I.E.I NEWS



May 1,

Energy Efficiency in HVAC & R Industries and Air Pollution Control Equipment Unconventional Machining and Modern Production Techniques

Recent Trends in Renewable Energy Application & Research Reports of World Water Day **IEI Diary**

5

9

98 YEARS OF RELENTLESS JOURNEY TOWARDS ENGINEERING ADVANCEMENT FOR NATION-BUILDING

Volume 68 Number 2

Thirty-second National Convention of Computer Engineers, Ahmedabad

Application of IT in Rural Development

Gujarat State Centre of the Institution in association with Computer Society of India, Ahmedabad Chapter organized the Thirty-second National Convention of Computer Engineers and National Seminar on the theme 'Application of IT in Rural Development' during February 24-25, 2018 at Ahmedabad. Mr H U Kalyani, Honorary Secretary of the Centre, welcomed the dignitaries and the participants. The Guest of the function, Mr Pradep Kumar Hota, Chief General Manager, BSNL, Gujarat Circle, spoke about evolution of telecommunication engineering by connecting rural to urban areas through magic thread called optical fiber. He highlighted the importance of optical fiber for improved data operation and communication system all over the country. Mr Hota stressed on the necessity of literacy and education for social and economic development of rural India. Mr B S Patel, Chairman, Computer



Engineering Division Board, IEI, presided over the inaugural session. In his address, Mr Patel mentioned advancement of agriculture as the backbone of rural development and suggested application of Information Technology for introducing necessary improvements in agriculture and agribusiness. He stressed the need for industry-academia meet, where b2b, b2c and G2c programs using Information Technology can be discussed for creating awareness about the advantages of such applications for furtherance of existing practices. He further mentioned that ideas from start-ups make a great change in the movement of innovation and development of Nation Building which is the prime vision of IEI. Mr Sisir Kumar Banerjee, President, IEI was felicitated on this occasion. Mr Banerjee in his address, appealed to the Corporate Members, experts in the field and engineering students to be a part of Digital India, the initiative taken by Mr Narendra Modi, Hon'ble Prime Minister of India. He further deliberated on the importance of technical education and open source and distance learning processes for bridging the social and educational gap. Mr Banerjee also highlighted the importance of ICT and remote sensing application for the development of agriculture and rural areas.

Contd. on page 2

From the **President's Desk.....**



The pace of development and technological inputs in the globalised economy, are changing rapidly. Knowledge, skill and expertise need constant updating with the advent of newer state-of-the-art technologies providing competitive and smarter products to the consumers. In order to bridge the gap between

the requirement and availability of highly specialised and trained manpower in emerging areas of technology, engineers require to update their knowledge and competence at regular intervals. Continuous skill development is thus, not optional any more but a definite necessity.

IEI organises technical activities regularly through State and Local Centres all over the country to facilitate skill development and knowledge updating in various emerging areas of cutting edge technologies. In addition to Seminars and National Conventions, the Centres of the Institution also organise statutory days, viz. World Water Day, World Telecommunication and Information Society Day, World Environment Day, Engineers' Day, World Habitat Day, World Standards Day, etc on themes of topical interest. Participation in these technical activities not only enhances knowledge levels but also provides a platform to interact with fellow engineers and other stakeholders and share experience for mutual benefits.

Our members will be happy to note that The Institution of Engineers (India) has launched a pioneering cloud-based platform named 'ENGGTALKS' for technical networking, collaboration and community learning which will help us to strengthen the engineering ecosystem through technical collaboration among geographically separated members across academia and industry. I request our members to join the platform by signing in through IEI website (www.ieindia.org using membership number and password) and avail the benefits of 'ENGGTALKS'.

Pursuant to our constant and persistent effort towards making IEI Journals world class, we are proud to inform that all the five series of journals of The Institution of Engineers (India), which were already approved by UGC, are now Scopus Indexed.

To improve the content and quality of the Journals of IEI, an Editors' Meet was held at IIT Delhi on April 28, 2018. Editors and Associate Editors of the five series of journals attended the meet along with representatives of Springer (India) Pvt. Ltd. It was heartening to note that the Chief Editors and Associate Editors are rendering yeomen service to improve the quality of our journals.

I invite suggestions from you towards further enhancing the services we provide to the engineering fraternity.

Energy Efficiency in HVAC & R Industries and Air Pollution Control Equipment

Jharkhand State Centre of the Institution in collaboration with ISHRAE, Ranchi Chapter organized a two-day All India Seminar on the theme 'Energy Efficiency in HVAC & R Industries and Air Pollution Control Equipment' under the aegis of Environmental Engineering Division, IEI during February 10-11, 2018 at Ranchi. Mr P K Kar, Executive Director (Projects), MECON Limited, graced the occasion as the Chief Guest. Mr Kar, in his address, lauded

the efforts of organizers for conducting Seminar on such an important topic. He further elaborated the role of MECON in optimising energy usage in various fields. Mr S K Verma, General Manager (Marketing), MECON Limited, graced the occasion as the Guest-of-Honour. Mr Verma, in his speech, spoke about energy requirements of HVAC industry and narrated the efforts taken by steel industry in conservation of energy. Earlier, Mr Sanjay Sen, Chairman of the Centre, in his welcome address, emphasized that the energy efficiency in iron and steel industry is a major challenge and needs to be matched with bench marks in the energy usage. Mr Anujeet Rituraj, Organizing Secretary of the event, presented a brief account of the Seminar and technical sessions. Mr S Ganesh, President, ISHRAE, Ranchi Chapter, presented a brief introduction about the aim and activities of the Seminar. Mr Deepak Barma, Past National President, ISHRAE, highlighted the initiatives taken by ISHRAE on raising energy efficiency in HVAC equipment. Mr M R Kumar, Honorary Secretary of the Centre, proposed the vote of thanks. Papers embracing the theme of the Seminar were presented and discussed during technical sessions. Mr S P Sharma, presented paper on 'HVAC & R Systems Integrated with Clean Air Technologies'. He shared his knowledge on various pollution control technologies of NTPC. Mr Uma Shankar Chakravarty from M/s ECODEA, presented the offerings on cold fog system along with description on technological aspects and its various installations. Dr (Ms) Richa Pandey, in her presentation on 'Design 7 Development of Low Cost Automated Sprinkler Irrigation System for Rural Areas', explained various types of irrigation methods and highlighted the benefits of using sprinkler method. Dr S K Mishra, CMO, Ispat Hospital, in his presentation, discussed various aspects of air-conditioning in hospitals in general and operation theatre in particular.



Application of IT in Rural Development

Contd. from page 1

Mr Sandeep B Vasava, Chairman of the Centre and Dr Nilesh Modi, Assistant Director, BAOU also attended the inaugural session. On this occasion, four Eminent Engineering Personalities, namely, Dr Anirban Basu, Research Professor, Computer Science & Engineering, Consultant to PQR Software, Bangalore; Dr Manpreet Singh Manna, Director, SWAYAM & PMSSS and In-charge of Parliament Cell, All India Council for Technical Education, Ministry of HRD, Govt. of India, New Delhi; Dr K S Dasgupta, Director, Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, Gujarat and Dr Srinivas Padmanabhuni, Co-Founder, City Mandi and Chief Mentor, Tarah Technologies, Bangalore, were felicitated for their valuable contributions to the profession of Computer Engineering. The 'IEI Young Engineers Award' in Computer Engineering for the year 2017-18 was presented to Dr Amol Dnyaneshwar Potgantwar, Dean, IPR and Head of the Department, Computer Engineering and Information Technology Department, Sandip Institute of Technology and Research Centre, Nashik; Dr Saptarshi Ghosh, Assistant Professor, Department of Computer Science and Engineering, Indian Institute of Technology Kharagpur and Dr R Dhaya, Associate Professor, Department of Computer Science and Engineering, Rajalakshmi Engineering College, Chennai (in absentia). Dr Samir Patel, Vice Chairman, Computer Society of India, Ahmedabad Chapter, proposed the vote of thanks. The prestigious M S Ramanujan Memorial Lecture was delivered by Dr Narottam Sahoo, Advisor & Member Secretary, Gujarat

Council on Science and Technology, Department of Science & Technology, Govt. of Gujarat, Gandhinagar. He expressed his views about the role of IT in rural development. Mr G C Jain, MD, MCBS, and a renowned industrialist delivered a technical talk on the topic 'Hybrid Media Technology Based Education and Multimedia Communication (EMCS) System for Rural and Remote Areas'. He elaborated on satellite based communication using V-SAT/SIT (Very Small Aperture Satellite Terminal or Satellite Interactive System) and satellite based broadcasting system, like Direct to Home (DTH) -- their advantages and challenges. Mr Jain further mentioned the role of ISRO in satellites communications and various remote sensing methods which are useful for agriculture, education, commerce and overall rural development. Dr Sanjay Chaudhary, Professor and Associate Dean, School of Engineering and Applied Science, Ahmedabad University, delivered a technical talk on 'Agro Advisory System'. He mentioned that in agricultural domain, ICT can play a major role to improve the agricultural practices and production. He felt that an agro advisory system can help in bridging the gap between farmers and the agriculture domain experts. Dr Chaudhary briefed about different web portals and databases provided by the Government to help the farmers regarding weather data, soil health records, cropping pattern, location specific crop disease and pest etc. On this occasion, a 'Panel Discussion' was also organized where experts in the field took active participation. Presentation of papers and invited lectures embracing the theme of the National Seminar, took place during the technical sessions.

'ENGGTALKS' - A Pioneering Initiative by IEI

In a continuous endeavour to provide enhanced value added services to IEI's Corporate Members, The Institution of Engineers (India) has launched a cloud-based platform 'online engineers network', called 'ENGGTALKS' for technical networking, collaboration and mutual learning.

