



I.E.I NEWS



June 2020

Water, Energy and Biodiversity for Sustainable Development of BIMSTEC Countries

02

Supply Chain Management - Post Covid 19 Lockdown Challenges and Remedies

03

Computational and Non-computational Tools involved in Aircraft Engine and Structural Health Monitoring System

04

Reports of World Telecommunication and Information Society Day 2020

06

A CENTURY OF SERVICE TO THE NATION

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From the President's Desk.....

The COVID 19 pandemic is set to change the world and the global economy is likely to show deeper contraction with a multidimensional impact. Along with the imperative of restarting economic activity, a new balance between work, life and learning has to be envisaged. Moreover, disruption in higher education in general and engineering education in particular would create its own challenges. Students are gradually being engaged with a new form of technology-driven teaching - learning process. As forecasted, in the long run, Information and Communication Technology (ICT) will be increasingly leveraged as a new paradigm of learning. A Hybrid model of education with synchronized learning modules is being thought of in the near future. The pervasive digital technology would be used to provide student centric experimental and collaborative learning, strengthening professional and soft skills of students, and application of online open courseware and continuous up gradation of faculty skills. All these would need to be enriched with industry oriented internship with live projects, adaptation of appropriate learning platforms, and so on. Moreover, there is a limit to be drawn between the extent technology is to be used in engineering education keeping its' efficacy in mind.



As a part of IEI Centenary Webinar series, a Webinar was organized on 6 June, 2020 on the subject 'Leadership and Change Management in VUCA World', wherein Mr Ajay Sharma, Leadership Coach & CEO, TPC Global was the speaker. Another Webinar as a part of this series was organized on 15 June, 2020 on the theme 'Transforming Engineering Education – Emerging Scenario', where two experts, Prof R K Shevgaonkar, Vice Chancellor, Bennett University & Former Director, IIT Delhi and Mr B V R Mohan Reddy, Executive Director, CYIENT outlined the practical insights regarding the current situation and the rapid acceleration in widespread use of digital technology and the forthcoming challenges in applying the same in the engineering education domain.

Various Centres of IEI are also organizing Webinars on contemporary subjects related to education, science and engineering. I do hope you would be logging in and availing of our value added services to the corporate members of IEI.

Stay Safe. Stay Healthy.

Webinar

Rejuvenating Construction Sector - Post Covid 19 Lockdown

The Institution of Engineers (India), **Jabalpur Local Centre** organized Webinar on the theme 'Rejuvenating Construction Sector - Post Covid 19 Lockdown' on 10 May 2020. The Chief Guest during the function, Mr Narendra Singh, President, IEI in his address congratulated Jabalpur Local Centre for organising the Webinar on such an important topic in this odd situation. Mr V B Singh, Council Member and Chairman, Civil Engineering Division Board, IEI presided over the function. Mr Rakesh Kumar Rathore, and Prof H B Goswami, Council Members, IEI were also present during the occasion. Mr D S Parihar, Indore Local Centre, IEI while delivering the Keynote address, highlighted the challenges to resume the civil construction works that have been derailed due to lockdown. In his presentation, Mr Parihar highlighted the relevant issues, namely; Resume

working with social distancing norms and sanitization protection protocols; Availability of workers and staff as well as absenteeism; Protection of employees and work groups from infection; Transportation arrangement of employees to commute; Maintenance of plant machinery and premises; Payment of salary & wages; Shortage of resources and required input supply; Planning for receiving raw material and delivery of products; Less demand due to fall in consumption in non-essential sectors; Volatilities in prices of inputs & supply; Receiving outstanding payments; Rent, utility and tax payments; Bank installments and interest service; Cash flow rotation etc. Mr Komal Chandra Jain, Retd. Chief Engineer, Govt. of Botswana and Zimbabwe, South Africa delivered Lecture on 'Safety in Construction'. Mr Vedant Shrivastava, HoD, Civil Engineering Department, Gyan Ganga Group of Institutions Jabalpur delivered Lecture on the theme. Mr Deepak S Shah, Honorary, Secretary, Indore Local Centre, IEI, Mr Prabhat Bhargava, Chairman, Gwalior Local Centre, IEI, Committee Members of Jabalpur Local Centre and students from different Engineering Colleges also attended the Webinar. Earlier, Mr Tarun Kumar Anand, Chairman, Jabalpur Local Centre welcomed the speakers and audience. Dr. Sanjay Verma, Committee Member, Jabalpur Local Centre, The Institution of Engineers (India) and moderator conducted the Webinar. Mr Prakash Chandra Dubey, Honorary Secretary, Jabalpur Local Centre proposed vote of thanks to all dignitaries, participants and guests for their valuable support in organising the Webinar.



