidence and ultimately lead to a safer and more sustainable future for the hilly regions.

Er Deepak Sharma, Engineer-in-Chief, Himachal Pradesh PWD, graced the occasion as the Chief Guest. Dr R Anbalagan, Chairman, CED 56, BIS ; Er Pankaj Dadwal, Chairman, National Skill Development Forum, IEI; Er Vijayveeran, Head of BIS, Parwanoo Branch and Er Manoj Kumar Rajak, Director, Civil Engineering Department, BIS graced the occasion as Guests of Honour. The programme began with the welcome address delivered by Er Vishwa Mohan Joshi, Chairman, Himachal Pradesh State Centre, IEI. In his address, Er Joshi mentioned that the beautiful landscapes of the hilly regions are home to millions of people and is a rich storehouse of diverse flora and fauna, which also consists of uncertain geotechnical complexities

and inherent vulnerabilities. He emphasized that it is our responsibility as engineers and stakeholders to explore and implement effective measures that ensure the safety, stability and sustainable development of these areas. He encouraged all participants to be actively involved in the sessions, workshops and discussions and seizing this opportunity to expand our horizons, challenge existing paradigms and explore new approaches to prevent and mitigate landslides and land degradation.

The Chief Guest, Er Deepak Sharma, in his address pointed out that landslides and land subsidence have emerged as important issues, affecting not only the lives and livelihood of the people living in these areas but also affect the socio-economic fabric. The devastating consequences of these natural disasters disrupt infrastructure, displace communities, and cause irreparable damage to the delicate ecological balance, he mentioned. It is therefore imperative for us to pool our knowledge, expertise and resources to find innovative solutions that address the root causes and mitigate the effects of such incidents.

Guest of Honour, Dr R Anbalagan delivered a lecture on the topic 'Overview of Indian Standards on Hill Area Development Engineering Committee'. He said that this seminar serves as a platform for exchange of ideas, experiences and best practices; It brings together renowned experts, researchers and professionals from various disciplines who have dedicated their lives to understanding and tackling the challenges posed by landslides and land subsidence; It is through collaboration and collective efforts that we can drive meaningful change and pave the way for a more resilient future. Guest of Honour, Er Pankaj Dadwal, mentioned that the ultimate goal is not only to reduce the effects of landslides and land subsidence but also to restore the affected areas. During the technical sessions, papers were presented on different topics, namely, A Menace to Human Population: Nomenclature, Classification and Introduction; Site Investigation Techniques and Analysis of Landslides; Subsidence Problems of Hill Towns, Precautionary and Mitigation Measures: A Case Study of Hoshimat Towns, Gorhwal Himalaya; Instrumental Slope Monitoring-Types Planning, Execution and Interpretation; Uses of Geosynthetics for Hill Excavations; Landslide Hazards in the Kinnaur District of HP in the Present Climate Change Scenario, etc.

During the valedictory function, Er Ajay Gupta, Engineer-in-Chief, HPPWD graced the occasion as Chief Guest and thanked the host Centre for organising the Seminar on the very burning topic of Landslide and Land Subsidence Management in hilly areas. He further highlighted that to rejuvenate the hills, it is our duty to adopt sustainable practices and solutions that benefit the affected areas and communities. Er Jaswant Singh, Honorary Secretary, Himachal Pradesh State Centre, IEI proposed the vote of thanks.

Energy and Environment

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Chief Guest, Dr Rana S Chakravarty, Chief General Manager (Environmental Engineering), MECON Limited addressed the gathering and provided insights into Green Buildings and design of buildings to reduce use of Air conditioners. He also emphasized the need to inculcate the habits to reduce the carbon footprint. Er Shivanand Roy, President, IEI and the then Chairman, ICC, IEI, discussed the role of IEI in spreading the awareness about sustainability and environment. He also requested ISHRAE for suggestions to reduce the energy consumption on the IEI JSC campus.

At the end, Dr Manoj Kumar proposed the vote of thanks. He mentioned that Jharkhand State Centre, IEI, is a pioneer in disseminating knowledge about new technologies across various domains. He also congratulated everyone for the valuable insights shared and expressed his pleasure at the breadth of topics discussed during the event.

A panel discussion was held on the topic, 'Sustainable & Effective HVAC through VRF'. Er Kaushik Kumar from Mitsubishi Electric shared his views and expertise. During discussion it emerged that VRG technology is very efficient for air Conditioning of large rooms and halls. During the Technical Session, the papers were presented, on the topic, namely: 'Case Study on Applications of Green Building Considerations in NISP' by Sri K M Roy, AGM (Arch), MECON Limited; 'Green Building' by Sri Atilesh Gautam, Electrical Executive Engineer cum SDA I/c JREDA, Ranchi and 'Road Map to reduce Carbon Emission by using Hydrogen in Steel Industry' by Dr Somraj Chakravarty, AGM (Utilities), SAIL-CET. A Motivational talk titled 'Self Augmentation' was delivered by Dr Rashmi Kapila, Motivational Speaker. A Technical talk was delivered by Sri Atul Nigam, Energy Expert, JREDA, Ranchi, on the occasion. Mitsubishi Electric provided a manufacturer's presentation on the occasion.

Impact of Artificial Intelligence in Communication Systems

Artificial intelligence (AI) is the ability of machines to replicate or enhance human intellect, such as reasoning and learning from experience, which has been used in computer programs and also applied to many other products and services. AI uses techniques from probability theory, economics, and algorithm design to solve practical problems. In addition, the AI field draws upon computer science, mathematics, psychology, and linguistics. Computer science provides the means for designing and building algorithms,



while mathematics equips us with the tools for modeling and solving the resulting optimization problems. During the Seminar, research in the field of artificial intelligence concerned with producing machines to automate tasks with intelligent behaviour was discussed. Examples include control, planning and scheduling, the ability to answer diagnostic and consumer questions, handwriting, natural language processing and perception, speech recognition, and the ability to move and manipulate objects.

Madurai Local Centre of the Institution organised a One-day Seminar on the theme **Impact of Artificial Intelligence in Communication Systems** in Madurai on 22 February 2023 under the aegis of Electronics and Telecommunication Engineering Division Board [ETDB], IEI. The programme began with the welcome speech delivered by Dr N Sivasubramanian, Chairman, Madurai Local Centre, IEI. Dr T Louie Frango, Principal, Sri Vidya

College of Engineering & Technology inaugurated the event and delivered the special address. The Seminar focussed on the principle and applications of Artificial Intelligence.

Dr A Yasodai, Committee Member, Madurai Local Centre, IEI delivered a lecture on the topic 'Application of Artificial Intelligence in Communication Systems'. The speaker, in her lecture, concentrated on the application of Neural Networks and Deep Learning and explored the applications of artificial intelligence for the optimization of wireless communication systems, including channel models, channel state estimation, beam forming, codebook design, signal processing, and more. It was discussed that the application of artificial intelligence technology to 5G wireless communications is appropriate to address the design of optimized physical layers, complicated decision-making, network management, and resource optimization tasks within networks. In exploring 5G wireless technologies and communication systems, artificial intelligence is a powerful tool and a research topic with numerous potential fields of application.

Ms S Venkata Lakshmi, Department of Computer Science and Engineering, K L N College of Engineering, Pottapalayam delivered lecture on 'Application of Artificial Intelligence in Recognition'. In this session, the participants learned about the application of Artificial intelligence recognition technology, which refers to the use of computers and intelligent platforms. The speaker elaborated that Artificial Intelligence recognition technology can identify reality and simulate various human thoughts and behaviors. It creates intelligent automated systems through a combination of intelligence and technology.

As an automatic, intelligent, and scientific computer technology, computer Artificial Intelligence recognition technology can accurately identify, scientifically judge, and simulate human thinking patterns. It ranges from

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Net Zero: Alternate Fuel for Marine Propulsion

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the same amount of propulsion power. Compared to Heavy Fuel Oil (HFO), the use of LNG allows substantial reductions of more than 99% of Sulphur emissions, 80% for Nitrogen oxides, most particulate matters, and also up to 20% for CO₂. "Furthermore, LNG, or Liquefied Natural Gas, is super-chilled and in a liquid state when transported. Since it is already seen as a supplementary fuel for various segments, it can have an even greater impact when used as ship fuel," he said.

Key Speaker, Er Ashok Gupta spoke on generating power from STP and technologies to reduce GHG levels and uses of Hydrogen as Marine Fuels.

Key Speaker, Er Yuvraj Thakur, CEO, Verifavia Shipping talked about various levels of regulations in relation with GHS emission and their verification. He discussed about the way outs to reduce greenhouse gas emissions associated with electric power production, transmission, and distribution, which include increased efficiency of fossil-fired power plants and fuel switching, using renewable energy sources rather than fossil fuel to generate electricity and Carbon Capture and Sequestration (CCS) etc.

Key Speaker, Capt Rajesh Saigal, Consultant, FOWE ECO Solutions Limited explained the working principle of Fuel Oil Water Emulsion (FOWE) which is simple and readily available solution to reduce GHG. FOWE's unique, world-leading Cavitech technology produces long life, stable water-in-oil emulsion and oil blends without using additives or mixer plants, he explained. FOWE fuels are fully suitable for marine use; The Cavitech system offers important

benefits for ship owners; Steam generated from the water-oil emulsion during the combustion cycle reduces exhaust gas emissions and increases the efficiency of the engine, allowing for less fuel to be used; Particulate matter is reduced, further cleaning the exhaust gas emissions and even more so when operated alongside scrubbing systems; In seagoing tests, large vessels obtained more than 5% fuel savings and reduced exhaust gas emissions of SO_x, NO_x, CO₂ in line with the International Marine Organization's regulatory framework, he mentioned.

Panelist Dr Pooja Mahajan, Associate Professor, Department of Applied Sciences, Chitkara University Institute of Engineering and Technology, Chitkara University also spoke on the occasion. Mr. Jasjeet Suri, a motivational speaker, presently associated with Marine Faculty Team at Chitkara University School of Maritime Studies addressed the participants.

During the valedictory function, the DG cum Secretary, New & Renewable Energy Department, Haryana, Mr S Narayanan, IFS, was the Chief Guest. The vote of thanks was proposed by Er Swinder Singh, FIE, Honorary Secretary, Punjab & Chandigarh State Centre.

In conclusion, the insightful One Day Seminar successfully brought together experts from various fields to discuss innovative solutions for achieving net-zero emissions in the maritime industry. The collaboration between multiple organizations and the active participation of attendees made the event a success, and hopefully, the insights shared and ideas discussed will contribute to a sustainable future for the maritime sector.

Nanotechnology

West Bengal State Centre, IEI organized Technical Webinar on the theme **Nanotechnology** on 29 July 2023 under the aegis of Electronics & Telecommunication Engineering Division Board [ETDB], IEI. Panellists of the webinar session were: Dr Manodipan Sahoo, Assistant Professor, Department of Electronics Engineering, IIT ISM, Dhanbad and Ms Monika Kumari, Research Scholar, Department of Electronics Engineering, IIT ISM Dhanbad. Er Chanchal Chakraborty, Convenor, Electronics & Telecommunication Engineering Divisional Sub-Committee, WBSC, IEI moderated the webinar session.

In the beginning, Dr Nirmal Das, Chairman, West Bengal State Centre, IEI welcomed the participants and made introductory remarks on the theme of the event. Er Ram Chandra Chakraborty, Joint Secretary, West Bengal State Centre, IEI introduced the Panellists of the session.