'ENGGTALKS' is a Community based Learning & Interactive Platform, exclusively designed for Engineering and Technology sharing among the Corporate Members.

Facilities provided in 'ENGGTALKS' are as follows:-

- It facilitates the Corporate Community of IEI to connect & collaborate with all Corporate Members of the Institution across the globe.
- Cloud storage can be utilized to share the relevant documents e.g. study materials, assignments, lecture notes, drawings, standards, research papers, project works etc.
- Interest based Groups and Sub-groups within IEI Community as per the requirement can be created.
- Technical blogs can be written to share the practical knowledge and real-life experiences within IEI Community.
- Share photos of events and other activities.
- Reach all IEI Community Members through announcements, bulk email notifications etc.
- Explore the largest discussion forum among technocrats with all engineering disciplines.

Corporate Members may utilize this platform by signing in through IEI website (www.ieindia.org using membership number and password) and avail the benefits of ENGGTALKS.



IEI-Springer Journals' Editors Meet



To enhance the quality and to increase the visibility of Journals of The Institution of Engineers (India), "IEI- Springer Journals' Editors Meet" was organized at the premises of Indian Institute of Technology Delhi, New Delhi on April 28, 2018. The Editors of various Series of Journals of IEI were present along with the team of Springer and IEI. Mr Sisir Kumar Banerjee, President, IEI welcomed the gathering and Dr D K Tripathy, Chairman, Committee for Advancement of Technology & Engineering (CATE), IEI expressed his views on the improvement of the Journals. The vote of thanks was delivered by Maj Gen (Dr) S Bhattacharya, VSM (Retd.), Secretary & Director General of the Institution.

Recent Trends in Renewable Energy

Kanchepuram Local Centre of the Institution in collaboration with the Department of Electrical & Electronics Engineering, Jerusalem College of Engineering (JCE), Chennai, organized a two-day All India Seminar on the theme 'Recent Trends in Renewable Energy' under the aegis of Electrical Engineering Division, IEI, during January 3-4, 2018 at Chennai. Dr S Nagarajan, Professor & Head, Department of Electrical & Electronics Engineering, JCE, Chennai, welcomed the august gathering and Dr M Ramalingam, Principal, JCE, Chennai, presented the Inaugural Address. Dr Rajesh Katyal, Deputy Director General, Group Head, WRA & Offshore, NIWE, Chennai, graced the occasion as the Chief Guest. Dr Katyal, in his Keynote Address, highlighted the importance of renewable energy in the present day scenario. The Guest-of-Honour, Dr M A Panneerselvam, delivered a thought provoking speech and discussed various aspects of renewable energy. Dr S Rama Reddy, Dean-Research and Convener of the Seminar, also addressed the gathering. Dr S R R Senthil Kumar, Honorary Secretary of the Centre, proposed the vote of thanks. A large number of papers on various subthemes of the Seminar were presented and discussed during technical sessions. The Chief guest, Dr Rajesh Katyal, delivered lecture on the topic 'Wind Resource Assessment and Offshore - An Overview', where he threw some light on wind resource assessments, techniques, scenarios and its applications. Mr A D Thirumoorthy, Energy Consultant Advisor, Indian Wind

Power Association, Coimbatore, presented paper on the topic 'Challenges in Renewable Energy, Integration to Grid'. Dr S Rama Reddy, Dean–Research, JCE, Chennai, delivered lecture on 'Power Electronics for Wind Energy'. Mr G Raja Ganesan, Chief Technical Officer, Tamilnadu Advanced Technical Trainer Institute, Chennai, discussed on 'Solar PV Technologies and its Thrust Areas'. Mr V Suresh from Power Grid, presented paper on the topic 'Balancing Needs for Large Scale Integration of Renewable Generation'. Mr S Selva Kumar, Technical Specialist in Micro-grid, Power Research & Development Consultant Limited, Bangalore, spoke on the topic 'Isolated & Grid Connected Solar Plant Design using PV System'.



Unconventional Machining and Modern Production Techniques

Odisha State Centre of the Institution in collaboration with the College of Engineering and Technology (CET), Bhubaneswar, organized a two-

day All India Seminar on the theme 'Unconventional Machining and Modern Production Techniques' under the aegis of Production Engineering Division. IEI. during February 9-10. 2018 at Bhubaneswar. Dr P K Parhi, Chairman of the Centre, welcomed the delegates and dignitaries and presided over the function. Dr D K Tripathy, Chairman, CATE, IEI and Organizing Secretary of the Seminar, introduced the theme of the Seminar whereas Prof (Dr) D Dhupal, Convenor, presented the technical details of the Seminar. Dr Arvinda Tripathy, Former Professor, IIM Ahmedabad and Former Dean, Vinod Gupta School of Management (VGSOM), IIT Kharagpur, graced the occasion as the Chief Guest. Dr Tripathy, in his address, narrated the chronological development of machining and production processes. He also

highlighted several practical case studies in these areas. A Souvenir was brought out on this occasion which was released by the Chief Guest. Prof (Dr) P K Patra, Principal, CET, Bhubaneswar, highlighted the importance

of the theme and the role of CET in this direction. Dr K K Rout, Honorary Secretary of the Centre, proposed the vote of thanks. Mr Sibasis Maity, Managing Director, Central Tool Room & Training Centre (CTTC), Bhubaneswar, delivered Keynote Address on 'Industry 4.0'. Prof N S Das, Former Professor, NIT Rourkela, delivered an invited talk on 'Development of Theory of Plastic Deformation of Metals'. Prof Seshadev Sahoo of Siksha 'O' Anusandhan (SOA) University, Bhubaneswar, delivered an invited talk on the topic 'Microstructure Evaluation in Additive Manufacturing Process: Phase Field Simulation'. Prof R R Das of CET, Bhubaneswar, delivered an



invited talk on 'Robotics and Automation in Production Industries'. A large number of technical papers on various sub-themes of the Seminar were presented and discussed during the various technical sessions.

Optimization Tools and Intellectual Property Rights

Kanchepuram Local Centre of the Institution in collaboration with the Department of Mechanical Engineering, St. Joseph's Institute of Technology, Chennai, organized a two-day All India Workshop on the theme 'Optimization Tools and Intellectual Property Rights' under the aegis of Mechanical Engineering Division, IEI, during February 23-24, 2018 at Chennai. During the inaugural session, Dr K Arun Vasantha Geethan,

Professor and Head, Department of Mechanical Engineering, St. Joseph's Institute of Technology, Chennai, welcomed the dignitaries and the participants. Ms Shanthilekshmi, Patent Consultant, Le Intelligensia Law Firm, Chennai, delivered the presidential address and inaugurated the Workshop. In her address, Ms Shanthilekshmi highlighted the importance of intellectual property in today's evolving engineering sector. The Guest-of-Honour, Mr S Srinivasan Alavanthan, Joint Honorary Secretary of the Centre, delivered lecture embracing the theme of the Workshop. Dr D Elilraja, Associate Professor, Department of Mechanical Engineering, highlighted various activities of IEI which are aimed for the benefit of the students and opportunities to its members. Dr V Savithiri, Professor, Department of Mechanical Engineering, proposed the vote

of thanks. Papers on various sub-themes were presented and discussed during technical sessions. Mrs Shanthilekshmi delivered lectures on the topics 'Importance of Intellectual Property' and 'Laws of Intellectual Property', where she threw some lights on the types of patent, techniques and regulation for its applications. Mrs Sathyavathy, IPR Consultant, Le Intelligensia Law Firm, Chennai, spoke on 'Introduction to Patent and 'Procedures' and 'How to Convert Research Papers into Patents'. Dr M Rajmohan, Associate Professor, CEG, Anna University, Chennai, delivered lectures on the topics 'Introduction to Optimization Techniques' and 'Design of Experiments & Taguchi Method'.



Recent Trends in Renewable Energy Application & Research

Gujarat State Centre of the Institution in collaboration with Student Chapter, Electrical Engineering Department, Vishwakarma Government Engineering College (VGEC), Chankheda, Ahmedabad organized a two-day All India Seminar on the theme 'Recent Trends in Renewable Energy Application & Research' under the aegis of Electrical Engineering Division, IEI during

February 16-17, 2018 at Ahmedabad. Mr Navinchandra B Vasoya, Immediate Past President, IEI and Mr P Rajamani, Vice President, IEI, graced the occasion as the Chief Guest and Guest-of-Honour, respectively. Dr R K Gurjjar, Principal, VGEC, Chankheda, Ahmedabad was the Special Guest during inaugural function. All the dignitaries shared their views about the theme and offered best wishes for the Seminar. Dr R K Guriar, narrated the recent trends in the field of renewable energy application & research with facts and figures. Earlier. Mr Sandeep B Vasava, Chairman of the Centre, in his welcome address, highlighted various activities of IEI. He further explained the role of engineers and the responsibilities of IEI to the country and the society at large. Prof R K Yadav, Convener of the event, speaking on the theme, stated that the Seminar will provide a common platform for researchers, academicians. experts and users to share their knowledge and experience. Mr H U Kalyani, Honorary Secretary of the Centre, proposed the vote of thanks. A large number of papers embracing the theme of Seminar were presented and discussed during technical sessions. Four invited lectures were presented by the experts in the field. Mr P H Rana, Former Member Secretary, Technical, Gujarat Urja Vikas Nigam Ltd (GUVNL) delivered lecture on the topic 'Overview of Developments in Renewable Energy – Current Trends & Future Prospects'. Mr Vihar Pancholi, CEO, Maverick Inc., Vadodara, delivered another lecture on the topic 'Experience and Current Technology Trends in Waste to Energy Sector'. Dr Gaurav Mishra, Director, SPERI, spoke on 'Current Trends and Future Prospects in Bio-energy in India' and Mr P A Shah, Former Chief Engineer, GEB, delivered lecture on 'Tidal Power Generation – Present and Future Prospects in Guiarat'.



