

IETE

NEWS LETTER

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From President's Desk



Dear Members,

I'd want to express my gratitude for the chance to serve as your President for the previous two years. It was one of the most incredible experiences of my career, and I felt proud to represent IETE in this capacity. I can only hope that I have satisfied the majority of your expectations, and I look forward to serving as Past President in 2021-22.

I've said it before, but it remains true: the current board members/past presidents with whom I've worked are truly the foundation of this organization's success. So, a heartfelt thank you to each and every one of them for all of their efforts during my term. We accomplished a great deal, and we would not be the successful and professional organisation that we are now without their collective efforts. Everyone has had a hard few years, and I am so pleased of how we have all pulled together to assist one other in times of need while still performing the duties. Not only are your collective efforts helping to keep our community members engaged, but you are enabling the Institution to continue providing an enriching and rewarding experience in support of the IETE's mission.

As you are aware, IETE has held a number of events in the last quarter, the most of which have been thoroughly covered in this issue. Due to safety concerns, many of the functions were carried out online. The Governing Council Meetings were streamed live online. We authorised a new Governing Council and President during the September meeting, therefore I officially passed the IETE President torch to Prof P Prabhakar. Congratulations to Prof Prabhakar; I am confident he will serve this illustrious organisation well. I'd want to thank and congratulate everyone who actively participated in the Governing Council & Organization Member election process. My warmest greetings to the newly elected Governing Council Members, and I look forward to their dedicated commitment to our Society's members and activities.

IETE Publications Awards have grown in importance and renown, and they are now receiving accolades from throughout the world. I am grateful to the IETE Publications Editorial Board and the expert juries for their selfless support and contributions to the fraternity. They are, in fact, the core of our organisation. The IETE Awards 2021 awardees, who could join us at Annual IETE Convention and have put in a lot of time and effort in their respective fields, deserve our congratulations as well.

Across the quarter under review, IETE commemorated the 53rd World Telecommunications and Information Society Day with the theme "Accelerating Digital Transformation in Challenging Times", which was observed by all IETE Centres/Sub-Centres in India. It also celebrated the IETE's 5th Industry & Innovation Meet on "Technological Innovations in Electronics and Related Fields for Aerospace and Defense Production." Both gatherings featured prominent professionals and government representatives as major guests, and yielded positive results.

Additionally, I am pleased to inform you that IETE's Scientific and Industrial Research (SIRO) registration status has been extended from 1st April 2021 to 30th March 2024. The staff from the Board of Research, Innovation, and Standards and the headquarters secretariat did an excellent job of submitting the necessary paper work for the extension procedure, especially during pandemic conditions.

Friends, as a fully integrated professional society with a varied range of activities and an enviable member-centric attitude, IETE is focused on digitization, research and development, publications, process optimization, startups and automation across the entire network of Centres. With our compelling vision and a will to succeed, we can redefine resilience, push the boundaries of possibility, and create tremendous value for our stakeholders and our nation.

As the impending wave of fundamental and economic upheaval reshapes the Organization and rearranges our position, I am confident that IETE, with its foresight, reactivity, agility, and tenacity, will maintain its prominent position and reach new heights in the coming years.

Stay safe & healthy!

Best regards,

President IETE

Prof (Dr) J W Bakal

CONTENTS

From President's Desk	1
President Elect	2
Report on 53 rd WT&ISD	2-3
5 th Innovator-Industry Meet-2021	3-5
New Elected GC Members (2021-24)	6-8
IETE Zonal Seminars	9
Centres'/Sub-Centres' News	10-22
PAC News	23
ISFs Activities	23-31
IETE Women Achievers	31-32
IETE Awardees	34-35



IETE HQs, New Delhi



News from IETE Headquarters

IETE has a new President



Prof (Wg Cdr) Pradeep Prabhakar (F-030017) is the elected President of IETE for the year 2021-22. He succeeds Prof (Dr) J W Bakal, who led IETE for two years. Prof Prabhakar is a multi-talented, senior military officer with a lengthy list of academic and professional accomplishments, considerable administrative experience, and demonstrated leadership responsibilities in the Air Force, academic institutions, and technical organizations. He holds a BTech (Hons) in electrical engineering with distinction, AMIETE, MTech in electronics & communication engineering and has also a PGDM degree. He has over 47 years of experience. He began his career as an assistant professor in an engineering college in 1974. In 1975, he was commissioned as an officer into the Indian Air Force. After completion of one-year intensive training at M/S Mecanique Aviation Traction Electronique (MATRA), France, he was assigned to DRDO's LRDE Lab to study the impact of EMP on electronics, communications, and radar systems, and how to protect the Air Force's most sensitive and venerable assets. He also helped in the field trials of indigenous INDRA Mark-1 Radar. He helped execute various tests on Defence Electronics Sensors at DRDO sites, including the "Defence Laboratory" in Jodhpur. During his active career in the IAF, he successfully inducted Weapon Systems on the Advanced French Fighter Aircraft, Mirage-2000s. He formerly led two Air Force Hi-Tech Field Training Units. After 22 years of dedicated service to the nation as a Wing Commander, he chose to retire early in 1997 to pursue his desire to serve the society as an academician.

He has spent the last 25 years as an academic, researcher, and Director-Principal in Punjab, Haryana, and Himachal Pradesh. At Punjab Technical University in Kapurthala, he served on the Academic Committee. He was also a member of Himachal Pradesh University's Academic Committee and Board of Engineering Studies at Shimla. He was a visiting professor at the C-DAC in Mohali. His research interests include digital electronics, digital signal processing, electronic instrumentation, computer communication networks, data networks, wireless and optical-fiber communication, cyber security, and information and communication technology.

He has successfully implemented a number of innovative projects on a national scale. Several notable organizations have conferred honours and accolades on him. He has received Rotary's prestigious International Excellence in Teaching Award. Aside from technology, he has worked to better the lives of those in need, particularly in health, hunger, and education. He has been a member of IETE since 1979. He made substantial contributions to the growth of IETE.

IETE welcomes the new leadership and stands ready to work under his guidance.

53rd World Telecommunication and Information Society Day celebrated at IETE HQs

The International Telecommunication Union (ITU) chose the theme of **Accelerating Digital Transformation in Challenging Times** for the 53rd World Telecommunication and Information Society Day, which was observed on the digital platform by IETE on 17 May 2021. **Shri Prakash Kumar**, IAS CEO, Wadhvani Institute of Technology and Policy Former CEO, Goods and Service Tax Network (GSTN), was the chief guest and **Shri Jitendra Pal Thethi** Vice President and Group R&I leader (Future of Engineering), Capgemini, was the keynote speaker for the function. **Prof MN Hoda**, Chairman of the IETE's Technical Programmes and Publicity Committee (TPPC), welcomed the attendees and emphasized the importance of commemorating this day to raise awareness of the potential offered by digital transformation in challenging times. There was a two-minute moment of silence observed in memory of all those who lost their lives in the COVID -19 pandemic. The IEE, CSI, ISTE, IITE, and ITPE Delhi Sections, as well as

IETE HQs, all came together to celebrate the occasion. The welcome remarks were delivered by **Dr Rachna Garg**, Chairperson of IEEE's Delhi Section. In her address, she discussed the benefits of current technology, such as how it allows us to perform online grocery shopping, shopping, working, and entertainment, as well as how it has boosted our productivity. She emphasized that IEEE has a long history of involvement in these types of activities and gave a rundown of what the IEEE Delhi section is up to currently.

Despite the difficult circumstances, **Prof MN Hoda**, stated that the programme had a large number of participants from all over the country. On behalf of IETE, he welcomed the chief guest and keynote speaker. He talked about the ITU's subject and how it keeps the country's charter. He described the fatal character of the 2nd wave of Corona. He blamed disorder & damage on unregulated lifestyles and nature-defying activ-

ities. On-line mode was here to stay, he advised. He argued that nothing is constant except change, and we should all change with time. He advocated looking for the good in the impending obstacles. Only advancing digital technology can handle the difficulties of changing business models. **Prof J W Bakal**, President IETE, in his address talked about IETE and its activities. He also spoke of how digital technologies were prompting all to change their business models.

Shri Prakash Kumar, the guest speaker, discussed the role of Information Communication Technologies (ICTs) during a pandemic. ICTs have an essential role in society's continuous functioning, he explained, pointing to the COVID-19 situation. It has hastened the growth of the digital economy, but it has also brought to light the stark digital inequalities that exist between communities, states/countries, and even countries themselves. It had an effect on a wide range of economic fields as well. Some of the ways he spoke about digital transformation were: the ways in which it has reshaped consumer behaviour and team expectations, making the rapid change a new normal; making the fast-changing consumer behaviour as permanent; forced experiments that have produced both good and bad experiences; and the renewed focus on data and people. Either become digital, he argued, or go dark. Talking about the benefits of digital technology, he said organisations that have adopted it are more resilient in the face of adversity, especially

in the areas of efficiency and productivity as well as security, customers, and flexibility.

“Digital Engineering to accelerate Digital Transformation” was the theme of keynote speaker **Shri Jitendra Pal Thethi**. The speaker began by defining digital engineering, which includes techniques, utility, and the creation process for new digital products and services that enhance quality of life. When it comes to developing innovative solutions, digital engineers take advantage of data and technology. As products become increasingly networked, intelligent, and service-integrated, he explained the product development cycles get shortened. A competitive distinction, according to him, is the ability to integrate new technology quickly. He explained how technology is pushing us towards Quantum Supremacy, and our challenge was to make use of that technology to solve problems. He pointed out the need of open and transparent corporate practices in building trust. With digital engineering, teams and organizations can become more collaborative and transparent by breaking down silos. Through digital transformation and the use of digital tools, it is possible to eliminate delays, streamline information flow, and boost agility. At each stage, there was more potential for process improvement. As a result, he said that digital transformation is a journey in which we must seek little but significant improvements to the overall system and process' efficiency. The event ended with a note of thanks by **Shri Pankaj Sharma**, Secretary General IETE.

Report on IETE's 5th Innovators-Industry Meet- 2021

The IETE HQs in New Delhi hosted the **5th IETE Innovators-Industry Meet 2021** on “Technological Innovations in Electronics and related fields for Aerospace and Defense Production” on the 26th and 27th of August 2021. The chief guest **Dr Ajay Kumar**, Secretary, Ministry of Defence, Government of India, and the guests of honour- **Shri Ajay Prakash Sawhney**, Secretary, MeitY, Government of India; **Dr G Satheesh Reddy**, Secretary, Department of Defence R&D and Chairman, DRDO, Government of India, and **Shri Sanjay Jaju** Secretary, Ministry of Defence Production, Government of India, were formally welcomed. This was followed by lighting of lamp by dignitaries and Sarasvati Vandana.

Prof (Wg Cdr) P Prabhakar (Veteran), Chairman, Board of Research, Innovation and Standards (BoRIS) & the President Elect (2021-22) began his address by thanking the Chief Guest and other dignitaries for their attendance and extending a warm welcome to all. The IETE Meet, he explained, is part of the Atmanirbhar Bharat Abhiyaan and aims to recognise and celebrate entrepreneurs who are making a difference in a number of ways. He asserted that BORIS's efforts reflected the Prime Minister's clarion call. The Meet will serve as a focal point for young innovators, researchers, entrepreneurs, and industrial

houses to collaborate on India's development, he explained. He remarked on the overwhelming response to this year's meeting, which included 23 invited lectures and 18 paper submissions covering the broad subject chosen. He informed the audience that the panel discussion had been cancelled in order to accommodate all speakers. He expressed gratitude to the innovators and industry and expressed optimism for positive talks and recommendations to come out of the event.

Dr Ajay Kumar, the chief guest, expressed optimism to see the event in person after a long time in his address. Complimenting IETE for selecting such an appropriate topic for the Meet, he stated that India was formerly the world's largest importer of defense items, but that trend has now reversed due to the government's open policies and the emergence of devoted start-ups. He emphasized that in order to be fully self-sufficient, we must build our own technology and have a robust R&D base. We have the eco-system in place to accomplish this, which is facilitated by digital technology, defense start-ups, and educated labor. He lauded DRDO's efforts to assist during the COVID epidemic. He closed his remarks by expressing the hope that the Atmanirbharta program will go a long way toward assisting defense in digitization, indigeniza-

tion, and meeting defense manufacturing requirements indignously through the establishment of more and more start-ups in this ecosystem. Following his remarks, the chief guest released the Meet's Souvenir.

Despite the COVID pandemic limits, the guest of honour, **Shri Ajay Prakash Sawhney** reminded the august audience about the exceptional growth rate in electronics from \$29 Billion in 2015 to \$76 Billion in 2020. In addition to quickly increasing base, worldwide competitiveness was a huge task. He praised the efforts made by diverse committed people around the country to launch 'Arogya Setu'. It has produced a variety of linked services, massive business and expansion of payment firms. He hoped that 2020 would be India's decade that would go deep into further indigenous developments in areas such as health care, defense production, education, defense transportation, and energy for home and industry, enabling it to meet worldwide competitiveness concerns. President IETE, **Prof (Dr) J W Bakal** in his address informed about IETE's events and webinars. He added the theme was chosen in light of our great Prime Minister, Shri Narendra Modi's desire for defence self-sufficiency. The creation of new start-ups has created an opportunity for young innovators in IT and electronics to demonstrate their skills to industry and academia to promote design and development of indigenous defence equipment.

In his address, guest of honour **Dr G Satheesh Reddy** asserted that India can design and produce electronic systems and devices. University research and development on cutting-edge technologies is needed to boost exports. High-powered lasers and quantum technologies are among the highly needed research subjects. Ministry and industry must collaborate to build infrastructure. If the nation takes the mission seriously, it can develop the most sophisticated systems. He appreciated the innovative efforts put in by young minds and launched start-ups to boost indigenization of defence products and DRDO for development & production of ventilators in record time of less than four months. He asked students to join university incubation units financed by TDS. An annual contest called "Day to Dream" would begin on October 15th, Dr Abdul Kalam's birthday, with winners getting one crore or ten crore for their proposal. Similarly, the Department of Defensive Production encourages ILAX for new defence product development. He added that the Indian government has various programmes to inspire young people. These activities' output must be exportable. Our goal should be to become the premier exporter, not the leading importer. "The government should create institutes to support creative manufacturing," he said. India needs this to attract innovative manufacturers. He complimented IETE for hosting today's event and hoped that participants would benefit from the sessions' new ideas.

In his online address by **Shri Sanjay Jaju**, guest of honour

commended the IETE President for organizing and selecting the theme. According to him, technological advancements in aerospace and defense production help make Atmanirbhar Bharat. The government had taken significant measures to boost domestic output. Defense production used to be dominated by munitions factories and DPUs (Data Processing Units). But today the business sector is heavily involved, and the government is encouraging it. The Defence Procurement Procedure (DPP 2020) provides preference to indigenously designed, developed, and manufactured equipment (IDDM). When implemented, the DPEPP (Defence Production and Export Promotion) will help stimulate domestic defense production. Innovations for Defence Excellence (iDEX) aims to use the Start-up environment to develop novel military solutions and increase local defense production. Among the critical projects identified for development and deployment are swarm drones and smart loitering weapons. To make India a global drone powerhouse, the Liberalized Drone Rules 2021 will encourage innovation and growth in the defense sector. To increase defence exports, the government has made numerous policy changes. He said the Defense Production Ministry has issued two open general export permits, one for select parts and components and the other for intra-company technology transfer. He praised the IETE office bearers and staff for arranging today's event and hoped that the Technical Session will produce fresh ideas for civil and defense production. After **Shri Pankaj Sharma**, IETE Secretary General, proposed the formal vote of gratitude, everyone recited the National Anthem as a closing ceremony tradition.

Delegates toured the Exhibition on products and services given by IT & IoT based Startup Enterprises, as well as other industries and public ventures, during the tea break. The exhibitors included M/s Apex Plus Technologies, Hyderabad; M/s Fiber Optic Sensing Solutions Pvt. Ltd., Navi Mumbai; M/s Paras Aerospace Pvt. Ltd., M/s J V Micronics, Faridabad; M/s Accuster Technologies Pvt. Ltd., New Delhi; Central Scientific Instruments Organization, Chandigarh; SAMEER, Ministry of Electronics & IT, Govt of India; Ajay Kumar Garg Engineering College, Skill Foundation, Ghaziabad; and IETE Kolkata.

The inaugural session was followed by a technical sessions with 23 invited talks and 18 paper presentations (out of which 6 presentations were conducted online for the speakers from Bharat Electronics Ltd), on various topics covering the broad areas of Emerging Avionics Technologies for 6th Generation Fighter Aircrafts, Advanced Guided Missiles, Modern Electronics Warfare Systems, Multifunctional Radar Systems, AI/ML based Smart Electronic Sensors, RPVs/UAVs Drones, Additive Manufacturing, Military Digital Synthetic Training Solutions using AR/VR Technologies, Space based Military Intelligence, Space Command and Control Systems, Autonomous Military Vehicles, Robots for Ground Based Applica-

tions, Naval Radar and Communications, CNS Systems for Underwater, Ground Based and Airborne Applications and Net Centric Operational Concepts.

The valedictory session witnessed **General Bipin Rawat, PVSM, UYSM, AVSM, VSM, YM, SM, ADC**, Chief of Defence Staff and Secretary, DMA, Govt. of India, as the chief guest for this function. The other dignitaries present were **Dr J W Bakal**, President IETE; **Prof (Wg Cdr) P Prabhakar** (Veteran), President Elect, IETE; **Dr KTV Reddy**, Past President, IETE; **Lt Gen (Dr) AKS Chandele**, PVSM, AVSM (Retd), Past President IETE; **Shri Jayant D Patil**, Director L&T and President SIDM, and **Shri Ravison Nagarjun**, Head Aerospace and Defence business, Mahindra Group, as guests of honour.