Water, Energy and Biodiversity for Sustainable Development of BIMSTEC Countries

Tripura State Centre of the Institution organized International Conference on the theme "Water, Energy and Biodiversity for Sustainable Development of BIMSTEC Countries" under the aegis of Electrical Engineering Division Board of IEI at Rabindra Bhawan, Agartala during 12-14 December, 2019. The event was inaugurated by Ambassador M Shahidul Islam, Secretary General, Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), Dhaka. Prof S Ayyappan, Chancellor, Central



Agricultural University, Imphal and Former Director General, Indian Council of Agricultural Research (ICAR), New Delhi and Dr Bidyut Baran Saha, Professor and Principal Investigator, Thermal Science and Engineering Division, International Institute for Carbon-Neutral Energy Research, (WPI-I2CNER), Kyushu University, Japan graced the occasion as Special Guests and addressed the gathering. Ambassador M Shahidul Islam, Secretary General, BIMSTEC, Dhaka in his address explained the geographical importance of North-east India as the region is centrally located among

the BIMSTEC member countries and mentioned that the collaboration and cooperation between member countries are very much required to address the problems like scarcity of potable water in the coastal region of Bay of Bengal, requirement of infrastructure development and uninterrupted energy supply. Dr Bidyut Baran Saha, in his address emphasized on more collaboration and cooperation between seven sisters States of India and Bangladesh for socio-technical development of the region. Prof S Ayyappan, in his address mentioned South-east Asia as the biodiversity hub which should be protected in sustainable manner so that humans can also be benefitted. Dr T M Gunaraja, the then President, IEI presided over the function. Mr R R Tanwar, Chairman, Electrical Engineering Division Board, IEI in his address briefed about BIMSTEC initiatives in member countries for sustainable development of biodiversity, water and energy resources which will be beneficial for future generation. Mr Sisir Kumar Banerjee, the then Immediate Past President, IEI, briefed the audience about initiatives taken by IEI for advancement of engineering education. Earlier, Mr Anup Kumar Mitra, Council Member, IEI welcomed the august gathering. The vote of thanks was proposed by Mr Tapan Lodh, the then Chairman, Tripura State Centre. A souvenir was released on the occasion by the dignitaries on the dais in the inaugural session.

A Plenary Session was organized to set the tone of the Conference where, eminent Panelists had thrown lights on hydro power generation, its pros and

Contd. on page 4

All India Seminar of Interdisciplinary Coordination Committee

Opportunities for Industry 4.0 Applications in Indian Industries

Tiruchirappalli Local Centre of the Institution in association with the Siemens Centre of Excellence (CoE) in Manufacturing, National Institute of Technology, Tiruchirappalli organized All India Workshop on the theme 'Opportunities for Industry 4.0 Applications in Indian Industries' during 03-04 January, 2020. The Chief Guest of the function, Prof Dr Mini Shaji Thomas, Director, National Institute of Technology, Tiruchirappalli in her inaugural address highlighted on various initiatives taken by IEI and NIT Trichy for serving the nation. Dr - Ing M Duraiselvam, Professor, Department of Production Engineering



, NIT Trichy and the Convener of the Workshop addressed the gathering about the theme of the Workshop. There were technical presentations by eminent resource persons during the Workshop with a field visit to the Siemens Centre of Excellence in Manufacturing, NIT Trichy. Dr - Ing M Duraiselvam during his technical presentation introduced about different features and associated bottlenecks of Industry 4.0. Mr Anand Phadnis, Pre

Sale Solution Manager, Siemens PLM Software, Bangalore enlightened the audience about empowering next generation of digital talent. Mr G Shankar, Manager, Car Manufacturing Production Division, Hyundai Motors India Ltd, Chennai deliberated on challenges in transitions to Industry 4.0. Mr Shaik Khaleel Baig, Hyundai Motors India Ltd, in his address presented an insight into line & mass production with specific applications pertaining to Industry 4.0. Mr R Kumar, Past Chairman, Tiruchirappalli Local Centre, IEI deliberated on the topic 'State of the Art Manufacturing Technologies in Power Sector'. Dr M Venkata Kirthiga, Associate Professor, Department of Electrical & Electronics Engineering, NIT Trichy deliberated Lecture on 'Industry 4.0 in Electrical Engineering and the Nuances of the Smartness in Electrical Utility Grid'. Dr S Vinodh, Department of Production Engineering, NIT Trichy in his address focused on 'Industry 4.0 Integration with Management Concepts'. A Technical Visit was organized in this occasion in Siemens Centre of Excellence in Manufacturing comprises sophisticated Laboratories for Design and Validation, Advanced Manufacturing, Test and Optimization, Automation, Electrical and Energy savings, Process Instrumentation, Mechatronics, CNC Machines, CNC Controller, Robotics, Rapid Prototyping and Internet of Things. Earlier, Prof (Dr) Natarajan Kumaresan, Chairman, Tiruchirappalli Local Centre and Council Member, IEI welcomed the gathering. Mr A Anand, Honorary Secretary, Tiruchirappalli Local Centre, IEI proposed the vote of thanks. The programme was well attended by the faculty members, scholars, students from various Engineering Colleges, Institutions and industries.