Challenges and Advances of Rapid Prototyping in Production Engineering

Salem Local Centre of the Institution in collaboration with the Department of Mechanical Engineering, Vidyaa Vikas College of Engineering and Technology (VVCET), Namakkal, organized a two-day All India Seminar on the theme 'Challenges and Advances of Rapid Prototyping in Production Engineering' under the aegis of Production Engineering Division, IEI during February 2-3, 2018 at Salem. The Chief Guest, Mr R R Prasad, Chief Executive Officer, Ran India Steels Pvt Ltd., Namakkal, inaugurated the Seminar. Mr Prasad, in his inaugural address, shared his expertise among the participants. He emphasized his views related to various aspects, such as, how to become a successful entrepreneur, positive thinking, how to rectify problems encountered in industries and importance of latest trends in engineering and technology. He appreciated the organizers for conducting Seminar on such an important topic. On this occasion, a Souvenir containing abstracts of technical papers was brought in CD which was released by the Chief Guest. Dr P R Kannan, Associate Professor, Department of Mechanical & Automation Engineering, Mahendra Engineerning College, Namakkal, graced the occasion as the Guest-of-Honour and addressed the gathering. Earlier, Dr K Pandian, Chairman of the Centre, welcomed the dignitaries and the participants. Dr K Samidurai, Prinicpal, VVCET, Namakkal and Co-Chairman of this event, in his address, discussed various aspects embracing the theme of the Seminar. Dignitaries, namely, Dr S Gunasekaran, Secretary & Managing Trustee, Dr T O Singaravel, Correspondent & Managing Trustee, Dr S Ramalingam, Managing Trustee, and Dr M Muthusamy, Managing Trustee of VVCET, Namakkal, also addressed the gathering. The function concluded with the vote of thanks proposed by Mr S R Saravanan, Honorary Secretary of the Centre. Technical papers embracing the theme of the Seminar were presented and discussed during various technical sessions.





IEI Celebrates World Water Day

Theme: Nature for Water

The World Water Day was celebrated by the Institution all over the country on March 22, 2018. Reports of celebration received from various Centres are highlighted here.

STATE CENTRES

Jammu & Kashmir

Mohammad Ashraf Fazili, Chairman of the Centre, in his welcome address, stated that this year's theme explores how we can use nature to overcome the water challenges of the 21st century. The Keynote Speaker,



Dr Shakil Ahmad Romshoo, Head, Department of Earth Sciences, University of Kashmir, speaking on the topic 'Glaciers & Water Resources under Changing Climate' stated that during last six decades, 20% of the glacial mass in the Kashmir Himalayas has been lost and implications of depleting

cryosphere under changing climate on water, energy and food security are far-reaching. Prof Danish Ahmad, Civil Engineering Department, NIT Srinagar and Special Speaker on this occasion, delivered lecture on 'Water Conservation & Solid Waste Management for Sustainable Development'. He informed that nearly two million trees will be cut to restore Wullar Lake under the National Lake Conservation Programme, a joint venture with South Asian Voluntary Association of Environmentalists, to increase water area. Mr Reyaz Ahmad Khan, Honorary Secretary of the Centre, proposed the vote of thanks.

Karnataka

On this occasion, Mr Basavaraj Gadwal, Chief Engineer (Retd), Upper Krishna Project, delivered the 'S G Balekundri Memorial Lecture'. In his address, Mr Gadwal explained about the utilization of water for agriculture

lands. He further briefed how the Upper Krishna Project, major Irrigation Projects, Malaprabha and Ghataprabha Dams and Karanja, Bannithora Projects are functioning. Other dignitaries graced the occasion included Dr M Nemichandrappa, Mr



G R Muttagi, Mr M Nagaraj, Committee Members of the Centre and Mr Jasmail Singh, Honorary Secretary of the Centre. The programme was organized jointly with Kalaburagi Local Centre at Kalaburagi.

West Bengal

Mr Sisir Kumar Banerjee, President, IEI, graced the occasion as the Chief Guest and complemented the efforts of the Centre for organizing this important event. Dr Debasis Nag, Chairman, Agricultural Engineering Division of the Centre, stated that the theme of the day will show the potential of nature-based solutions for water and how they can be considered for water management policy and practice. The Theme Speaker Dr Atmaram Mishra, Principal Scientist & Programme Leader, Ground Water Management

Programme, ICAR-IIWM, Bhubaneswar stressed upon the strategies for water resource development and various initiatives to mitigate the scarcity

of water. He also highlighted the nature-based solutions for facing the challenges of global requirements of water. Prof Anirnban Gupta, Head, Centre for Water & Environment Research, IIEST, Shibpur, Howrah & Director, Rural Development Forum



(RDF), IEI, elaborated upon the effective and sustainable measures to be taken for safe & quality water to all. Mr S P Datta, Chairman, RDF, IEI, stressed upon the importance of water for the improvement of human health and livelihood. Earlier, Mr Kashmir Lal Mallik, Chairman of the Centre, in his welcome address, highlighted the issues and strategies related to global water demand and availability. Mr Ranjan Dutta, Honorary Secretary of the Centre, proposed the vote of thanks.

LOCAL CENTRES

Agra

The Chief Guest Mr Devendra Singh Chaudhary, Chief Engineer (Retd.) and



Immediate Past Chairman of the Centre, in his welcome address, spoke about various activities of IEI and highlighted the importance of water management. Mr Dinkar Saxena, Member, Environment, delivered lecture on 'Water Conservation'. He mentioned that

water is very essential to maintain required oxygen in human bodies. He also suggested for storing rain water in ponds for recharging water table. Mr D C Gupta, suggested that we must conserve water and stop wastage of water. Mr Rajneesh Kumar Yadav, Department of Electronic and Telecommunication, BSA College of Engineering, Mathura, conducted the programme. Mr Ashok Kumar Shahu, Head of the Department, BSA College of Engineering & Technology, proposed the vote of thanks

Aligart

Dr Gyan Prakash, Chairman of the Centre, welcomed the august gathering. Prof Nadeem Khalil of Civil Engineering Department, AMU, Aligarh and Convenor introduced the theme of the day. He elaborated on 'Safeguarding Water Resources in India with Green and Sustainable



Technologies' and highlighted the significance of natural systems for cleaning rivers. The Chief Guest Dr Sudarshan Tomar, Sr. Oncologist and Environmental Activists, in his address, highlighted the efforts made by the Govt. of India for conservation of rivers of the country. He reiterated the importance of rivers and appealed to the authorities for maintaining the water bodies of the nation. The Guest-of-Honour Dr Ashok Kumar, Former Visiting Professor, Harvard Medical School, Boston and Ex Vice Chancellor, IIMT University, Meerut & AKS University, Satna, spoke about the importance of water and explained various ways to save water. Dr Anis Ahmed Ansari, Assistant Professor, Mechanical Engineering Section, University Polytechnic, AMU, Aligarh presented effective tips to save water in our daily life. Dr Salma Shaheen, Honorary Secretary of the Centre, proposed the vote of thanks.

Anpara

The Chief Guest, Mr G S Srivastava, General Manager, BHEL, Anpara 'D' Project, in his address, spoke about World Water Day Policies and called upon the engineering community to give equal importance to the urban and rural population while planning for future projects. Mr Surendra Prasad,





Construction Manager, BHEL, Anpara 'D' Project, graced the occasion as the Guest-of-Honour. Earlier, Mr Umesh Ch Mishra, Chairman of the Centre, welcomed the august gathering. Other dignitaries graced the occasion

included Mr R N Srivastava, SE, Anpara Thermal Power Project; Mr Rajesh Tiwari, Civil Head, HIE, Renusagar Power Division and Mr Rajesh Prasad, BHEL, 'D' Anpara Thermal Power Project. Mr U C Mishra, Mr Prashant Kumar and Mr Mukesh Kumar Singh of BHEL delivered keynote addresses on the theme of the day and discussed various issues embracing the theme. Mr Mukesh Kumar Singh, Honorary Secretary of the Centre, proposed the vote of thanks.

Asansol

Mr K V R Raju, Chairman of the Centre, welcomed the gathering and presided over the function. Mr Raju narrated the present scenario of water availability in and around Asansol–Burnpur Industrial Township and the upcoming threat of crisis of water availability. He



further emphasized the role of citizens to increase the awareness about water conservation. Mr Sumanta Karmakar, Committee Member of the Centre, compared the function. Mr T T Lahiri, Honorary Secretary of the Centre, narrated the present scenario of potable water and cited few examples of water crisis. He explained a few examples of how others countries already have taken steps towards conservation of water and how we can imbibe some good practices through which we can change the situation in a big way. Mr Lahiri also proposed the vote of thanks.

Bhilai

Mr Kailash Malhotra, Chairman of the Centre welcomed the dignitaries and the participants. Speaking on the theme, Mr Malhotra stated that damaged ecosystems affect the quantity and quality of water available for human



consumption. He apprised that at present, 2.1 billion people live without safe drinking water at home affecting their health, education and livelihoods. A short film prepared by Mr Rupesh Gupta on 'Crises of Water at Cape Town, South Africa' was shown to the audience. The

function concluded with the vote of thanks proposed by Mr Viteshwar Nath, Honorary Secretary of the Centre.

Bhimavaram

Mr A V Rao, Assistant Engineer-Irrigation, Undi Division, graced the occasion as the Chief Guest. Mr Rao, in his address, highlighted the importance of water in balancing the natural ecosystem and urged to protect the water for the future generations. Mr V K Viswanadha Raju, Honorary Secretary

of the Centre, graced the function as the Guest-of-Honour. He urged the students to preserve and conserve water. The Principal Dr G Srinivasa Rao and Vice Principal, State Member of Institute of Engineers Mechanical Division Dr P Srinivasa



Raju also attended the function and addressed the gathering. Dr Raju also proposed the vote of thanks.