The panellist, Dr Manodipan Sahoo started his deliberation with the history



Dr Manodipan Sahoo

of Nanotechnology where he narrated, that in 1959, renowned physicist Richard Feynman laid the scientific foundations for the nanomaterial revolution, the term "Nanotechnology" was first coined by Norio Taniguchi in 1974 and the term "Nano" comes from the Greek word for "Dwarf." He defined a nano-material as a material that has at least one of its dimensions in a nano-metric scale typically ranging between 1nm - 100nm; Nano-materials possess a

significantly higher surface area compared to their volume, which enhances chemical reactions, adsorption, and interactions with other substances. At the nano-scale, Quantum Effects become more pronounced which can influence their optical, electronic and magnetic properties. He further stated that certain nano-materials such as graphene and carbon nano-tubes exhibited exceptional strength, stiffness and resilience. He then discussed the physics of nanomaterials. This included topics such as the Quantum Confinement Effect, Density of States (DOS), Brillouin Zone, and Transport Properties. He also talked about how these properties are measured using various methods, including electrical measurements like the 4 Probe Method and Hall Method, as well as measurements of Magnetic Properties and Optical Properties such as Plasmon resonance, Photoluminescence, optical absorption, and scattering.

Additionally, he mentioned two methods for the fabrication of nanomaterials: the top-down approach and the bottom-up approach. He went on to describe in detail various methods of fabrication, which include the Sol-Gel Method, Electro-Chemical Deposition, Vapor Deposition Techniques, Sputtering Techniques, Pulsed Laser Deposition (PLD) method, Spin Coating Techniques, Ball-Milling Techniques, Self-assembly, and Lithography Techniques. He further narrated two types of nano-materials, namely Carbon-Based Nano-materials and Metal-Based Nano-materials.

He then elaborated on different applications of nanotechnology as follows.

Electronics and Optoelectronics

- ❖ Nano-materials, such as carbon nanotubes (CNTs) and graphene, have shown promise in transistor technology.
- ❖ Quantum dots (QDs), semiconductor nanocrystals with tuneable emission wavelengths, have been utilized as colour converters in QD-LEDs. QD-LEDs offer a wider colour gamut, high colour saturation, and improved energy efficiency compared to traditional phosphor-based LEDs.
- ❖ Nano-materials have facilitated advancements in the field of nanophotonics, where light is manipulated at the nanoscale.

Energy Storage and Conservation

- ❖ Nano-materials, like silicon nanowires or graphene, have been explored as electrode materials to achieve high energy density and long cycle life in lithium-ion batteries.

- ❖ Nanostructured materials, such as carbon nanotubes, graphene, and metal oxides, have shown promise in supercapacitor applications.
- ❖ Nanostructured electrodes, such as carbon nanotubes and nanostructured oxides, facilitate efficient fuel and oxygen transport, enhancing the overall performance of fuel cells.
- ❖ Semiconductor nanostructures, such as quantum dots or nanowires, can be tuned to absorb a wide range of solar wavelengths and enhance light absorption.

Biomedical Applications

- ❖ There are several Bio-medical applications of nano-materials such as Drug Delivery, Tissue Engineering, & Gene Delivery etc.
- ❖ Nano-materials, including quantum dots, gold nanoparticles, and iron oxide nanoparticles, are used as contrast agents in medical imaging techniques like MRI, CT scans, and fluorescence imaging.

Environment Applications

- ❖ Nano-materials such as carbon nanotubes, graphene oxide, and metal-organic frameworks have been used for water purification.
- ❖ Titanium dioxide nanoparticles can be used in photocatalytic coatings to break down air pollutants like nitrogen oxides and volatile organic compounds under sunlight.
- ❖ Nano sensors can detect and quantify pollutants, gases, and toxins with high sensitivity and selectivity. They enable real-time monitoring of environmental parameters and early detection of contaminants in air, water, and soil.
- ❖ Nanoencapsulation of agrochemicals enhances their controlled release, improves their efficacy, and minimizes leaching into the environment.

He further outlined the challenges and future directions in the domain of nanotechnology, that are summarised as follows.

- ❖ One of the significant challenges is the scalability of nano-manufacturing processes. While nanoscale fabrication techniques have achieved impressive results in research labs, translating them into large-scale production remains a hurdle.
- ❖ As with any emerging technology, the environmental and health impacts of nano-materials and nano-devices need to be thoroughly studied and understood.
- ❖ Nano-technology often requires integration with existing technologies and systems.
- ❖ Ensuring compatibility and seamless integration between nano-devices and macro-scale systems can be challenging.

Ms Monika Kumari started her lecture with the definition of a biosensor as an analytical device, containing an immobilized biological material, like enzyme, antibody, and nucleic acid, that can specifically interact with an analyte like glucose, urea, and drug and produce measurable chemical or



Ms Monika Kumari

electrical signals. She then discussed the features of biosensors, highlighting their high specificity, compact size, biocompatibility, sensitivity, selectivity, linear response, and fast time-response. She further elaborated on the applications of biosensors in food analysis, study of biomolecules and their interactions, drug development, environmental field monitoring, agricultural industry, medical diagnosis. She then elaborated on the Dielectric-

Modulated FET-Biosensor, discussing its limitations. She also explained the construct of a Biosensor based on Dual Material, Double Gate, Gate Stack Engineering, and Junctionless MOSFET. Additionally, she covered topics related to mathematical modeling.

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Modern Approaches in the Field of Waste Water Treatment

Tripura State Centre, IEI organized Technical Webinar on the theme **Modern Approaches in the Field of Waste Water Treatment** on 05 April 2023 under the aegis of Chemical Engineering Division Board [CHDB], IEI. Panellists of the webinar session were; Dr V C Padmanaban, Assistant Professor, Department of Bioengineering, NIT Agartala; Dr Dipaloy Dutta, Assistant Professor, Department of Chemical Engineering, MNIT Jaipur and Er Pankaj Dnyandeo Indurkar, Scientist, CSIR CSMCRI, Bhavnagar, Gujarat. The webinar session was moderated by Er Harjeet Nath, Assistant Professor and HOD (i/c), Chemical & Polymer Engineering Department, Tripura University. The event was started with the welcome address delivered by Dr Subhadeep Bhattacharjee, Chairman, Tripura State Centre, IEI and Associate Professor & Former Head, Department of Electrical Engineering, NIT Agartala.

Panellist, Dr V C Padmanaban was presented his expert talk on a broad topic namely 'Removal of Dye based Recalcitrant from Aqueous Matrices using Radical Driven Advanced Oxidation/Reduction Processes'. He highlighted the quality and availability of water available in our country. He has stressed principally on the micropollutants available in water. He explained various methods, that can be used to remove these micropollutants especially using advanced oxidation/reduction processes.



Dr V C Padmanaban

Panellist, Dr Dipaloy Dutta has presented his expert talk related to the field of separation of pollutants using solvent impregnated resin which is a combination of solvent extraction and ion exchange process that can improve significantly separation efficiency as well as selectivity for a wide range of compounds to be removed. He has properly explained the method in which a solvent or combination of solvents is/are incorporated into the resin which acts as the support in a physical impregnation method. The solvent is impregnated into the pores of the resin by dry/incipient or wet/diffusional impregnation; The solvent molecules get distributed homogeneously inside the pores of the resin; The solute molecules are attached to the different functional groups of impregnated solvent by weak forces; It is a hybrid process comprising the principle of adsorption, extraction, and ion exchange, he explained.



Dr Dipaloy Dutta

Er Pankaj D Indurkar has presented his lecture on the topic 'Forward Osmosis Process: Fundamental Membranes and Applications'. He briefly discussed various membranes especially polymeric membranes which are



Er Pankaj D Indurkar

used in waste water treatment to make it drinkable. He has also explained in details the various advantages and disadvantages of the membrane processes. He has then stressed upon one of the emerging areas of water treatment known as forward osmotic membranes and have explained its multiple possibilities in application in various industries. At the end of deliberation, the moderator summed up the proceedings. An interactive session was also held at the end of deliberation, when the speakers had exchanged their views with the participants.

The webinar session explored the fact that when the world is progressing at a rapid pace, and this progression is exerting a lot of pressure on natural resources. The resources are limited, but demand has been increased to all time higher. The nations are facing many challenges including climate change, extinction of natural flora and fauna, acute crisis of fresh water etc. Tremendous population growth has put stress on water and sanitation system. One of the major issues of present days is the management of wastewater being generated from domestic, hospital, industries, and agricultural sectors. Discharge of wastewater into rivers, seas, and oceans harms the aquatic environment in many ways such as acidification, nutrient enrichment, high level of growth, oxygen depletion and many others. This has lead to the extinction of rich flora and fauna of aquatic systems and also has indirect impact on human health by means of bio-magnifications. Over the years, technologies have developed and many advanced methods have been emerged which are more efficient, cheap and eco-friendly in treating wastewater. Methods like Removal of dye-based recalcitrant from aqueous matrices using radical driven Advanced Oxidation/Reduction Processes, membrane based separation technique, a combined solvent extraction and ion exchange process and a number of other advanced biological means are currently being employed at various levels of wastewater treatment. The webinar has presented various issues, pros-cons, challenges, opportunities related to the field of waste water treatment. In the above backdrop, this webinar was successful in focusing mainly on recent technological developments, key challenges and potential solutions for wastewater treatment to protect public health and environment. Dr Mrinal Kanti Deb Barma, Honorary Secretary, Tripura State Centre proposed the vote of thanks.



Er Harjeet Nath

Nanotechnology

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She also presented performance results and metrics associated with this biosensor.. She further narrated the TMD Materials that were the most intriguing 2-D Semiconductors for the next generation of Biosensing with the focus on planar structure, high surface-to-volume ratio, compatibility with modern fabrication technology, high carrier mobility, weak V-dW forces making layer controlled, tunable band gap without dangling bonds. She discussed the analytical model of Dual-gate TMD FET based label-free biosensor along with measurement results. She then presented discussed the impact of partially filled biomolecules on sensitivity. She explained the device architecture of the Dielectrically Modulated Charge Plasma-based Monolayer TMD Heterojunction TFET Biosensor for enhanced Sensitivity and measured results in the laboratory. She proceeded to discuss the fabrication of MoS2 Nanosheet-based Biosensors, emphasizing the urgent need for accurate and prompt glucose monitoring due to its crucial role in

reducing the risk of various health-related issues. She further mentioned that despite numerous efforts, there was still a need for an affordable and practical biosensor to detect glucose.



Er Chanchal Chakraborty

An interactive session was held at the end of the session. Moderator of the session, Er Chanchal Chakraborty, while summing up the proceedings of deliberation, stated that Dr Sahoo and Ms Monika Kumari lucidly described the concepts of Nanotechnology with case studies and current research activities in this arena. They also outlined the future road map of this all-pervasive technology, including upcoming research directions, potential applications, and expected advancements. Dr Raju Basak, Honorary Secretary, West Bengal State Centre, IEI extended Vote of Thanks.

IEI Celebrates

World Environment Day 2023

Theme : Solutions to Plastic Pollution

World Environment Day was celebrated by the Centres of the Institution all over the country on 5 June, 2023. Brief accounts of the celebration as received from various Centres are reported hereunder.

STATE CENTRES

Karnataka

Karnataka State Centre, IEI in association with the Institution of Public Health Engineers (IPHE), Karnataka Center and Dayananda Sagar College of Engineering (DSCE), Bengaluru observed World Environment Day 2023 on 05 June 2023 through online mode. A webinar was organized on the topic 'Plastic Menace Control and Solution'. This webinar aimed to raising awareness about plastic pollution and exploring sustainable solutions. Dr Enti Ranga Reddy, Honorary Secretary, Karnataka State Centre, IEI in his opening remarks highlighted on finding sustainable solutions to reduce plastic pollution. Er M Lakshmana, Chairman, Karnataka State Centre, IEI welcomed the participants and emphasized on collaborative efforts required to solve the plastic pollution. Keynote Speaker of the session was Dr Shashidhar Ganjigatti, Former Honorary Secretary, Karnataka State Centre, IEI and Former Chief Engineer, BWSSB. Dr Ganjigatti shared severity of plastic menace, effective strategies and practical solutions for achieving sustainable futures by minimizing plastic waste. He stressed on the urgent need to address plastic pollution and its detrimental impact on the environment, strategies to minimize plastic waste through effective waste management systems and recycling initiatives, promoting the use of biodegradable alternatives to single use plastics, raising awareness among individuals, communities and industries to drive behavioural change and collaboration and collective efforts among various stakeholders to implement sustainable practices to minimize plastic pollution. Dr B G Prasad, Principal, Dayananda Sagar College of Engineering (DSCE) in his inaugural address, highlighted the importance of environmental stewardship and the role of educational institutions in promoting sustainable practices. Dr R P Mallikaradhya, Chairman, IPHE delivered the valedictory address and encouraged continuous involvement in finding innovative solutions to tackle plastic pollution. Dr Geetha L, Dayananda Sagar College of Engineering (DSCE) expressed her gratitude to Speaker, Participants and Organizing Institutions for their contributions in making the webinar a success. It was discussed on the webinar to provide a roadmap for cleaner and greener future and needs collective efforts in preserving the environment for our next generation.