Supply Chain Management - Post Covid 19 Lockdown Challenges and Remedies

The Institution of Engineers (India), **Jabalpur Local Centre** organised Webinar on Logistics and Supply Chain Management - Post Covid 19 Lockdown Challenges and Remedies' on 24 May, 2020.

With the massive change in supply chain, no doubt the digital transformation in industries will be accelerated. Every element of the logistics process will be reconsidered, rethought, and digitized, from planning to implementation. India's supply chain will undergo a drastic change over the next few years as the impact of the COVID 19 continues to challenge our demand and supply chains, that are either facing partial break down or severely affected. As the ongoing supply side issue begin to be addressed, there is a contraction in demand in many industry sectors leading to further disorder. Organizations need to consider some emerging ideas to adapt this new reality and build supply chain flexibility. An observation during this crisis is that, many companies are operating the supply chain with limited pipeline stock and unable to provide products as per requirement. Risk management



and mitigation are gaining prominence in supply chains where companies have begun to build more safety stock in their distribution pipelines. This will increase more warehousing space throughout the network. The practice of developing many more robust contingency plans are now being taken more seriously. Chief Guest of the function, Mr Enti Ranga Reddy, Council Member and Member, Mechanical Engineering Division Board, IEI, in his speech mentioned that disruption and problems are obvious in present situation, but as we have to sustain with COVID 19 even longer, hence sustainable and innovative solutions are the need of the hour. Therefore, engineers and technocrats should be engaged in determining digital solutions. Guest of Honour, Mr PAR Bende, Managing Director, Madhya Pradesh Power Transmission Company Limited and Madhya Pradesh

Power Generation Company Limited, Jabalpur, discussed the challenges in power supply sector due to COVID 19 and specifically mentioned that it is a great challenge to maintain a sudden disruption in power supply, when no standard operating procedure is available to deal with. Dr Amit Raj Singh, Assistant Professor, Mechanical Engineering Department, National Institute of Technology, Raipur (CG) while delivering the Key note address, discussed supply chain and distribution network post covid 19 lockdown including the efficiency, responsiveness and resilience of Supply Chain. The speaker further mentioned specific challenges in logistics and distribution in post pandemic era and probable challenges, the remedies and technological adoption and opined that digital supply networks are capable to mitigate the probable impacts. Dr Indra Kumar Khanna, Retd Principal, Government Engineering College, Bilaspur, Brig Vipin Kumar Trivedi, Member, Interdisciplinary Coordination Committee and National Committee for Excellence Awards, IEI, Ms Shweta Goela, Assistant General Manager, Corporate Strategy, Safexpress delivered Guest Lecture during the occasion.

Brig Vipin kumar Trivedi in his address explained supply chain problems during lockdown in Indian context, like disruption in transport, large scale migration of labour, loss in jobs and food security. Ms Shweta Goela in her speech introduced Safexpress as a major player in supply chain and logistics industry and discussed different domains, customer segments and industrial vertical in details. She mentioned that business disruption, liquidity crunch, shortage of labour and vehicle, lack of clarity in movement norms etc, are the major challenges during the lockdown crisis and discussed the initiatives with aligned quantum growth in economy, infrastructure, tech - driven system, vibrant demography and demand. Earlier, Mr Tarun Kumar Anand, Chairman, Jabalpur Local Centre welcomed the honourable guests, speakers, delegates and audience and participants and briefed the detailed information in the context of the subject, in which he mentioned that India's major logistics intelligence platform has studied the current rapid growth situation in the logistics and supply chain industry and prepared a report, which highlights the situation of grassroots logistics in India, and logistics and information technology can work together to mitigate the economic impact and in addition, the report highlights the concerns raised by key industry leaders in the logistics and transportation sector. Mr Ashish Kumar Chakravorty, Joint Organising Secretary briefed the Proceedings of the webinar and proposed vote of thanks. Mr Prakash Chandra Dubey, Honorary Secretary, Jabalpur Local Centre coordinated the event.

Centenary Celebration of IEI by Munirabad Local Centre

Munirabad Local Centre of the Institution observed Centenary Year Celebration of IEI on 26 January, 2020 at Munirabad. Mr T Lakshmappa, Land Development Officer (Engg), Tungabhadra Command Area Development Authority, Munirabad inaugurated the function. A Technical paper authored by Mr Sandeep Kodandapani, SAP Expert was presented during the occasion. Mr Prahalada E, Chairman, Munirabad Local Centre welcomed the audience. Me W Lalitha Prasad, Honorary Secretary, Munirabad Local Centre proposed the vote of thanks.



Computational and Non-computational Tools involved in Aircraft Engine and Structural Health Monitoring System

Coimbatore Local Centre of the Institution organized All India Seminar on the theme 'Computational and Non-computational Tools involved in Aircraft Engine and Structural Health Monitoring System' in association with Hindustan Institute of Technology, Coimbatore during 05-06 February, 2020 under the aegis of Aerospace Engineering Division Board, IEI.