Dhanbad

Dr T N Singh, Former Director, CSIR-CIMFR, Dhanbad and Past Chairman of the Centre, presided over the function. In his address, Dr Singh mentioned



that if we ignore the eco-system and make it adverse, there will be scarcity of water which will not only create problem to us but it will be a problem to all living being in this planet. He further emphasized that damage to the environment is creating scarcity of water

unabatedly which can be controlled only by honouring the nature. Earlier, Mr H N karmakar, Past Chairman of the Centre delivered the welcome address and Dr R K Srivastava, Former Professor, Production Engineering Department, BIT, Sindri, introduced the theme of the day. Other dignitaries, graced the occasion included Mr B K Samanta, Past Chairman of the Centre, Mr S Ratnaker and Dr M K Chandra, Jt. Honorary Secretary and Immediate Past Honorary Secretary of the Centre, respectively.

Jammu

A Seminar was organized on this occasion. The Chief Guest Mr Sham Lal Choudhary, Hon'ble Minister for PHE and I & FC Department, Govt. of Jammu & Kashmir, in his address, stated that it is our responsibility not

to waste or pollute water because water is a precious resource. 'If we wish to leave clean and adequate water for our future generations, we need to save and preserve it today', he added. Mr Choudhary urged the engineers to ensure supply of clean



and safe water to the masses and also to conserve water resources. Mr M Raju, Secretary to the Govt. of J&K, PHE and I&FC Department and Mr Ramesh Kumar, Commissioner, Jammu Municipal Corporation, graced the occasion as Guests-of-Honour. Mr Ramesh Kumar, advocated adoption of very simple dictums in our day-to-day life which can result into saving lot of water. The function was presided over by Mr Ravi Kumar Chanyal, Chairman of the Centre and Mr K K Magotra, Executive Director, CCDU, WSSO, Dept. of PHE, I&FC, J & K Govt. presided over the function. Earlier, Mr Ravi Kumar Chanyal, welcomed the august gathering. Mr Vijay Kumar Sharma, Honorary Secretary of the Centre, conducted the proceedings of the Seminar. Mr Gopal Sharma, AEE, CCDU, proposed the vote of thanks.

Kota

Mr C K S Parmar, Chairman of the Centre, welcomed the august gathering



and highlighted the importance of the day. The Chief Guest, Mr K D Sandu, Chief Engineer, WR & Director General, IMTI Kota, explained the significance of observing the day and highlighted the water availability scenario of Rajasthan including drinking water.

He also stressed on Intra Basin Transfer Scheme. The Guest Speaker, Mr Kailash Bhargava, Additional Director (Retd.) Govt. of Rajasthan, discussed in detail about nature based solutions (NBS) of water crisis, such as, restoring forests, grasslands and natural wetlands, reconnecting the rivers to floodplains, creating buffers of vegetation along water courses, etc. 'NBS are not a panacea to the critical water-related challenges we face as the global population grows, but they can provide innovative and cost-effective options for supplementing insufficient or ageing water infrastructure', opined Mr Bhargvava. The Guest-of-Honour, Mr Shyamveer Singh, Former Superintending Engineer, PHED, Kota, in his address, stressed the need for safe drinking water and sanitation solutions. Mr Jasamat Singh, Honorary Secretary of the Centre, proposed the vote of thanks.



Ludhiana

Dr H S Rai, Dean Consultancy and Principal in Charge, Guru Nanak Dev



Engineering College, Ludhiana, graced the occasion as the Chief Guest. Mr S Ravneet Singh, Director, Eco Sikh, Ludhiana, in his speech, highlighted the importance of water and informed that water table in Punjab is falling by 1m

per year. He exhorted the youngsters to think about ways for sustainable development. Mr Singh further advocated strong government policies to meet the growing water crisis. Brig. (Retd.) Mastinder Singh, Chairman of the Centre, explained that world over water crisis is looming large and we must act now to save water and thereby save ourselves. Dr Arvind Dhingra, Faculty Advisor-SCIE, Guru Nanak Dev Engineering College, Ludhiana, proposed the vote of thanks.

Madurai

The function was chaired by Mr K Vijay Kumar, Chairman of the Centre. Dr S Rajamohan, Chairman, CII, Madurai Zone, delivered the welcome address and introduced the need for Water Vision 2030 for Madurai city. Dr S Chandran, Associate Professor in Civil



Engineering, Thiagarajar College of Engineering, Madurai, set the context and conducted the brainstorming session. He narrated the objective of celebrating the day and explained the theme 'Nature for Water'. In his speech. Dr Chandran presented an inventory of the available water sources & its potential to meet the demand of water. The programme was concluded with the vote of thanks proposed by Mr J Samuel, Honorary Secretary of

Munirabad

Mr Rajashekhara Gowda Patil, Honorary Secretary of the Centre, welcomed



the dignitaries and the participants. The Guest Speaker, Mr T Narauddin, Head, Department of Mechanical Engineering, TMAES Polytechnic College, Hospet, in his address, spoke about the origin of water, its uses, purification, sources,

wastage, etc. He further explained in details about how to save water. The function concluded with the vote of thanks proposed by Mr Rajashekhara Gowda Patil

Saurashtra

Mr H A Kansagra, Chairman of the Centre, welcomed the guests and

dignitaries. Prof (Dr) Javesh V Deshkar, Principal, V V P College Engineering (VVPEC). Rajkot, presided over the function. Prof (Dr) J V Mehta, Head, Civil Engineering Department, VVPEC, Rajkot, delivered the theme lecture. Mr Deepak V Suchde, Chairman,



Activity Sub-Committee of the Centre, highlighted various technical activities of the Centre. Mr Navinchandra K Ravajibhai, Honorary Secretary of the Centre, also addressed the gathering.

The Institution of Engineers (India)

Sir R N Mookerjee Engineering Information Service Centre IEI Headquarters, Kolkata

New Arrival of Books

Title and Author

- Fundamentals of Signals and Systems (2nd Ed.): Michael J. Roberts, Govind Sharma
- Foundations of Physics: Electromagnetics, Optics and Modern Physics (Vol. II); R. S. Gambhir, D. Banerjee, M. C. Durgapal
- Turbomachines; B. U. Pai
- Computer Architecture and Organization: A Practical Approach; Rajiv Chopra
- Software Quality Assurance, Testing and Metrics; Anirban Basu
- Analytical Tools in Research; L. N. Pattanaik
- Data Structures, Algorithms and Application in Java; Sartaj Sahni
- Principles of Physics (10th Ed.); Jearl Walker, David Halliday Robert Resnick
- Microwaves: Introduction to Circuits, Devices and Antennas; M. L. Sisodia, Vijay Laxmi Gupta
- TCP/IP Protocol Suite (4th Ed.): Behrouz A. Forouzan
- Data Analysis with Hadoop; Benjamin Bengfort, Jenny Kim

Publisher

McGraw Hill Education (India) Pvt. Ltd.

New Age International (P) Ltd.

Wiley India Pvt. Ltd.

S.Chand & Co.

PHI Learning Pvt. Ltd. Educreation Publishing

Universities Press

Wiley India Pvt. Ltd.

New Age International (P) Ltd.

McGraw Hill Education (India)Pvt. Ltd.

Shroff Publishers & Distributors Pvt. Ltd.

- OP-AMPS and Linear Integrated Circuits; Ramakant A. Gayakwad
- GATE through Physics; Navin Manaswi
- Water Resources Systems; Pramod R Bhave
- Online Mine Working; H. N. Karmakar
- Online Mine Ventilation; H. N. Karmakar
- Engineering Drawing; Basant Agrawal, C. M. Agrawal
- Hadoop Application Architectures: Mark Grover, et. al.
- Concrete Technology Practices; Aminul Islam Laskar
- Design of Machine Elements (4th Ed.); V. B. Bhandari
- Inorganic Chemistry (2nd Ed.); D. K. Chakrabarty
- Refrigeration and Air Conditioning (3rd Ed.); C. P. Arora
- Materials Management: Procedures, Text and Cases; A. K. Datta
- Industrial Engineering and Production Management; Martand Telsang
- Railway Transportation: Engineering, Operation and Management (2nd Ed.); S. Ponnuswamy
- CAD/CAM: Computer-Aided Design and manufacturing; M. Groover
- Strength of Materials; R. V. Raikar
- Engineering Mathematics; C. B. Gupta, S. R. Singh, Mukesh Kumar

Pearson New Age International (P) Ltd.

Narosa Publishing House

The Author

The Author

McGraw Hill Education (India) Pvt. Ltd.

> Shroff publishers & Distributors Pvt. Ltd.

Narosa Publishing House

McGraw Hill Education (India) Pvt. Ltd.

New Age International (P) Ltd.

McGraw Hill Education (India) Pvt. Ltd.

PHI Learning Pvt. Ltd.

S. Chand & Co.

Narosa Publishing House

McGraw Hill Education (India) Pvt. Ltd.

Narosa Publishing House

McGraw Hill Education (India) Pvt. Ltd.