Shri Ravison Nagarjun, Head Aerospace and Defence Business, Mahindra Group, addressed the audience and thanked Gen Bipin Rawat for his support for their defense initiatives. Aviation, navigation, radar, communication and other military systems all require electronics. According to the Indian government's defense policy, the Mahindra Group's defence offerings include land systems, naval systems, defence electronics, and security consulting. He said the Group is rapidly scaling up its capacities to meet the demands of a nation on the rise. The Group is also exploring cyber security. He stated that the current government is very supportive of the defense cause. Also, in recent years, start-ups have developed some of the most inventive company models. Defense innovations will not only reduce defense imports but also allow the country to compete with other countries with high export potential. **Shri Jayant D Patil** addressed the gathering and thanked IETE for organizing this Meet. Extending L&T's achievements in the defense sector he recalled shifting technological scenarios. He believes that because of innovation, start-ups, favourable government policies, and massive backing, a sea-change has occurred in civil and defense infrastructure, and L&T has led the way. L&T provides innovative design solutions for defense systems. L&T may also provide turnkey defence construction solutions. L&T is also modernizing old defense facilities with novel ideas. He stated that electronics has been instrumental in the design, development, and production of the

country's most sophisticated defense equipment. He praised the government for releasing two positive indigenization lists, totaling around 209 weapons and defense equipment whose import is prohibited. He said it was time for the industry to profit from the government's open policies and make India self-sufficient in defence items via innovation, skill and competence.

General Bipin Rawat addressed the gathering after a brief introduction by **Lt Gen (Dr) AKS Chandele**. He thanked IETE and said that he was honoured to be the chief guest for the event. In his address, he mentioned about moving people and goods, rating, sensing and correcting, securing and defending our national interests, and finally research and exploration. He mentioned that diverse technological, economic, social, and regulatory trends will shape the aerospace and defense industry's future. New opportunities will arise as sensor and AI technology progresses. The Indian aerospace industry will spend tens of billions of rupees as technology evolves. That would not only boost the industry's business opportunities but also its technological capabilities. Avionics, high-powered lasers, radars, computing, and communication networks are all emerging. Nanotechnology is a big deal in sensors and other systems. The demand for electronics is growing at a compounded rate of 25%, and the supply gap is 9%. India's defence sector is entering a new era of greater responsibility. India's manufacturing sector is expanding and exporting. India is becoming a global manufacturing hub. Its wars must be won with Indian solutions, not imports. Banning of 209 defense products is the first step in this direction. He hoped that all stakeholders would work together to achieve this. A meeting like this will reveal ways and means. Lastly, he asked the Indian industry to work with the Indian armed forces to develop world-class equipment that will not only prepare the armed forces but also change our national resources. And he hoped we could do it together.

The Chief Guest presented awards to all invited speakers and exhibitors. **Shri Pankaj Sharma**, IETE Secretary General, proposed the vote of thanks at the end of the ceremony.

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NEW MEMBERS IN THE IETE GOVERNING COUNCIL (2021-24)

CONGRATULATIONS



Shri R S Chauhan (F-068960) is an IETE alumnus who earned an AMIETE in 1994 and an MTech in computer science. For the past 23 years, he has worked as an executive for MTNL Delhi. He has experience with several switching technologies, including 5ESS and EWSD, and is now working in the areas of MM and Planning, as well as FTTH. For the past 25 years, he has been an active member of IETE. In the last 12 years, while serving as Honorary Secretary and Chairman, he has made significant contributions to the growth of the IETE Delhi Centre by developing massive infrastructure (25 KVA Solar plant, lift, new DG Set, online 200 PC Lab); by conducting various courses (Cyber Security, Fiber Optics, etc.) and has played a critical role in achieving the vision of IETE-Reaching the unreachable.



Dr D S Bormane (F-189076) Principal of AISSMS College of Engineering in Pune is also the Chairman of the Board of Studies in E&TC Engineering at Savitribai Phule Pune University in Pune. He earned a ME (electronics) and a PhD in electronics and computer science engineering and has 34 years of experience teaching, doing research, and administering. He has over 180 publications in international journals, national periodicals, and international conferences. He holds 17 patents, 7 copyrights, and 3 publications to his credit. He was the Chairman of the Board of Studies for Electronics Engineering at Dr BAMU, Aurangabad; a member of the Board of Studies for Electronics at Dr BATU Lonere, Shivaji University Kolhapur; and a member of the Board of Studies for Electronics at Dr PAH University Solapur. He has guided 14 PhD research scholars and more than 60 PG students at Savitribai Phule Pune University as a PG and PhD guide. He is a member of the Savitribai Phule Pune University's Academic Council, Research and Recognition Committee. Since 2010, he has conducted several international and national conferences; faculty orientation seminars; and PG student project competitions. He is a Fellow Member of IETE, New Delhi; a Fellow Member and Chartered Engineer (India) of IE(I) Calcutta; a Senior Member IEEE and a Senior Member of IACC-SIT, Singapore; a Life Member of ISTE; a Life Member of the Indian Society for Continuing Engineering Education; a Member SAEINDIA; a Member IAENG – International Association for Engineers and Computer Scientists; and other professional societies. He has received the PSD Shastri Foundation's Excellence in Education Award, the Computer Society of India's (CSI) Best Principal of the Year 2018, the Venus International Foundation's Distinguished Leader in Engineering Award, and the DNA and Stars of the Industry Group's Education Leadership Award. Under his leadership, AISSMSCOE was accredited by NAAC with an A+ grade, received the SPPU's Best Professional College award in the Urban Area, and was named a Mentor College by the UGC under the Paramarsh scheme. He was able to secure more than

Rs 5 crores in funding for the institute through various funding schemes.



Shri Sunil (F-224760) is the Additional Director General of Prasar Bharati and the head of the divisions of international relations, marketing, global distribution, and central archives as well as external services. He has been in the broadcasting industry for 33 years. With a BTech and an MBA (FMS), he oversaw the planning of transmitters, satellites, capital procurement, and broadcasting project installation in India and abroad. He also holds the position of President of the Broadcast Engineering Society for 2021-2023. He has been elected as its President unopposed for this term. He formerly served on the Technical Advisory Group of the DoS and as Secretary of the Broadcast Engineering Society (BES). He is the recipient of the Asia Pacific Broadcasting Union (ABU) Broadcast Excellence Awards 2018, IETE S N Mitra Memorial Award (2016), World Book of Records 2021. His other important portfolios include Vice Chairman Technical Bureau ABU; International jury for ABU awards, jury for the Association of International Broadcasters (AIB) UK.



Dr R R Deshmukh (F-203171) ME, MSc (CSE), PhD FIETE, PEIN Fellow, is a Professor at Dr BAM University in Aurangabad, Maharashtra, India, where he works in the Dept of Computer Science and Information Technology. He also acts as the University Coordinator for both the DST-FIST and the MHRD GIAN programmes. He was the Chairman of the IETE Aurangabad Centre from 2014 to 2018, and arranged for a zonal ISF in 2016. He was the Sectional President of ISCA-2019's ICT Section. He has also served as the Coordinator for ISCA, CSI, ISTE, IEEE, IAEng, CSTA, IDES, and ACEE, as well as a Life Member of ISCA, CSI, ISTE, IEEE, IAEng, CSTA, IDES, and ACEE. Dr Deshmukh is a member of the University of Hyderabad's University Management Council, Senate, and Academic Council. He has edited twelve books and has over 250 research papers published in top journals, including the CSI Journal of Computing, where he is currently Editor-in-Chief. He has travelled to Russia, the United States, China, Spain, the Philippines, Uzbekistan, and Thailand for academic research and conferences.



Shri Sharad Singh (F198422) is having vast experience in various areas of power sector such as power plant engineering, power plant erection, human resource management, power trading, quality, safety, power plant operation and maintenance and financial management. He has over 25 years of expertise in the power sector and is a Project Management expert. He has also worked at NTPC in the field of IT infrastructure

development, where he created a one-of-a-kind project (from concept to design) of a paperless office, the first of its type in the government sector, and pushed the company's computerization plan, which saved millions of rupees. He earned an MBA in business strategy from MDI Gurgaon, and renewable energy is one of his specializations. He was Hony Secy at the IETE Delhi Centre from 2010 to 2012, where he concentrated on infrastructure, GATE classes, recruitment of skilled teaching personnel, and student placement operations. He was also an IETE Governing Council member from 2016 to 2019 and the Hony Treasurer from 2018 to 2019. He wishes for a concerted effort to end the current dilemma of IETE course de-recognition.



Dr K Jaya Sankar (F-174479) received a BTech in electronics and communication engineering from S V University in Tirupati, Andhra Pradesh, and ME and PhD degrees in electronics and communication engineering from the Department of ECE at Osmania University in Hyderabad, Telangana, in 1988, 1994, and 2004, respectively. He joined Vasavi College of Engineering in Hyderabad in 1992 after a brief stint in a few firms. He worked there for about 26 years. For about 14 years, he was the head of the ECE department, and for about 2 years, the Principal. On December 3, 2018, he was appointed as Professor of ECE and Principal of Mahatma Gandhi Institute of Technology (MGIT). He has taught electromagnetics, antennas, digital communication, microwave and radar systems for 28 years. Wireless communications and genetic algorithm based antenna design are two of his research interests. He has over 100 research articles that have been published in national and international conferences and journals. He is an IEEE Senior Member and an IETE Fellow. Since 2004, he has been a part of the IETE Hyderabad centre. He served on the EC of the IETE Hyderabad Centre for two terms, 2008-2010 and 2012-2014, and was unanimously elected Chairman of the IETE Hyderabad Centre for the 2014-2016 term. From 2017 until 2020, he was a member of the IETE Governing Council in New Delhi.



Prof (Dr) Ajay P Thakare (F-121223) BE, ME, PhD, has 31 years of professional experience, including teaching at a Foreign Defence University in Africa and serving as Head of Communication Technology & Secretary of Academic Council. From 2017 to 2018, he was IETE Governing Council and served in several positions, including Chairman TPPC, Mentor East Zone. Also Chairman Amravati Centre from 2014-16, and Founder Secretary Amravati Centre from 2004 -09. The Centre got the best Centre award during his stint as Chairman, and he organised MTS and AIC in 2015 and 2018, respectively. He is recipient of Brig M L Anand Award in 2016. Currently, employed as Professor at Sipna College of Engineering in Amravati, he also serves on the University's Board of Studies as a Member and a PhD Supervisor. He has been a member of IETE for about two decades. So far, he has travelled to eight different countries to participate as session chair, speaker, and present papers.



Prof H S Bhatia (F-141729) graduated from Jabalpur University (BSc 1965 and BESC 1968 in Telecommunication) and IIT Delhi (MTech 1979) with specialization in RADAR and communication engineering. For 35 years, he worked at LRDE, DRDO Bangalore, where he made significant contributions to the design and development of numerous technologically advanced RADAR Systems for Armed Forces, viz, the first indigenous design and development of a naval surveillance radar based on pulse compression; Dual-Frequency Naval Tracking Radar for Sea Skimming Missiles against sea clutter and multipath adversaries; Radar for Central Acquisition in 3D (3D CAR); Multimode Radar for LCA (TEJUS). After resigning in June 2004, he spent ten years at KNSIT Bangalore, as Prof and HoD, Dept of ITE, where he also carried out Principal duties. Aside from his regular duties, he took charge of running FDPs and SDPs, as well as Soft Skill Training Programs, to empower people and boost productivity. He is a member of several professional organisations, including IEEE, IETE, ISOI, ISSS, SEE, and IMAPS-India. He was the Hony Secretary of the IETE-Bangalore Centre for two terms (2012-14 and 2016-18), as well as the Chairman from 2018 to 2020. Under his energetic and capable leadership and dedication, the IETE Bengaluru Centre earned the best centre award three years in a row. He is now the Chairman of the India Chapter of the International Microelectronics and Packaging Society (IMAPS). He is an active participant in socio-religious and professional projects involving human personality development programmes, as well as ISF activities at several academic institutes in and around Bangalore. RF MEMS, MMICs for RF Front Ends, LPI Radars, Electronic Intelligence (EI) for Electronic Warfare (EW) applications, and Smart IoT Technologies are among his current research interests.



Dr K Seetha Ram Babu (F-216294) IETE Org Rep Member, has 25 years of expertise in software engineering. He worked in the United States and Singapore for 5 years, where he was involved in numerous SAP projects at various levels of the organization's management hierarchy. He formerly held the positions of SAP Practice Head at Capgemini and SAP-India Delivery Head at Sitacorp, and he has 13 years of SAP experience. He is currently the Director of MVSR and Matrusri Engineering Colleges in Hyderabad, and he previously served on the Osmania Graduate Association's Governing Council for Education and Polytechnic Colleges. He has served as Past Chairman of the CSI Hyderabad Chapter, Nomination Committee Chairman, Secretary, and Executive Committee Member; Former Vice-Chairman and twice-elected member of the IETE Hyderabad Centre's Executive Committee; Former Vice-Chairman, Secretary, and EC Member of the ISOI Hyderabad Centre, and currently Chairman of the Centre; Former member of the BES Hyderabad Centre's EC on two occasions, and currently a member of the ISCA Hyderabad Centre's Executive Committee. He dedicated time and engaged in several professional activities during his term in several professional organisations.

IETE Nominated Members (2021-22)



Lt General (Dr) Rajesh Pant, PVSM, AVSM, VSM (Retd) (F-177312) is an internationally recognised Cyber Security expert, who is presently tenanted the prestigious appointment of National Cyber Security Coordinator in the National Security Council Secretariat of India. In this capacity, he is responsible for coordinating all activities across multiple sectors to ensure a secure and resilient cyber space within the nation. He holds a PhD degree for his research in the field of Information Security metrics. He is also MTech from IIT Kharagpur, MPhil from Madras University and Master of Management Studies from Osmania University. Prior to this appointment, he was the head of the Army's Cyber Training establishment for three years. He served in the Army Signals Corps for 41 years wherein he was awarded three times by the President of India for distinguished service of the highest order. Consequent to his retirement, he was Chairman of a listed Electronics Company, peer review member of NAAC, and Governing Council member of IETE (India). General Pant brings to the table an interesting mix of military operations, academic excellence, corporate governance and cyber security wisdom.



Prof Raghunath K Shevgaonkar (F-104016) has been an active researcher in electromagnetics, optical communication, image processing, antennas, microwaves, radio astronomy, and other fields. He has numerous publications in international journals and conferences, as well as a textbook, namely *Electromagnetic Waves*, and a monograph on *Transmission Lines for Electrical Engineers*, both published by McGraw Hill Education. He has held numerous academic leadership positions, such as Director of IIT Delhi, Vice Chancellor of the University of Pune, Vice Chancellor of Bennett University, and Deputy Director, Dean Resource Mobilization, Dean Student Affairs, Head of the Department of Electrical Engineering, Founder and Head of the Centre of Distance Engineering Education Program, among others, at IIT Bombay. He is a Fellow of IEEE, the Indian National Academy of Engineering, the National Academy of Science, India, the Institution of Electronics and Telecommunication Engineers, the Optical Society of India, the Institution of Engineers, the Maharashtra Academy of Sciences, and Member of International Astronomical Union and Astronomical Society of India. Prof Shevgaonkar has received the IEEE William E. Sayle

Award for his achievements in Engineering Education, the IEEE Undergraduate Teaching Award for his inspirational teaching, the SN Mitra Memorial Award of the Indian National Academy of Engineering for his contribution to electromagnetics, antennas, and radio astronomy, the Ram Lal Wadhwa Award of IETE for his outstanding contribution to optical communication, the VASVIK Award in ICT, and the IIT Bombay's 'Excellence in Teaching.' He has received the Headlines Today Education Leadership Award as well as the Dewang Mehta Educational Excellence Award.



Air Vice Marshal P K Srivasatava, VSM (Retd) (F-500434) is an aeronautical engineer with 46+ years of distilled experience in defence aerospace. He, in his different Avatars, had been promoting, strategizing and operationalizing newer dimensions of aerospace business through policy and structural initiatives for meeting national objectives of threshold technology accumulation and creation of vibrant aerospace ecosystem, wherein, make-in-India and skill-India can take sustainable roots. He has the unique distinction of working in all three segments of aerospace domain viz. Government - while in the IAF as Air Vice Marshal, public sector -while in BDL as Director (Production) and private sector -while in L&T as Head of their Flight Systems Business Unit. He has worked from tarmac level upwards to tactical and strategic levels and have contributed as thought leader and aviation expert through various national task forces and articles published in prestigious national journals. He is fully seized with the functioning and interplay of different ministries, departments, DPSUs, Private Sector, DRDO, ISRO inclusive of MoCA, MoD, DDP, IAF, IA, IN, SFC, ADA, ADE, HAL, BDL, BEL etc. This empowers him with 360-degree vision of aerospace domain. He firmly believes that we, as nation, have necessary political, bureaucratic, managerial, financial and technical bandwidth to achieve the desired national objectives and make global impact in aerospace domain. We need to employ our resources in synergy through policy initiatives and attendant organizational structures that are capable of translating national vision into national deliverables. He is passionate, eager and committed to serve the country to find its pathways to become self-reliant and make a global impact in defence weapon systems. He is an alumnus of IIT, Mumbai & Varanasi. He is also an alumnus of FMS, Delhi University.

IETE Honorary Fellow 2021

Congratulations to Shri Natarajan Chandrasekaran, Chairman Tata Sons on being selected as IETE Honorary Fellow this year. This recognition has been conferred on his multifarious accomplishments, which extends beyond professional community, as well as his role as a significant inspiration to many others.