Kerala



Kerala State Centre, IEI, in association with HLL Lifecare Limited, Thiruvananthapuram observed World Environment Day 2023 on 05 June 2023 in Thiruvananthapuram.

Prof (Dr) M Jayaraju, Chairman, Kerala State Centre, IEI and Er Roy Mathew, Honorary Secretary, Kerala State Centre, IEI planted trees in the premises of Kerala State Centre, IEI in presence of Committee Members, Members of TKM Alumni Association, staff members of IEI. A technical visit was conducted to the Effluent Treatment and RO Plant, HLL Lifecare Limited.

Technical presentation was obtained by Er Venugopal S, General Manager, HLL Life Care Limited.

LOCAL CENTRES

Aligarh

Aligarh Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Aligarh. The event was started with welcome address delivered by Dr (Mrs) Salma Shaheen, Chairman, Aligarh Local Centre, IEI. Mr



Prashant Singhal, Mayor of Aligarh graced the function as the Chief Guest. Prof Mirza Mohd Sufyan Beg, Principal, ZHCET, AMU, Aligarh was the Guest of Honour. Speakers of the session were Dr Anwar

Khwaja, General Manager, Nagar Nigam, Aligarh and Ms Fatima Kamil, Zoology Department, Aligarh Muslim University. Ms Kamil delivered lecture on the topic 'Plastic Pollution and Environment Sustainability'. Mr N K Garg, Convener of the Program proposed the vote of thanks at the end of the event.

Alwar

Alwar Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Alwar. Chief Guest of the event, Er Gopi Chand Sharma, Former Executive Engineer, Government of Haryana spoke on the theme. A tree plantation programme was also organized on the occasion. Er Ashok Kumar Gupta, Chairman, Alwar Local Centre, IEI presided over the function and extended warm welcome to distinguished guests, dignitaries and



other participants for their gracious presence on the occasion. Er S C Joshi, Immediate Past Chairman, Alwar Local Centre, IEI shared insight on various sources of pollution, their harmful effects and suggested various methods

to reduce pollution and save our earth. He spoke on preventive measures to minimize the plastic pollution and save our planet. Er R C Sharma, Honorary Secretary, Alwar Local Centre, IEI expressed gratitude to the august gathering, highlighted the evolution of World Environment Day, warned against damaging the natural resources, greenery, etc and proposed the vote of thanks at the end of the event. Er Rajdeep Sharma, Immediately Past Honorary Secretary & Convenor of the program coordinated the program.

Bokaro Steel City

Bokaro Steel City Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Bokaro. Chief Guest of the function, Er B K Tiwari,



Executive Director (Works), SAIL, Bokaro Steel Plant inaugurated the function. In his inaugural address, Er Tiwari emphasized the importance of effective collaboration between industries and IEI in finding solutions in the field of environmental conservation

through circular economy approach. Earlier, Er Navin Prakash Srivastava, Chairman, Bokaro Steel City Local Centre, IEI welcomed the dignitaries and participants and encouraged all to reject single use plastic in daily life. He further highlighted the significance of energy conservation, water conservation and resource conservation. Er Nitesh Ranjan, AGM/ Environment Conservation & Sustainability, SAIL, Bokaro Steel Plant presented paper on the theme 'Solutions to Plastic Pollution'. Er Y N Singh, Immediate Past Chairman, Bokaro Steel City Local Centre, IEI proposed the vote of thanks at the end of the event.

Belagavi



Belagavi Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Belagavi. Keynote Speaker of the session, Prof Mahantesh Kanthi, Associate Professor & Head, Civil Engineering

Department, Angadi Institute of Technology and Management, Belagavi spoke on development of plastic consuming microbes. Er Ramesh T Jangal, Chairman, Belagavi Local Centre presided over the function, Er Devendrappa Kenchakkanavar Veeranna, Honorary Secretary, Belagavi Local Centre, IEI delivered the welcome address and proposed the vote of thanks at the end of the event.

Chandrapur



Chandrapur Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Chandrapur. Chief Guest of the session was Dr R K Krishna, Associate Professor, Rajiv Gandhi College of Engineering,

Research & Technology, Chandrapur. Keynote Speaker of the session was Mr Vijay M Khanke, President, WAREE Sanstha & well known Social Activist in Chandrapur. Er Yogendrasingh D Parihar, Honorary Secretary, Chandrapur Local Centre, IEI delivered the opening remarks. Er Madhukar Krushanji Shende, Chairman, Chandrapur Local Centre, IEI welcomed all present on the occasion and spoke on the importance of observing environmental day. Er Yogendrasingh D Parihar proposed the vote of thanks.

Coimbatore



Coimbatore Local Centre, IEI observed World Environment Day 2023 on 23 June 2023 in Coimbatore and organized a technical lecture on the theme of the day. The event began with the welcome address delivered by Dr H Ram Mohan, Immediate Past Honorary Secretary, Coimbatore Local Centre, IEI. Dr D Maruthamani, Assistant Professor,

PSG College of Technology introduced the Guest Speaker of the session, D P Pramod, Senior Principal Scientist, Salim Ali Centre for Ornithology and Natural History, Anaikatty, Coimbatore. Dr Pramod explained the need of retaining the biodiversity in earth, spoke about the effect of pollution on animals and birds in forests as well as un urban areas. Prof (Dr) J Krishnamoorthi, Honorary Secretary, Coimbatore Local Centre, IEI proposed the vote of thanks at the end of the event.

Durgapur



Durgapur Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Durgapur and a Seminar was organized on this occasion. The event began with the opening remarks delivered by Er Manas Majumder,

Honorary Secretary, Durgapur Local Centre, IEI. While explaining the theme of the day, mentioned the significance of observing the day for raising global awareness, encouraging action on environmental issues and focused on solutions to plastic pollution. Er Safikul Islam, Chairman, Durgapur Local Centre, IEI welcomed the dignitaries and shed light on the collective, transformative action to beat plastic pollution. Guest of Honour, Dr Kalyan Kumar Mistry, Principal Scientist, CSIR-CMERI focused on the solutions to reduce plastic pollution and the close relevance within energy literacy and environmental sustainability. He mentioned this year the World Environment Day has been jointly hosted by Ivory Coast and Netherland and he informed that Ivory Coast has banned the use of plastic bags. Guest of Honour and Keynote Speaker, Prof (Dr) Sudit Sekhar Mukhopadhyay, Department of Biotechnology, NIT Durgapur focused on the theme and plastic materials like water bottles, carry bags, etc in our daily use. He highlighted that plastic materials are not easily degradable and it is accumulated in the earth, contaminates both soil and water bodies and also to ocean ecology. He stressed on saving the earth using 3 R (reduce, recycle, reuse) and on using biopolymers which are easily degradable and plastic eating bacteria which can destroy the plastic material. Er Manas Majumder proposed the vote of thanks at the end of the event.

Gorakhpur



Gorakhpur Local Centre, IEI, in association with Municipal Corporation Gorakhpur and INTACH, Gorakhpur Chapter observed World Environment Day 2023 on 05 June 2023 in Gorakhpur and a Seminar was organized on this

occasion. The Chief Guest of the program was Mr Gaurav Singh Sogarwal, Municipal commissioner, Gorakhpur. Dr Govind Pandey, Dean, MMMUT Gorakhpur, Dr Mumtaz Khan, Co-Convener, INTACH, Gorakhpur Chapter, Mr Achintya Lahiri, Convener, INTACH, Gorakhpur Chapter, Er J B Rai, President, Malaviya Alumni Association, Er SBR Mishra, President, Braham Vidhya Sansthan and Dr Madhu Gulati, a senior doctor by profession were the Guests of Honour on the occasion. Er Pawan Kumar Mishra, Chairman, Gorakhpur Local Centre, IEI welcomed the Guests of Honour, Keynote Speaker, Engineers and Corporate Members. Er Ramesh Chandra Pandey, Honorary Secretary, Gorakhpur Local Centre, IEI expressed gratitude to all the participants, Corporate Members, INTACH, Gorakhpur Chapter Nagar Nigam, Gorakhpur for their supports and participation and proposed the vote of thanks at the end of the event.

Indore

Indore Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Indore. Chief Guest of the function was Mr Amit Mandloi, Editor,



Dainik Bhaskar and Guest of Honour of the session was Dr Rakesh Saxena, Director, Shri G S Institute of Technology and Science, Indore. Keynote Speaker of the event was Dr S

L Garg, Senior Environmentalist and the invited speakers for delivering the theme lecture were Mr Vivek Tiwari, SGSITS, Indore & Mr Siddhant Gupta, Senior General Manager, EKI Energy Services Limited. The program was started with the welcome address delivered by Er Rajendra Prasad Gautam, Chairman, Indore Local Centre, IEI. Mr Amit Mandloi highlighted the significance of conservation of five elements. Dr Rakesh Saxena stated the initiative by SGSITS Indore regarding design of disposable bag material. Dr S L Garg briefed about the significant effect of sunlight, trees and plantations upon the human health and our eco-systems. Mr Vivek Tiwari discussed the use of plastic products in concrete to enhance its comprehensive strength, durability etc. Mr Siddhant Gupta delivered lecture on the topic 'Plastic Waste and Opportunity through Carbon Credit'.

Kadapa

Kadapa Local Centre, IEI in association with Government Polytechnic, Vempalli observed World Environment Day 2023 on 05 June 2023 in Kadapa and a Seminar was organized on this occasion.



Dr T Kiran Kumar, Professor of Civil Engineering, KSRM College of Engineering, Kadapa delivered lecture on the theme of the day. The Seminar provided a platform

in raising awareness to protect environment, awareness campaigns regarding the major environmental issues such as pollution, wastage and losses of food, increasing global warming, deforestation, climate change, plastic pollution etc. Er V Chandra Mohan, Principal, Government Polytechnic, Vempalli discussed on the theme. Earlier, Er N Bramhananda Reddy, Chairman, Kadapa Local Centre, IEI delivered the welcome address.

Kanyakumari

Kanyakumari Local Centre, IEI, in association with University College of Engineering, Nagercoil observed World Environment Day 2023 on 05 June 2023 in Nagercoil. Guest of Honour, Er A Venat Subramanian MS, Technical Lead-IoT/Edge, Envision Digital, Singapore explained the cause of plastic pollution and its effect on human health. He highlighted on plastic pollution due to overreliance on single use plastics, poor waste management practices and improper waste disposal. He mentioned that plastics as well as plastic



particles contaminate sea food with toxic chemicals causing potential health hazards and presence of microplastic particles in drinking water pose a threat to human health. He also explained in details regarding the nine ways

to reduce ocean plastic by using pictograph. He focused on smart waste management system, recycle optimization and smart packaging. He spoke about carbon offsetting and explained how the plastic wastes are disposed at Singapore using this technology without affecting the environment. He suggested all the plastic wastes from hospitals, school buildings, residential complexes and other places are collected systematically and processed for a single reuse if possible and the accumulated wastes are dumped in

an island without affecting the sea water and environment. Dr S Arumuga Perumal, Chairman, Kanyakumari Local Centre, IEI in his address focused on the topic of the day and highlighted how we overcome this plastic pollution using latest technology. In his address he emphasized without plastic we cannot survive in this world and he invited the budding engineers to find suitable solution with the help of this technology. He explained any products are having four components such as design, manufacturing, usage and disposal and a when a product is finalised we should see the time of disposal. Er S Natarajan, Honorary Secretary, Kanyakumari Local Centre, IEI opined that a balance should be arrived regarding usage of plastic and disposal of plastic.