IEI DIARY

Aerospace Engineering Division

Thirty-second National Convention of Aerospace Engineers on "Advances in Aerospace Sciences and Technologies"

Ranchi, October 27-28, 2018

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Ranchi 834002 [26: (0651) 2491344; web: ieijsc.org; e-mail: jharkhandsc@ieindia.org]

Agricultural Engineering Division

Thirty-second National Convention of Agricultural Engineers on "Agricultural Engineering for the Sustainable Rural and Agriculture Development in India"

Kota, August 18-19, 2018

The Honorary Secretary, IEI, Kota Local Centre, Near E S I Hospital, Jhalawar Road, Kota 324 005 [☎: 0744-2428250/9461655704; e-mail: kotalc@ieindia.org]

Thirty-third National Convention of Agricultural Engineers on "Commercial Crops Processing and Value Addition"

Agartala, August 10-11, 2019

The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Near Tripura Housing Board, P. O. Kunjaban, PB No 139, Agartala 799 006 [☎: 0381-2304700; Fax: 0381-2304700; e-mail: tripurasc@ieindia.org]

Architectural Engineering Division

All India Seminar on "Structural Aspects of Architectural Engineering"

Jaipur, June 09-10, 2018

The Honorary Secretary, IEI, Rajasthan State Centre, Gandhi Nagar, Tonk Road, Jaipur 302 015 [☎: 0141-2706327/2700413; Fax: 0141-2700413; e-mail: rajasthansc@ieindia.org]

All India Seminar on "Application of RERA in Society"

Goa, August 18-19, 2018

The Honorary Secretary, IEI Goa State Centre, D Type Quarters, D-8-1 Government Polytechnic Campus Altinho Panaji Goa 403 001 [28: 0832-2434686; e-mail: goasc@ieindia.org]

All India Seminar on "Architectural Engineering for First Track Constructions"

Nashik, September 09-10, 2018

The Honorary Secretary, IEI, Nashik Local Centre, PWD Campus, Bharat Ratna Sir Visvesvaraya Marg, Nashik 422 002 [26]: 0253-2317701/2582500; e-mail: nashiklc@ieindia.org]

International Conference on "Architectural Innovations: Engineering, Technology and Materials"

Jaipur, November 10-12, 2018

The Honorary Secretary, IEI, Rajasthan State Centre, Gandhi Nagar, Tonk Road, Jaipur 302 015 [☎: 0141-2706327/2700413; Fax: 0141-2700413; e-mail: rajasthansc@ieindia.org]

Thirty-fourthNationalConventionofArchitectural Engineers on "Architectural Engineering for Socio-economic Development"

Mangalore, November 24-25, 2018

The Honorary Secretary, IEI, Mangalore Local Centre, 2nd Floor Opal Complex, Opp Bejai Church Bejai, Mangalore 575 004; [奮: 0824-2400112; e-mail: mangalorelc@ieindia.org]

Chemical Engineering Division

All India Seminar on "Recent Trends in Chemical Engineering and Biotechnology in Mitigation of Global Warming"

Kolkata, August 17-18, 2018

The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700 020 [2012]: 033-22238914; Fax: 033-22233140; e-mail: wbsc@ieindia.org]

All India Seminar on "Waste Management For Sustainable Development"

Berhampur, August 17-18, 2018

The Honorary Secretary, IEI, Berhampur Local Centre, C/o The Executive Engineer, Quality Control Division, Courtpeta, Dist Ganjam, Berhampur 760004 [e-mail : berhampurlc@ieindia.org]

Thirty-fourth National Convention of Chemical Engineers on "Bio-degradable Materials and Bio-technology for Environmental Protection in Chemical and Pharmaceutical Industries" Chennai, October 26-27, 2018

The Honorary Secretary, IEI, Tamilnadu State Centre,, 19 Swami Sivananda Salai, Chepauk, Chennai 600005 [28: (044) 25360614/64998729; e-mail: tnsc@ieindia.org]

Civil Engineering Division

All India Seminar on "Sustainability in Construction and Civil Engineering"

Guwahati, June 23-24, 2018

The Honorary Secretary, IEI, Assam State Centre, Panbazar Overbridge, East Lane, Guwahati 781001 [260: 0361-2548742; Fax: (0361) 2630368; e-mail: assamsc@ieindia.org]

Workshop on "National Building Code of India – 2016"

Bhubaneswar, July 05-06, 2018

The Honorary Secretary, IEI, Odisha State Centre, Sachivalaya Marg, Unit-IV, Bhubaneswar 751001 [☎: (0674) 2390291; Fax: (0674) 2390630; e-mail: odishasc@ieindia.org]

Workshop on "Latest Provisions for Life and Fire Safety in NBC – 2016"

New Delhi, July 07, 2018

The Honorary Secretary, IEI, Delhi State Centre, Engineers Bhawan, Bahadur Shah Zafar Marg, New Delhi 110002 [2: (011) 23379052/23379948; Fax: (011) 23370489; e-mail: delhisc@ieindia.org]

Workshop on "Disaster Roof Construction and Other Risk Management Systems"

Ghaziabad, July 15, 2018

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15 Shopping Complex, ALTT Centre, Rajnagar, Ghaziabad 201002 [262: 0120-2728699/2702673; e-mail: ghaziabadlc@ieindia.org]

All India Seminar on "Application of EPC Contract in Highways : Opportunities and Challenges"

Ranchi, July 21-22, 2018

The Honorary Secretary, IEI, Jharkhand State Centre, Engineer Bhawan, Nepal Kothi Campus, Ranchi 834002 [26: (0651) 2491344; web: ieijsc.org; e-mail: jharkhandsc@ieindia.org]

One Day Seminar on "Alternatives to the Cement, Natural Sand and Aggregates in Modern Construction Practices"

Erode, July 23, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

All India Seminar on "Recent Developments in Concrete Composites"

Hyderabad, August 24-25, 2018

The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana [: 040-233114969; e-mail: telanganasc@ieindia.org; website: www.ieitsc.org]

All India Seminar on "Concrete and Steel Structures – Care for their Health and Longevity"

Bokaro, August 25-26, 2018

The Honorary Secretary, IEI, Bokaro Steel City Local Centre, Abhiyanta Bhavan, Sector 5A, Bokaro Steel City 827006 [☎: (06542) 267227 / 288972; e-mail: bokarolc@ieindia.org]

All India Seminar on "Reuse and Recycle of Wastewater"

Erode, August 30-31, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

Thirty-fourth National Convention of Civil Engineers, on "Innovative Trends in Civil Engineering for Sustainable Development"

Pune, September 28-29, 2018

The Honorary Secretary, IEI, Pune Local Centre, Abhiyanta Bhavan, 1332, J M Road,



Shivajinagar, Pune 411005, Maharashtra [267: 020-25533376 / 25520239 / 25530150; e-mail: punelc@ieindia.org]

Computer Engineering Division

All India Seminar on "Python Programming for IoT"

Kanchepuram, June 21-22, 2018

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

All India Seminar on "Data Analytics using R Language"

Erode, June 28-29, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

One Day Workshop on "Machine Learning Using Python"

Kanchepuram, July 04, 2018

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

One Day Seminar on "Cost Effective Solutions for Selection of Cloud Services Using Multi-Criteria Decision-Making Model"

Erode, July 25, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

One Day Workshop on "Wireless Sensor Networks"

Chandigarh, August 17, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Madhya Marg, Sector 19-A, Chandigarh 160019 [2: (0172) 2775418; Fax: (0172)2540133; e-mail: pcsc@ieindia.org]

All India Seminar on "Recent Trends in Image Processing"

Chandigarh, October 22-23, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Madhya Marg, Sector 19-A, Chandigarh 160019 [2: (0172) 2775418; Fax: (0172)2540133; e-mail: pcsc@ieindia.org]

Thirty-third National Convention of Computer Engineers on "Computer Cognitions and Intelligent Systems"

Ghaziabad, February 15-16, 2019

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15 Shopping Complex, ALTT Centre, Rajnagar, Ghaziabad 201002 [26: 0120-2728699/2702673; e-mail: ghaziabadlc@ieindia.org]

Electrical Engineering Division

All India Workshop "Challenges of Integrating Wind & Solar into the Electric Grid using Information Communication"

Tiruvallur, June 08-09, 2018

The Honorary Secretary, IEI, Tiruvallur Local Centre, Dr MGR Educational and Research Institute University, Periyar EVR HIgh Road (NH 4 Highway), Maduravoyal, Chennai 600 095 [e-mail: tiruvallurlc@ieindia.org]

One Day Seminar on "Smart Grid Technologies and Indian Power Scenario"

South Guiarat, June 23, 2018

The Honorary Secretary, IEI, South Gujarat Local Centre, Mahida Bhavan, Ichchhanath, Surat 395 007 [☎: 0261-2227340; e-mail: sglc@ieindia.org]

One Day Seminar on "Evolution of Fuel Cell Technology in Autonomous Vehicles using Internet of Vehicles (IoV)"

Salem, July 27, 2018

The Honorary Secretary, IEI, Salem Local Centre, 3rd Floor, SPC Bhawan, No.104/7, Manivannan Street, Opp to Salem New Bus Stand, Salem 636004, Tamilnadu [2: (0427) 2332544; e-mail: salemlc@ieindia.org]

All India Seminar on "Renewable Energy for Sustainable Development"

Ghaziabad, July 27-28, 2018

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15 Shopping Complex, ALTT Centre, Raj Nagar, Ghaziabad 201002 [28: 0120-2702673; e-mail: ghaziabadlc@ieindia.org]

One Day Workshop on "Designing of Embedded Systems using Arduino"

Salem, August 17, 2018

The Honorary Secretary, IEI, Salem Local Centre, 3rd Floor, SPC Bhawan, No.104/7, Manivannan Street, Opp to Salem New Bus Stand, Salem 636004, Tamilnadu [2: (0427) 2332544; e-mail: salemlc@ieindia.org]

All India Seminar on "Energy Management and Audit"

Vallabh Vidyanagar, September 23-24, 2018
The Honorary Secretary, IEI, Gujarat State
Centre, Bhaikaka Bhavan, Law College Road,
Ahmedabad 380 006 [26: 079-26400811;
Fax: 079-26561825; e-mail: gujaratsc@
ieindia.org]

International Conference on "Recent Developments in Clean and Safe Nuclear Power Generation"

Hyderabad, October 03-05, 2018

The Honorary Secretary, IEI, Telangana State Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana [: 040-233114969; e-mail: telanganasc@ieindia.org; website: www.ieitsc.org]