IETE-Life Time Achievements Awardees-2021

Congratulations to Prof (Dr) Baidyanath Basu, superannuated Professor, IIT-BHU, on being selected to receive this year's life time achievement award. It has been in recognition of his seminal contributions over a period of four decades to theoretical and applied research, accruing national and international collaborative efforts, that led to the development and production of a number of state-of-the-art microwave tubes for civil and defence applications at various R&D Centres and industries in the country and abroad.

Congratulations to Dr Vijay Tulshiram Ingole, Amravati, on being named the co-receiptant of this year's life time achievement award in recognition of his seminal contribution to the area of electronics, that led to the development and production of a number of innovative products as well as import substitution products and for rendering dedicated services towards the cause of IETE activities.

IETE Zonal (West) Seminar on Next Generation Communication Systems & ISF Congress

The IETE Bhopal Centre hosted a virtual Seminar on 16th -17th of May 2021 in collaboration with the Dept of EE, Madhav Institute of Technology and Science, Gwalior, IES University Bhopal, Shivpuri Institute of Technology, Shivpuri, IE (India), Gwalior Chapter, and ICOTEX India, Gwalior, under the auspices of the IETE Zonal Seminar & ISF Congress. **Next Generation Communication Systems** was the theme of the Zonal Seminar. **Dr P K Singhal**, Chairman, IETE Bhopal Centre; **Prof N N Kasat**, Mentor, IETE West Zone; and **Prof M N Hoda**, Chairman, TPPC, IETE, all gave welcome/ introductory speeches. The chief guest at the inaugural session was **Prof Y D S Arya**, Vice Chancellor, Invertis University, Bareilly, and the guest of honour was **Dr Navine Chandra**, Vice Chancellor, IES University, Bhopal. On this occasion, **Dr J W Bakal**, President of IETE New Delhi, addressed all of the attendees. With a

vote of thanks, **Dr Vandana Vikas Thakare**, faculty advisor of ISF MITS Gwalior, concluded the session. Following the Inaugural ceremony, speakers from all over the country presented 21 research papers. **Dr Manjaree Pandit**, Dean Academics, MITS, Gwalior, gave the keynote lecture on the 17th of May 2021. **Shri Prateek Singhal**, Senior Director, Squaretrade, California, gave a motivational speech. One of the day's events was an idea presentation. Students from all throughout the country signed up to propose their ideas. A total of 20 teams were chosen to present their ideas at the event, with the top three concepts receiving cash prizes. As part of the programme, students took a competency test, with the top three scorers receiving a monetary prize and a certificate of achievement. **Dr Nilendra Badal**, Principle, Rajkiya Engineering College, Bijnor, UP, gave an expert lecture after the IETE Zonal meet for the west zone.

IETE Zonal (South) Seminar on IoT and its Applications Office Bearers' Conclave & ISF Congress

IETE Zonal (South) Seminar was hosted by **GSSS Institute of Engineering and Technology for Women, Mysuru**, on 3rd and 4th of August 2021 on the topic **IoT & its Applications**. The entire event took place online. **Prof J W Bakal**, President of IETE, inaugurated the event. **Dr M H Kori**, Vice President, IETE, delivered the keynote presentation. Additionally, **Dr DC Pandey**, Mentor, South Zone, and **Shri G Ramesh**, Chairman Membership Committee, **Prof C R Natraj**, Chairman IETE Mysore, **Dr Rajendra R Patil** and **Smt Vanaja B Pandit**, all participated. The seminar discussed the following topics: IoT for sustainable health monitoring and management; IoT in data analysis and decision automation; Industrial IoT; IoT for predictive analysis; and IoT security. There were a total of 38 articles and two posters submitted. **Dr Parmeshachari B D**, Hony Secretary IETE Mysore, gave the vote of thanks at the end of the programme.

Office Bearers' Conclave: As part of the zonal seminar, an interaction meeting was organised among the office bearers of all the South Zone's Centres and Sub-Centres to enable idea exchange and sharing of best practises. Similarly, an ISF Congress was held to foster interaction among the many ISFs in the South zone. These activities contribute to the promotion of organisational and technical interaction among the many centres in the South zone, enabling the IETE community to be of service to society in general and to professionals in particular. **Shri G Ramesh** addressed the audience and shared extremely valuable knowledge with them. Several members requested that such an interactive meeting be held at the zonal level, with proper ad-

vance notice, once in a quarter. The organisation of such an event might be rotated between multiple centres. The next meeting was called in October, and IETE Mysuru has been asked to host it. IETE Mysuru agreed to this suggestion and stated that they will give advance information to all South Zone Centres with a scheduled agenda. The meeting lasted over two and a half hours and was characterised by productive dialogue. IETE Mysuru expressed gratitude to all participants for their participation and wished for more such meets in the future. The online event was enthusiastically participated in by office bearers from Bengaluru, Hyderabad, Chennai, Thiruvananthapuram, Palakkad, Gulbarga, Kochi, and Kozhikode.

ISF Congress: On 4th August 2021, during the zonal seminar (South), an online meeting of representatives and coordinators of ISFs in the South Zone was arranged. Around 12 representatives attended the meeting, which shared and discussed various best practises. The response was not as positive as anticipated. It was necessary to go forward in order to ensure that ISFs receive the necessary support and advice. The Mysuru Centre extended their appreciation to the chief guest, guest of honour, all participants, special guests, and invitees. They expressed their appreciation to **Smt Vanaja B Pandit**, Honorary Secretary, GSSS(R), and the management of GSSSIETW, Mysuru, as well as Principal **Dr Shivakumar M**, for conducting the zonal seminar at GSSSIETW, Mysuru. Thanks was also extended to all volunteers, track chairs, IETE Mysuru's Executive Committee members, and various event coordinators for their assistance with this event.

Centres'/ Sub-Centres' News

AHMEDABAD

The Centre, in collaboration with the IE(I) Gujarat Centre, the CSI, Ahmedabad Chapter, and Sankalchand Patel University, Visnagar, observed the **53rd World Telecommunication and Information Society Day (WTISD)** on 17th May 2021 via web conferencing on the theme **Accelerating Digital Transformation in Challenging Times**. **Er H U Kalyani**, Chairman IEI, offered the opening comments, while **Er Niraj Shah**, Chairman, CSI, provided context for the event. The Chairman IETE Ahmedabad, **Er R M Makwana**, also addressed the gathering. Speakers **Shri Sanjay Sawhney**, Senior Project Manager, Shaw Communication Canada, and **Mrs Nagini Madhuranthakam**, Director IT, Vision India Ahmedabad, delivered expert presentations on the subject. **Mrs M Nagini** discussed the Digital Transformation Strategy and its benefits, as well as the field's obstacles and organisational hurdles to change, as well as management recommendations. **Er Bharat Patel**, Director and Chief Operating Officer of Yudiz Solutions Pvt Ltd and Council Member of IEI, was the chief guest, and the ceremony was presided over by **Dr D J Shah**, Director, Technical Courses, SPU and Principal SPCE, Visnagar. The vote of thanks was proposed by **Dr Ankur Saxena**, Professor and Head, SPCE's ICT Department.

ALIGARH

On 19th May 2021, the IETE Aligarh Centre commemorated and conducted the **53rd World Telecommunications & Information Society Day (WTISD)** via online means. The session began with the recitation of the Holy Quran, followed by **Prof Muzaffar A Siddiqi's** welcome address as Chairman of IETE. Additionally, he highlighted the Centre's activities to all participants. Honorary Secretary **Dr Abdus Samad** read the message from ITU Secretary General Houlin Zhao. **Mr Parvez Akhtar**, Retd Principal General Manager, Telecom District, BSNL Hoshiarpur, Punjab, was the chief guest and delivered the keynote presentation. In his talk, he underlined the India's transformation towards a digitally empowered society and knowledge economy. He briefed on several telecom initiatives now underway in India. Mr Parvez also discussed the technological benefits and potential implications of 5G mobile networks. He also discussed his thirty-three years of service with BSNL. **Dr Ayyub Khan**, IETE Aligarh Centre's EC member, concluded the session with a vote of thanks.

BANGALORE

- At the AICTE-sponsored 6-day online **Short Term Training Program** on "Data Analytics in Machine Learning Techniques" (STTP Phase-1), **Dr M H Kori**, Vice President, IETE, and Former Director, ALCATEL, delivered a keynote address on **Data Analytics and Machine Learning – Applications in 5G, IoT** on 22nd March 2021. The Dept of CSE at Sri Venkateshwara College of Engineering in Bengaluru hosted this STTP from March 22 to March 27, 2021. **Shri Mallikarjun**, CEO, TechFortune Technologies, Bengaluru, was the chief guest of this STTP, which

was virtually inaugurated by **Dr Suresha**, Principal, SVCE, Bengaluru. **Dr Sanjeev C Lingareddy**, Prof and Head, and Convener of the STTP, provided an overview of the program's benefits. Over two hundred individuals from across the country enrolled and attended all sessions successfully. The programme was coordinated by all faculty members in the Dept of CSE at SVCE, Bengaluru.

- IETE Bangalore was an associate partner in the 'Smart Manufacturing Summit,' which took place on April 15, 2021, and was attended by a wide range of companies. Experts gave talks on Digital Transformation and Industry 4.0, followed by a panel discussion on 'Creating Opportunities from Digital Transformation in a Crisis.' To kick off the conference, **Shri C Satyanandan**, Chairman of IETE Bangalore, gave a keynote presentation in which he introduced IETE to the audience and discussed the organization's objective and activities. The speaker went over the many types of IETE membership, including Organizational Membership, and invited the companies in attendance to become Organizational Members. He invited them to collaborate with IETE in the development of its infrastructure.

- IETE Bangalore commemorated the **WT&ISD** on 17th May 2021. **Shri Devesh Kumar** ITS, CGM, Telecom, BSNL Karnataka Circle, was the chief guest. Guests of honour included: **Dr Saptarshi Chaudhuri**, Chief Architect, Radisys, and **Shri K S Madanpuri**, ITS, CGM, NE-I Telecom Circle, Shillong. Ms Rashmi, an MSRIT student, sang the invocation. The welcome address was given by Honorary Secretary **Dr Shivaprasad Yadav**. **Dr Kavitha**, Jt Honorary Secretary, read the ITU Secretary General's message, while Dr Shivaprasad read the IETE President's message. The chief guest was introduced by **Dr CV Ravishankar**, Vice Chairman. **Shri Devesh Kumar** defined digital transformation and described the various domains in which it is taking place. He focused on BSNL's efforts to reach out to distant places. He claimed that BSNL went digital to improve operational efficiency and customer experience. He went on to explain how digital technology has aided in the current Covid problem and natural calamities. Guest of honour **Dr Chaudhuri** gave a talk on '5G and Beyond- Technology and Challenges.' He discussed the impending debut of 5G, its advantages, and how it differs from 4G. He also stated that the time has come to discuss the 6G concept. Dr Kavitha, gave a brief introduction to the guest of honour, **Shri Madanpuri**, who presented the challenges for ICT's during the Covid crisis. He outlined the key sectors for digital transformation, stating that broadband has become the new standard and that fibre to the home is a basic requirement. **Dr MH Kori**, IETE Vice President, gave an overview of the organization's goals and activities. The 10th edition of the **IETE Bengaluru Magazine** was launched by Shri Devesh Kumar. The Chairman, **Shri Satyanandan**, appreciated the distinguished guests for their informative talks. He said that IETE can help to bridge digital divides by bringing all stakeholders together on

a common platform. The vote of thanks was proposed by **Shri Ranjeet Kumar**, Hony Treasurer.

- **World Wi-Fi Day** was celebrated by the Centre online on 20th June 2021. **Shri GR Ravi**, Principal GM BSNL, Karnataka Circle, was the chief guest who gave the keynote address on ‘Wi-Fi, a necessity for the development of Karnataka’. **Dr Kavitha**, Jt Hony Secretary spoke about the World Wi-Fi Day. **Shri Satyanandan**, Chairman IETE Bangalore presided. **Dr Shivaprasad Yadav**, Hony Secretary welcomed the gathering and **Dr C V Ravishankar**, Vice Chairman introduced the chief guest. Hony Treasurer proposed vote of thanks.

- A webinar on **Women Empowerment in Engineering** was held on June 28th, 2021. **Dr Sanju Tiwari**, Senior Researcher at University Autonoma de Temaulipas, Mexico, was the chief guest. Despite coming from a rural background, Dr Tiwari is now a well-known author and post-doctoral researcher. She is a role model for young women everywhere. Using historical data, she showed how the number of Indian women working in science and technology has grown at an exponential rate. In elite universities like IITs and at the PhD level, however, the ratio of women to males has been extremely low. The lecture was followed by a lively discussion in which Chairman **Shri Satyanandan**, Immediate Past Chairman Prof Bhatia, EC member Dr DG Rao and Dr Kavitha participated.

- A webinar “**Women - Peak your Potential**” was conducted on 30th June 2021. The keynote speaker **Shri K Gururaja**, HRD Trainer and Mental Health Professional, was introduced by Hony Secretary **Dr S G Shivaprasad Yadav** after his welcome address. Shri Gururaja discussed different facets of women’s empowerment, including obstacles women experience and strategies for overcoming them. He provided examples and case studies to illustrate his points. The interactive session was really dynamic, with lots of participation from the participants. The Centre Chairman complimented the keynote speaker’s speech, and urged IETE women members to get more involved in the organization’s activities. He said that IETE Bangalore will hold events to encourage women to do the same. **Prof Harjinder Bhatia** praised the speaker’s work and shared his thoughts on women’s empowerment after he finished his remarks. The Honorary Treasurer offered a heartfelt thanks to close the event.

BHOPAL

- The IETE Bhopal Center hosted an **international conference** titled “Next Generation Education Technology for Science and Engineering” in partnership with the IEEE MP Section and the Institution of Engineers (India), Gwalior Chapter, Gwalior, on February 26-27, 2021. **Dr Vandana Vikas Thakare**, Assoc Prof and Chairperson, IETE ISF, MITS, Gwalior, opened the session with a welcome address. **Dr J Vaishampayan**, Hon’be Vice Chancellor of Bundelkhand University, Jhansi, was the programme’s chief guest. He enlightened the participants on the importance of next-generation education technologies and encouraged them to continue arranging similar events. The guest of honour was **Er B S Yadav**, Chancellor of IES University

in Bhopal, who spoke about the use of ICT in next generation education. **Dr P K Singhal**, Professor at MITS Gwalior and Chairperson of the IETE Bhopal Centre, gave the keynote presentation. Twenty-four international speakers from Indonesia, Brunei, Romania, Turkey, Nigeria, Germany, Philippines, Egypt, Bangladesh, Thailand, and India, participated in the conference as keynote speakers. The conference featured 38 papers in total. More than 200 academics, entrepreneurs, and students took part. The programme was coordinated by Dr Vandana Vikas Thakare, Dr Rahul Dubey, Dr Karuna Markam, Shri D K Parsedia, Mrs Pooja Sahoo, EE Dept. MITS, Gwalior, and Dr Laxmi Kumre, ECE Dept MANIT, Bhopal.

- On the occasion of **National Science Day**, February 28, 2021, the Centre, in collaboration with University Institute of Technology, Barkatullah University, Bhopal, hosted a webinar. A presentation on “Recent Technology in Satellite and Wireless Communication” was given by **Shri Rajneesh Sharma**, Deputy Manager, Earth Station and Instrumentation, ISRO Bhopal. Around 100 students and IETE members attended the event. The seminar was coordinated by **Dr Poonam Sinha**, Head - EC Dept, University Institute of Technology, Barkatullah University, Bhopal.

- The BIET, Jhansi; State Project Implementation Unit, UP; the Technical Education Quality Improvement Programme –III (a World Bank-supported project under the Ministry of Human Resource Development of the Government of India); the Society of Automotive Engineers India (SAE) Western Section; the IETE Bhopal Centre; and the IEEE MP Sub Section jointly organised a **national webinar** on 29th May 2021. Participants from across the country included faculty members, students, researchers, and industry personnel. **Dr Shahanaz Ayub**, Dean Research and Development, BIET, Jhansi, convened the webinar with **Dr Mahaveer Singh Naruka**, Nodal Officer (Academics), SPIU-UP, serving as co-convenor. **Prof V K Tyagi**, Director, BIET Jhansi, delivered the welcoming and inaugural addresses. **Dr Sandeep Mahajan**, Chairman, Society of Automotive Engineers India (SAE) Western Section; and **Prof P K Singhal**, Chairman IETE Bhopal, offered special addresses. The technical session featured a keynote presentation by an expert **Dr Santosh Rane**, Dean Academics of Mumbai’s Sardar Patel College of Engineering on **Unlocking the Industrial Potential of Digital Twin**. **Dr Anil Kumar**, State Project Administrator, SPIU-UP, provided the opening comments. **Dr Shahanaz Ayub**, Dean of Research and Development at BIET Jhansi and Webinar Coordinator, presented a vote of thanks.

- The Centre organised a webinar jointly with Shivajirao Kadam Institute of Technology and Management, Dept of ECE on **AI and Robotics Edge** on 1st June 2021. **Dr Sapna Katiyar**, Dean Academics and Prof, Dept of ETE, ABESIT, Ghaziabad, discussed Classification of AI, advantages and disadvantages of AI along with ant colony optimization algorithm. Adaptive control system for a mobile robot path planning, global path planning and integration of ACO algorithm was discussed with grid model. Total 106 participants registered from around the globe. **Mrs Anagha Chougankar** coordinated the event and **Dr Amit Udawat** pro-

posed vote of thanks. Another webinar organised jointly with them on **Edge Devices for IoT Applications** on 2nd June 2021. **Dr Vaibhav Neema**, Asso Prof, Dept of ETE, IET DAVV, Indore addressed an expert session. **Ms Sneha Nagar** coordinated, while **Dr Amit Udawat** proposed vote of thanks.