Kolhapur

Kolhapur Local Centre, IEI, in association with Kolhapur Zilha Sah Dudha



Utpdak Sangh Limited, Kolhapur observed World Environment Day 2023 on 05 June 2023 in Kolhapur. Er S B Khot, Honorary Secretary, Kolhapur Local Centre, IEI, in his welcome address, highlighted the importance

of World Environment Day and explained the effect of plastic pollution. On this occasion, tree plantation program was organized at Gokul Dairy Plant, Gokul Shirgaon, MIDC, Kolhapur. Mr Arun Dongale, Chairman and Mr Ajit Narake, Director of Kolhapur Zila Sah Dudha Utpadak, Sangh Limited, Gokul, Kolhapur spoke on the occasion. Mr Prakash Adnaik, Committee Member, Kolhapur Local Centre, IEI expressed gratitude to Chairman and Director of Gokul for sharing their views and proposed the vote of thanks at the end of the event. The event highlighted an important platform to raise awareness about the challenges of plastic pollution and its solution.

Kota

Kota Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Kota. Er Devendra Kumar Bhargava, Chairman, Kota Local Centre, IEI welcomed the Chief Guest of the function, Shri Sharada Pratap Singh, IFS,



Forester, Kota City; Guest of Honour, Prof A K Dwivedi, Rajasthan Technical University, Kota; Guest Speakers on the occasion, Dr M L Parihar, Manager, Nuclear Fuel Complex, Rawatbhata; Dr Shiv Lal, Associate Professor, Department of Mechanical

Engineering, Rajasthan Technical University, Kota; Mr Leela Dhar Suman, Research Scholar, Kota University, Kota. Er Bhargava also welcomed Executive Members, Corporate Members, Past Honorary Secretaries, Past Chairmen, Er Mahendra Chauhan, Er Anand Bardava and Er C K S Parmar, students, distinguished guests and participants. Dr Shiv Lal, in his keynote speech mentioned about the huge amount of plastic debris present in the oceans and focused on plastic pollution, accumulation of plastic waste in the environment, primary plastics, secondary plastics, micro plastics and macro plastics. He explained plastic pollution by the accumulation of waste, accumulation of marine litter, fragments or micro particles of plastics and non-biodegradable fishing nets etc. Chief Guest, Shri Sharada Pratap Singh strongly advocated to create awareness and action for environmental protection by the global community. Guest of Honour, Prof A K Dwivedi highlighted the significance of the day in raising awareness about the value of the resources on our planet and to protect the environment. Guest speaker, Dr M L Parihar highlighted the role of United Nations on World Environment Day for encouraging worldwide awareness and to protect the environment. Guest speaker, Er Leela Dhar Suman discussed the initiatives by the Government of Netherlands by taking ambitious action to shorten

the plastic lifecycle and the signatory of New Plastics Economy Global Commitment and the membership of the country on Global Partnership on Plastic Pollution and Marine Litter. Er Shyam Lal Gupta, Honorary Secretary, Kota Local Centre, IEI proposed the vote of thanks at the end of the event.

Mangalore

Mangalore Local Centre, IEI observed World Environment Day 2023 on 06 June 2023 in Mangalore. Chief Guest of the function, Dr Ravi D R,



Regional Officer, Karnataka State Pollution Control Board spoke on the theme and stressed on eliminating plastic products, not to promote plastic innovation and encouraging their reuse and thus encourage the Circular Economy in plastic

management. He focussed on eliminating unnecessary plastic packaging by redesigning products for enhanced sustainability and promoting innovative business models to move from single use to reusable plastic products. Earlier, Dr Manu B, Honorary Secretary, Mangalore Local Centre, IEI welcomed the gathering and introduced the Chief Guest. Dr Sunil B Malegole, Chairman, Mangalore Local Centre, IEI presided over the meeting.

Muzaffarpur

Muzaffarpur Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Muzaffarpur. Er Anjani Kumar Srivastava, Chairman,



Muzaffarpur Local Centre, IEI delivered the welcome address and emphasized on increasing awareness among the people to protect the environment and stressed on saving the environment from plastic pollution in terms of the 3R

(reduce, reuse and recycle) philosophy. Chief Guest, Er Tej Narain Ram, Former Chief Engineer, Water Resource Department, Government of Bihar stressed on using environment friendly bio-plastics, eliminating single use plastics and improving waste management and disposal. Keynote Speaker, Dr Amaresh Kumar Rai, Associate Professor, Civil Engineering Department, MIT Muzaffarpur highlighted on the proper use of plastic container, which reacts above certain temperature and warned to keep this in specified temperature and also to use it before expiry date. Dr Sanjay Kumar, Associate Professor, Chemistry Department, MIT and Mr S K Mishra, Past Chairman, Muzaffarpur Local Centre, IEI shared their valuable insights on the occasion. Prof C B Rai, Associate Professor and HoD, Civil Engineering Department, MIT Muzaffarpur presented paper on the occasion. The programme was attended by faculty members, staff and number of students of MIT Muzaffarpur. Er Sanjay Kumar Choudhary, Honorary Secretary, Muzaffarpur Local Centre, IEI proposed the vote of thanks at the end of the event.

Tirunelveli

Tirunelveli Local Centre, IEI observed World Environment Day 2023 on 22 June 2023 through online mode. Speaker of the virtual session, Er S Vijay Chandrakanth, Assistant Professor, Department of Civil Engineering, Einstein College of Engineering, Tirunelveli delivered lecture on the theme and covered the latest initiatives taken by different countries to keep the environment free from plastic pollution. Earlier, Prof (Dr) R Velayutham, Chairman, Tirunelveli Local Centre, IEI delivered the welcome address. Mr Jimmi Carten M, Honorary Secretary, Tirunelveli Local Centre, IEI proposed the vote of thanks at the end of the event.

Tiruvallur

Tiruvallur Local Centre, IEI in association with Southern Railways, Perambur Loco Center, Perumbur observed World Environment Day 2023 on 10 June 2023 in Chennai. The event started with welcome address, delivered



by Prof (Dr) Ramesh L, Chairman, Tiruvallur Local Centre, IEI. Speaker of the event was Er N K Nadanwar, Chief Workshop Manager, Perambur Loco Works, Southern Railway, Perambur. Dr J Balamurugan, Honorary Secretary, Tiruvallur Local

Centre, IEI proposed the vote of thanks at the end of the event.

Udaipur

Udaipur Local Centre, IEI observed World Environment Day 2023 on 05 June 2023 in Udaipur. The event began with the welcome address, delivered by Er Purushottam Paliwal, Honorary Secretary, Udaipur Local Centre, IEI. Er Chandra Prakash Jain, Chairman, Udaipur Local Centre, IEI



welcomed the Chief Guest of the session, Mr R K Jain, IFS, Regional Conservator of Forests, Udaipur and Keynote Speaker, Er Shafik Ahmad, DGM, Secure Meters Limited, Udaipur. Mr R K Jain highlighted that

approximately 430 million tonnes of plastics are produced every year, out of which half is single use plastic. He also mentioned that every person uses 50000 microplastic particles per year. He stressed on minimum use of polythene, eradication of single use plastic and disposal. Er Shafiq Ahmad explained briefly about plastic pollution which affected the ecosystems, wildlife and human health. He stressed on minimizing plastic waste by adopting comprehensive strategies like reducing the production and consumption of single use plastic, strengthened the recycling and proper waste management systems, encouraging individuals to concentrate more in recycling infrastructure and emphasized the role of environmental education and awareness program in engaging communities and fostering collective responsibility towards reducing plastic pollution. Er Purushottam Paliwal proposed the vote of thanks.

Impact of Artificial Intelligence in Communication Systems

Contd. from page 7

abstraction to concreteness and, finally, fully reflects it through computer programs. Computer artificial intelligence identification technology is widely used in various fields; Compared with other computer technologies, artificial intelligence identification technology has a broader application prospect and can provide humans with more efficient, convenient, and high-quality services. In the application process, computer technical analysis techniques can detect and analyze the affected data.

Mrs S Soundarya, Electronics and Communication Engineering Department,

Sri Vidya College of Engineering & Technology, Virudhunagar delivered lecture on the topic 'Medical Application of Artificial Intelligence'. The speaker illucidated the application of AI in medicine, use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. The speaker said that the most common roles for AI in healthcare are clinical decision support and imaging analysis; Clinical decision support tools assist in making decisions about treatments, medications, mental health, and other patient needs. They provide quick access to relevant information and research that pertains to the patient.

IEI Celebrates World Telecommunication and Information Society Day

2023

Theme: Empower the Least Developed Countries through Information and Communication Technologies

World Telecommunication and Information Society Day was celebrated by the Centres of the Institution all over the country on May 17, 2023. Brief Accounts of celebrations as received from various Centres are given hereunder.

STATE CENTRES

Assam



Assam State Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 at Guwahati. Er Nripendra Nath Patwari, Chairman, Assam State Centre, IEI presided over the programme. Er Amitava

Nath, Organizing Secretary of the event delivered the welcome address. Chief Guest of the session, Er A K Pahi, ITS CGM, Assam Telecom Circle (BSNL) emphasized the role of telecommunication as an essential part of our daily life including banking, social communication, entertainment, healthcare, agricultural weather forecast, education etc for all. Keynote Speaker of the session, Dr Tulsi Bezbaruah, Director, Guwahati University – IST and Hod, Electronics and Telecommunication Engineering Department, Guwahati University highlighted the evolution of telecommunication system since dial type telephone to 5G spectrum or even next generation of 6G & 7G. Mr Pulak Sarmah, Honorary Secretary, Assam State Centre, IEI proposed the vote of thanks. In the technical session under the Chairmanship of Dr Bhairab Sarma, Professor of Information and Communication Department, University of Science and Technology, Meghalaya, eight technical papers were presented by the students of University of Science and Technology, Meghalaya, Assam Engineering College and Assam Don Bosco University related to the theme of the day on the topics; Early Flood Detection, Impacts of ICT, Impact of Covid Pandemic in Under Developed Countries, Autonomous Surface Waste Water Collecting Boat, Emergency Patient Assistance System etc. The meeting was attended by Corporate Members, Engineers, Academicians, Officials of BSNL and students of different technical institutions and polytechnics.

Haryana



Haryana State Centre, IEI, in association with the Galaxy Global Group of Institutions, (GGGI) Dinpur, Ambala observed World Telecommunication and Information Society Day on 17 May 2023 in Ambala. Chief Guest and Keynote speaker of the session, Dr Vrindra Krishanlal Gupta,

Department of Electronics & Communication Engineering, National Institute of Technology, Kurushetra and Former Chairman, Haryana State Centre, IEI highlighted the overwhelming developments in the field of information and communication technologies and its unprecedented implications towards the progress in business, healthcare and corporate sector. Er K C Sethi,

Former Vice President, IEI graced the occasion and highlighted the history of IEI and the details of technical activities being carried out by IEI. Dr Sorabh Gupta, Director, GGGI, Dinpur welcomed the Chief Guest, other dignitaries, participants and introduced the Keynote speaker. Er Rajeev Vasudeva, Chairman, Haryana State Centre, IEI proposed the vote of thanks and thanked the Keynote speaker for excellent presentation on the theme and also the GGGI authorities for providing necessary infrastructure for making the event success.