Thirty-fourth National Convention of Electrical Engineers on "Recent Advancement in High Voltage Direct Current (HVDC) Transmission" Agartala, November 10-11, 2018

The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Near Tripura Housing Board, PO: Kunjaban, PB No. 139, Agartala 799006, Telefax: 0381-2304700 [email: tripurasc@ieindia.org]

All India Seminar on "Renewable Energy Technologies: Perspectives and Challenges" Chandigarh, November 16-17, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [2:0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

Electronics & Telecom. Engg. Division

All India Workshop on "Internet of Things through Long-term Evolution Network"

Kanchepuram, July 23-24, 2018

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

One Day Seminar on "Wavelet Video Processing Technology"

Erode, August 14, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

All India Workshop on "Advance Wireless Communication and Its Implications"

Chandigarh, September 10-14, 2018

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

All India Seminar on "Role of Embedded System in Wireless Sensor Networks"

Chandigarh, October 12-13, 2018

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

Thirty-fourth National Convention of Electronics & Telecommunication Engineers on "Intelligent Telecommunication Networks for Sustainable Growth"

Ghaziabad, October 21-22, 2018

The Honorary Secretary, IEI, Ghaziabad Local Centre, 15 Shopping Complex, ALTT Centre, Rajnagar, Ghaziabad 201002 [26: 0120-2728699/2702673; e-mail: ghaziabadlc@ieindia.org]

Thirty-fifth National Convention of Electronics & Telecommunication Engineers on "Mechatronics: Bridge between Technologies"

Pune, November 23-24, 2019

The Honorary Secretary, IEI, Pune Local Centre, Abhiyanta Bhavan, 1332, J M Road,



Shivajinagar, Pune 411005, Maharashtra [26020-25533376 / 25520239 / 25530150; e-mail: punelc@ieindia.org]

Environmental Engineering Division

One Day Workshop on "Implementation of Hazardous Waste (M&TB)"

Ahmedabad, June 09, 2018

The Honorary Secretary, IEI, Gujarat State Centre, Bhaikaka Bhavan, Near Law Garden, Law College Road, Ellisbridge, Ahmedabad 380006 [2079] 26400811; Telefax: (079) 26561825; e-mail: gujaratsc@ieindia.org]

One Day Seminar on "Environmental Pollution and Management"

Aurangabad, August 08, 2018

The Honorary Secretary, IEI, Aurangabad Local Centre, Railway Station Road, Osmanpura, Aurangabad 431005 [Fax: (0240) 2325621; e-mail: aurangabadlc@ieindia.org]

Thirty-fourth National Convention of Environmental Engineers on "Environmental Pollution and Climate Change"

New Delhi, August 10-11, 2018

The Honorary Secretary, IEI, Delhi State Centre, Engineers Bhawan, Bahadur Shah Zafar Marg, New Delhi 110002 [26: (011) 23379052/23379948; Fax: (011) 23370489; e-mail: delhisc@ieindia.org]

All India Seminar on "Advanced Techniques for Sustainable Solid Waste Management for Green India"

Erode, October 4-5, 2018

The Honorary Secretary, IEI, Erode Local Centre, Texvalley Campus, Gangapuram, Erode 638102 [e-mail: erodelc@ieindia.org]

All India Seminar on "Sources of Planet Energy, Environmental & Disaster Science: Climate Disturbances & its Global Impact" Lucknow, October 27-28, 2018

The Honorary Secretary, IEI, Uttar Pradesh State Centre, Engineers Bhawan River, Bank Colony Lucknow 226 018 [Telefax: (0522) 2625322; e-mail: upsc@ieindia.org, website: www.ieiup.org.in]

Marine Engineering Division

Thirty-second National Convention of Marine Engineers on "Indian Maritime Sector – An Ocean of Opportunities"

Chennai, August 16-18, 2018

The Honorary Secretary, IEI, Tamilnadu State Centre,, 19 Swami Sivananda Salai, Chepauk, Chennai 600005 [28: (044) 25360614/64998729; e-mail: tnsc@ieindia.org]

Mechanical Engineering Division

One Day Workshop on "Gearing and Bearing of Bulk and Unit Material Handling"

Ranchi, June 23, 2018

The Honorary Secretary, IEI, Jharkhand State

Centre, Engineer Bhawan, Nepal Kothi Campus, Ranchi 834002 [(0651) 2491344; web: ieijsc.org; e-mail: jharkhandsc@ieindia.org]

One Day Seminar on "Recent Trends in Condition Monitoring of Rotating Equipment in Steel, Mines and Power"

Durgapur, July 15, 2018

The Honorary Secretary, IEI, Durgapur Local Centre, Nehru Avenue, 'B' Zone, Durgapur 713205 [Telefax: 0343-2564770; e-mail: ieidurgapurlc@ieindia.org]

All India Seminar on "Optimization Techniques in Mechanical Engineering"

Chandigarh, July 26-27, 2018

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

Thirty-fourth National Convention of Mechanical Engineers on "Mechanical Engineering and Emerging Challenges for Manufacturing" Delhi, September 07-08, 2018

The Honorary Secretary, IEI, Delhi State Centre, Engineers Bhawan, Bahadur Shah Zafar Marg, New Delhi 110002 [☎: (011) 23379052/23379948; Fax: (011) 23370489; e-mail: delhisc@ieindia.org]

All India Workshop on "Micro-machining" Chandigarh, September 18-19, 2018

The Honorary Secretary, IEI, Punjab & Chandigarh State Centre, Sector 19A Madhya Marg, Chandigarh 160 019 [28: 0172-2775418; Fax: 0172-2540133; e-mail: pcsc@ieindia.org]

Thirty-fifth National Convention of Mechanical Engineers, on "Exploring Trends and Developments in Automobile Engineering"

Hosur, September 13-14, 2019

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

Thirty-sixth National Convention of Mechanical Engineers, on "Innovations in Thermal Science and Engineering"

Agartala, September 05-06, 2020

The Honorary Secretary, IEI, Tripura State Centre, Pandit Nehru Complex, Near Tripura Housing Board, P. O. Kunjaban, PB No 139, Agartala 799 006 [32: 0381-2304700; Fax: 0381-2304700; e-mail: tripurasc@ieindia.org]

Metallurgical & Materials Engg. Division

All India Seminar on "Advances in Metallurgy and Manufacturing Processes"

Hyderabad, July 13-14, 2018

The Honorary Secretary, IEI, Telangana State

Centre, Visvesvaraya Bhavan, Khairatabad, Hyderabad 500004, Telangana [: 040-233114969; e-mail: telanganasc@ieindia.org; website: www.ieitsc.org]

One Day Seminar on "Green Polymer Composite and its Applications"

Kolkata, July 25, 2018

The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [28: (033)22238914; Fax: (033) 22233140; e-mail: wbsc@ieindia.org]

Thirty-second National Convention of Metallurgical & Materials Engineers, on "Major Advances and Sustainable Developments in Materials and Metallurgical Engineering"

Jamshedpur, January 17-19, 2019

The Honorary Secretary, IEI, Jamshedpur Local Centre, Subarnarekha Link Sakchi, Jamshedpur 831 001 [26: 0657-2234316; Fax: 0657-2230159; e-mail: jamshedpurlc@ieindia.org]

Mining Engineering Division

All India Seminar on "Emerging Mining Methods and Machinery"

Dhanbad, August 24-25, 2018

The Honorary Secretary, IEI, Dhanbad Local Centre, Veena Engineers' Building, Golf Ground, Dhanbad 826001 [e-mail: dhanbadlc@ieindia.org]

Textile Engineering Division

All India Seminar on "Quality Evaluation Methods for Textiles"

Kolhapur, July 24-25, 2018

The Honorary Secretary, IEI, Kolhapur Local Centre, C/O Executive Engineer Minor Irrigation Division Sinchan Bhavan Tarabai Park, Kolhapur 416 003 [Mobile : 9422625485; e-mail: kolhapurlc@ieindia.org]

Interdisciplinary Coordination Committee

International Conference on "Emerging Technologies for Sustainable and Intelligent Technologies for HVAC & R Systems"

Kolkata, July 27-28, 2018

The Honorary Secretary, IEI, West Bengal State Centre, 8 Gokhale Road, Kolkata 700020 [28: (033)22238914; Fax: (033) 22233140; e-mail: wbsc@ieindia.org]

National Languages Promotional Comm.

All India Seminar on "Harit Evam Swachh Urja Ka Nirman Ke Upyog"

Lucknow, August 25-26, 2018

The Honorary Secretary, IEI, Uttar Pradesh State Centre, Engineers Bhawan River, Bank Colony Lucknow 226 018 [Telefax: (0522) 2625322; e-mail: upsc@ieindia.org, website: www.ieiup. org.in]

Journals of The Institution of Engineers (India) are now SCOPUS indexed

All the following journals of The Institution of Engineers (India), which were already approved by UGC are now SCOPUS indexed.

Journals of the Institution are grouped into following five Series:-

Journal of The Institution of Engineers (India): Series A

- Civil, Architecture, Agriculture & Environmental Engineering
- Published in March, June, September and December 4 issues in a year
- UGC approved
- SCOPUS indexed

Journal of The Institution of Engineers (India): Series B

- Electrical, Computer and Electronics & Telecommunication Engineering
- · Published in February, April, June, August, October and December 6 issues in a year
- UGC approved
- SCOPUS indexed

Journal of The Institution of Engineers (India): Series C

- Mechanical, Production, Aerospace & Marine Engineering
- · Published in February, April, June, August, October and December 6 issues in a year
- UGC approved
- SCOPUS indexed

Journal of The Institution of Engineers (India): Series D

- Mining and Metallurgy & Materials Engineering
- Published in June and December 2 issues in a year
- UGC approved
- SCOPUS indexed

Journal of The Institution of Engineers (India): Series E

- Chemical and Textile Engineering
- · Published in June and December 2 issues in a year
- UGC approved
- SCOPUS indexed

Free e-Access to all Journals of IEI for Corporate Members

For getting free e-access to the journals of IEI and downloading of papers, please visit www.ieindia.org and sign in with your membership number and password.