- The Centre observed **World Environment Day** virtually on 5th June 2021 by hosting an International Webinar on **Climate Change and Global Warming** in partnership with Shivpuri Institute of Technology, Shivpuri, IES University, Bhopal, and the Institute of Engineers, Gwalior Chapter. The inaugural note was provided by **Dr P K Singhal**, Chairman, IETE Bhopal Centre. **Dr Sunil Kumar Gupta**, Honorable Vice Chancellor of RGPV, Bhopal, was the program's chief guest. He enlightened the participants about nature and the environment and encouraged them to practise environmental responsibility. **Dr Dragan Jovanon**, MIT University, Macedonia, **Dr Rania Lampou**, Greek astronomy and space enterprise, Greece, **Shri David Fiase**, Executive Director, GLANDi, Nigeria, and **Mohd Irwan**, Universitas Muhammadiyah, Sidereng, Rappang, were the event's international speakers. The event attracted a total of 222 participants. Vote of thanks was proposed by **Dr Rahul Dubey**.

- IETE Bhopal Centre organized an **International online training for Climate change activists** on 16th June, 2021 in collaboration with Women Environmental Programme (WEP), Abuja, Nigeria, Global Awareness for Development initiative (GLADi), Abuja, Nigeria, and Nigerian Institution of Environmental Engineers (NIEE), Abuja Nigeria. Welcome message was read by **David Fiase**, Exec Dir and Climate Activist, David All Green, Abuja, Nigeria followed by the goodwill message from the member of WEP, Nigeria. **Dr P K Singhal** Centre Chairman, readout the goodwill message. **Dr Priscilla Achakpa** from NIEE, Nigeria was the guest speaker of the program, delivered a lecture about the **Eco-system Restoration**, which is followed by interactive question answer session. **Dr P K Singhal** and **Dr Rahul Dubey**, Member, IETE were declared as the Global Ambassador of climate change.

- The Centre celebrated **World Yoga Day** on 20th June 2021. **Shri Munna Singh Parihar**, Yoga Teacher, Anterman Anand Club, Gwalior led members of the Centre and MITS ISF students in a yoga class.

- The Centre in association with Bundelkhand Institute of Engineering and Technology, Jhansi, organised a webinar on **Recent Trends in Satellite and Wireless Technology** on 25th June 2021. The resource person was **Shri Rajnish Sharma**, Scientist, ISRO MCF Bhopal. The webinar was attended by professionals and students.

- A webinar was arranged on '**How to file a Patent**' on 18th July 2021 with the resource person **Dr Amit Yadav** from Raj Balwant Singh Engineering Technical Campus, Agra.

- The webinar on **Matlab for New Users** was arranged on 3rd Aug 2021, wherein **Shri Manoj Kumar**, Application Engineers, Design Tech Systems Pvt Ltd, delivered a lecture and conducted hands on training. The program was attended by IETE Bhopal Center members and MITS ISF students. **Prof Deep Kishore**, Member, IETE was the coordinator of the program.

- The Centre along with MITS ISF conducted a **Students Career Counseling Session** with Industry Experts on 7th Aug 2021. Counseling was done by **Shri Abhijeet Singh Tomar**, Volvo Power Train, Sweden; **Shri Rahul Kathuria**, Management Consultant, Accenture; **Shri Yasho Vijay Singh Yadav**, CSIR-NAL Bangalore and **Shri Anuj Pahariya**, Intel. About seventy students from MITS ISF participated in the program.

- IETE Bhopal Centre, Shivpuri Institute of Technology, Shivpuri, IE (India), Gwalior Local Center, Gwalior India and IETE MITS Student's Forum, Gwalior India, jointly organized a one-day **Women International Summit on "Women Empowerment"** on 8th August 2021. The major goal was to raise awareness about the importance of women's education and how it may help them become more independent and have a positive impact on their quality of life. It's also important to arm women with the resources and know-how as they need to become self-sufficient. **Dr Renu Jain** Vice-Chancellor Devi Ahilya Vishwavidyalaya, Indore, India was the chief guest for the inaugural program and **Dr Manjaree Pandit** Dean (Academic) and Professor Dept of EE, Madhav Institute of Technology and Science, Gwalior, was the guest of honour. The program was coordinated by **Dr Vandana Vikas Thakare**. Total 145 participants participated from various universities/institutes from different parts of country out of which 14 participants are from outside the country. There were 14 keynote speakers spoke in 5 different sessions, chaired by Dr Vandana Vikas Thakare, Dr Karuna Markam, Prof Pooja Sahoo, Dr Shahnaaz Ayub and Dr Vimlesh Singh.

- IETE Bhopal Centre, in collaboration with Global Awareness for Development Initiative (GLADi), Abhuja, Nigeria, organised a lecture series on "The Role of Youths in Combating Climate Change", on 12th August 2021. **Prof PK Singhal**, Chairman IETE Bhopal Centre, gave a welcome address, stressing the consequences of global warming. The lectures were delivered by **Emolot Allan David**, National Coordinator, African Youth Charter Hustlers, Uganda, **Ms Obimdike Loretta**, Founder, Green Environment and Climate Change Initiative, Nigeria and **Moses Salem**, Dept of Forestry, JS Tarka University, Nigeria. It was concluded that every youth must plant one sapling every month.

- A webinar on **New Paradigm Shift in Wireless Communication** was organized on 5th Sep, 2021, wherein **Prof Neelam Srivastava**, Head, Dept of ECE, IET Lucknow delivered a lecture.

- **Teacher's Day** was celebrated on Sept 5, 2021, with the subject **The Role of Teachers in Restructuring the Nation**. The function's chief guest was **Prof Geshe Ngawang Samten**, Padam Shri, Vice-Chancellor, Central Institute of Higher Tibetan Studies,

Sarnath, Varanasi. **Prof K K Agarwal**, Chairman of the National Board of Accreditation and Former Vice-Chancellor of GGS Indraprastha University in New Delhi, presided over the event. **Prof P K Singhal**, Chairman of the IETE Bhopal Centre, gave the opening remarks. **Prof Vandana Vikas Thakare**, Faculty Advisor, MITS ISF, Gwalior, oversaw the conduct of the programme.

CHANDIGARH

- IETE Chandigarh Centre hosted the **53rd WT&ISD** online, on the topic **Accelerating Digital Transformation in Challenging Times** on May 17, 2021. The welcoming address was given by **Shri S C Jain**, Chairman of the IETE Chandigarh Centre. Prior to the start of the actual proceedings, the Chairman announced the untimely death of **Shri PN Chopra**, a legendary IETE Mentor of the era of Telecommunication Systems of Valve/Solid state Version of HF/VHF equipment, who was always on the cutting edge of emerging technologies in electronics and communication, IETE's core area. A two-minute silence was observed as a mark of respect for the departed soul. Speaking on the theme of the day, the Chairman emphasized not only the critical importance of ICTs in the continuing operation of society in the context of Covid-19, but also glaring digital imbalances between and within countries. He spoke of the ITU stepping up and taking on responsibilities that have been demonstrated to be vital in saving lives and maintaining economies. He also relayed two significant messages from ITU Secretary General Dr Houlin Zhao and IETE President IETE. **Dr Amod Kumar**, Vice Chairman, IETE Chandigarh Centre & former Officiating Director, CSIR-CSIO, and **Wg Cdr (Prof) P Prabhakar (Retd)**, the then Vice President IETE, read these messages on the occasion. **Dr Sanjay Sood**, Associate Director, CDAC, Mohali, and Project Director of this project, delivered an expert talk on "eSanjeevani: A New Frontier for OutPatient Services," who has taken the eSanjeevani programme to the point where it is now being announced and launched from a national platform by the Government of India.

- A 4-week event on **Women Entrepreneurship Development Program (WEDP)** was arranged jointly with Dept of Research, Innovations, Sponsored Projects and Entrepreneurship (RISE) Chandigarh Group of Colleges (CGC) Landran, Mohali, funded by DST in collaboration with Niti Ayog, GOI and supported by IETE Chandigarh Centre from 17th May to 12th June 2021. The program aimed to train the women S&T graduates and diploma holders in the entrepreneurship essentials from all over India. The program gave training and ideas to conceive, plan, initiate, launch and maintain economic activity to run a successful enterprise. The awareness camp was inaugurated on 17th May 2021 by the chief guest- **Ms Mandeep Kaur Sidhu**, CEO, Simba Quartz and guests of honor - **Ms Jagdeep Kaur Bawa**, (CPA, CA) in USA & Canada; **Ms Margaret Singh Punj**, CEO, The Winner Academy; and **Shri Subhash Chander Jain**, Chairman IETE Chandigarh Centre. The welcome speech was delivered by **Dr P N Hreeshiksha**, Campus Director, CGC. Ms Sidhu motivated the young gathering as she herself being an entrepreneur briefed them about how a woman entrepreneur desiring economic independence individually and

simultaneously creates employment opportunities for many others. Ms Jagdeep K. Bawa expressed her deeper thoughts on woman who has created a business in which she has a majority shareholding and who takes an active interest in the decision-making, risk-taking and day-to-day management. Ms Margaret Singh Punj highlighted how women could initiate, organize and operate a business enterprise. Finally, Shri Subhash Chander Jain highlighted the basic nature of women who as creative, inborn managers and a good decision maker, having all important traits can be a successful entrepreneur. The session concluded with the vote of thanks by **Prof (Dr) Ruchi Singla**, Dean Research, CGC, wherein she extended her sincere gratitude to the dignitaries and participants, the management of CGC for showering all kind of resources to conduct such program to promote culture of innovation and entrepreneurship in the campus of CGC and in whole Punjab-Chandigarh region.

- The Centre Chairman, **Shri S C Jain**, hoisted the National Flag on the occasion of the 75th National Independence Day on August 15, 2021, in its premises. **Dr Amod Kumar**, Vice Chairman, **Dr Sushil Kumar Kaura**, Immdt Past Chairman, **Dr Piyush Kumar Awasthi**, Hony Secretary, **Shri Ravi Kumar Dongaonkar** and **Shri Kulvinder Singh**- EC Members, and the personnel of IETE Chandigarh Centre were all present. Addressing the participants, the Chairman congratulated all and wishing the country well, emphasized on the importance of virtual platforms for being powerful and valuable instrument to organize meetings, seminars, and expert lecturers during a pandemic. He announced Wg Cdr Prabhakar's appointment as IETE President to the Centre fraternity. He provided an update on the current activities. Sweets were provided to everyone who attended the event. A tree planting campaign was also organized.

CHENNAI

- Commemorating **IETE Students' Day**, IETE Chennai Centre arranged a workshop from 30th Jan to 1st Feb 2021 on **Image Processing with Open CV and Python** organized by the Forum of Data Science Engineers (FODSE), SVCE. **Shri Jyothiraditya**, Founder, Array Coaching, and **Ms Soundarya Lakshmi Narayanan**, Founder, Array Coaching, led the workshop.

- From 30th Mar- 28th April 2021, the IETE Chennai Centre in collaboration with Sri Venkateswara College of Engineering in Sriperumbudur, Chennai, hosted a one-month **online certificate course on Complete Matlab Essentials Leading to Application Development**. Shri Dhiraj Jagtap, Shri Milind Khanderao, Shri Suraj Gawande, and Shri Ravindar Reddy were among the Mathworks, DesignTech Systems Pvt Ltd speakers. On the list of speakers was also **Dr N Venkateswaran**, Prof, Dept of ECE, SSN College of Engineering, Chennai.

- **IETE Chennai Centre** organized an International Conference on **Power of Digital Technologies in Societal Empowerment - IETE CHENCON 2021** at Panimalar Institute of Technology, Chennai on 4th and 5th June 2021. **Dr N Venkateswaran**,

Chairman, IETE Chennai Centre delivered the welcome address. **Prof (Dr) J W Bakal**, President IETE, graced the occasion as the chief guest. Other dignitaries joining the webinar were : **Prof (WgCdr) P Prabhakar** (Retd), Vice President, Chairman (BoRIS); **Dr D C Pande**, Co-Chairman (BoRIS), Zonal Mentor (South); **Dr M H Kori**, Vice President & Chairman (AC); **Shri S Ramasamy**, former GC member & Past Chairman, IETE Chennai Centre; **Prof (Dr) S J Thiruvengadam**, Prof ECE, Thiagarajar College of Engineering; **Dr Ajay Agarwal**, Professor, IIT, Jodhpur & Chairman, IETE Pilani Centre; **Dr Anand Lakshmanan**, SMIEEE, Edu-Tech and Consulting; **Prof Dr VSN Rao Tatavarti**, Dir, Dean - Industrial Consultancy and Sponsored Research, GVP-SIRC; **Prof (Dr) Tanya Singh**, Professor (CSE), Dy. Director (Academics), Amity University, UP and **Prof (Dr) Fakhru Hazman Yusoff**, Senior lecturer, Faculty of Computer and Mathematical Sciences, University Technology, MARA.

DEHRADUN

IETE Dehradun Centre organized a presentation on **Geographical Information Systems (GIS)** on 30th June 2021. The occasion was addressed by **Shri A P Khan**, Scientist E, DEAL, DRDO, Dehradun.

GOA

As part of the **WTISD** celebrations, the IETE, Goa Sub-Centre hosted a webinar on **Digital Transformation-Trends & Skills Required** on May 20, 2021. **Ms Sonia Kuwelkar**, the Sub-Centre's Hony Secretary, delivered the opening remarks. The participants received the message of the Secretary General of the International Telecommunication Union, ITU. The importance of the chosen issue was discussed by **Dr R B Lohani**, Chairman of the Sub-Centre. **Shri Mallinath Naik**, Principal Engineering Manager, Persistent Systems Limited, was the event's keynote speaker. The speaker discussed the digital change during the last decade, citing two industry projects as examples. 5G, automation, AI, Blockchain, Connected Autonomous Vehicles, Drones, Cloud, and CDP Explosion were among the topics he discussed. He underlined the importance of a variety of skills in order to drive digital transformation. Over 80 people registered for the webinar. Faculty and students from A P Shah Institute of Technology in Thane, KC College of Engineering, Management Studies and Research in Thane, Prof Ram Meghe College of Engineering and Management in Amravati, KCE's College of Engg and Management in Jalgaon, Goa College of Engineering, and Don Bosco College of Engineering, made up the majority of the participants. The webinar was attended by a number of senior IETE members. The speaker received a certificate of gratitude, and all participants received e-certificates.

HYDERABAD

The IETE Hyderabad Centre hosted number of Knowledge Sharing Sessions (KSS) / workshops/ technical activities with subject experts during the last quarter as follows:

- **KSS 21: Webinar 40** was held on 4th April 2021 by **Shri G N S V Prasad**, Senior Software Engineer from Voidmain Technologies in Hyderabad on "Deep Learning Using Python". It had a total of 82 participants.
- **Webinar-41** on 11th April 2021 was on **Artificial Intelligence & 5G** by **Brig (Dr) V D Abraham, SM (Retd)**, Past Governing Council Member, IETE Delhi.
- **Webinar-42** on **Introduction to Radar System** was delivered by **Prof HS Bhatia**, Chairman of IMAPS-I, Former Chairman, Institute of Defence Scientists and Technologists (IDST) Bangalore Region; Immdt. Past Chairman, IETE-Bangalore Centre on 18th April 2021. **Shri G Ramesh**, IETE GC Member, graced the event as the chief guest.
- A one-day **Workshop-05 : Webinar-43** on **Introduction to Verilog HDL** by **Shri Raja Bandi**, Founder & Director Lucid VLSI, was arranged on 25th April 2021.
- **KSS-24: Webinar-44** by **Prof H S Bhatia** was centered on **Embedded Technologies For Modern Radar Systems** and held on 2nd May 2021. The event was graced by **Shri C Satyanandan**, Chairman IETE Bangalore Centre.
- **KSS-25: Webinar-45** by **Shri K Vijay Kumar Gupta**, CEO, Kwaliti Photonics & LED chip Indus P Ltd, was given on **Novel Application of LEDs - a fillip to Appliance Industry** on 9th May 2021. **Dr Ajay Thakare**, Amravati, was the chief guest for the occasion.
- **KSS-26: Webinar-46** was on **5G Wireless Networks and a Glimpse of 6G** by the expert **Prof C Murali**, in the presence of **Dr Tata Sudhakar** Scientist G, National Institute of Ocean Technology, Chennai., as the event's chief guest.
- **World Telecommunication & Information Society Day & 16th Dr TH Chowdary-CTMS Endowment Lecture: Webinar-47** was delivered by **Dr Ram Sewak Sharma**, IAS Retd, CEO, National Health Authority (NHA), Ministry of Health and Family Welfare (Govt of India), Former Chairman, TRAI, New Delhi on 17th May 2021. The talk was on **Accelerating Digital Transformation in Challenging Times**. The chief guest on the occasion was **Dr TH Chowdary**, DFIETE, Director, Center for Telecom Management and Studies, Hyderabad; Chairman: Pragna Bharati, Telangana & Andhra Pradesh and Convener, Bharatiya Dharma Rakshana Samakhya.
- **KSS-27: Webinar-48** was delivered on **Tsunami Early Warning System-India** by **Dr Tata Sudhakar**, Scientist G, National Institute of Ocean Technology, Chennai on 23rd May 2021. **Dr Sanjay M Gulhane**, Principal, Pravara Rural Engineering College, Loni, Ahmednagar, was the invited guest for the occasion.
- **KSS-28: Webinar-49** was held on 30th May 2021 on the topic **Introduction to Low Probability of Intercept Radar Systems** by **Prof H S Bhatia**. The Chief Guest on the occasion was **Dr S Arivazhagan** Principal, Mepco Schlenk Engineering College, Sivakasi.