Karnataka

Karnataka State Centre, IEI in association with the IEEE Communications Society, Bangalore Chapter observed World Telecommunication and Information Society Day on 17 May 2023 through online mode and a webinar was organised on the occasion. Dr Enti Ranga Reddy, Honorary Secretary, Karnataka State Centre, IEI and Council Member, IEI delivered the welcome address. Dr Alokenath De, Council Member, IEI & Program Chair, IEEE Bangalore Section presented the brief introduction of the subject and introduced Keynote Speaker of the session, Ms Pamela Kumar, Advisor and Former Director General of Telecom Standards Development Society of India (TSDSI). Ms Pamela Kumar shed light on the topic 'Role of Standards for Socio-economic Development' and shared valuable insights into the transformative power of technology in empowering underdeveloped regions. She covered a wide ranges of topics including significance of standards, India's unique challenges and opportunities, case studies, the 5Gi story, broadcast broadband convergence, IoT smart city challenges, Digital India Vision, technology adoption and economy, IoT specific communication and sensor technology, progress on 5G, global initiatives for 6G, Bharat 6G vision and mission, etc. She highlighted several case studies about the impact of standards on socio-economic development, explained how standards contribute to the innovation and market competitiveness, fostering growth in areas such over-the-top (OTT) services, video streaming, personalized content recommendations, etc. She emphasized the importance of standards in enabling the convergence of broadcasting & broadband networks and highlighted how standards facilitate seamless content delivery across multiple devices and networks, revolutionizing content consumption, etc. She discussed the significance of standards in addressing challenges like interoperability, data security, privacy, etc and standards provide a foundation for efficient communication, seamless integration and interoperability between different IoT devices and systems. The event marked a significant milestone to promote the role of information and communication technologies in least developed countries and emphasized the transformative power of ICT in driving sustainable development, uplifting the socio-economic development and bridging the digital divide to create a prosperous world. During the discussion, will contribute to driving positive change and harnessing the full potential of technology for a better tomorrow.

Kerala

Kerala State Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023. Prof (Dr) M Jayaraju, Chairman, Kerala State Centre, IEI welcomed the gathering. Mr R Sajikumar, ITS, Principal General



Manager, BSNL, Trivandrum delivered lecture on the theme. Er Roy Mathew, Honorary Secretary, Kerala State Centre, IEI proposed the vote of thanks at the end of the event.

LOCAL CENTRES

Angul



Angul Local Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 in Angul. Chief Guest of the function, Mr S K Dogra, Ex-General Manager, NALCO & Past Chairman, Angul Local Centre, IEI and

Chief Speaker Dr Abhaya Kumar Samal, Professor, Trident Academy of Technology, Bhubaneswar shared their valuable insights on the theme of the day. The program was started with the welcome address delivered by Er Satyabadi Mishra, Chairman, Angul Local Centre, IEI. Er Biju K, Honorary Secretary, Angul Local Centre, IEI introduced the Chief Speaker of the session. Er Debashish Mishra, Executive Committee Member, Angul Local Centre, IEI proposed the vote of thanks at the end of the event. Engineers from NALCO and NPTI attended the Seminar.

Asansol

Asansol Local Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 at Asansol. Chief Guest of the function was Er Sanjiv Ranjan Das, CGM (Inst & Auto), SAIL, ISP, IISCO and Guest of Honour was Dr D Sarkar, Immediate Past Honorary Secretary, Asansol Local Centre, IEI. Speakers of the session were Er Jeevan Kumar

R, Senior Manager (Telecomm), SAIL-ISP IISCO and Er Deepak Kumar, Senior Manager (C&A), SAIL-ISP IISCO. Er Deepak Kumar called on the public & private sectors for universal connectivity and digital transformation in developing countries through its Partner2Connect Digital Coalition. Er Jeevan Kumar opined that least developed countries are the world's greatest untapped resource, whose needs must be addressed to to achieve the UN-SDGs. Er Sanjiv Ranjan Das and Dr D Sarkar highlighted the role of ICTs in least developed countries to minimize inequalities between and within the countries.

Ghaziabad



Ghaziabad Local Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 in Ghaziabad. The event was started with the welcome address delivered by Er Raghunandan

Prasad Sharma, Chairman, Ghaziabad Local Centre, IEI & Council Member, IEI. He briefed about the theme and emphasized the role of ICT in the modern world for increasing productivity, efficiency, faster communication in the field of business as well as in our daily life. Dr Arindam Basu, Director General, NITRA addressed the audience and explained about the role & significance of the day. Er S K Shukla, Executive Committee Member, Ghaziabad Local

Centre, IEI & Guest Faculty, National Power Training Institute spoke on the growth and advancement in information and communication technology. He highlighted on empowering least developed countries through ICT for socio-economic development. Er R R Tanwar, Council Member, IEI spoke about the latest activities of IEI and provide futuristic direction to the young engineers. Er Ashok Kumar, Honorary Secretary, Ghaziabad Local Centre, IEI proposed the vote of thanks at the end of the event.

Jabalpur

Jabalpur Local Centre, IEI observed World Telecommunication and Information Society Day on 21 May 2023 at Jabalpur. Chief Guest of the function was Dr Manish Shukla, Principal Chief General Manager, Bharat



Ratna Bhim Rao Ambedkar Institute of Telecom Training, BSNL, Jabalpur. Guest of Honour of the function was Colonel Anurag Walia, Deputy Commandant 1, Signal Training Centre, Jabalpur. Keynote Speaker was Er Sapan Bose, Former Chief General Manager,

Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training, BSNL, Jabalpur. Earlier, Er Prakash Chandra Dubey, Chairman, Jabalpur Local Centre, IEI and Er Sanjay Kumar Mehta, Honorary Secretary, Jabalpur Local Centre, IEI welcomed the guests, participants. Chief Guest, Dr Manish Shukla highlighted the revolution happening in the telecom sector in India and informed the contribution of various telecom companies. Er Sapan Bose presented the insightful keynote lecture on the theme. Er Sanjay Kumar Mehta proposed the vote of thanks at the end of the event.

Jamshedpur

Jamshedpur Local Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 through online mode. The event began with the welcome address delivered by Er Anurag Saxena, Immediate Past Chairman, Jamshedpur Local Centre, IEI and Chief Electrical Maintenance, Tata Steel, Jamshedpur. Speaker of the virtual session was Mr Rajesh Kumar Singh, Assistant General Manager, BSNL, Jamshedpur highlighted that the role of wireless telecommunication technologies in our daily life. He highlighted the role of telecommunication in satellite, radar, military, navigation surveillance, TV, mobile communication, education sector, health care, IoT. He explained the significance of the day in raising awareness about internet usage and ICTs, as well as bridging the digital divide and the transformative impact on the socio-economic development of least developing countries. He also informed that this day provides a forum to talk about new technologies, legislative measures, etc and encourage universal access to the society. Er Shanti Das Bhattacharjee, Honorary Secretary, Jamshedpur Local Centre, IEI proposed the vote of thanks at the end of the event.

Kadapa

Kadapa Local Centre, IEI, in association with KSRRM College of Engineering, Kadapa observed World Telecommunication and Information Society Day on 17 May 2023 in Kadapa and a Seminar were organized on the theme.



Speaker of the day, Dr Kasigari Prasad, Associate Professor of Electronics and Communication Engineering, Annamacharya Institute of Technology & Sciences, Rajampet delivered lecture on the theme. He explained how

ICTs are changing people to communicate, learn and do The e-edition is available at www.ieindia.org 16 August 2023 Old Volume 73 business

and highlighted the need on transformative impact of ICT on the socio-economic development of least developing countries (LDCs). He highlighted the significance of developing digital skills, implementing e-government services for transparency and efficiency, fostering e-commerce and digital entrepreneurship, leveraging ICTs for quality healthcare and education, promoting innovation and research, development challenges and improve their competitiveness in the global economy. The purpose to celebrate World Telecommunication and Information Society Day (WTISD) in raising awareness about the use of internet and other information & communication technologies such as digital technologies for older person & healthy ageing and the role of ICTs in supporting people to build smarter cities, green cities, combat age based discrimination at the workplace, ensure financial inclusion of older persons and thus support millions of caregivers in the world. Earlier, Er N Bramhananda Reddy, Chairman, Kadapa Local Centre delivered the welcome address.

Kanpur

Kanpur Local Centre, IEI, in association with the Institution of Electronics & Telecommunication Engineers, Kanpur Centre; The Institution of Electrical and Electronics Engineers (IEEE), U P Section, Department of Computer Science & Engineering, Harcourt Butler Technical University, Kanpur and MedTeh, IIT Kanpur observed World Telecommunication and Information



Society Day on 30 May 2023 through online mode and a webinar was organized on the theme. Ms Neha Jain, District Magistrate, Kanpur Dehat graced the function as Chief Guest through her virtual presence. Theme

Speaker Prof (Dr) Amey Karkare, Head, Department of Computer Science & Engineering, IIT Kanpur explained the impact of ICT to the common people in our daily life and the empowerment of society through ICT. He explained, how ICT can be leveraged for quality health care and education, delivery & logistics and development of economic growth, innovation, etc. He concluded on mentioning ICT's many success stories in India such as UID, DBT, Digil Locker, Gati Shakti, Digital Currency, etc and mentioned that ICT is a power tool, which requires appropriate policies, infrastructure, skills, etc. Er Vivek Asthana, Chairman, Kanpur Local Centre, IEI read out the message received from General Secretary of International Telecommunication Union (ITU).

Kanchepuram



Kanchepuram Local Centre, IEI, in association with the Department of Electronics and Communication Engineering, Sri Sai Ram Institute of Technology, Chennai observed World Telecommunication and Information Society Day on 17 May 2023 at Chennai.

Keynote Speaker of the session was Er R Baskar, Sub-Divisional Engineer, RGMTTC, BSNL, Chennai. Er Baskar explained the important role of telecommunication and information in today's life. He explained revaluation from 1G to 5G in terms of data rate and modulation technology, and briefed about speedup ITU 5G, enhanced mobile broadband in 5G (eMBB) and basic working principle of OFDM. Dr G Shanmugasundar, Honorary Secretary, Kanchepuram Local Centre, IEI proposed the vote of thanks at the end of the event.

Kochi

Kochi Local Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 through online mode. The event began with

the welcome address, delivered by Er Salahudheen P A, Chairman, Kochi Local Centre and Council Member, IEI. Chief Guest of the virtual session, Er S Gopalan ITS, Deputy Director General, Services and Compliance, Kerala LAS described the evolution of World Telecom Day, explained the roadmap to empower undeveloped countries through telecom technology and the development in the field of communication, health care, education and general administration. Prof (Dr) G Madhu, Council Member, IEI highlighted the Speaker's experience in academic achievements, telecommunication and other Government agencies & missions. Er Babu K S, Honorary Secretary, Kochi Local Centre, IEI proposed the vote of thanks at the end of the webinar.

Kollam



Kollam Local Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 at Kollam. The event began with the welcome address, delivered by Dr (Prof) Ms Sheeba R,

Honorary Secretary, Kollam Local Centre, IEI. Chief Guest of the event, Dr Padmadas M, Assistant General Manager, BSNL, Kollam emphasized on the tremendous growth and advancement of communication technology.

Kozhikode



Kozhikode Local Centre, IEI observed World Telecommunication and Information Society Day on 25 May 2023 in Wayanad, Kozhikode. Resource person of the session was Dr Sabiq Puthiya Valappil, Principal,

KMCT College of Engineering. Er S Komancherry, Chairman, Kozhikode Local Centre, IEI introduced the topic and highlighted the theme. Er K Shaju, Honorary Secretary, Kozhikode Local Centre, IEI welcomed the audience and delivered an informative lecture on the event. Er Manuraj, Kozhikode Local Centre, IEI proposed the vote of thanks at the end of the event.