If you are a new member having no password, you may also create an account from our website.

For any further assistance regarding password, please write to edp@ieindia.org quoting your Name, Membership No., Mobile no. and Email address

Submission of paper in IEI Journals

Series 'A': www.editorialmanager.com/ieia

Series 'B': www.editorialmanager.com/ieib

Series 'C': www.editorialmanager.com/ieic

Series 'D': www.editorialmanager.com/ieid

Series 'E': www.editorialmanager.com/ieie

Please follow the Author's Guidelines as already given in the above links, failing which the paper cannot be considered for publication. You may therefore submit your paper through the above web links whichever is applicable for your paper.



Journal of The Institution of Engineers (India)









NEWS-IN-BRIEF

The following is a brief account of Technical Activities organised by various Centres of the Institution

STATE CENTRES

Andhra Pradesh

- Celebrated 'National Survey Day 2018' on April 10, 2018.
- Celebrated 'World Earth Day 2018' on April 22, 2018.

Assam

 Lecture on 'Sustaining Life on Earth by Ecosystem' delivered by Prof Mohammad Jawed, Department of Civil Engineering, IIT Guwahati on March 3, 2018.

Bihar

• Lecture on 'Solar Energy - The Only Alternative' delivered by Prof (Dr) Santosh Kumar, Former Professor, NIT Patna on March 17, 2018.

Chhattisgarh

 Lecture on 'Demystifying Intellectual Property Rights: The Patent Context' delivered by Prof Hulas Pathak, College of Agriculture, IGKV, Raipur, Chhatttisgarh on March 24, 2018.

Gujarat

• Workshop on 'Meditech' on March 23, 2018.

Jharkhand

 Organized an Interactive Session with Technician Chapter on March 11, 2018.

Karnataka

- Celebrated 'World Meteorological Day 2018' on March 21, 2018.
- Celebrated 'World Heritage Day 2018' on April 19, 2018.

Punjab & Chandigarh

 Organized Faculty Development Programme on 'Cyber Security and Big Data Analytics' during February 26 – March 2, 2018.

Telangana

- Er V Subba Rao First Endowment Lecture on 'Safety Plan for Emergency Maintenance of a Sewerage/Storm Water Drainage System' delivered by Dr D M Mohan, World Bank Consultant on January 26, 2018.
- Er M Thirpath Reddy Seventh Endowment Lecture on 'Details of Kaleswaram Project' delivered by Mr B Ananta Ramloo, Former Chief Engineer, Irrigation & CAD Department, Govt. of Andhra Pradesh and TSCC Member on February 5, 2018.
- Organized Panel Discussion on 'LEDs: Facts & Myths' on February 27, 2018.
- Celebrated 'National Science Day 2018' on February 28, 2018.
- Dr J Purushottam Thirteenth Endowment Lecture on 'Irrigation Projects

 Post Benefits' delivered by Mr Bhupathiraju Nagendra Rao, Engineer-in-Chief (Admn.), Irrigation & CAD Department, Government of Telangana on March 2, 2018.

Uttar Pradesh

- Seminar on 'Solid Waste Management & Technology' on March 18, 2018.
- Lecture on 'Integrated Management of Water Resources in Canal

- Command' delivered by Dr P K Srivastava, Retd. Chief Engineer, UP Irrigation Department on March 26, 2018.
- Lecture on 'Neuro Linguistic Programming (NLP): A Tool for Achieving Excellence in Academics' delivered by Dr Dheeraj Mehrotra, Academic Evangelist, Next Education India Pvt. Ltd., Hyderabad on April 10, 2018.

West Bengal

 Seminar on 'Metro Rail in Soft Soil – Kolkata Metro' on February 28, 2018

LOCAL CENTRES

Agra

- Seminar on 'Water Conservation' on February 15, 2018.
- Seminar on 'Energy and Water Conservation in Daily Life' on March 18, 2018

Alwar

Seminar on 'Industrial Safety and Fire Control' on March 14, 2018

Asansol

- Technical Paper Meeting on 'Internet of Things'; 'Smart Lighting' and 'Block Chain and Cryptocurrency' on February 9, 2018.
- Lecture on 'Minimizing Energy Requirement and Making Effective Waste Heat Recovery at SAIL-ISP, Burnpur' delivered by Mr Vikrant Chitale, Deputy Manager (EMD), SAIL-ISP, Burnpur on February 16, 2018.
- Technical Paper Meeting on 'Air Breathing Aqueous Flow Battery' and 'Electromagnetic Braking System' on March 3, 2018.
- Lecture on 'New Rolling Mills at SAIL-ISP Burnpur' delivered by Mr Sandip Ganguly, DGM, (WRM & BM) Operations, SAIL-ISP Burnpur, on March 16, 2018.
- Technical Paper Meeting on 'Artificial Intelligence' and 'SG Wireless Technology' on April 13, 2018.

Bareilly

 Workshop on 'Coding Based Line Follower and Edge Follower Robot' on April 13, 2018.

Durgapur

 Seminar on 'Indian Opencast Blasting Protection: A Critical Appraisal' on March 4, 2018

Erode

• Seminar on 'Application of the Finite Element Method of Analysis in Solving Boundary Value Problems' on March 19, 2018.

Faridabad

Lecture Meeting on 'Total Quality Management' on March 21, 2018.

Gwalio

• Celebrated 'National Safety Day 2018' on March 4, 2018.

Indor

 Lecture on 'Legal Aspects of Mining' delivered by Mr Sharad B Sarwate, Mining and Demolition Expert and Technical Director, M/s Vijay Stone Quarries Pvt Ltd, Hyderabad on February 28, 2018.

Kanchepuram

- Workshop on '3D Modeling of Building Structures Using Autodesk Revit Architecture' on March 7, 2018.
- Workshop on 'Recent Trends in Robotics and Automation' on March 9, 2018.
- Workshop on 'loT Using Raspberry Pl' on March 12, 2018.

- Workshop on 'The Role of Remote Sensing in Civil Engineering' on March 14, 2018.
- Workshop on 'Novel Advances in Concrete Technology and Sustainable Concrete Construction Practice' on March 19, 2018.
- Workshop on 'Project Planning Construction and Management Beginner's Guide' on March 28, 2018.
- Workshop on 'Web Application Development Using PHP with MySQL' on April 4, 2018.

Kolhapur

 Lecture on 'Skill Development in Food Processing' delivered by Dr S S Thorat, Head, Food Science and Technology, MPKV Rahuri on March 9, 2018.

Kollam

- Seminar on 'Microcontrollers' on February 28, 2018.
- Workshop on 'Artificial Intelligence using Python' on March 11, 2018.

Kota

- Celebrated 'National Science Day 2018' on February 28, 2018.
- Celebrated 'World Earth Day' on April 22, 2018.

Meerut

Lecture on 'Ash Utilization' delivered by Mr Ram Nivas on April 8, 2018.

Nashik

- One Day Seminar on 'Automated Driverless Vehicle' on March 2, 2018.
- One Day Seminar on 'Mandates and Implementation of ICAO Requirement for Indian Aviation' on March 13, 2018.
- One Day Seminar on 'Air Traffic Control (ATC)' on March 24, 2018.
- One Day Seminar on 'Inline Drip Irrigation for Horticultural Crops' on April 9, 2018.

Neyveli

- Lecture on 'Solar Energy Generation Opportunities' delivered by Mr P Mahendra Kumar, Deputy Chief Engineer, P&BD, NLC India Ltd. on March 9, 2018.
- Lecture on 'Project Scheduling and Monitoring A Digital Way' delivered by Mr K A Prabhakar, VP, CADD Centre, BIM & PPM, Chennai and Mr C P Ronald Reagan, Technical Head, Synergy, Chennai on March 26, 2018.
- Lecture on 'Nuclear Energy in India Emergence, Issues & Prospects' delivered by Mr V Chandrasekar, DGM, Indian Rare Earths Ltd., Kerala on March 31, 2018.

North Bengal

 Lecture on 'Application of Emerging Signal Processing Tools in Induction Motor Condition Assessment' delivered by Dr Santanu Das, Associate Professor, Electrical Engineering Department, Jalpaiguri Government Engineering College, Jalpaiguri on March 21, 2018.

Roorkee

• Organized 'Financial Awareness Programme' on April 18, 2018.

Rourkela

- Lecture on 'Polygenration System in Industries' delivered by Prof S Murugan, Department of Mechanical Engineering, NIT Rourkela on March 14, 2018.
- Lecture on 'Modeling and Analysis of CNT-Reinforced Composite Structure- Micro to Macroscale' delivered by Prof S K Panda, Department of Mechanical Engineering, NIT Rourkela on April 20, 2018.

Salem

- Seminar on 'Challenges in Modern Power System Operation and Control' on February 13, 2018.
- Seminar on 'Recent Trends in Solar Energy with Efficient IoT Control' on February 26, 2018.

Saurashtra

- Lectures on (i) 'Need of Safety Awareness in Civil Engineering Field' delivered by Mr B V Harsoda, (Retd. Deputy Executive Engineer, R&B Department, Government of Gujarat and (ii) 'Occupational Health and Safety' delivered by Mr Navin G Pithadia, Consulting Engineer and Valuer, Plant and Machinery – Rajkot on February 6, 2018.
- Celebrated '49th Foundation Day' of the Centre during February 19-20, 2018.
- Lecture on 'Advancement in Machine Tools Technology & Future Prospects for Mechanical Engineering Field' delivered by Dr Dinesh Kahambhayata, Director, Gujarat Lathe (Shapar), Rajkot on April 10, 2018.