- **KSS–29: Webinar–50** was on **Advances in Communication Technology and Its Utilization in Satellite Ground Station** by **Dr G Prasad**, Scientist “SG”, Group Head, ICIG / Data Processing Area, National Remote Sensing Centre, Indian Space Research Organization (ISRO), Hyderabad, wherein **Prof P Laxminarayana**, Registrar, Osmania University (OU), Hyderabad, Former Dean (Faculty of Engg), Former Dean (Student affairs), Former HoD, Osmania University, was the invited Chief Guest.
- **KSS** on the topic, **Is it too early to start Research in 6G? Research Trends in ‘Beyond 5G’ & ‘6G’ Technologies** was delivered by **Dr M H Kori** on 13th June 2021 in the presence of President IETE, Prof J W Bakal; Prof Wg Cdr P Prabhakar; Prof Dr S M Gulhane; Dr S Arivazhagan; Dr G Ramesh; Prof HS Bhatia; Prof K Laxminarayan; Smt Geeta Varadan; Sri Ajay Thakare; Dr Tata Sudhakar, Er K Gnaeshwar Rao- Chairman; Er Nuli Namassivaya, Hony Secy; EC members, IETEGC, Faculty, Students, co-opted, special Invitee Members.
- **KSS–31: Webinar–52** centered around **High Voltage Standards, Protection and Mitigation for Electronics System**, talk delivered by **Shri Anupam Tiwari**, Senior Member of IETE. The chief guest on the occasion was **Prof K Kishan Rao**, Ex Principal REC, Warangal.
- **International Women in Engineering Day: Webinar–53** was given by **Ms Narendra Ramya**, Quality Specialist at Amazon, Hyderabad, on 23rd June 2021. The chief guest for the occasion was **Dr Yarlagadda Padma Sai**, Prof & HoD, ECE, Dean Student Progression, VNRVJIET, Hyd.
- **KSS–35: Webinar–57** on **Uses of Oxygen for Improvement in Patients** was presented by **Dr Nalini**, MSc PhD on 25th July 2021.
- Next session & number of webinar was on **The Art of Reverse Engineering** by **Shri P Narasimha Rao** Retd Scientist-G, DLRL (DRDO). It was organized on 1st Aug 2021.
- **KSS–37: Webinar–59** was organized on 8th Aug 2021 with the speaker **Dr DVSS Subrahmanyam**, Prof, Dept CSE, Neil Gogte Institute of Technology, Uppal, Hyderabad. He Spoke on “**Efficiency of Machine Learning Algorithms in Solving Complex Problems**”.
- On the 15th of August 2021, the Hyderabad Centre celebrated **Independence Day** and **Haritha Haram** with roughly 36 participants. The EC Committee presented souvenirs and plants to all of the webinar presenters who had delivered knowledge sharing sessions, seminars, endowment/memorial/lectures, and other events.
- A 5-day webinar was held from Aug 15 to Aug 19, 2021. **Dr Chetan Singh Solanki**, Professor at IIT Bombay and Founder of the Energy Swaraj Foundation, gave a talk on the **Need for and Directions toward Energy Independence**.
- **Dr V Srinivasa Rao**, Scientist ‘F’, RCI, Hyderabad, delivered the **5th Memorial Lecture of Prof CV S Rao** on **Development of Antenna Products for Defense Applications** on 22nd Aug 2021.
- **KSS–38: Webinar–61** was conducted by **Shri Venkat T**, Project Manager, ViHaVe Innovations Pvt. Ltd., Hyderabad, on **Introduction to Blockchain Technology** on 29th Aug 2021.
- **Teachers’ Day** celebrations were held on 5th Sept 2021, with **Dr P S Sarma**, retired principal of Aurora Engineering College in Bhuvanagiri, Hyderabad, delivering a speech on the **Role of a Teacher in Today’s Educational System**.

JABALPUR

- On 13th May 2021, the IETE Jabalpur Centre hosted an expert presentation in commemoration of **World Telecommunication and Information Society Day 2021**, with the focus theme “Accelerating Digital Transformation in Challenging Times.” **Dr Rajiv Dey**, BML Munjal University, delivered the first expert session on **IoT-Based Healthcare Technology**. The presentation drew a total of 255 attendees. All enrolled participants received certificates. **Dr Mukta Bhatele**, Chairman of IETE Jabalpur, served as the series’ patron. **Er Pankaj Sahu**, the current Vice-Chairman of IETE Jabalpur and convener of this webinar series, conceptualised and spearheaded this webinar series.
- **Dr Rahul Upadhyay**, Thapar Institute of Engineering and Technology, Punjab, offered another expert session in this series on **Artificial Intelligence in Healthcare** on 20th May 2021. There were a total of 309 participants, and all registered participants received certificates.
- In collaboration with Oriental Institute of Technology, Jabalpur, the IETE Jabalpur Centre hosted its third expert discussion on **Single Molecule Diodes as Components of Next-Generation Electronic Devices**. The phrase molecular electronics or moletronics refers to organic electronic devices based on single molecules. It is concerned with the investigation of electron transfer in organic compounds. Certain molecules possess intriguing features that enable them to function as diodes. Scientists are attempting to construct the next generation of nanoscale electronic devices by utilizing the features of these molecules. The scientific presentation focused on fundamental concepts and key breakthroughs in the field. The current developments were also discussed. **Dr Tabish Rasheed** of BML Munjal University, Gurugram, Haryana, was the expert for this national webinar. It was scheduled for 27th May 2021.
- Together with Oriental Institute of Technology Jabalpur, IETE Jabalpur Centre organized its 4th expert discussion on **Electric Vehicle** as part of the ongoing series of expert talks and to commemorate **World Environment Day**. The study presentation concentrated on fundamental ideas and significant findings in the field. Alternative energy sources have also been proposed in light of current advances and environmental concerns. MANIT, Bhopal’s Professor and HOD Dept of Electrical Engineering, **Dr Tripta Thakur**, served as the

expert for this National Webinar on 3rd June 2021 and educated the attendees.

- The fifth expert talk focused on **AI and IoT in Healthcare** and was held in conjunction with ISF GGITS, Jabalpur. The study presentation concentrated on fundamental ideas and significant findings in the field. There was a discussion about the most recent advancements and requirements. **Dr Shuvabrata Bandopadhaya**, from BML Munjal University in Gurugram, was the expert on hand for this webinar, which took place on 5th June 2021.
- On 10th June 2021, the Centre hosted its sixth webinar on **Data Science** in collaboration with OIST, Jabalpur. The research presentation concentrated on fundamental principles and significant discoveries in the field. **Prof Bhoopesh Daheria**, founder and CEO of Aegis School of Data Science in Mumbai, educated the attendees. This event drew 400+ attendees, including fellows and members of IETE Jabalpur and notables, as well as participants from India and abroad. All registered participants received certificates from IETE Jabalpur Centre.
- National Webinar on **Cloud Computing Strategy for Future** by IETE Jabalpur Centre was on 17th June 2021. This was the 7th webcast in the Centre's expert lecture series. **Er Pankaj Sahu**, Vice-Chairman IETE Jabalpur, and **Dr Neeta Nathani**, member IETE Jabalpur and ISF Faculty coordinator from GGITS, Jabalpur, co-ordinated this webinar. **Dr Pranjal Kumar Phukan**, Professional Member, Institute of Science, spoke on this topic. A total 153 participants attended this event.
- **International Yoga Day** was celebrated on 20th June 2021. Members of IETE Bhopal Centre and MITS ISF students practiced yoga on this occasion under the supervision of **Shri Munna Singh Parihar**, Yoga Teacher, Anterman Anand Club, Gwalior.
- On the occasion of **International Yoga Day** on 21st June, IETE Jabalpur organised a total 7 Live YOGA and Meditation webinar sessions, from 9 AM to 7 PM, jointly with different institutes such as, GGITS, Jabalpur, GGCT, Jabalpur GGCE, Jabalpur, Shri Ram Institute Jabalpur, Oriental Institute Jabalpur, SGBM Institute Jabalpur and a special separate webinar for IETE members. All these events were coordinated by **Er Pankaj Sahu**, Vice-chairman IETE Jabalpur and from Sahaj Yoga Foundation, **Ms Shailja Pandit** as the coordinator. The sessions were taken jointly by **Shri Chandrakant ji** and **Shri Nishant ji** from Sahaj Yoga Foundation. All the webinars were successful and praised by everybody.
- In collaboration with OIST, Jabalpur, the IETE Jabalpur Centre hosted its eighth expert session on **Test Challenges in Integrated Circuits**. The scientific presentation focused on fundamental concepts and key breakthroughs in the field. The

current state of affairs and necessities were also discussed. On the 24th of June 2021, the expert for this national webinar, **Dr Ashok Kumar Suhag**, Assoc Prof from BML Munjal University, Gurugram, enlightened the participants.

- On 30th June 2021, the Centre hosted its ninth expert talk in collaboration with Shri Ram Institute of Technology, Jabalpur, on the theme **Industry 4.0 for Logistics**. The research discussion concentrated on fundamental concepts and key discoveries in the field. The expert talk was conducted by **Dr Surya Prakash**, Asso Prof from BML Munjal University in Gurugram.
- The tenth lecture in the series was jointly presented with ISF GGITS Chapter, Jabalpur Department of Mechanical Engineering on July 5, 2021. **Dr Sanjay Chhalotre** from SISTec Bhopal, gave the expert talk on the topic **Hidden Challenges in E-Vehicle Technology**.

KANPUR

- IETE, Kanpur Centre in collaboration with UPTTI, Kanpur, IE (I) Kanpur Local Centre, IEEE-UP Section, organized a lecture on 25th Feb 2021, on the theme **Quality Management: Zero Defect & Quality Circles**. The chief guest and the keynote speaker was **Er N B Singh**, former GM, British India Corporation Ltd, Kanpur. **Prof Narendra Kohli**, Chairman, Institute of Engineering and Technology, Kanpur Centre, introduced the chief guest. Er N B Singh stated during his talk that American management expert Philip Crosby pioneered the concept of Zero Defect in the field of Quality Management. He explained that the system's objective is to eradicate recognised flaws by preventing them from occurring to the greatest extent possible. The principle of zero defects is defect prevention through doing things correctly the first time and every time. The Japanese recognised that shop floor workers may contribute to quality improvement programmes. Dr Ishikawa, a Japanese quality specialist, established the notion of Quality Circles, which he defined as a small group of employees taught to find, analyse, and resolve quality-related problems on a volunteer basis and report their answers to their supervisors.
- IETE Kanpur Centre in collaboration with IE (India), Kanpur Local Centre, Dept of Civil Engineering, HBTU, Kanpur, and IEEE UP Section, celebrated **World Water Day** on 22nd March 2021. The Chief Guest and keynote speaker was **Dr Deepesh Singh**, Asstt Prof, Dept of Civil Engineering, HBTU, Kanpur. He spoke on **Valuing Water: A Blue Gold for the Future**. **Prof Pradeep Kumar**, the program's convener, extended a warm welcome to the topic speaker and attendees. **Prof Narendra Kohli**, Chairman, IETE, Kanpur Centre, introduced the topic speaker, Dr Deepesh Singh. According to the speaker, the majority of Earth's water is salt water, which is unsuited for human and animal sustenance. The United Nations estimates that 663 million people worldwide lack access to safe drinking water. Water pollution is one of India's most serious problems, with around 80% of gastrointestinal disorders occurring as a result of eating contamin-

ated water. The programme drew approximately 25 members. **Dr Rajat Kumar Khare**, Honorary Secretary, Institute of Engineers (India) KLC, presented the vote of thanks.

- IETE Kanpur Centre jointly with IE (India) Kanpur Local Centre, IEEE-UP, Dept of CSE, HBTU, Kanpur and Incubation Hub, HBTU, Kanpur celebrated **WTISD** on 17th May, 2021. **Prof Narendra Kohli**, Chairman, IETE, Kanpur presented a welcome address & introduced the chief guest. Centre Hony Treasurer **Prof J Ramkumar** read out the President's Message. **Prof Samsher**, Hon'ble Vice Chancellor, HBTU, Kanpur was the Chief Guest on the occasion and spoke about the Role of Digital Technology in Covid-19 pandemic times. **Dr S Jayakumar**, Consultant, Digital Signal Processing was the guest speaker delivered a theme talk on **Accelerating Digital Transformation in Challenging Times**. The speaker discussed Digital Twins in his talk. He stated that the real world contains a diversity of physical processes, and numerous attempts have been made to mimic those using Digital Twins. A digital twin is one such representation of physical processes created through the use of readily available tools. Around 100 people attended the programme. The Hony Secy **Er Prashant Kumar** proposed a vote of thanks.

- IETE Kanpur Centre, in collaboration with IE (India), Kanpur Local Chapter, IEEE UP Section, Med Tech, IIT Kanpur, and Incubation Hub, Harcourt Butler Technical University, Kanpur, hosted a webinar on **Ecosystem Restoration: Waste Management Strategies** on 25th June 2021. On this occasion, **Shri Devendra Surve**, Founder Director, Star Projects and Consultancy, was the guest speaker. **Prof J Ramkumar**, Chairman, IE(I), Kanpur Centre and Honorary Treasurer, IETE, Kanpur Centre, greeted participants, while **Prof Narendra Kohli**, Chairman, IETE, Kanpur Centre, introduced the guest speaker. Explaining about bioconversion / biotransformation, **Shri Devendra Surve** said that it is the process of converting organic materials into useful products such as biomethane, CO₂, elemental sulphur, or energy sources through biological processes or agents such as certain microorganisms. He said that there are two types of bioconversions: enzymatic and nonenzymatic. Enzymatic biotransformation is catalysed by microsomal enzymes found in lipophilic membranes and nonmicrosomal enzymes found in mitochondria. The primary focus of this presentation was on bioconversion of industrial water waste. Numerous innovative technologies were reviewed, and lastly, some of the significant reforms implemented under the 'Namami Gange Programme,' the Government of India's flagship programme, was highlighted with examples. **Dr Rajat Kumar Khare**, Hony Secretary, IE(I), Kanpur Local Centre, concluded the programme with a vote of thanks.

KOZHIKODE

- IETE, Kozhikode Sub-Centre hosted a webinar on **Design and Development of Reconfigurable Antenna** on 27th May 2021. **Dr Dinesh Yadav**, Asst Prof in the ECE Dept at Manipal University Jaipur, conducted the discussion. **Dr P V Sabiq**, the session's host, greeted everyone who joined in to listen to them. To

begin, **Dr Yadav** talked about the many types of antennas and how they work. Then he switched on to more modern antennas, such as those used in airborne warning and control systems, mobile phones, as well as earth stations. He also talked about mechanisms that can be reconfigured to operate in different modes. Later, he went into detail on the various antenna designs and measurements for reconfigurable systems. The vote of thanks was offered by **Shri E P Hemand**.

- On 15th July 2021, a webinar on **Improving Trustworthiness in AI for Medical Imaging** was held. **Dr B Lakshmipriya**, Post-Doctoral Fellow at JIPMER Puducherry, moderated the discussion. **Dr Sabiq P V**, Chairman of the IETE Kozhikode Sub-Centre, welcomed the chief guest and session participants. Dr Lakshmipriya began her presentation by discussing artificial intelligence in medical diagnosis. Later, she acknowledged the shortcomings of the current AI system. Important aspects of strengthening the trustworthiness of AI systems were discussed. She introduced the Capsule Network concept to the audience (CapsNet). She also made a comparison between CNN and CapsNet. Finally, she posted some key case studies to help readers become better acquainted with the subject. **Dr Sabiq P V**, **Prof Pratap G Nair**, **Shri Hemand E P**, and **Shri Swaradh P** were among those in attendance.

- A webinar on **Big Data-Technologies, Architecture and Use Cases** was hosted on 12th August 2021 by the Sub-Centre, Kozhikode. Tata Consultancy Services' Enterprise Data Architect, **Shri Karimulla Shaik**, led the seminar. A warm welcome was extended by **Dr Sabiq P V**, the Chairman of the IETE Kozhikode Sub-Centre. The speaker introduced the audience to Big Data. The attendees learned about Big Data tools and technologies, as well as the changes that have occurred in these areas throughout time. His explanations of Hadoop, HDFS, and the Big Data Ecosystem were in-depth as well. Later, he wrapped up the discussion by explaining how and where Big Data actually comes in handy when it comes to making business decisions. The vote of thanks was offered by **Shri E P Hemand**.

- On 9th Sept 2021 a webinar on **Exposure to Innovation and Startup as a Career**. The chief guest speaker was **Dr Tushar Panchal**, Asst Prof, Gujarat Technological Centre. **Dr P V Sabiq**, Chairman of the IETE Kozhikode Subcentre, welcomed the special guest and session participants. **Dr Tushar** began his presentation by providing a brief overview of ways to demonstrate an interest in innovation and entrepreneurship. He also spoke about many successful startups in India.

MHOW

On 10th Aug 2021, the IETE Sub-Centre in Mhow hosted an lecture by **Lt Col Mandeep Malik** on "5G NR" at Iyappa Hall, MCTE, Mhow. Students and faculty from MCTE, Mhow attended the talk, which was well received by everybody.