A propulsion system is a machine that produces thrust to push an object forward. Propulsion system of an aircraft is mainly due to the Engine that generates thrust which is used to move the aircraft through the air and provides the power for various other functions such as the complete requirements of the vehicle in terms of electrical, hydraulic and pneumatic power for various safety critical subsystems of the vehicle. An aircraft engine is a complex system requiring regular maintenance to ensure flight safety. As mentioned in the US Air Force Statistics on Aircraft Failure Modes, the engine accounts for the maximum (37%) of the failures under the head 'Logistics'. Modern aircraft engines incorporate numerous sophisticated devices like sensors for measuring their operating parameters, both in the immediate sense for electronic control of performance and in longer term, to monitor engine health, i.e. Engine Health Monitoring. Safety is the utmost priority for the aviation industry so that the aircraft engine must carefully be monitored as its failure may cause severe crashes. Engine Health Monitoring (EHM) allows operators to minimize unplanned downtime and cost. Modern condition monitoring-based methods are used to reduce maintenance costs, increase aircraft safety, and reduce fuel consumption. In the literature, parameters such as engine fan speeds, vibration, oil pressure, oil temperature, exhaust gas temperature (EGT), and fuel flow are used to determine performance deterioration in gas turbine engines. The basic concept of Condition based Maintenance (CBM) is to utilize sensors installed on the aircraft structure, called structural health monitoring (SHM) system. The SHM system is used to detect damage and to determine the size and location of damage. Since the SHM system use installed sensors, it is unnecessary to remove internal surrounding structures for inspection. In addition to detecting damage, the SHM can be used to predict the future behaviour of detected damage based on damage data at past inspections, which is called prognostics. This makes it possible to predict when the existing damage threaten the safety of the system and repair them before that. Therefore, the scheduled maintenance is often referred to as preventive maintenance, while CBM as predictive maintenance. With prognostics information, it is possible that airlines and MRO (maintenance, repair and overhaul) can schedule and prepare for maintenance in advance. The usage of SHM in CBM can also reduce aircraft downtime by reducing the time of removing and reinstalling surrounding structures, which can increase the availability of aircraft and reduce revenue loss. This Seminar provides the crisp knowledge about the EHM & SHM associated software which are currently present in various

Aircrafts. Also this Seminar provides the knowledge about merits & demerits of various types in EHM and SHM Sensors used to identify the different failure modes. The two-day deliberations results the insight about different software properties, selection of input and output parameters in the software, different prediction approaches, designing the prediction model using software, the awareness of positioning the sensors in the aircraft properties, etc. Prof (Dr) V Sugumaran, School of Mechanical Engineering, Vellore Institute of Technology, Chennai Campus graced the function as Chief Guest. Prof Sugumaran, while delivering the Invited Lecture on the topic 'Recent trends in Aircraft Structural Health Monitoring System', explained different aspects of computer based automation of fault diagnosis process, application of transducer as Accelerometer, the challenges in data collection, feature choice, model choice, training, evaluation, computational complexity and so on. Dr R Sakthivel, Amrita School of Engineering, Coimbatore delivered Invited Lecture on 'Various Tools involved in developing EHM and SHM' and explained the objective of engine health monitoring and structural health monitoring by minimize the deviations between predicted and actual measures. In his address, Dr Sakthivel explained constrained and unconstrained optimization under Genetic Algorithms, Artificial Neural Network, Response Surface Methodology, Diagnostic & Prognostic Algorithms, Evolutionary Random Search Algorithm etc. Mr V Sugumar, Senior Engineer - CFD, Simgrosys Consulting Services Private Ltd, Coimbatore delivered Invited Lecture on the topic 'CFD Tools involved in Developing a Structural Health Monitoring System'.

Mr. R. Suresh Balaji, Department of Aeronautical Engineering, Karpagam University, Coimbatore delivered Invited Lecture on the topic 'Advanced NDT Tools involved in Developing a Health Monitoring System' and explained how to detect flaw and leak, location determination, dimensional measurements, structure and microstructure characterization, material sorting and determination of chemical composition. Papers presented during technical sessions on diversified sub – theme, which include; Design and Numerical Analysis of UAV Landing Gear under different Mechanical Loading; Analysis of Compressor Blade with different Blade Angle; Prognostics for Advanced Compressor Health Monitoring; Wind Turbine Condition Monitoring; State-of-the-Art Review, New Trends, and Future Challenges; Aircraft Gas Turbine Engine Health Monitoring System by Real Flight Data; Active health monitoring of an aircraft wing with embedded piezoelectric sensor/actuator network: I. Defect detection, localization and growth monitoring etc. Dr H Rammohan, Honorary Secretary, Coimbatore Local Centre proposed the vote of thanks.