Tiruchirappalli

- Lecture on 'Peer to Peer Computing: Issues and its Applications' delivered by Dr S Moses Dian, Professor and Head, CSE Department, MAM College of Engineering & Technology, Tiruchirappalli on January 9, 2018.
- Lecture on 'Global Carbon Capture, Utilization and Storage to Combat Climate Change' delivered by Dr M Velan, Council Member, IEI & Deputy General Manager (Environment), Corporate Environment Cell, NLC India Ltd, Nevveli on January 23, 2018.
- Lecture on 'Smart City Mission, Tiruchi with Special Reference to BHEL' delivered by Mr V Ganapathy, Special Correspondent, THE HINDU (Retd.), on February 1, 2018.
- Lecture on 'Basics of Aeronautics & Aerospace' delivered by Mr Karthik Subramanian, Assistant Professor (Aerospace Engineering & Director In-Charge of CETAT), Periyar Maniammai Institute of Science and Technology, Vallam on February 6, 2018.
- Lecture on 'Consumer, Corruption and Technology' delivered by Mr S Pushpavanam, Secretary, Consumer Protection Council, Tamilnadu on February 13, 2018.
- Lecture on 'Applications of IT & ITes in Today's World' delivered by Mr S Manikandan, Head of Department / Chairman - Board of Studies, Information Technology, E.G.S Pillay Engineering College (Autonomous), Nagapattinam on February 20, 2018.
- Lecture Meeting on 'Types of Steels & Their Processing (Steel 18)' on February 23, 2018.
- Lecture on 'Current Scenario in Textile Engineering' delivered by Mr G Balakrishnan, Committee Member of the Centre on February 27, 2018.

Tiruvallur

 Lecture on 'Research Challenges in Power Engineering' delivered by Dr D P Kothari, Former Director, IIT Delhi on April 5, 2018.

Udaipur

 Seminar on 'Role of Women Engineers in Society including CSR Projects' on March 10, 2018.

Visakhapatnam

- Lecture on 'Women Empowering for Women Steel Executives' delivered by Ms Rama Devi, DGM (PP), RINL, Vizag Steel Plant on March 8, 2018.
- Workshop on 'Valves and Pump Maintenance & Safety Aspects' on March 28, 2018.
- Lecture Meeting on 'Personality Development and Corporate Culture' on April 24, 2018.

Notification for

R&D Grant-in-Aid (2018-19)

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

Like every year, the Institution invites applications for the session 2017-2018 for funding industry-oriented R&D projects and research initiatives aimed at improving the life-style of common people from engineering students pursuing Diploma/UG/PG/Ph. D courses. The application form and guidelines are available in our website https://www.ieindia.org. The projects should be carried out under the guidance of faculty members who are Corporate Members (AMIE/MIE/FIE) of IEI. Membership criteria for students are as follows:

Project Category	Student/Applicant Membership		
1. Diploma	Not mandatory. Membership of Student Chapter is desirable		
2. UG (BE/B. Tech/AMIE/ Equivalent)	Preferably 'Student Member' (SMIE)		
3. PG (ME/M. Tech/Equivalent)	Should be 'Corporate Member'		
4. Ph. D	Should be 'Corporate Member'		

The soft copy of the duly filled-up applications (in editable format), as per the given proforma, should be sent through email to research@ieindia.org and one printed copy of the same, duly sealed and signed should reach the following address:

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

Applications received in format other than that available on our website will not be accepted. Application should be forwarded through the Guide, Head of the Department or Head of the Institution. Please note that preference will be given to project proposals received from Institutions who are members of The Institution of Engineers (India). Kindly go through the guidelines (visit link https://www.ieindia.org/webui/IEI-Activities.aspx#RnD-Initiative)carefully before filling up the application.

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

TWENTY-SIXTH IEI CONVOCATION AND TECHNICIANS'/STUDENTS' CONVENTION

Ranchi, November 03-04, 2018

Theme: Challenges and Opportunities in Sustainable Development

Sub-themes:

Technical papers are invited on following sub-themes:

- Advanced Manufacturing Creation for Sustainability
- Sustainable Design and Innovation in Product Development
- Sustainable Transport Infrastructure
- · Renewable Energy and its Impact on Environment

With this in focus, papers are invited from Technician/Senior Technician members, students of polytechnics and engineering colleges for presentation in the All India Technicians'/Students' Convention to be held on November 03, 2018 at Ranchi, Jharkhand. The papers shall be on innovative ideas, design, prototype and technology development, case studies, survey details augmenting innovations, etc. pertaining to the theme so as to reach at Jharkhand State Centre latest by September 25, 2018.

Organized by: The Institution of Engineers (India) Hosted by: Jharkhand State Centre

For further information, please contact:

The Organising Secretary (Convocation 2018)

The Institution of Engineers (India)

Jharkhand State Centre

Engineer Bhawan, Nepal Kothi Campus

Doranda, Ranchi 834002, Jharkhand

Phone: 9431392111

E-mail: ieiconvocation2018@gmail.com

IVRS at IEI HQ

For General Enquiry,
please dial IVRS No. (033) 4015 5400
Contact for queries related to
Examination: exams@ieindia.org
Membership and change of address:
membership@ieindia.org

Superannuation from IEI



Mr Deba Priya Ghosal, an employee of the Institution HQ will be superannuated from the services of IEI on May 31, 2018. He joined the Institution on May 1, 1983 and rendered his services to the Institution for a period of over 35 years.

IEI wishes Mr Deba Priya Ghosal and his family a happy and healthy life in future.



Mr R Raju, an employee of Neyveli Local Centre of the Institution will be superannuated from the services of IEI on May 31, 2018. He joined the Institution on January 1, 1983 and rendered his services to the Institution for a period of over 35 years.

IEI wishes Mr R Raju and his family a happy and healthy life in future.

IEI Industry Excellence Award 2018 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 2018. The last date of receipt of application for the Award 2018 is **August 31**, **2018**. Interested applicants are requested to send their applications (5 hard copies & 1 soft copy in CD) to the below mentioned address.

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

Advertisement Rates in IEI Publications

IEI News (Printed + online)

Reach: 1,25,000 members by email + 3200 hard copies to industries,

Government Departments and others + Available online

Schedule: Monthly - 12 issues in a year

Rate per issue

Description	Size	Туре	Total Cost (Rs.) (including GST)
Inside Full Page	20.6 cm (width) x 27.6 cm (height)	Colour	50,000
Inside Half Page	20.6 cm (width) x 13.75 cm (height)	Colour	30,000
Inside Quarter Page	10.3 cm (width) x 13.75 cm (height)	Colour	15,000

5% discount for advertisement in 6 consecutive issues 10% discount for advertisement in 12 consecutive issues

IEI Epitome (Online)

Reach: 1,25,000 members by email + Available online perpetually

Schedule: Monthly - 12 issues in a year

Rate per issue

Description	Size	Туре	Total Cost (Rs.) (including GST)
Inside Full Page	18.9 cm (width) x 23.1 cm (height)	Colour	30,000
Inside Half Page	18.9 cm (width) x 11.55 cm (height)	Colour	15,000
Inside Quarter Page	9.46 cm (width) x 11.55 (height)	Colour	8,000
5% discount for advertisement in 6 consecutive issues 10% discount for advertisement in 12 consecutive issues			

Annual Technical Volumes of Engineering Divisions (Printed + online)

Aerospace Engineering Division	Agricultural Engineering Division		
Architectural Engineering Division	Chemical Engineering Division		
Civil Engineering Division	Computer Engineering Division		
Electrical Engineering Division	Electronics & Telecommunication Engineering Division		
Environmental Engineering Division	Marine Engineering Division		
Mechanical Engineering Division	Metallurgical and Materials Engineering Division		
Mining Engineering Division	Production Engineering Division		
Textile Engineering Division	Interdisciplinary Coordination Committee		

Reach: 1,25,000 members by email + 500 hard copies to industries and Government Departments + Available online

Schedule: One issue in a year per Engineering Division

Rate per issue

Description	Size	Туре	Total Cost (Rs.) (including GST)
Back Cover Page	16.8 cm (width) x 22.6 cm (height)	Colour	30,000
Inside Cover Page	16.8 cm (width) x 22.6 cm (height)	Colour	25,000
Inside Full Page	16.8 cm (width) x 22.6 cm (height)	Colour	20,000
Inside Full Page	16.8 cm (width) x 22.6 cm (height)	B/W	15,000
Inside Half Page	16.8 cm (width) x 11.3 cm (height	B/W	8,000

For booking, Please write to:

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

Email: technical@ieindia.org

[Payment is to be made by 'at par' cheque drawn in favour of The Institution of Engineers (India)]



Owner: The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700 020 Printer: Maj Gen S Bhattacharya, VSM (Retd), Secretary & Director General Publisher: Maj Gen S Bhattacharya, VSM (Retd), Secretary & Director General Published from: 8 Gokhale Road, Kolkata 700 020

Printed from : M/s Florence Offset Process Pvt. Ltd. 6A S N Banerjee Road, Kolkata 700013

Editor : Maj Gen S Bhattacharya, VSM (Retd), Secretary & Director General

President : Mr Sisir Kumar Banerjee

Editor: Maj Gen S Bhattacharya, VSM (Retd)

Associate Editor: Mr S Chaudhury

Special Contributors: Mr N Sengupta, Mr K Sen, Dr S Ghosh, Mr T Chakraborty, Ms A Dutta, Mr P Mukhopadhyay, Mr A Basu, Ms H Roy, Mr S Bagchi

The Institution of Engineers (India) as a body accepts no responsibility for the statements made by individuals. Reprints of any portion of the publication may be made provided reference thereto is quoted.

Telephones: 91-33-2223 8311/14/15/16; Facsimile: 91-33-2223 8345 Web: http://www.ieindia.org; E-mail: iei.technical@gmail.com