Mangalore



Mangalore Local Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 at Mangalore. Speaker of the day, Er Harisha Shetty, Principal, Karnataka Government

Polytechnic, Mangalore highlighted the significance of ICTs in healthcare, teaching/learning, fostering business/e-commerce, banking and finance etc. Dr Sunil B Malegole, Chairman, Mangalore Local Centre, IEI presided over the event. Dr Manu B, Honorary Secretary, Mangalore Local Centre, IEI proposed the vote of thanks at the end of the event.

Palghat



Palghat Local Centre, IEI in association with The Institution of Electronics and Telecommunication Engineers (IETE), Palakkad Centre observed World Telecommunication and Information Society Day on

17 May 2023 in Palakkad. Er Madhana Mohan K, Chairman, Palghat Local

Centre, IEI delivered the welcome address and presided over the function. He highlighted the innovative changes occurred in the field of information and communication technology and its role in improving our lives. Prof (Dr) Pradip C, Honorary Secretary, Palghat Local Centre, IEI also welcomed the dignitaries and participants. Dr B Rajesh Menon, Honorary Joint Secretary, Palghat Local Centre, IEI introduced the Keynote Speaker, Er M S Ajayan, General Manager, BSNL, Palkkad. Er Ajayan highlighted the evolution of Indian Post & Telegraph, Radio Broadcasting, introduction of Telephones in India, TRAI regulation etc.

Pune

Pune Local Centre, IEI, in association with the Institution of Electrical and Electronics Engineers (IEEE), Pune Section; Institution of Electronics and Telecommunication Engineers (IETE), Pune Centre and Institution of Engineering & Technology (IET), Pune Network observed World Telecommunication and Information Society Day on 20 May 2023 through online mode. The event witnessed the presence of Theme Speakers, Dr Shankar Venugopal, Vice President, Mahindra & Mahindra, Pune; Mr Sachin Vidhate, Asst RTO, Panvel and Dr K C Vora, Former Senior Deputy Director & Head, ARAI, Pune. At the outset, Prof (Dr) Girish Shrikisan Mundada, Council Member, IEI & Convener of the event welcomed the august audience. Dr Sanjay Bhaskar Zope, Chairman, Pune Local Centre, IEI highlighted the activities of Pune Local Centre, IEI. Dr Surekha Deshmukh, Chairman, IEEE Pune Section, Dr Virendra Shete, Chairman, IETE Pune Chapter and Dr Anil Hiwale, Chairman, IETE Pune Local Network also spoke on the occasion. Er Mandar J Khurjekar, Former Scientist, CWPRS introduced the theme of the event. Dr K C Vora, in his address, emphasized the importance of bridging the digital divide, focussing on global telecommunication inclusiveness, fostering accessibility, affordability and use in all countries & regions including lower socio-economic groups. Mr Sachin Vidhate, in his address emphasized on ensuring everyone to take the benefits from telecommunications and organizations and have to work to bridge the digital divide for an inclusive information society and enabling broadband access to all. Dr Shankar Venugopal emphasized the role of telecommunications

as a key enabler for the socio-economic development and environmentally sustainable development. He further emphasized that organizations have to work to enable the increase use of telecommunication on digital economy, providing support to the countries on making digital transition towards digital economy through ICT. He stressed on nurturing cooperation among the organizations in the telecommunication environment to achieve sustainable development goals. Dr (Ms) Gunnu Padmavati, Council Member, IEI; Er Santoshkumar Surajmal Mutha, Council Member, IEI and Er V B Singh, Council Member, IEI & Former Vice President, IEI were attended the webinar.

Tiruchirappalli

Tiruchirappalli Local Centre, IEI in association with Computer Society of India, Tiruchirappalli Chapter; Safety & Quality Forum, IEI; Indian Institute of Welding, Tiruchirappalli Branch; Indian Welding Society Southern Zone; Indian Institute of Metals, Tiruchirappalli Chapter; Indian Institution of Industrial Engineering Tiruchirappalli; Kumari Arivial Peravai Kanyakumari and Indian Society for Non-destructive Testing, Trichy Chapter observed World Telecommunication and Information Society Day on 16 May 2023 through online mode. Er R Selvaraj, Past Chairman, Tiruchirappalli Local Centre, IEI was present on the occasion. Speaker of the session was Dr A K Nayak, Professor & Advisor, IIBM Group and Former President, Computer Society of India. Topics covered during the virtual session were; the key components to empower the least developed countries, latest trends in information technology, global status of information and communication technologies, digital empowerment of citizens, etc.

Tiruvallur

Tiruvallur Local Centre, IEI observed World Telecommunication and Information Society Day on 17 May 2023 through online mode. Chief Guest and Speaker, Thiru Raghuram Alamuri, Founder at RA Services explained about edge security, edge applications & prevention attack on edge, IoT etc. Dr J Balamurugan, Honorary Secretary, Tiruvallur Local Centre, IEI proposed the vote of thanks.



The Institution of Engineers (India)

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Project Category	Student/Applicant Membership	Guide(s) Membership	Institutional Membership
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For details, please visit the following link :

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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



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#industry-excellence-award>. The application deadline is **30th September 2023**.

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

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

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

Know-Your- Member (KYM)

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

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

The Director (Membership)

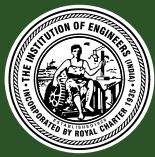
The Institution of Engineers (India)

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



Water Management Forum

A Peripheral body of the Institution of Engineers (India)

The Institution of Engineers (India)



Gujarat State Centre, Bhaikaka Bhavan, Law Garden, Ahmedabad 380006
Tel.: (079) 26400811, Email: watermanagementforum@gmail.com, Website: www.wmf-iei.org

WMF announces award for Best Contribution towards Conservation of Water in Individual as well as Institutional categories 2023

Criteria for Consideration

- The Individual should be an engineer by profession. In case of in institution, it should have been engaged in engineering activities.
- The individual/institution must have achieved excellence in water resources management within India.
- The Awards will be considered broadly, but not limited to the following parameters:
 - Innovative protection of ground water augmentation-Rain water harvesting/ artificial recharge in urban and rural areas
 - Optimum utilization of water in agriculture sector
 - Promoting water use efficiency
 - Recycling/reuse of water
 - Creating awareness through public participation.
 - Adequate capacity building amongst stake holder.
 - Contribution towards related activities will also be considered.
- Award shall carry a Citation and Plaque.

Evaluation Criteria

The assessment of applications to identify contribution of professionals- individual/ institutional in the field as enumerated under (b) & (c) above through innovation, creativity, commitment, achievement, well researched and sustainability.

Awards

One best nomination in both categories shall be selected by the Jury of eminent persons appointed by WMF, The Judge's decision shall remain final and no correspondence will be entertained. Winner shall be conferred upon an Award, a certificate and a cash prize of Rs. 10000/- each.

Individuals/ Institutions shall make an application before **15th September 2023** in the format enclosed and send by post / courier to The Director, Water Management Forum, c/o The Institution of Engineers (India), Bahikaka Bhavan, Opp Law Garden, Near Ellis bridge Gymkhana, Ahmedabad 380006. Email – watermanagementforum@gmail.com

Note:- The decision of the Forum, for Organizing this will be considered final and bound to all participants. All rights are reserved by Forum.

If any query regarding this you may contact: Er. VIJAY SOLANKI, Deputy Director, WMF, Mo. No. 9898418979

APPLICATION FORMAT FOR WATER MANAGEMENT FORUM AWARDS - 2023

1) NAME OF THE APPLICANT/ INSTITUTION	
2) ADDRESS: (Please provide email, telephone, mobile numbers)	
A) OFFICE :	
B) RESIDENCE:	
3) Details of membership with professional bodies:	
4) Significant contribution in the field of water management with supporting documents :	
5) Names and addresses of references (at least (2)) in the related field with whom either worked or known to the applicant's work :	
6) Social relevance of the contribution:	
7) Whether the achievements have already been recognized for awards by any well recognized organization? If so, the name of the body, award and the year of award may be given. A copy of citation may also be enclosed.	
8) Any additional information of relevance.	
PLACE:	
SIGNATURE	
NAME / HEAD OF THE ORGANISATION	
DATE:	

Note: Please attached necessary copies of documents.



Engineering Staff College of India

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

Continuing Professional Development Programmes (CPDPs) for the Month of September 2023

Sl. No.	Name of the Course	Scheduled Dates
1.	Operation, Maintenance and Quality Assurance of High-pressure valves and Heat Exchangers	04-06 Sep 23
2.	Flexible Pavements and Overlays-Design, Construction and Maintenance	04-08 Sep 23
3.	Network Administration: Configuring & Securing LANs and WANs	04-08 Sep 23
4.	Creative Leadership and Leading High-Performance Teams for Organizational Development (Innovative and Inspiring Leadership Methodologies with Case studies and Role plays)	04-07 Sep 23
5.	Water Pollution Monitoring & Modelling using Software Applications - Theory & Practical's.	05-07 Sep 23
6.	Critical Minerals & Elements: Exploration, Mining & Sustainability	06-08 Sep 23
7.	Disciplinary Proceedings	06-07 Sep 23
8.	Advances in Design & Optimization of UAV's for Industrial Applications (Defence, Mining & Construction)	11-14 Sep 23
9.	Big Data Analytics for Business Decisions (Hands-on practical on MS Excel & Tableau)	11-14 Sep 23
10.	NDT Level II Certification in Ultrasonic Technique in Accordance with ASNT Document No. SNT-TC-1A 2011	11-15 Sep 23
11.	Hydro Turbines, Governing & its Protection Systems	11-14 Sep 23
12.	Surface Engineering - Concepts, Applications and Emerging Technologies	12-15 Sep 23
13.	Information Security Policies & Security Audit	12-14 Sep 23
14.	Operation, Maintenance & Testing of Power Transformers and HT Circuit Breakers	12-15 Sep 23
15.	Application of Bio- Engineering Technologies for Waste Water Treatment in Nalas, Drains And Canals	13-15 Sep 23
16.	Soil & Water Conservation : Importance and Best Practices	11-13 Sep 23
17.	Teambuilding, Motivation and Leadership Skills for Improving Organizational Performance at Mount Abu	16-18 Sep 23
18.	Agroecology and organic farming	20-22 Sep 23
19.	Sanitation and Waste Management	20-22 Sep 23
20.	Power Cables Selection, testing, Laying and Commissioning	20- 2 Sep 23
21.	Contract Management and Dispute Resolution in Engineering Projects	25-29 Sep 23
22.	Engineering Design using CREO-Parametric	25-27 Sep 23
23.	Competency Based Performance Management Systems (PMS) and Strategies (For HR Scientists, Managers and Executives)	25-28 Sep 23
24.	Advanced Blasting Techniques in Opencast Mines to Mitigate Undesirable Effects	25-29 Sep 23
25.	Micro grids - Smart Grids Issues & Challenges	25-27 Sep 23
26.	Industry 4.0, Quality Aspects	25- 8 Sep 23
27.	Training on Data science & Machine Learning at Coorg	25-27 Sep 23
28.	Water Governance - Challenges and the way forward	26-28 Sep 23
29.	Preparation of bid documents and Procurement of sewerage schemes	27- 9 Sep 23

For detail information please contact:

Engineering Staff College of India

Old Bombay Road, Gachibowli, Hyderabad – 500 032

Landline : 040-66304100 & Mobile: +91 7337319038 / Email : mis@escihyd.org / URL : <https://escihyd.org>

News-in-Brief

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

STATE CENTRES

Karnataka

Organized a Lecture on 'A Road Map for IEI – The Next Century' on 04 February 2023 through hybrid mode. Speaker of the session, Er Shivanand Roy, President, IEI stressed on organising more technical activities, inviting young engineers to participate in the brainstorming sessions, formulate strategies to mobilize the IEI Membership enrolment drive etc.

Kerala

Organized technical talk in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME, IITArb, PMI, IETE on 'Consciousness Based Approach on Knowledge Economies' on 01 February 2023. Speaker of the event was Er Vinod Divikaran, Chief Promoter & Founder, VINVIN.