Water, Energy and Biodiversity for Sustainable Development of BIMSTEC Countries

Contd. from page 2

cons, the huge scope of generating hydro-electricity in north-east region and overall water management issues in India. They have deliberated that the natural resource and traditional knowledge of the country should be protected as India is a biodiversity hotspot. The Panelists also discussed the Biodiversity Act and Biosafety Protocols as unplanned urbanization and industrialization is taking a toll on ecosystem and posing sustainability crisis. During three-day 15 parallel Technical Sessions, number of Papers embracing the theme and sub theme were presented including Keynote addresses. The Delegation Teams from neighbouring countries, Bangladesh and Nepal participated in the event.

One Day Seminars/Workshops Conducted by Various Centres of IEI

STATE CENTRE

Kerala

Kerala State Centre of the Institution organized the One Day Colloquium AGNI 2019 on **Space Systems Heat Transfer** in association with The Indian Society for Heat & Mass Transfer Regional Centre (ISHMT – ICT) Thiruvananthapuram on 23 November, 2019 under the aegis of Aerospace



Engineering Division Board of the Institution. Dr V K Dadhwal, Director, Indian Institute of Space Science & Technology (IIST) graced the function as Chief Guest. During Technical Sessions, Lectures were delivered

by eminent speakers and resource persons, that include; 'Space Craft Systems and Missions'; Human Thermoregulation aspects in Space Environment; Lean Automation; Thermal Challenges in Cryogenic Propulsion Systems; Thermal and Humidity Control System of Cabin Crew for Human in Space Program etc. A Panel discussion was also organized during the occasion. Earlier, Dr S Sunil Kumar, Deputy Director, Liquid Propulsion Systems Centre (LPSC -ISRO) and President, ISHMT - RCT explained the objectives of the Colloquium. The function was chaired by Mr K K Gopalakrishnan Nair, Chairman, Kerala State Centre and Council Member, IEI. Mr Asok Kumar K, Honorary Secretary, Kerala State Centre, IEI welcomed the guests and delegates. Mr Jagadeesa Chandra Pisharady, Member Aerospace Division, Kerala State Centre, IEI proposed the vote of thanks.

LOCAL CENTRES

Kanchepuram

Kanchepuram Local Centre of the Institution, in collaboration with the Department of Computer Science & Engineering, St. Joseph's Institute

of Technology (SJIT), organized One Day Seminar on the theme **Cyber Disease – Ethical hacking & Cyber Forensics** on 3 March, 2020. The Chief Guest during the function, Mr V N Prem Anand, Secretary, Cyber Society of India in his address gave



a brief introduction about the awareness of Cyber Security. The technical sessions covered relevant topics of Cyber Security, which include; Ethical Hacking and Ethical Networking; Cyber Security Attacks, Trojans, Malwares; Opportunities, Social Impact, Advantages & Disadvantages of Ethical Hacking etc. Earlier, Dr K Palani Kumar, Chairman, Kanchepuram Local Centre & Council Member, IEI welcomed the audience.

Erode

The Institution of Engineers (India), **Erode Local Centre** in association with Department of Civil Engineering, Velalar College of Engineering and

Technology (VCET) was organized One Day Seminar on **Urban Water Management Scenario: Issues and Challenges** on 14 February, 2020

under the aegis of Environmental Engineering Division Board, IEI. During the technical sessions, Dr S Senthil Kumar, Professor, Department of Civil Engineering, K S Rangasamy College of Engineering, Tiruchengode explained different aspects of Water efficiency and Conservation Measures, Urban Water Policy, Demand and Supply of water in Urban India etc. The other speaker during the occasion, Dr T



Pradeep, Professor, Department of Civil Engineering, Kongu Engineering College, Perundurai addressed the challenges and issues in urban water conservation, methodological framework for a solution to water supply problems in cities and historical water conservation practices in India. The Convener of the Seminar, Dr E Ravi, Professor & Head, Department of Civil Engineering, VCET in his address, briefed about the theme of the Seminar. Earlier, Prof (Dr) C Venkatesh, Chairman, Erode Local Centre delivered the welcome address. Prof (Dr) R Nallusamy, Honorary Secretary, Erode Local Centre proposed the vote of thanks. The Seminar was well attended by the faculty members and students from various Engineering Institutions all over Tamilnadu.