MUMBAI

The IETE Mumbai Centre, in collaboration with the BES (I) Mumbai Chapter, the IEEE Bombay Section, the IET Mumbai

Local Network, and IETE Navi Mumbai organized the **WTISD** in virtual mode on 17th May 2021. **Dr B Satyanarayana**, IEEE Bombay's Chairperson, delivered the keynote address on **Accelerating Digital Transformation in Challenging Times**. **Dr Q Bakir**, former chairman of the IEEE Bombay section, participated as the event's chief guest. The occasion was blessed by the presence of all BES, IET, IEEE, and IETE members. The speaker discussed how the ongoing pandemic benefited society via digital revolution. The speaker demonstrated very clearly how the Mumbai model became popular in India due to its success in reducing the number of Covid cases. **Dr Mukesh Patil**, Chairperson of the IETE Navi Mumbai Centre, and **Prof Sanjay Patil**, Secretary of the IETE Navi Mumbai Centre, were also in attendance. **Shri J K Chandira**, President of the BES (I) Mumbai Chapter; **Shri A R Vibhute**, Secretary of the BES (I) Mumbai Chapter; **Dr B Satyanarayana**, Chairperson of the IEEE Bombay Section; **Dr Saurabh Mehta**, Secretary of the IEEE Bombay Section; **Shri Vikrant Sankhe**, Chairperson of the IET Mumbai Networks; **Shri Vimal Choubey**, Secretary of the IET Mumbai Networks, were all present.

MYSORE

- IETE Mysuru Centre organized an **international webinar on Career Insights & Way forward- Post Covid** on 15th Jan, 2020, graced by the chief guest **Shri Mahadeva Prasad S**, Head-Training & Placement, GSSSIETW, Mysuru. The eminent persons participated from IETE Mysuru Centre were: **Prof Nataraj C R**, Chairman; **Dr Bhagyashree S R**, Vice Chair, Dean (Research) & Prof, Dept of ECE, ATMECE, Mysuru; **Dr Parameshachari B D**, Hony Secretary & Prof & HOD, Dept of TCE, GSSSIETW, Mysuru; **Dr Shashidhar S Gokhale**, Hony Treasurer; EXECOM members of IETE Mysuru Centre and college students. The session commenced with welcoming of the speaker, panel members and participants and later on the chief guest was introduced. Webinar was coordinated by **Prof Rajesh K M**, Asst Prof, Dept of TCE, GSSSIETW, Mysuru and **Prof Goutham V**, Asst Prof, Dept of ECE, BGSIT, B G Nagara. **Shri Mahadeva Prasad S** discussed the various sectors in which engineering graduates could work, including private companies, public sector organizations, and the government sector, as well as higher education options such as MTech, MS, MBA, and PhD and the career options for core engineering graduates including research organizations, public sector undertakings, private companies, teaching, self-employment, state government jobs, and central government jobs. He also discussed the top ten skills that will be required in 2025, including analytical thinking and innovation, active learning strategies, complex problem-solving, critical thinking and analysis, creativity, originality, and initiative, leadership and social influence, technology use, monitoring, and control, technology design and programming, resilience, stress tolerance, and flexibility, and reasoning, problem solving, and ideation. He urged pupils to establish a sensible objective that is specific, quantifiable, attainable, reasonable, and timely. Finally, he discussed the soft skills necessary to succeed as an engineer. **Yashwanth Gowda P**, student, Dept. of ECE, BGSIT, B G

Nagara, concluded the session with a vote of thanks. The webinar drew over a hundred attendees from throughout the country.

- A webinar titled **Deep Learning for Disaster Management** was held on 30th January 2021. **Dr Jyothi Prakash Singh**, Head of the CSE Department at the National Institute of Technology in Patna, India, was the webinar's keynote guest. **Prof Nataraj C R**, Chairman, IETE Mysuru Centre; **Dr Bhagyashree S R**, Vice Chairman; **Dr Parameshachari B D**, Hony Secretary; **Dr Shashidhar S Gokhale**, Hony Treasurer, IETE Mysuru; EXECOM Members, and students from other colleges attended. **Dr Jyothi Prakash Singh**, the keynote speaker, provided insight into the current disaster management approach, which includes satellites and drones that collect data from disaster-prone areas.

- On **IETE Students' Day** the Centre organized events like technical collage making, technical quiz, poster presentation and pick and speak competition on 1st Feb 2021. The event was presided by **Prof Nataraj C R**, Chairman, IETE Mysore Centre. The event was commenced with an invocation from **Dr Shashidhar S Gokhale**. In his address, Prof Nataraj C R motivated the students to utilize the IETE students' forum for their success in career. The winners of each competition were awarded with attractive cash prizes followed by winner certificates.

- An **international webinar on Image processing and machine learning applications** was held in Vadodara, India on February 19th, 2021, with **Dr Arvind R Yadav** as the keynote speaker. **Ms Supreetha H S**, TCE Dept, GSSSIETW, Mysuru, gave the opening remarks. **Prof Pavithra A C**, Asst Prof Dept of ECE, ATMECE, Mysuru, coordinated the webinar. During his speech, **Dr Arvind R Yadav** talked about the importance of image processing and how the industry's demand for it grows year after year. Image processing based on machine learning was first developed in the 1960s as a means of simulating the human visual system and improving the efficiency of image analysis methods. As technology progressed and developed, particular task solutions began to emerge. Image processing techniques have become increasingly necessary since computer viewing accelerated rapidly in 2010 due to in-depth research, the introduction of open source projects and large-scale photographic data. There are numerous libraries and projects available now that can assist in using machine learning to tackle image processing challenges or just improve the processing pipelines for computer viewing applications. **Ms Prarthana M R**, GSSSIETW, Mysuru, gave a vote of thanks at the close of the session, which drew over 200 people from all around the country.

- An **international webinar on Intelligent receiver design and future communication for 6G Technology** was held on 13th Mar 2021, with **Dr Sudhan Majhi**, NTU, Singapore, as the chief guest. Attendees included the Chairman and Vice Chair of IETE Mysuru Centre, as well as the Hony Secretary and Treasurer, EC Members students from other colleges. The 6G wireless network is planned to merge land, air and sea communications into a powerful one that can be very reliable and fast and serve a huge number of devices with ultra-low latency needs, according

to Dr Sudhan Majhi's analysis, There are many cutting-edge technologies that researchers around the world recommend, such as artificial intelligence (AI) / learning equipment (ML), blockchain, tera-hertz and millimetre wave communication (QML), internet connection, non-orthogonal mass access (NOMA), small cell connections, fog / edge computing, and many more. He went into great depth about the size of the 6G network, including the air connection and all of the ancillary stuff. In particular, he drew attention to the fees associated with using various scales of the projected 6G networks.

- **IoT and TinyML: The New Era of Smart Objects** was the topic of an international webinar hosted by the IETE Mysuru Centre on 26th Mar 2021. **Dr Ramon Sanchez-Iborra**, Assistant Professor at the University Center of Defense at San Javier Air Force Base in Spain, presided over the webinar. All of the Centre's esteemed members were in attendance. **Asst Prof Rajesh K M** from TCE Dept, GSSSIETW, Mysuru and **Asst Prof Pavithra A C** from E & C Dept ATMECE, Mysore coordinated for the event. It was pointed out by Ramon Sanchez-Iborra that TinyML is an embedded software technology that can be utilized to develop low-power consumption devices for running machine learning models. It's also known as the "missing link" between edge hardware and device intelligence. It lowers the cost, simplifies the process, and improves the reliability of computing at the edge. TinyML also allows for faster response times, greater privacy, and lower operating costs. Every year, the use of TinyML grows exponentially. Around 230 billion devices will ship with TinyML chipset by 2030, according to ABI Research, a leading IT industry consultancy organisation. There are numerous uses for TinyML, including images micro-satellite, wildfire detection, and crop disease identification. The use of blockchain in Internet of Things (IoT) devices is another hot topic rig, the speaker informed.

- On the occasion of **International Women's Day** on 27th Mar 2021, the Centre hosted yet another international webinar on **Data Science**. **Dr Sumati Ramakrishna Gowda**, Asst Prof, Dept CS, Karnataka State Open University, Mukhtaganthri, Mysore, was the chief guest. All of the Centre's illustrious members were present. Ms Deepika D, Student, Dept of TCE, GSSSIETW, Mysuru, opened the session by welcoming the speaker, panel members, and attendees. Dr Sumati Ramakrishna Gowda explicated the project phases of data science after introducing data science as an interdisciplinary field that uses scientific methods, processes, algorithms, and systems to extract knowledge and insights from structured and unstructured data, and apply knowledge and actionable insights from data across a broad range of application domains. She discussed the many forms of data and data applications in health-care systems, as well as various data processing methodologies. Cell phones, social media, commerce sites, health research, and Internet searches were amongst the industries, channels, and forums from which data is gathered. The growth in data availability paved the way for a new study field focused on big data - large data sets that aid in the development of improved working tools across the board. Because of advancements in technology and data collection techniques, data can be accessed

indefinitely. On the basis of the data they collect, people who buy trends and behaviours can be tracked and forecasted. However, ever-increasing data is not generated, and it must be separated in order to make informed decisions. The speaker also informed that for businesses, this process is complicated and time-consuming, which is why data science has emerged.

NAGPUR

- IETE Nagpur Centre celebrated **Dr Kapre Memorial Lecture** on 2nd April 2021. On this occasion a renowned advocate **Shri Swapnil Gawande**, Director of BLI Consultancy Pvt Ltd, delivered a lecture on **Intellectual property Rights and Patent Filing**. During the lecture, participants learned about physical and intangible forms of property, copy right protection versus patent application, patentable and non-patentable ideas, and were urged to file patent applications. The program was graced by **Dr Sanjay Badjate**, Chairman, IETE Nagpur Centre. The others present were: **Dr Suresh Rangankar**, Hony Secretary, **Prof Harshwardhan Kharpate**, Hony Treasurer, **Dr Nilesh Kasat**, Zonal Mentor IETE, Vice Chairman **Dr Salim Chavan** and **Dr Vijay Mankar**, Immdt Past Chairman **Dr B P Joshi**, **Er A R Sawatkar**, **Dr Hema Bhusari**, **Prof Partik Hepat**. The programme was coordinated by **Dr Vilas Mahatme**, EC member IETE Nagpur Centre and hosted by **Prof Amit Ukalkar**, KITS, Ramtek.

- On the occasion of **World Telecommunications and Information Society Day 2021**, the Centre invited **Dr M B Daigavane**, Joint Director, DTE Nagpur & Principal GP Nagpur as the chief guest. **Shri Yash Panhekar**, GM, Telecom, BSNL, Nagpur, provided an expert talk on the subject. After his welcome remarks, **Dr Sanjay Badjate**, Chairman of IETE Nagpur, read the President's Message given for the occasion. Some of the distinguished persons present included **Dr Nilesh Kasat**, Mentor West Zone; **Dr B P Joshi**, Past Chairman; **Er Ajay Sawatkar**, Past Chairman; **Dr Suresh Rangankar**, Hony Secretary; and **Prof Harshwardhan Kharpate**, Hony Treasurer. The seminar was attended by **Dr Salim Chavan** and **Dr Vijay Mankar**, Vice Chairman of the IETE Nagpur Centre. **Dr Hema Bhusari**, EC member Nagpur Centre, arranged the event and also offered the participants a vote of thanks.

PALAKKAD

- **World Telecom and Information Society Day** was celebrated on 17th May 2021 by the IETE Palakkad Centre. The chief guest was **Dr T Sudha**, Principal of NSS College of Engineering in Palakkad. The Hony Secretary, **Shri Beji K Mathew**, welcomed the attendees. The occasion was presided over by **Dr V Devi**, Chairperson of IETE Palakkad and Principal of the Royal College of Engineering and Technology in Thrissur. She emphasized that the IETE Palakkad Centre is in the forefront in the organizing the webinars. She appreciated Dr Sudha's courage and directness throughout her career. On the webinar, there were around 60 people, including students and members from various states. Dr N Leena gave the message of the ITU Council. As the keynote

speaker, Dr T Sudha went into great detail about the significance of the digital transformation that has occurred recently across all fields. Although Covid-19 had a negative impact on business, it actually boosted the rate of digital transformation growth. To a significant extent, the digital divide in India has narrowed, she said. Commendation speeches were given by **Prof P Nanadkumar, Dr S Sindhu, Dr C Pradip**, as well as DF & Founder Chairman, **Shri C K Haridas**. IETE Senior Fellow Dr T Sudha, who was retiring from her position at the college on May 31st, thanked and her best wishes were conveyed. The session was hosted by Hony Treasurer **Shri P Suresh**, who also submitted a vote of thanks.

PUNE

- IETE Pune Centre and Hams Pune jointly organized a **technical talk** held on 2nd May 2021 on a project that allows any one to send postcards and receive postcards (Like QSL Cards) back from random people around the world, which is not electronic. The chief guest **Dr T Jaisakthival**, University of Madras, talked about this interesting post crossing online project that allows its members to send and receive postcards from all over the world. The project's tag line is "send a postcard and receive a postcard back from a random person somewhere in the world!". The participants were encouraged to join this QSL card like innovative post card exchange hobby. Other dignitaries attached with the programme were: **Dr R D Kharadkar**, Chairman IETE Pune Centre, **Shri Kishor Shende** Immdt Past Chairman, **Shri G K Dawara**, **Prof Amol Bhoi** and **Shri Vilas Rabde**.

- The Centre and Radio Hams Pune observed **World Telecom Day** on 17th May 2021. **Dr R D Kharadkar**, Chairman of the IETE Pune Centre, welcomed everyone. He announced the formation of the ISF at 46 colleges and 10 organisational members. He also mentioned IETE's digital role during the Covid pandemic. The chief guest **Shri Vinit Mathur**, Ex Deputy Director General, presented the digital needs and transformation challenges throughout the pandemic Covid-19. He also mentioned how digitalization expanded throughout the epidemic and met daily necessities such as data management, immunisation, banking, education, and so on. **Shri Vilas Rabde** proposed a vote of thanks.

- IETE Pune, IE, IEEE, and IET celebrated the **WTISD** together on May 21, 2021. **Ms Mukta Joshi** Pendse, Scientist at Philips in the Netherlands, conducted a technical talk on the topic of **Accelerating Digital Transformation in Challenging Times**. She stated that during the COVID-19 pandemic, ICTs played a vital role in the ongoing functioning of society and the reduction of inequities between and within countries. The epidemic has also emphasized the importance of speeding digital transformation and advancing the Connect 2030 Agenda's goals and targets in order to leave no one behind. This programme was organised by **Dr G S Mundada**, Convener. **Dr R D Kharadkar**, Chairman of the IETE Pune Centre, briefed the audience on the activities of the IETE Pune Centre. The chief guest on this occasion was **Dr J W Bakal**, President of IETE. The programme concluded with a vote of thanks.

- A webinar on **Accelerators/Incubation- Opportunities for the Students & Faculties- Early Stage Entrepreneurs** was

organised by IETE, Pune Centre in JSPM, Bhivarabai Sawant Institute of Technology & Research, Wagholi, Pune on 27th May 2021. The chief guest **CMA Rahul A Chincholkar** in his talk outlined the requirements for entrepreneurship. He began with the basics of beginning a business. He stated that one's goal, vision, and objective must be clear. Publicity, location of the industry, and harmonising firm standards with regulatory mandates are crucial parameters. Work patenting was also advised. Also highlighted were setting goals using current rivals' stage & strategy, organisational structure & internal control. Entrepreneurial failures were also cited. He also defined the terms proprietorship, partnership, LLP, private company, public company, HUF trust AoP, and so on. The speaker concluded by defining a businessman, an industrialist, and an entrepreneur. The important dignitaries present on the occasion were **Dr R D Kharadkar**, Chairman, IETE, Pune Centre, **Dr S V Admane**, Director, JSPM Wagholi, **Dr T K Nagaraj**, Principal, JSPM's BSIOTR, Wagholi, Pune and **Dr Y S Angal**, Vice- Chairman, IETE, Pune Centre.

- The Dept of ECE, MIT School of Engineering, MIT ADT University organized a **one-week national level FDP on RF Front End Design** from 19th - 22nd May 2021 via virtual mode. This FDP was co-sponsored by IETE Pune Region, IEEE Pune Section, IEEE Education Society, and IEEE Communication Society, and was held in collaboration with Elmack Engineering Services, Chennai. **Dr Shubhangi Joshi**, the FDP organizer, greeted all of the dignitaries and gave a brief overview of the program. The welcome address was given by **Prof (Dr) Virendra V Shete**, Convener of the FDP. **Prof (Dr) P B Mane**, Treasurer, IETE, Pune Centre, **Prof R D Kharadkar**, Chairman, IETE Pune Centre, **Er Girish Khilari**, IEEE Chair Pune Section, **Shri Ranganath Vura**, Business Manager, Elmack Engineering Services, Chennai, and **Prof Dr Kishore Ravande**, Principal, MITSOE, were among those present to inaugurate the FDP. **Shri Anant Kulkarni** presented the first session, in which he discussed the many design issues in 5G and RF front end circuits. After that, **Shri Ranganath Vura** went over the various EMI/EMC troubleshooting paths. On the second day, the session began with the introduction of **Shri Anant Kulkarni**, the resource person, who informed the attendees about ADS software, which is used for RF Front end Design and Design flow of RFIC/MMIC. **Shri Kulkarni** presented Microstrip RF Filter for IoT Applications on 21st May 2021, followed by Design of Power Divider for 5G and IoT Applications. **Mrs Renuka Wekhande Andankar** kicked off the session on 22nd May 2021. Mrs Wankhede covered Impedance Matching Techniques, Amplifier Design, and Measurement Techniques for RF Circuit Characterization. The session was both interactive and educational. The resource person led the session, which included hands-on experience with ADS software. After lunch, the last session began with the speaker, **Shri Jayanandan Thulasiraman**, being welcomed and introduced. He explained ISM Band Microstrip Antenna Design and ISM Band Antenna Array Design to the audience. **Prof Dr Virendra Shete** addressed the audience and thanked the speakers for their time and insightful presentations. Following then, **Shri Darwin** and **Mrs Leena Chaudhary**, both participants, presented their opinions on FDP.

Prof Dr Dhananjay Upasani gave a vote of thanks at the end of the session.