Organized technical talk in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME, IITArb, PMI, IETE on the topic 'Project Viability' on 22 February 2023. Speaker of the event was Er N Rajkumar, Past Chairman, Kerala State Centre, IEI.

Organized the 25th Er C S Padmanabha Iyer Memorial Lecture, in association with IEEE, CSI, INSARM, ASI, SSI, ISTD, SAME, IITArb, PMI, IETE on 08 February 2023. Speaker of the event was Mr P Balakrishnan Nair, Committee Member, Kerala State Centre, IEI.

Puducherry

Celebrated National Science Day, in association with Manakula Vinayagar Institute of Technology as SCIMIT'23 Mega Project Expo competition on 28 February 2023. Chief Guest was Mr Rajendran Dandapani, Director-Engg, ZOHQ, Chennai. Mr Vinayak Babu, CEO, 4Semi Technology India Private Limited, Bangalore and Dr G Zayaraz, Professor & Head, Department of CSE, PTU were the Guests of Honour.

Telangana

Organized National Safety Day on 'Our Aim – Zero Harm' on 04 March 2023 at Hyderabad. Prof Venkata Dass, Former HOD, Department of CSE, Osmania University has graced the occasion as Eminent Speaker and he delivered an insightful lecture on environment and its impact on human lives.

Organized Dr A Ramakrishna 10th Endowment Lecture on 'Engineering Gigantic Statues' on 18 March 2023 through online mode. On this occasion, Er B Brahma Reddy, Chairman, Telangana State Centre, IEI paid tribute to eminent Dr A Ramakrishna along with Dr I Satyanarayana Raju, Council Member, IEI and other dignitaries. Dr S P Anchuri, Committee Member, Telangana State Centre, IEI & Convenor of the event introduced the Speaker, Dr Abhay Gupta, Director, Skeleton Consultants Private Limited.

LOCAL CENTRES

Aurangabad

Organized One Day Faculty Development Program on 'Autodesk Fusion 360' on 21 July 2022 in Aurangabad. Speaker of the session, Mr Anant Kulkarni, CEO, Tech Mantra, Vijaypura informed that Auto Desk Fusion 360 is the first cloud-based CAD/CAM tool for collaborative product development, which is helpful in integrating design, modelling and simulation capabilities.

Presentation was given on the subject introduction to Autodesk Fusion 360, basic fundamentals, creating the first feature with quick shapes, sketching, modelling, assemblies, visualization, rendered images and animations, drawings, simulation, importing various CAD data like documents, images or any specification.

Coimbatore

Organized a Technical Lecture, in association with the Department of Production Engineering, PSG College of Technology, Coimbatore on 'Mobile Manipulator in Modern Industries' on 08 March 2023 in Coimbatore. Guest Speaker, Dr Santhakumar Mohan, Associate Professor, Department of Mechanical Engineering, IIT Palakkad discussed about science, engineering, industrial revolution and highlighted on first to fourth industrial revolution. He explained the usage of mobile manipulators in modern industries with real-time case studies.

Organized a Technical Lecture in association with the Department of Civil (Environmental) Engineering, Government College of Technology (GCT), Coimbatore on 'Environmental Compliance in Industries' on 10 March 2023 in Coimbatore. Guest Speaker, Er K Nalini, Joint Chief Environmental Engineer, Tamilnadu Pollution Control Board, Coimbatore highlighted the significance of environmental legislations, legislations followed by the pollution control board in ensuring the environmental compliance in industries. The speaker stressed on the procedure for drafting EIA report and role of EIA in environmental protection.

Organized a Technical Lecture, in association with Department of Textile Technology, Kumaraguru College of Technology (KCT), Coimbatore on 'Advanced Textiles for Surgical Implants' on 27 March 2023 in Coimbatore. Guest Speaker, Mr Michael Rodrigues, Head-Research and Development of CareNow Medical Private Limited, Coimbatore discussed about material science, engineering aspects, innovations in textile materials towards the needs of surgical procedures. He highlighted on various surgical implants, which are used as life saving product in current medical field and explained about various types of valves used in human body such as heart and tissue valves, nerve injury, nerve guidance channel, other cardiovascular implants. His lecture covered heart patch, hernia repair meshes, tendons & ligaments, clinical trials, etc.

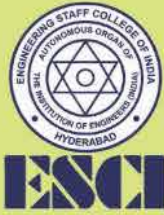
Ghaziabad

Organized a Lecture Meeting on 'Managing Road Safety – Startup Approach' on 28 February 2023 in Ghaziabad. Guest of Honour & Keynote Speaker, Prof Virendra Nath Grover, Indian Institute of Technology, Kanpur, Founder 'Udyog Sanchetana' discussed about road safety.

Indore

Organized World Standards Day and 25th Er T N Kutumbale Memorial Lecture on 09 March 2023 in Indore. The event witnessed the presence of Speakers, Mr Vinay Verma, Former President, Corporate Quality, Symbiotech Pharmed and Architect Mrs Ratna Bochara, Chief Town Planning, Indore Development Authority, Indore. Mr Vinay Verma delivered lecture on 'A Shared Vision for a Better World' and explained in details the various points of standardization, use of standards in each stage of product of pharmacy and the benefit of standardization for quality products, equipments and the role played for the development of standards. Mrs Ratna Bochara delivered lecture on the topic 'Attitude Makes the Difference'.

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Autonomous Organ of the Institution of Engineers (India)



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| Occupational Health & Safety Management System
| Industry Compliance and Regulations**

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PGDM ISE Management - Any recognised Bachelor's Degree in Engineering / Technology OR Science Graduate with Physics, Chemistry & Mathematics as Main Subjects will be considered

Qualifying Exam - Candidate with qualified score in CAT/MAT/ATMA/XAT/CMAT/ICET or any other state-level Management Aptitude Test. As per AICTE guidelines.

SELECTION PROCESS

Group Discussion, Personal Interview and qualified score in any Management Aptitude Test.

For Further Details :

ESCI BUSINESS SCHOOL

Gachibowli, Hyderabad - 500 032, Telangana

Phone : 040 - 66304177, 66304188, 66304182

Mobile : +91 94901 16179, 94900 11311, 94920 11311



CREATING MANAGERS TO MAKE THE WORLD A PLACE FOR QUALITY LIVING



38th INDIAN ENGINEERING CONGRESS

Jabalpur, December 27-29, 2023

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

Organized by

The Institution of Engineers (India)

Hosted by: **Jabalpur Local Centre**

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 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 **30 September 2023**. Interested applicants are requested to submit their applications (Four hard copies & One soft copy in Pendrive/CD) to the below mentioned address.

The Director (Technical)- I/C

The Institution of Engineers (India)

8 Gokhale Road, Kolkata 700 020

56th ENGINEERS' DAY

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

September 15 is celebrated every year in the country since the year 1967 as "Engineers' Day" to commemorate the birthday of the legendary engineer Sir Mokshagundam Visvesvaraya.

Sir Visvesvaraya, an eminent Indian engineer and statesman was born in a remote village of Karnataka, the State that is incidentally now the Hi-tech State of the country. Due to his outstanding contribution to the society, Government of India conferred "Bharat Ratna" on this legend in the year 1955. He was also called the precursor of economic planning in India. His learned discourse on Economic Planning in India, Planned Economy for India and Reconstructing India, was the first available document on the planning effort of the country



Bharat Ratna Sir M Visvesvaraya

and it is still held as the parent source matter for economic planners. A theme of national importance is chosen every year by the Council of the Institution and deliberated at its various State/Local Centres to educate the engineering fraternity in general and the society in particular. This year the 56th Engineers' Day will be celebrated all over the country on the theme "Engineering a Resilient Future: Building Stronger, Smarter, Safer".

The Institution of Engineers (India) exhorts the entire fraternity of engineers to embark on a remarkable journey of engineering excellence to celebrate Engineer's Day on September 15th. With the resounding theme, "Engineering a Resilient Future: Building Stronger, Smarter, Safer," we pay tribute to the visionary Bharat Ratna Sir Mokshagundam Visvesvaraya and delve into the captivating realm of engineering perspectives.

In this dynamic era, engineers stand at the forefront of progress, crafting a future that is well fortified and unyielding. They are the architects of resilience, working tirelessly to build structures that withstand the test of time. With their expertise, they erect towers that brave the fiercest storms, bridges that span vast chasm and roads that pave the way to safer journeys. With resilience, engineers stand tall, symbolizing their commitment to a stronger tomorrow.

But engineering goes beyond fortification. It's about envisioning a world where technology unlocks endless possibilities. Our engineers tap into the power of innovation, leveraging cutting-edge advancement to create smarter systems. From intelligent cities that optimize resources to revolutionary transportation solutions they propel us towards a future where intelligence reigns supreme.

Yet resilience is not just physical; it extends to our safety and well-being. Engineers are the guardians of our security, meticulously designing structures and systems that safeguard lives. They implement stringent safety protocols, develop disaster management strategies, and pioneer ground breaking technologies that keep us shielded from harm. Their dedication to safety creates an environment where we can thrive and prosper with peace of mind. In our quest for a viable future, sustainability becomes a guiding principle. Engineers lead the charge, embracing eco-friendly materials, renewable energy solutions, and sustainable practices. They shape a world that harmonizes with nature, where delicate balance between progress and preservation is upheld. Through their innovations, they ensure that future generations inherit a planet that thrives with abundant resources and thriving ecosystems.

Join us in embracing the power of innovation and resilience, as we honour the unsung heroes who shape our world and engineer a future that stands tall, thinks smart, and keeps us safe. Together, let's empower engineers and forge a path towards a brighter, more resilient tomorrow.

IEI AWARDS

CALL FOR PAPERS

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

The topics for the year 2023 are given hereunder.

SAIL AWARD

Beneficiation of Iron Ore — Existing Best Practices / Technologies and Way Ahead

DR M VISVESVARAYA AWARD

Improvement in Productivity of Blast Furnaces — Way Forward

The articles preferably restricting to 3000 words along with good quality photographs may be submitted along with a Declaration Form to award@ieindia.org within **September 15, 2023**.