Salem

Salem Local Centre of the Institution, in association with Department of Electrical and Electronics Engineering, Sona College of Technology, Salem organized One day Seminar on the theme **Smart Irrigation System using Intelligent Techniques** on 5 February, 2020 under the aegis of Agricultural

Engineering Division Board, IEI. Presently with Artificial Intelligence (AI), many constraints can be handled easily by sensors, controllers and PLC. Now, most of the efforts in irrigational system analysis have been successfully reduced by AI techniques, which is the science of



automating intelligent behavior accomplishable through a computer interfaced with machines like robots. Artificial General Intelligence (AGI) is the intelligence of a hypothetical machine or computer which can accomplish any intellectual assignment successfully which a human being can accomplish too. For irrigational development with smart intelligent techniques, parameters to be determined with accuracy. Dr S R R Senthil Kumar, Principal, Sona College of Technology, Salem in his address touched key areas of conservation and mitigation techniques, new technological advances based on software, hardware and new materials that should be implemented in irrigational systems. He mentioned that additionally, these advanced devices must incorporate elements of artificial intelligence and advances in smart irrigation development must be complemented with the

Contd. on page 8

IEI Celebrates

World Telecommunication and Information Society Day

2020

Theme: Connect 2030; ICTs for the Sustainable Development Goals (SDGs)

World Telecommunication and Information Society Day was celebrated by the Centres of the Institution all over the country on May 17, 2020 through Webinars. Brief Reports as received from various Centres are given hereunder.

STATE CENTRES

Punjab & Chandigarh

The Institution of Engineers (India), Punjab & Chandigarh State Centre organized World Telecommunication & Information Society Day on 18 May, 2020. A Webinar was organized in this occasion, when Prof (Dr) Jagtar Singh, Council Member, IEI & Campus Director, Yadavindra College of Engineering, Punjabi University Guru Kashi Campus delivered



address on the theme and discussed the significance of online connectivity during the COVID 19 pandemic, for educational institutions, workplaces, healthcare and essential supplies. Dr Singh also discussed about application of 5G technology and the significance of Arogya Setu App introduced by Government of India. The function explored and leveraged initiatives that demonstrate how telecommunication is being applied to deliver positive impact for communities and people around the world to accelerate the information system. Earlier, Mr Sukhvir Singh Mundi, Chairman, Punjab & Chandigarh State Centre and Council Member, IEI welcomed the audience. Dr Baljit Singh, Honorary Secretary, Punjab & Chandigarh State Centre proposed vote of thanks. The Webinar was well attended by Corporate members, students, guests.

Telangana

The Institution of Engineers (India), Telangana State Centre observed World Telecommunication and Information Society Day on 17 May, 2020. A Webinar was organized in this occasion. The Chief Guest during the function, Dr K M M Rao, Former Director, National Remote Sensing Center, Hyderabad and Adjunct Faculty, BITS - Pilani, during his address on the topic 'Image Processing for Healthcare and Challenges – Advances in Communications, High Speed Computers & Intelligent Software', stressed on the importance of image processing for healthcare and challenges.



He further mentioned the major forces influencing the pattern of healthcare delivery, which include: new technologies for more patient-friendly treatment methods; new treatment methods result in minimally invasive procedures with less hospitalization and faster recovery, containment of direct and

indirect costs and as a consequence, an increased demand for the new treatment methods. Dr Rao explained the advances in treatment method and surgeries in healthcare, with the advancement of image processing software, artificial intelligence, robotics, Lasers etc. Dr Rao explained the functional aspects of Image processing, that helps in easy diagnosis of diseases, non-invasive surgeries, remote surgeries, autonomous hospital facilities and many more activities for healthcare. Dr Rao further mentioned that the photon sensing role of the eye allows optical access to the retina over a wide band of wavelengths. In view of this natural phenomena, Image processing and hyper-spectral or multi-spectral imaging techniques, greatly help diagnosing various eye diseases - like Glaucoma, Age related Macular Degeneration (AMD), Diabetic Retinopathy etc. Earlier, Dr G Rameshwar Rao, Chairman, Telangana State Centre and Council Member, IEI welcomed the audience and Mr K Subbi Reddy, on behalf of Telangana State Centre proposed the vote of thanks.

Uttar Pradesh

Uttar Pradesh State Centre of the Institution in association with Babu Banarasi Das Northern India Institute of Technology, Lucknow celebrated the World Telecommunication and Information Society Day 2020 on 17 May, 2020. A Webinar was organized to celebrate the occasion where eminent academicians, faculty members and research scholars of various universities across the country have participated. Prof (Dr) J P Pandey, Director, Kamla Nehru Institute of Technology, Sultanpur was the Chief Guest during the Webinar and addressed about the importance of communication and information technology for the sustainable economic and social growth. Keynote Speaker, Dr Jagdish Chand Bansal, South Asian University, New Delhi presented a talk on the application of Artificial Intelligence (AI) in sustainable growth and connectivity in public life including its wide applications in monitoring COVID 19 pandemic scenario and vaccine development. Dr Bansal further explained the application of AI in agricultural activities through application of AI inspired robots and drones for crop monitoring etc. The occasion was blessed with the gracious presence of Mr Narendra Singh, President, IEI who addressed the upcoming challenges on the use of communication technology in the current scenario. President IEI mentioned that the young engineering fraternity are motivated by IEI to contribute larger roles to facilitate the rural areas with ICT establishments. Mr V B Singh, Council Member and Chairman, Civil Engineering Division Board, IEI in his address outlined the need of ICT applications in the sustainable growth of public life. Earlier, Mr Rajesh Kumar Trivedi, Chairman, Uttar Pradesh State Centre and Council Member, IEI and Dr V K Singh, Director (Engineering), Babu Banarasi Das Northern India Institute of Technology, Lucknow welcomed the dignitaries and participants. Mr Prabhat Kiran Chaurasia, Honorary Secretary, Uttar Pradesh State Centre proposed the vote of thanks. Prof (Dr) Praveen Shukla, Convener presented an overview of the activity and message of Secretary General, International Telecommunication Union (ITU).