RAJKOT

- The IETE Rajkot Centre commemorated **WTISD** on 17th May 2021. **Shri Nilesh Advani**, Asst Prof & Senior Manager for International Admissions and Liaison, Marwadi University, was the chief guest. **Prof (Dr) Atul M Gonsai**, Chairman IETE Rajkot, opened the event with a welcoming message and a history of IETE up to the present day. **Dr Divyesh R Keraliya**, Honorary Treasurer of the IETE Rajkot Centre, read the messages from the IETE President and ITU Secretary General. **Dr Rahul D Mehta**, Hony Secretary IETE Rajkot Centre, proposed a vote of thanks. Er Mohit Parbat, IETE Rajkot's EC Member, coordinated the entire event.
- On 18th June 2021, the IETE Rajkot Centre and the CS Department of Saurashtra University, Rajkot, jointly hosted an International **Online Workshop on Cyber Safety**. **Prof (Dr) C K Kumbharana**, HoD CS Dept at Saurashtra University and a member of IETE Rajkot, delivered the keynote address. **Dr Pritam Shah**, PhD, UC Australia, and Chair of the Society for Innovation in Scientific, Technological, and Medical Research (Australia), provided an expert discussion on Cyber Safety and Security. The expert satisfactorily explained the members'/participants' questions. Dr Divyesh R Keraliya, IETE Rajkot's Honorary Treasurer, presented the vote of thanks. There were around 100 participants / members from various IETE centers and universities / colleges organizations in attendance.

SIVAKASI

- IETE Sivakasi Centre's **Sixth Techno Blaze** took place on 12th April 2021, in Mepco Schlenk Engineering College, Sivakasi, with a lecture and discussion at Computing Facilities, Dept of ECE. The event was presided over by **Dr S Syed Ameer Abbas**, Chairman of the IETE Sivakasi Centre. IETE Sivakasi Centre Corp Member **Mrs E Amrutha** welcomed the audience and introduced **Dr N Sivasankari**, Asst Prof, Dept of ECE, Mepco Schlenk Engineering College in Sivakasi, as the day's speaker. 25 of the Centre's IETE Corporate members attended the Techno Blaze. The talk emphasized the need of creating a unique identity in all security-sensitive situations and current communication, with software or hardware support. However, well-designed hardware can provide a trustworthy and distinctive identity with less complexity than software. A PUF, for example, is designed to respond to binary input with a device-specific binary response. This attribute can be used to manage digital rights in processor ICs. Personalities on IC chips can also be verified. She discussed how to create unique identities for each user using PUF and the accompanying vulnerabilities. Then she led a group discussion on security implementations for authentication applications. Chairperson of IETE Sivakasi Centre, **Dr Syed Ameer Abbas**, gave an award. Thanks remarks were given by Mrs E Amrutha.
- This year's **First Techno Blaze** at Mepco Schlenk Engineering College, Sivakasi was organized by IETE Sivakasi Centre and focused on **Challenges in Wireless Optical Communication**.

The event was presided over by **Dr S Syed Ameer Abbas**, Chairman of the IETE Sivakasi Centre. In her welcome address, Honorary Secretary **Dr W Sylvia Lilly Jebarani** presented the day's speaker, **Dr A Sivanantha Raja**, Prof of ECE at Alagappa Chettiar College of Engineering and Technology in Karaikudi. He gave a presentation on **Challenges in Wireless Optical Communications** and got the group talking about it. The presentation showed how wireless optical communication can reduce the number of car accidents caused by fog and mist on roadways. He went into great detail about the various components of an optical communication system, as well as the various research hurdles. He also talked about his research experience in optical wireless systems in his lecture. During his briefing on FSO, he also discussed WLEDs as an alternative to LASER for use in free space optical communication. In a nutshell, the audience learned a lot about the rapidly-evolving field of wireless optical communication. The session was closed by **Dr R Ahila Priyadharshini**, Hony Treasurer, who gave a vote of thanks to all those present.

- During 26th-27th July 2021, a three-member team of Angel Investors from STER (Student to Entrepreneur), Chennai visited the campus with the purpose of identifying, nurturing, and funding innovative student initiatives and instilling an entrepreneurial culture among stakeholders. **Shri D Ravichandran**, **Shri Kumar Ekambaram**, and **Shri Raj Prasad** were among the members of the team. On the first day of their visit (26th July 2021), the team met with Principal **Dr S Arivazhagan** and discussed the visit's plan. Following that, the team met with the heads of departments from around the school. The visiting team briefed the HoDs on their goals and objectives and emphasized the significance of cultivating an entrepreneurial culture on campus. Following the discussion with HoDs, students from several departments participated in an online presentation session. Students presented their unique ideas and proof of concepts to the visiting team of experts based on the awarded Students Project Scheme and other outstanding projects shortlisted from all disciplines. The online session was divided into three halves, with four biotechnology ideas being presented at the first session's forenoon session on the first day. The afternoon session featured presentations by students from the Civil and Mechanical departments, two from each department. Then, in the third session, students from the circuit branch presented their unique ideas, which included IT-2, EEE-2, ECE-2, and CSE-3 concepts. During the presentation, the visiting team was joined by the heads of relevant departments and mentors of student projects. There were a total of 17 concepts given, and the following table details the ideas presented by each department. On the second day of the visit, the STER visiting team met with each department's head of department and held one-on-one discussions with them, as well as mentors and faculty members, in order to explore new possibilities for projects that could lead to entrepreneurship. They have paved the way for the investigation of financial aid for the effective prototyping and commercialization of ideas, thereby propelling their careers as successful entrepreneurs. As a next step, the team offered one-on-one interaction with pupils who provided promising ideas.

- The Centre conducted the **Second Techno Blaze** of the year 2021-2022 on the theme **Wireless Body Area Networks (WBAN) and its Applications** at MepcoSchlenk Engineering College in Sivakasi on 9th August 2021. The occasion was presided over by **Dr S Syed Ameer Abbas**, Chairman, IETE Sivakasi Centre. **Dr W Sylvia Lilly Jebarani**, Honorary Secretary, addressed the audience and presented the day's speaker, **Dr G Athisha**, Professor and Head, Department of Electrical and Computer Engineering, PSNA College of Engineering and Technology, Dindigul. She presented a talk on the day's theme and led a group discussion on the subject.

TRIVANDRUM

Dr Asharaf S, Professor Dean (R&D), University of Digital Sciences and Innovation Technology, a.k.a. Digital University of Kerala (DUK), delivered a talk on the focal theme "Accelerating Digital Transformation in Challenging Times" on 17th May 2021, as part of the **World Telecommunication and Information Society Day**. Dr Asharaf's talk focused on the impact of information technology and digital sciences on daily living. He also discussed the new hype-tools of information technology, such as Artificial Intelligence and Block Chains, and their pervasive applicability in the everyday lives of ordinary people. Around 74 participants attended the webinar, including engineering students, professionals, and academicians. The webinar received positive feedback from all attendees. **Prof (Dr) K C Raveendranathan**, Hony Chairman IETE Trivandrum, welcomed and moderated the meeting; **Prof N Radhakrishnan Nair**, Immediate Past Chairman IETE Trivandrum, summarized the talk; and **Dr K Gopakumar**, Honorary Secretary IETE Trivandrum, proposed the vote of thanks. The presentation was conducted over the Google Meet platform.

VADODARA

A Google meet event hosted by the IETE Vadodara Centre marked the **53rd World Telecommunications and Information Society Day 2021**. **Dr Rajesh S Bansode**, Professor IT, Thakur College of Engineering and Technology in Mumbai, was invited to appear as the keynote speaker. Hony Secretary **Dr Sorum Kotia** greeted the guest and all of the attendees to the meeting. Preamble for WTIS Day was given by IETE Vadodara Centre Chairperson **Dr Mamta Padole**, who also read out a message from IETE President in view of WTIS Day. The speaker was introduced by IETE Vadodara Centre Vice Chairperson **Shri Yashpal Goyal**. Dr Rajesh S Bansode deliberated on the given theme extensively. According to him, this outbreak has necessitated the development of new skills and resources, including investing on digital resources. Group communication platforms are being explored by everyone in school, corporate offices, business communities, and even entertainment and marketing. Culture has changed as much as strategic shifts have been required, with everyone on the team being tasked with mapping new digital technologies in order to create a stable workplace and achieve holistic optimization. His vision included the creation of a modern, inclusive, and digitally empowered learning environment that was in line with NEP. There

were a large number of academics, professionals, and students in attendance, including members of the IETE. **Dr Sorum Kotia**, Hony Secretary, IETE Vadodara Centre, presented a vote of thanks at the end.

VARANASI

IETE Varanasi Sub-Centre, in collaboration with IEEE Photonics Society SBC IIT (BHU) Varanasi, observed **National Science Day 2021** by hosting a webinar on **Raman effect, the narrative of its discovery, and its recent uses in Electronics, Photonics, and Communication** on 28th Feb 2021. **Prof P K Basu (Retd)**, Institute of Radio Physics and Electronics, University of Calcutta, India, delivered the webinar, which drew over 50 attendees. **Dr Somak Bhattacharyya** extended a warm welcome to the audience. Following that, **Dr Santanu Das**, faculty advisor of IEEE Photonics Society SBC IIT (BHU) Varanasi, introduced the famous speaker Prof P K Basu, who discussed the history of the Raman effect, as well as the connection between scientist C V Raman and the old University of Calcutta. He went on to explain the 'Raman effect' and how the invention came to be awarded the Nobel Prize. Various experimental facts pertaining to the applications of 'Molecular Diffraction of Light' in the electronics, photonics, and communication domains were also discussed in a lucid manner during the lecture. He not only accurately described it, but also offered guidance and encouragement to young engineers and scientists interested in working in this subject. The presentation was followed by an extended discussion. **Dr Somak Bhattacharyya** finished the occasion with a formal vote of thanks.

VIJAYAWADA

On 17th April 2021, the Centre, in collaboration with the IE(I) Andhra Pradesh State Centre in Vijayawada and the Department of ECE at SRM University, hosted a **webinar** on the theme **Wonders of Cosmos**. **Dr Sarita Vig**, Prof, Astronomy & Astrophysics Group, Dept of Earth & Space Science, IIST Thiruvananthapuram, was the guest speaker.

WARANGAL

On the 4th and 5th of January 2021, the IETE Warangal Centre hosted a seminar on **Tecxellenz 19** and a **Mid-Term Symposium on Emerging Trends in ICT & Electronics** on the 2nd March 2021. Both events were held entirely online.

YAVATMAL

- To mark **IETE Students' Day**, the IETE Yavatmal Sub-Centre invited Microsoft Azure Cloud Engineer **Shri Prasad Nilajkar** from e-Zest Solutions in Pune to deliver a lecture at the Jawaharlal Darda Institute of Engineering and Technology in Yavatmal on the topic of **Implementing IoT Solutions**.

- For **Women's Day**, IETE Yavatmal Sub-Centre held an essay and **poster competition** at Jawaharlal Darda Institute of Engineering and Technology, Yavatmal from March 13-17, 2021 on the theme of **Women in Technology Development**.

IETE PROFESSIONAL ACTIVITY CENTRE (PAC) NEWS

AUSTRALIA

The **IETE Australia 19th Symposium and Annual Day** was held on 24th July 2021, at Murdoch University's Robertson Lecture Theatre. The Professional Activity Centre, which has been open since May 2017, charges no membership fee and hosts talks by high-tech professionals on current Australian issues. Three members participated within the state, while one from another country. The symposium drew 33 participants in all, with the four presentations as follows: **Dr Manickam Sundaram**, Deputy Head of Research and Senior Lecturer at Murdoch University, addressed the use of WA's lithium resource to power electric vehicles (EVs); **Atul Garg JP**, Chairperson of IETE Australia and Principal Consultant at FMG Ltd., discussed cyber recycling in Western Australia; **Siddharth Malani**, AWS Solutions Architect, Modis IT & Services, discussed machine vision and AI. Track'em API Senior Software Developer, **Pankaj Patro** discussed the cost benefits of remote working technologies.

Shri Atul Garg has been giving talks at symposiums on Australian-relevant themes. This IETE PAC promotes and mentors the next generation of technologists in all fields, in addition to disseminating valuable information. Bateman's local MLA, **Kim Giddens**, was present at the occasion and lent his support to the organization's mission and operations. Aside from **Mr Nic Castagnette**, who represented Pro Vice Chancellor Kelly Smith, attended included Councillor **V Senathirajah**. The Chairman of IETE Australia, Shri Atul Garg, thanked the Murdoch University and all the attendees for coming to the ceremony. In his welcome statement he said that IETE Australia intends to be a Centre of Excellence to empower entrepreneurs, professionals, and students in the finest practices, research, and innovation of the business world. Speaking about IETE's parent organization Shri Atul Garg stated that it was created in 1953, 68 years ago, and has been India's leading recognized professional association dedicated to the growth of electronic, telecommunication, and information technology science and technology.



IETE Students' Forum (ISF) Activities

- Technobuzz was the first event in the Technotronz'21 event series, which was hosted by the **ISF at PSG College of Technology in Coimbatore** on **Jan 24, 2021**. The contestants had to overcome three tiers of obstacles in order to earn the glory. At the first level, participants were screened by technical quizzes. Canvas was used to administer the quiz. The following exciting challenge was "clip and clap" This round had questions about simple scientific effects accompanied by a video. The participants were tasked with determining the scientific basis for it. A third-round debate was held among the selected

participants to assess their social awareness. According to the participants, Technobuzz was quite intriguing and provided an excellent opportunity for them to express themselves on an online platform. The tournament began with over 100 participants, three of them were named winners. The ISF held next event Codestorm on **Jan 31, 2021**. This was an unusual event for critical thinkers and aspiring engineers. It began with the elaboration of fundamental programming principles for approximately 50 people. Then, the shortlisted participants advanced to stage 2, where they created algorithms to sequentially solve a

real-world scenario. Following this, in the previous round, outperforming coders became treasurers for a time, tasked with establishing a meet link, before transitioning to being gamers tasked with completing difficult tasks. Collectively, the participants felt as though they were demonstrating their problem-solving abilities to the outside world via this remarkable platform. Finally, two teams stood out and won the event, providing attendees with an extraordinary experience. On **Feb 07, 2021**, the ISF organized the 3rd event Mind Iconic. This was the middle of Technotronz events. Following the overwhelming response on Technobuzz, this event had 3 rounds and 58 competitors. The participants thought the time they spent valuable and the event itself engaging. Unlike prior Technotronz events, this one was enjoyable. Participants said the program was intriguing and that the pieces put together for the event were more engaging.

- **ISF at ECE dept of Crescent Institute of Science and Technology, Chennai**, organized a value added course on Certified Labview Associate Developer (CLAD) from **Feb 1, 2021 to Feb 15, 2021** in association with Optithought & the student chapters of IETE & IE. The objective of the workshop was to train the students in Lab VIEW tool and to qualify them as a LabVIEW Associate Developer. The training program was felicitated by Dr Najumnissa Jamal, Dean/SECS, and the welcome address was delivered by Dr R C Tharani, HOD/ECE, both from B S A Crescent Institute of Science and Technology. The highlight about NI LabVIEW Academy was delivered by Chief Guest Mr E Muralikrishnan Dir, Optithought. **ISF** conducted a national level technical Symposium Spectron 2021 on **April 09, 2021** via google meet. The chief guest of the occasion was Shri Afaaq Imran specialist Radio Access Network Ericsson India Global Services Ltd Chennai. On **April 29- 30, 2021**, the ISF and Entuple Technologie, Bangalore-jointly organized a two- day workshop “Online -Training on Full custom and Semi-custom Design Flow in VLSI using Cadence Tools”. **ISF** organized a Virtual Project EXPO’2021 for the Final year students on **June 26, 2021**.
- **ISF at RMK Engineering College, Chennai**, organized following guest lectures/ webinars/ conferences during **Feb– June 2021 viz.**, a guest lecture on **Feb 24, 2021** by Shri R Selvaganapathy Former Asst Commandant (ITBP); a webinar on Coding Skills for IT Industry by Shri V Devi Prasad on **Feb 24, 2021**; another guest lecture on **Mar 11, 2021** by Shri Zakkir Hussain on 'In Sight to Wireless communication'; an International Conference on **Mar 26-27 2021** on 'Intelligent Computing, Smart Communication and Network Technologies ICICSCNT 2021'; a guest lecture on 'Placement Orientation Program' by Ms M Vanmathi, Software Engineer Coda Global Alumnus -2020 on **April 4, 2021**; a webinar on **April 30, 2021** on 'Chip Designed & its Opportunities' by Shri J Jayakumar. A technical Club Webinar was organized on **May 8, 2021** on 'RPA Robotics Process Automation' by Ms Naveen Kumar. On **May 13, 2021**, webinar on 'Influence of Electromagnetic Field Theory on 5 G & Beyond' was held by the speaker T Jayanandan. Yet another webinar was arranged on **May 22, 2021** on 'Website Framework (ASP Net) Work Flow & My SQL Database' by Shri Diwakar.
- **ISF at Dept of ECE, Sri Venkateswara College of Engineering (SVCE), Chennai**, jointly with the Indian Association of Physics Teachers (IAPT) organized the National Science Day on **March 11, 2021**. On the occasion a technical talk was delivered by Dr A Anandavadivel, Assoc Prof, Dept of Applied Physics, SVCE. The Dept of ECE, SVCE in association with IETE Chennai Centre organized a one day national conference on Signal Processing, Communication & Networking (NCSPCN-2021) on **May 7, 2021**. The inaugural keynote address on the topic ‘Oceanographyship – navigation and Survey’ was given by chief guest Dr Tata Sudhakar, Group Head, Ocean Electronics Group, NIOT, Former Chairman, IETE, Chennai, in which he elaborated about the navigation systems and sensors, their advancements, and the various research issues. The inaugural address was followed by paper presentation sessions, which was conducted in three parallel sessions. After the technical sessions, a valedictory keynote address was given by the chief guest Dr N Venkateswaran, Prof, Dept of ECE, SSN College of Engineering, Chairman, IETE Chennai on the topic “Intelligent Reflecting Surface for Future Wireless Communications”. A total of 33 papers of good quality were selected by the review committee based on the novelty of the work relevant to the latest research topics and the real-world applications. 28 papers were presented in the conference. Following the keynote address, Dr S Muthukumar, HOD, ECE, gave the valedictory address and announced three best paper awards and cash reward of Rs 1000/- from each of the technical sessions. The 53rd WT&ISD was observed on the theme, “Accelerating Digital Transformation in Challenging Times” on **May 17, 2021**. The chief guest and keynote speaker was Prof Abhay Karandikar, Dir, IIT, Kanpur. **ISFs at SVCE and Forum of Data Science Engineers (FODSE), Chennai**, in association with IETE Chennai Centre and ISF of **Jeppiaar Institute of Technology, Veltech Multitech**