The template of the paper and the Declaration Form are enclosed, which are also available under the following link: https://www.ieindia.org/webui/IEI-Activities.aspx#Call_Papers

Intending contributors are requested to send the soft copy of the paper by email to award@ieindia.org (with subject heading Paper for SAIL/Dr M Visvesvaraya Award) and submit four nos. printed copies of their articles to :

Director (Technical)

The Institution of Engineers (India)

8 Gokhale Road, Kolkata 700 020.

IEI DIARY



Architecture Engineering Division

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@ieiindia.org]

Agricultural Engineering Division

All India Workshop on **"Agricultural Entrepreneurship and Sustainable Natural Farming"**

Chennai, 31 August - 1 Sept, 2023

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

Thirty-fifth National Convention of Agricultural Engineers **"Emerging Technologies for Advances in Agriculture and Horticulture"**

Jabalpur, September 12-13, 2023

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

Chemical Engineering Division

All India Seminar on **"Innovative Trends and Aspects of Nanotechnology: Fueling the Chemical Industry's Future"**

Coimbatore, September 21-22, 2023

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

Civil Engineering Division

One Day Seminar Remote Sensing And GIS Application In Flood Risk Management

Kochi, September 08, 2023

The Honorary Secretary, IEI, Kerala State Centre, Visvesvaraya Bhavan, Opposite Kanakakunnu Palace, Thiruvananthapuram 605033, Ph: 0471-2322991 / 2322992, E-mail: keralasc@ieiindia.org; Website: www.ieitvm.org

All India Seminar on **"Smart Cities Leveraging Internet of Things IoT"**

Indore, September 26-27, 2023

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

One Day Seminar on **"Sustainable Developments in Quality Control of Construction Sector"**

Chennai, October 12, 2023

The Honorary Secretary, IEI, Tamilnadu State Centre, No. 19, Swami Sivananda Salai,

Chepauk, Chennai 600005 [☎: 044-25360614 / 9962950333, E-mail : tnscc@ieiindia.org, Website : www.ieitnsc.org]

All India Seminar on **"Net Zero Energy and Net Zero Carbon Building Design"**

Bangalore, September 28-29, 2023

The Honorary Secretary, IEI, Karnataka State Centre, No.3, Dr B R Ambedkar Veedhi, Bangalore 560001, [☎: (080) 22264698, Telefax: 080-22256191, E-mail: karnatakasc@ieiindia.org, Website: www.ieiksc.org]

Thirty-eighth National Convention of Civil Engineers on **"Water Management for Sustainability using Emerging Technologies"**

Belagavi, October 08-09, 2023

The Honorary Secretary, IEI, Belagavi Local Centre, Er S G Balekundry Marg, Shivabasava Nagar, Belagavi 590010 [☎: 0831-2470258, Mobile: 9141384358, E-mail : belagavilc@ieiindia.org, Website: www.ieilcbelagavi.org]

One Day Seminar on **"Latest Trends In Transportation Engineering And Town Planning"**

Coimbatore, October 13, 2023

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

One Day Seminar on **"Smart Material In Civil Engineering"**

Bhopal, October 16, 2023

The Honorary Secretary, IEI, Madhya Pradesh State Centre, Visvesvaraya Marg (Kasturba Hospital Road), PO: Habibganj, Bhopal 462024 [☎: 0755-2474572 / 2502987, E-mail: mpssc@ieiindia.org, Website : www.mpsciei.org]

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 [☎: 0761-2678929, E-mail: jabalpurc@ieiindia.org]

Computer Engineering Division

All India Seminar on **"Artificial Intelligence"**

Bareilly, September 22-23, 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@ieiindia.org]

All India Seminar on **"Protection of Data and Privacy Within Distributed System"**

Ranchi, September 23-24, 2023

The Honorary Secretary, IEI, Jharkhand State

Centre, Engineer Bhawan, Nepal Kothi Campus, PO: Doranda, Ranchi 834002 [☎: 0651-3510412, E-mail: jharkhandsc@ieiindia.org; Website: ieijscjharkhand.org]

All India Workshop on **"Building ChatGPT Messenger using Nextjs"**

Kattankulathur, September 28-29, 2023

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

All India Workshop on **"Intelligent System And Security Challenges In Industry 5.0"**

Kolkata, September 29-30, 2023

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

One Day Workshop on **"Soft Computing and Machine Learning"**

Durgapur, October 05, 2023

The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B-Zone, Durgapur 713205, [☎: 0343-2564770, E-mail: durgapurc@ieiindia.org; Website: www.ieidurgapurc.org]

Thirty-sixth National Convention of Computer Engineers on **"Blockchain Technology for Artificial Intelligence of Things (AIoT)"**

Salem, October 16-17, 2023

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

All India Seminar on **"Integration of Cloud Computing and Internet of Things (IoT)"**

Kanchepuram, October 18-19, 2023

The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [Email: kanchepuramc@ieiindia.org]

All India Seminar on **"Machine Learning and Internet of Things IoT"**

Bareilly, October 18-19, 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@ieiindia.org]

All India Seminar on **"Deep Learning in the Medical Field Opportunities and Challenges for Advancement"**

Coimbatore, November 02-03, 2023

The Honorary Secretary, IEI, Coimbatore Local Centre, PSG Tech Campus, Peelamedu, Coimbatore, Tamilnadu 641004 [☎: 0422-2580733, E-mail: coimbatorelc@ieiindia.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 [☎: 0651-3510412, E-mail: jharkhandsc@ieindia.org; Website: ieijscjharkhand.org]

Electrical Engineering Division

All India Seminar on **"Artificial Intelligence and Machine Learning Applications in Electrical Engineering"**

Tiruchirappalli, September 20-21, 2023

The Honorary Secretary, IEI, Tiruchirappalli Local Centre, Near Ganesa Bus Stop, BHEL Main Office Road, Opposite to 79 Building, Tiruchirappalli 620014 [☎: 0431-2554285 /2574022, E-mail: tiruchirapallilc@ieindia.org]

All India Workshop on **"Design and Circuit Debugging of Electronic Circuits"**

Kattankulathur, September 26-27, 2023

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

All India Seminar on **"Operation and Control of Solar PV Electric Conversion Systems"**

Tiruchirappalli, October 03-07, 2023

The Honorary Secretary, IEI, Tiruchirappalli Local Centre, Near Ganesa Bus Stop, BHEL Main Office Road, Opposite to 79 Building, Tiruchirappalli 620014 [☎: 0431-2554285 /2574022, E-mail: tiruchirapallilc@ieindia.org]

One Day Seminar on **"Electrical and Hybrid Vehicles"**

Agra, October 11, 2023

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

One Day Seminar on **"Transforming The Electrical Technology with AI"**

Chennai, October 12, 2023

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

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 [☎: 0177-2623736, E-mail: hpssc@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, [☎: 0712-2525617, E-mail : nagpurilc@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 [☎: 044-25360614 /9962950333, E-mail : tnscc@ieindia.org, Website : www.ieitnsc.org]

Electronics and Telecom. Engg. Division

All India Seminar on **"The Impact of Quantum Computing on Society and the Economy :Unlocking New Possibilities"**

Coimbatore, September 04-05, 2023

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

All India Seminar on **"Smart Application of Labview in Electronics Engineering"**

Madurai, September 22, 2023

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

All India Workshop on **"Recent Advancements in Organic and Nanoelectronics"**

Kattankulathur, October 05-10, 2023

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

One Day Workshop on **"Robotics Artificial Intelligence Enable Cyber Crimes and Animation Development"**

Agra, November 09, 2023

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

All India Workshop on **"Internet of Things and AI a Multidisciplinary Approach"**

Bhimavaram, November 16, 2023

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

All India Three Days Workshop on **"Competitive Programming and System Design"**

Kattankulathur, February 7-9, 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 [☎: 044-2745 2270]

Thirty-eighth National Convention of Electronics & Telecommunication Engineers on **"Hyper Connectivity Applications of Next Generation Communications"**

Kochi, October 27-28, 2023

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

Environmental Engineering Division

All India Seminar on **"Cost-Effective and Emerging Effluent Treatment Technologies"**

Durgapur, October 07-08, 2023

The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, B-Zone, Durgapur 713205, [☎: 0343-2564770, E-mail: durgapurilc@ieindia.org; Website: www.ieidurgapurilc.org]

Thirty-seventh National Convention of Environmental Engineering on **"Eco-friendly & Sustainable Approaches for Landslide and Land Subsidence Management in Hilly Regions"**

Shimla, September 15-16, 2023

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

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

Coimbatore, 16-17 Nov, 2023

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

Marine Engineering Division

Thirty-fifth National Convention of Marine Engineers on **"Recent Advances in Marine Engineering and Marine Systems"**

Kanchepuram, September 11-12, 2023

The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [Email: kanchepuramlc@ieindia.org]

International Conference on **"Industry 4.0 for Eco-friendly Marine Solutions"**

Colombo, November 17-18, 2023

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

Mechanical Engineering Division

All India Seminar on "Advances in Nanotechnology for Sustainable Development"

Puducherry, September 04-05, 2023

The Honorary Secretary, IEI, Puducherry State Centre, No. 63, Nethaji Subash Chandra Bose Salai, Ground Floor, PWD Campus, Puducherry 605001 [Mobile: 9489766701/9443748471, Email: puducherryisc@ieindia.org, Website: www.ieipsc.org]

All India Seminar on "Solar Energy and Thermal Storage for Sustainable Environment"

Kattankulathur, September 21-22, 2023

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

All India Seminar on "Advancements, Challenges and Opportunities in Electric Vehicles"

Coimbatore, September 26-27 2023

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

All India Seminar on "Interfacing Mechanical Engineering with Artificial Intelligence and Machine Learning"

Coimbatore, October 10-11, 2023

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

All India Seminar on "Non Conventional Energy Resources for Power Plant Design; Advanced Green Energy Sources"

Bareilly, October 12-13 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]

Metallurgical & Materials Engineering Division

All India Seminar on "Advanced Material Synthesis - Characterization and Application"

Puducherry, 06-07 Oct, 2023

The Honorary Secretary, IEI, Puducherry State Centre, No. 63, Nethaji Subash Chandra Bose Salai, Ground Floor, PWD Campus, Puducherry 605001 [Mobile: 9489766701/9443748471, Email: puducherryisc@ieindia.org, Website: www.ieipsc.org]

All India Workshop on "Advance Alloys Charecterization and Application"

Kanchepuram, October 12-13, 2023

The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [Email: kanchepuramlc@ieindia.org]

All India Seminar on "New Generation Composite Materials"

Kanchepuram, October 19-20, 2023

The Honorary Secretary, IEI, Kanchepuram Local Centre, Agni College of Technology – ACT, Old Mahabalipuram Road, Thalambur, Chennai 600130 [Email: kanchepuramlc@ieindia.org]

Thirty-sixth National Convention of Metallurgical & Materials Engineers on "Green Composites, the New-generation 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

One Day Workshop on "Laser-based Processing: Advancements and Applications in Modern Manufacturing"

Ranchi, October 08, 2023

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-eighth National Convention of Production Engineers on "Green and Bio-inspired Manufacturing – The Way Forward"

Bareilly, June 28-29, 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]

Textile Engineering Division

Thirty-sixth National Convention of Textile Engineers on "Smart Textile"

Chennai, September 29-30, 2023

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

Interdisciplinary Coordination Committee

All India Seminar on "Green Technologies for Sustainable Development"

Pune, September 02-03, 2023

The Honorary Secretary, IEI, Pune Local Centre, Abhiyanta Bhavan, 1332 J M Road, Shivajinagar, Pune 411005 [☎: 020-25533376 / 25520239 (Admin Incharge: 8380042746), E-mail: punelc@ieindia.org; Website: www.ieipune.org]

All India Seminar on "Technology Inclusion for Innovation and Productivity Enhancement"

Jamshedpur, October 03-04, 2023

The Honorary Secretary, IEI, Jamshedpur Local Centre, Subarnarekha Link, Sakchi, Jamshedpur 831 001 [☎: 0657-2234316, Fax: 0657-2230159]

One Day Seminar on "Innovation Conclave"

Durgapur, November 05, 2023

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

WFEO 2023 Awards – Call for Nominations

The WFEO Secretariat is pleased to advise you that the call for nominations is now open for:

- **The 2023 WFEO - GREE Women in Engineering Award**
- **The 2023 WFEO Medal for Excellence in Engineering Education**
- **The 2023 WFEO - CCC H. J. Sabbagh Prize for Excellence in Engineering Construction**

You will find attached the combined presentation and nomination forms for each of the above mentioned Awards can be downloaded at <http://www.wfeo.org/awards>.

The awards are open for nominations by any institution, however nominations sent or supported by WFEO member organizations will be highly regarded.

For all three awards, please note that the deadline for nominating for any of those awards is **22 September 2023**.

Nominations are to be sent only at wfeo-awards@wfeo.org.

The Laureates will be announced at the forthcoming WFEO World Engineers' Convention and General Assembly meetings in **Prague, 9-15 October 2023**.

The WFEO Secretariat may be contacted at secretariat@wfeo.org for any queries.



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: <https://www.ieindia.org/webui/IEI-Activities.aspx#industry-excellence-award>) are invited from prospective applicants for IEI Industry Excellence Award 2023. The last date of receipt of application for the Award 2023 is **30 September 2023**. Interested applicants are requested to send their applications (Two hard copies & One soft copy in Pendrive/CD) to the below mentioned address.

The Director [Technical]

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



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 <https://www.ieindia.org/webui/IEI-Activities.aspx#industry-excellence-award> 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.

IEI NEWS

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