LOCAL CENTRES

Agra

Agra Local Centre of the Institution in association with BSA College of Engineering and Technology, Mathura organized Webinar to observe World Telecommunication and Information Society Day on 17 May, 2020. Committee Members from Agra Local Centre, Corporate Members, students and Faculty Members from BSA College of Engineering and Technology were present during the occasion. Dr Ashok Yadav, Chairman, welcomed the audience. Mr Devendra Singh Chaudhary, Honorary Secretary, Agra Local Centre proposed the vote of thanks.

Bareilly

Bareilly Local Centre of the Institution organized Webinar to observe World Telecommunication and Information Society Day on 17 May, 2020. The Key Note Speaker during the function, Mrs Chhavi Sharma, Mahatma Jyotiba Phule Rohilkhand University, Bareilly explained the ICTs Goals. Earlier, Mr Sudhir Kumar Gupta, Chairman, Bareilly Local Centre welcomed the gathering and shared his views. Mr Saheb Singh, Honorary Secretary, Bareilly Local Centre proposed the vote of thanks.



Bathinda

Bathinda Local Centre of the Institution organized Webinar to observe World Telecommunication and Information Society Day on 17 May, 2020. Prof (Dr) Savina Bansal, Electronics & Communication Engineering Department, Maharaja Ranjit Singh Punjab Technical University (MRSPTU), Bathinda delivered address on the theme and discussed 17 Sustainable Development Goals and how ICT helpful to achieve these goals. Earlier, Prof (Dr) Buta Singh Sidhu, Dean, Planning and Development, MRSPTU & Chairman, Bathinda Local Centre welcomed the guests. Prof (Dr) Jagtar Singh, Honorary Secretary, Bathinda Local Centre and Council Member, IEI proposed the vote of thanks.



Gorakhpur

Gorakhpur Local Centre of the Institution organized Webinar to observe World Telecommunication and Information Society Day on 17 May, 2020. Prof (Dr) Sanjay Kumar Soni, Dean, Research, Department of Electronics and Telecommunication Engineering, Madan Mohan Malaviya University of Technology, Gorakhpur, the Keynote speaker during the occasion stressed on spreading awareness regarding the role of ICT in societal development, followed by brief introduction of the evolution of the wireless technology highlighting technical aspects of 2G, 3G, 4G and 5G. The speaker also highlighted various important areas where ICT has brought changes. That include; Smart Agriculture; Health Monitoring System; Telemedicine; Role of Satellite in GPS; Forest Fire and Drone Usage etc. Further, different challenges associated with ICT implementation also discussed, which include enhanced greenhouse effect due to more power usage. Earlier, Mr Ved Prakash Gupta, Honorary Secretary, Gorakhpur Local Centre welcomed the audience. Mr Dharendra Chaturvedi, Chairman, Gorakhpur Local Centre proposed the vote of thanks.

Ludhiana

Ludhiana Local Centre of the Institution organized Webinar to observe World Telecommunication and Information Society Day on 24 May, 2020. Dr Arvind Dhingra, Department of Electrical Engineering, Guru Nanak Dev Engineering College, Ludhiana, the Keynote speaker of the Day, highlighted the importance and application of ICT in real lives. He explained the applications of ICT in the context of UN Sustainable Development Goals (SDGs). Earlier, Mr Rup Lal Mahajan, Chairman, Ludhiana Local Centre and Council Member, IEI welcomed the guests. Mr Surjit Singh, Honorary Secretary, Ludhiana Local Centre proposed vote of thanks.

Muzaffarpur

Muzaffarpur Local Centre, IEI celebrated World Telecommunication and Information Society Day on 17 May, 2020 through WebEx platform. Mr Mitul Rana, Key note Speaker on the day, explained the significant aspects of Sustainable Development Goals. He further explained ICT enabled access to information and service, better connectivity between individual and organisation for improved productivity and efficiency. Earlier, Dr Anjani Kumar Mishra, Chairman, Muzaffarpur Local Centre welcomed the gathering. Mr Narendra Kumar Jha, Honorary Secretary, Muzaffarpur Local Centre proposed the vote of thanks.

Udaipur

Udaipur Local Centre of the Institution organized Webinar to observe World Telecommunication and Information Society Day on 17 May, 2020. Mr Jitendra Kumar Dayal, General Manager, BSNL, Telecom District, Udaipur, the Keynote speaker during the occasion briefed the audience about the journey of telecom sector starting from telegraph, telegram, telephone, fax, dial up internet, broadband to current 3G, 4G, DTH, broadband over Wi Fi and tectonic shift towards 5G. Mr Dayal mentioned IoT, AI and Robotics as the principle components for continuous technological advancements. Earlier, Mr Yawanti Kumar Bolia, Chairman, Udaipur Local Centre welcomed the guests. Mr Chandra Prakash Jain, Honorary Secretary, Udaipur Local Centre proposed vote of thanks.



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One Day Seminars/Workshops Conducted by Various Centres of IEI

Contd. from page 5

development of new techniques by using PLC and ZIGBEE modules. The speaker explained that the areas of research based on the technologies, namely: Operation and Control, Maintenance and Lifespan Management. Irrigation Systems are changing and we are moving from an "traditional irrigational to smart irrigational system" scenario to more complex techniques where developments in advanced agriculture are dynamically integrated into an automated management system and to achieve this, it is necessary to introduce new equipment into the irrigational system; Dr Senthil Kumar opined. Papers were presented during technical sessions embracing smart irrigation, automation in irrigation system, application of PLC in agriculture, agricultural robots etc. Earlier, Mr D Arul Selvan, Chairman, Salem Local Centre, IEI welcomed the audience and shared the importance of providing a solution to complex problems in irrigational system which is tough and tedious. Mr S Shanmugam, Past Honorary Secretary, Salem Local Centre proposed the vote of thanks.

South Gujarat

South Gujarat Local Centre of the Institution, in association with Dr S & SS Ghandhy College of Engineering and Technology, Surat organized One Day Seminar on the theme **An Eco-Friendly Approach For Textile Wet Processing** on 16 January, 2020 under the aegis of Textile Engineering

Division Board. The Seminar is intended to provide an outstanding opportunity for researchers, academicians and industrial communities alike to address new trends and challenges, developments in wet processing of textiles for eco-friendly and green processes towards sustainability. Eco-friendly approach includes measures such as reduction and prevention in pollution load, reduction in input resources, waste minimization and quality & process control. It involves better chemical management and housekeeping, substitution of toxic and hazardous materials, process modifications, and reuse of waste products. Invited Chief Guests during the occasion are Chief Guests during the occasion are Mr A G Modi, HOD (Retd), DTPT, DGCET, Surat and Mr S B Naik, President, Bhutpurva Vidhyarthi Mandal, DGCET, Surat. During the technical sessions, Keynote Lectures were presented on Quality Control in Textile Wet Processing, Sustainability in Processing, Polyester Processing, Carrier Opportunities in Textile Field, and Eco - Labels. Earlier, Mr Kirti Hiralal Shethna, Chairman, South Gujarat Local Centre and Council Member, IEI delivered the welcome address. Mr Dipak Gomanbhai Patel, Honorary Secretary, South Gujarat Local Centre, IEI proposed the vote of thanks.



Important Notice

It has been observed that there are many Corporate Members of IEI whose mobile number/email id is not registered with IEI till date. Non availability of the mobile numbers and email ids precludes us not only from providing our full range of services but also from participation in the Online Election Process.

The Corporate Members whose mobile number/email id is not registered with IEI are therefore requested to kindly communicate their mobile no. and email id along with membership number to datamemb@ieindia.org by 10 July 2020.

For any further clarification, one may feel free to speak to us at (033)40106248/ 246/ 269/ 299.

Maj Gen (Dr) S Bhattacharya, VSM (Retd)
Secretary and Director General

IEI Join Hands with Various Certification Bodies to Nurture Engineers

IEI and The Institute of Cost Accountants of India have signed a MoU on 27 May 2019, Kolkata, to offer a course exclusively for engineers- "Executive Diploma in Cost & Management Accounting for Engineers". Here is a wonderful opportunity for all corporate members of IEI to enhance knowledge in the domain of finance and understand the framework of costing, accounting system etc. in various decision making processes.

IEI also ties up with Project Management Associates (PMA), on 3 Jun 2019, at Chennai, in an exclusive collaboration to build a project mindset through Project Management education "IPMA's level C and D Certification Programme" in the country. The program offers a golden opportunity for project professionals to acquire key knowledge and concepts in Project Management, based on the approach followed by the world's leading authority on competence based Project, Program & Portfolio Management- International Project Management Association (IPMA).

IEI members have the exclusive facility of enrolling in the courses at a discounted fee!

For details, Corporate Members may login to their respective dashboard (<https://www.ieindia.org/WebUI/IEI-Registration.aspx>) and submit their application under Certification --> IPMA.

Please visit www.ieindia.org under Certification for details. For further clarification you may call at: 033-40106304 or Email at certification@ieindia.org

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