Dr Rangarajan, Dr Sakunthala Engineering College, SRM Easwari Engineering College, Panimalar Institute of Technology and SRM Institute of Science and Technology organized a National level hackathon on 'Ease The Error 2.0' on **May 15-16, 2021**. This event challenged students to offer innovative ideas to build smart applications which will help address major real time problems in our country. The Mentors of Forum of Data Science Engineers played an important role in assigning problem statements played an important role in assigning problem statements related to the innovative engineering domains such smart communication and vehicles, health care, rural development, Robotics, Cyber Security, IoT, pandemic safety, disease awareness and AI/ML/DL for human development. The hackathon consisted of two rounds of judging. The three judges present for the preliminary round were Shri Shraavan Srinivasan; Shri Padmanaban Alagappan and Vuppalapatti Chenchu Ujwal . The judges for the final round were Dr W Jino Hans, Assoc Prof, Dept of ECE, SSN College of Engineering, Chennai; Dr V Sherlin Solomi, Asst Prof, ECE Dept, ECE, Hindustan University, Chennai and Shri C Ashok, Asst Prof, Dept ECE, St. Joseph's College of Engineering, Chennai. **ISF at Dept of ECE, SVCE, Chennai**, in association with IETE Chennai Centre organized a webinar on **May 27, 2021**. The speaker for the webinar was Dr P Uma Sathyakam, Asst Prof, School of Electrical Engineering, Vellore Institute of Technology, Vellore. The webinar was coordinated by Dr S Sutha, Dr K Ashwini, Dr P Ashok and Shri K Venkatesh, AP/ECE, SVCE. Dr S Muthukumar, HoD, ECE addressed the gathering and gave the welcome address. The speaker gave deep insights into the topic Carbon nanotube electronics and shared his knowledge on nanotube structures, their configuration, applications of nanotubes etc. He also detailed various research challenges with respect to nanoelectronics. Dr K Ashwini, concluded the webinar with vote of thanks. **ISF at ECE Dept** organized a valedictory function on **June 19, 2021** for ECE Association, and Robotics and Artificial Intelligence Club (RAIC) SVCE. The chief guest on the occasion was Dr N Venkateswaran, Chairman IETE Chennai Centre.

- **ISF at Coimbatore Institute of Technology, Coimbatore** in association with IETE Coimbatore Centre conducted a national level technical symposium, INFOTRA'21 on **March 18-19, 2021**. It is one of the largest of its kind in the country, combining technical contests from many genres. The project presentation, programming contest, and circuit design were all held. The symposium was extremely beneficial to the students in terms of improving

their immaculate knowledge and individual creativity capacity. This technical symposium's major goal was to establish a common forum for students to communicate thoughts on technological themes such as the internet, curriculum, jobs, higher educational options, and growing needs.

- **ISF at Dept of ECE of Sri Ramakrishna Institute of Technology (SRIT), Coimbatore**, organized a webinar titled Automation Testing Strategies on **April 12, 2021**. Ms R Prabha, Automatic QA Engineer, Hippo videos, Guindy, Chennai, was the resource person. She emphasized the significance of testing strategies. She also discussed many concepts in automation as well as the challenges that manual testing presents. Students in their final year of ECE benefited from the webinar. The Dept of ECE organized another webinar titled, Robotic Process Automation in UiPATH on **Sep 7, 2021**. Dr Jeyalakshmi Ayyappan, Asso Prof, was the resource person. She pointed out the importance of RPA with many examples. She also highlighted various top RPA Open source tools.
- **ISF at K C College of Engineering and Management Studies and Research, Thane (E)**, organized an Inter-collegiate technical debate competition "TechBate-2021" on **April 13, 2021**. The event was attended by Principal Dr Vilas Nitnaware, HOD of EXTTC; Dr Baban U Rindhe, ISF faculty coordinators, TechBate team members, participants & judges. Topics for debate were from various domains like IoT, AI, Robotics, etc. The winner Shri Cibin Chandrashekhar and 1st runner up Shri Siddhi Rajwatar were awarded with the achievement certificates. **Dept of ET & IETE-ISF, KC College of Engg and Mgmt Studies & Research (KCCEMSR), Thane (E)**, in association with IETE Mumbai Centre presented Valedictory Session of OSCILLATIONS-2021 on **May 18, 2021** in virtual mode. Speaking on the topic "How to leverage personal branding for career growth" the chief guest Shri Rishabh Singh shared some real-life experiences and guided for personal branding for career growth. Other dignitaries who attended the function online were Dr J W Bakal President IETE, Mrs Suvarna Bhise Hon Secretary of IETE Mumbai. Many ISF faculty in charge Faculty Coordinator of Host college Prof Sumita Gupta and Prof Paurnima Vadak. Dr Baban Rindhe, HoD EXTTC of host college, Dr Arundhati Chakrabarti Vice-principal of host college Dr Vilas Nitnaware Principal of host college.
- **ISF at E&T Dept of S B Patil College of Engineering, Indapur, Maharashtra**, organized a seminar on How to write Technical Paper by Dr R Arulmurugun from Sanjivani

College of Engineering, Kopergaon, Ahmednagar on **Apr 24, 2021**. Event was organized under guidance of honorable Dr P D Nemade, Principal, SBPCOE and Prof P R Taware, HOD. It was attended by near about 50 participants. Dr R Arulmurugun gave details knowledge regarding writing a technical paper. Prof Togrikar P S was the coordinator for the event

- **ISF at Adamas University Kolkata, West Bengal**, in collaboration with IETE Kolkata Centre organized a webinar on “Evolution from 1G to 5G: An Antenna Engineers Prospective”, by Shri Jeet Banerjee, Asst Prof, Dept of ECE, School of Engg & Tech, Adamas University on **April 25, 2021**. There were 215 people from India that signed up for the webinar. A total of 102 people actively and intellectually participated in the webinar, with the response collected from 92 participants rating it as “very good/excellent/amazing”. Aside from their participation certificates, The participants’ supportive posts on LinkedIn demonstrate the webinar’s success. The ISF organized another webinar on Career prospects in electronics and communication engineering on **June 16, 2021**. The guest speaker Prof V Mahadevan Scientist ISRO enlightened the audience with the various career prospects in the domain of satellite communication. Dept of ECE, SOET **Adamas University** and the ISF jointly organized a virtual guest lecture on “Career Opportunities in Microwave Filters Design” for ECE students and professionals on **Aug 14, 2021**. Speakers were from Intel, HCL, etc. The lecture started with the importance of filter design in modern smart phones and the session’s objectives. The expert outlined the essential skill gaps. The speaker first discussed Maxwell’s Equations in Microwave Filter Design, then microstrip band pass filters, quarter-wave filters, etc. During the seminar, the construction and problems were briefly explained. The lecturer then explained the role of resonance in Microwave Filter design and functioning. Next, the lecturer discussed Microwave Filter Design utilizing EM Simulation Software (like Sonnet Project Editor). Using EM modeling and design software, the speaker designed a filter at the end of the session. Furthermore, the job options in Microwave Filter design were informed. And career advices for prospective filter designers were given. The guest speaker also shared her professional experience in several fields. **ISF at Dept of ECE of SOET, Adamas University**, jointly organized a one-day free virtual workshop on ‘Design and Fabrication of Printed Circuit Boards (PCBs)’ for the projects of the students at home. The workshop was arranged on **Sept 10, 2021**. The workshop started with an introduction and departmental recorded video and Introduction to PCB’s by Asst Prof Jeet Banerjee, ECE, SOET, who explained about the need of PCB in electronic circuits. Next, Shri Uttam Basak, technical assistant, ECE, SOET, demonstrated the presence of single layer, and Multilayer PCBs in small portable devices and their layouts. Shri Pradip Kumar Roygupta, also a technical assistant, ECE, SOET, demonstrated various boards (Breadboard, Vero Board, and PCB). Next, he demonstrated the live designing of a sample circuit using Multisim Software tool; the realization of the PCB from the designed PCB (using software tool); the soldering of components on the fabricated PCB. The event’s feedback reflected high degree of satisfaction in the learners.
- **ISF at St Vincent Palloti College of Engg & Technology (SVP CET), Nagpur**, in association with IETE Nagpur Centre organized a webinar on “Mystic World of Data Science” on **May 2, 2021**. The expert speaker was Shri Arpit Yadav, Research in Artificial Intelligence and Machine Learning Tensorbrew, Hyderabad.
- **ISF at Shivajirao S Jondhale College of Engineering, Dombivli (E)** organized a webinar under “2021” on **May 08, 2021**, which was conducted online. The event was graced by Chief Guest Shri Parag Walinjkar, Chairman IETE Mumbai Centre, Dr H S Gambhir, Vice Chairman IETE Mumbai Centre and the speaker Shri Ritesh Verma, Vice President, Quinnox Consulting Services Ltd. The other dignitaries included Prof Smita Lonkar, Dr Pramod Rodge, Dr Uttara Gogate, Dr Savita Sangam, Dr Madhuri Rodge, Dr S K Srivastava, Staff & ISF members. Janhavi Prabhu, Secretary, ISFSSJCOE welcomed all the dignitaries and talked about ISF of SSJCOE. Dr S K Srivastava introduced ISF committee for 2020-21. Shri Pratik Gode, Chairman, ISF SSJCOE, highlighted the activities of ISF and proposed activities. The chief guest motivated the students with his address. Shri Ritesh Verma covered all aspects about ‘Career Opportunities in Current Pandemic’ in the webinar and answered all students’ queries. Prof Smita Lonkar gave a short speech and thanked all. The vote of thanks was proposed by Miss Saloni Malusare.
- On **May 13, 2021**, **ISF at Chandigarh Group of College, Jhanjeri, Mohali**, Dept of ECE, in association with IETE Chandigarh Centre, hosted a webinar on “5G Technology and Its Applications” for BTech. ECE students. The resource person was Shri Kapil Bhutani, Director Telcocrats Technologies Pvt Ltd. The event’s chief guest was Shri S C Jain, Chairman, IETE Chandigarh Centre. Over 50 students and faculty members from the ECE department at-

tended the talk. Dr Sajjan Singh, HoD of ECE, greeted the chief guest and professional speaker. Dr Rajneesh Talwar, Director, also addressed the audience and encouraged students to complete quality projects. Shri Subhash Chander Jain, addressed the students, providing an overview of IETE and encouraging them to become members of the IETE Students' Forum (ISF). He discussed the benefits of ISF membership in detail and encouraged students to engage in trainings, submit papers, and compete for IETE's many awards. Shri Kapil Bhutani, an industry specialist, presented the students to the fundamental ideas of telecom firms, their flow processes, and the structure of cell sites. He went into detail about the many types of antennas and other components found in Mobile Towers. He contrasted 4G and 5G technologies. Additionally, the discussion focused on the necessity and requirements of 5G technology in the near future for IoT-based applications. Finally, numerous pupils expressed their concerns to the expert. The pupils were quite appreciative of the presentation.

- **ISF at Government Polytechnic, Nagpur**, organized "Genesis 2K20" for all polytechnic students of all branches on **May 15-16, 2021**.
- **ISF at ECE Dept at Sri Sai Ram Engineering College, West Tambaram, Bangalore**, organized a one-day workshop on "Orange Data Mining tool Workshop" by Shri Jayachandiran Udayakumar, Asst Prof, Dept of ECE, Sri Sairam Engineering College on **May 15, 2021**. The ISF organized the 53rd WT&ISD-2021 on the designated theme "Accelerating Digital Transformation in Challenging Times" on **May 17, 2021**. Expert speakers for the occasion were Dr Mithileysh Sathiyarayanan, Founder & CEO, MIT Square, London and Shri Ravi Teja Ganti, Robotics Consultant, MIT Square, India. The ISF organized a workshop on "Tinker your Ideas to the Next Level" by Shri S Prabhakaran, AP ECE and Shri J Prakash, AP, ECE on **May 22, 2021**.
- **ISF at Dept of ETE of Karmaveer ADV Baburao Ganpatrao Thakare College of Engineering (KBTCOE), Nashik**, in collaboration with IETE Nashik Sub-Centre organized number of activities including a webinar on "MSP 430 and it's Applications" by Dr Santosh S Sonawane, Director, School of Mechatronics Engineering, Pune on **May 15, 2021**; an online expert talk and quiz programme on **May 17, 2021** to commemorate WTISD-2021; a webinar by Shri Renjith C V on **May 24, 2021**, to celebrate the role of electronics engineers in digital transformation; another webinar on "Electric Vehicles" by Ms Bhavisha Kalani,

Vice President-Business Development AIESEC, Nashik on **May 25, 2021** and on "Applications of MATLAB" for engineering students by Dr Pranav Lad and Shri Nikhil Sonavane of MathWorks on **June 18, 2021**.

- **ISF at Lalbhai Dalpatbhai College of Engineering (LDCE), Ahmedabad**, organized World Telecom day on **May 17, 2021** via online platform. Shri Vipul Dodiya, JTO, BSNL Bhavnagar, delivered an expert presentation on "5G Technology and Its Impact on Human Health". Dr Rajul Gajjar, Principal LDCE, Dr M V Shah, HoD EC, and Er R M Makwana, Chairman IETE Ahmedabad, all addressed the gathering with motivational addresses.
- **ISF at SKN Sinhgad Institute of Technology and Science, Lonavala, Pune**, organised a e-National Conference on Advances in Modern Technologies of Multidisciplinary Research in Engineering Field in association with IETE, ISTE and CSI on **May 20-21, 2021**. Prof R M Thadi, HOD (E&TC) and Convener of the e-national conference, briefed the attendees about the conference. The Chief Guest Dr D S Aldar, Asst Prof, E&TC, KBTCOE, guided all participants in their research work in many areas such as IOT, ML, AI, cognitive radio, speech enhancement, embedded system, and so on. He also proposed necessary resources for research in several sectors, as well as appropriate setups at engineering institutes. Prof N K Gawade, HOD of SKNSITS, proposed a vote of thanks. Following the inaugural ceremony, the paper was evaluated in respective departments by specialists in the respective era in an online mode. The paper evaluation continued for two days, and the valedictory celebration was held in individual departments on **May 21, 2021**. Each department had a winner and a runner-up prize for the best paper. In addition, all attendees received a certificate for their participation in the e-National conference. ISF organized "Embedded RTOS" on **May 28, 2021**. Prof D K Shende addressed students about the subjects and motivated to give their best in contributing to subject. On **May 28, 2021**, the ISF organized session on "Wireless Networks" by Prof D K Shende. The ISF organized the National Student Conference IEEE Technicoknockdown-2021 on **May 30, 2021** in collaboration with IEEE Student branch and Department of E&TC. Out of a total of 140 papers 75 papers got received for the conference. Event was divided in two sessions. Dr M S Gaikwad and Dr DD Chaudhary addressed students and congratulated them for their paper selection. Dr D Smantri convener of conference explained the event flow. Chief Guest Dr R D Kharadkar, Chairman, IETE Pune Centre, and Dr B Satayanarayana, Chairman, IEEE

Bombay Section, congratulated the organizing committee for organizing event and motivated students to make their contribution in the field of research. The keynote speaker Dr B Satyanarayana spoke on need of digital transformation in challenging times, while Shri Chinmay Pathak gave his speech on Electro vehicle and future mobility. In sessions students presented their papers and experts asked this question.

- **ISF at St Peter's Engg College, Hyderabad**, organized a webinar on 'Tracking and Telecomm and Systems Support for Satellite launch Vehicle Missions and as well as an Annual Meet on **May 26, 2021**. The welcome address was given by Ms T Soumya. Er K Gnaneshwar Rao, Chairman, IETE Hyderabad Centre, gave an enthralling address about the activities of the IETE Hyderabad Centre and the events that are held there on a regular basis throughout the year. The new student council members then spoke to the audience. President KVN Guna Vardhan discussed the IETE and the activities and events that would take place in the college during the next year. Varun Mahindra, Vice President, provided a short history of IETE via his address. Varsha Reddy, the General Secretary, spoke about the advantages that IETE provides to students. In his lecture to the students, Er N Namassivaya, Secretary, IETE Hyderabad Centre, discussed the value of professional membership and why students should enroll. He also urged students to submit research papers and articles to the IETE students' journal. Shri B V Subbarao, Scientist-G, ISRO, gave a superb talk on satellite launch vehicle tracking and telecomm and systems support. Mrs Hemlatha Dalmia, Faculty Coordinator, gave a vote of gratitude at the end of the event.
- **ISF at Dept of ECE, Brindavan College of Engineering, Bengaluru**, opened a student chapter on **May 28, 2021** with 55 student members and Faculty members of the department. Mr. Satyanandan, Chairman IETE Bangalore was the Chief Guest. He inaugurated the ISF and gave a motivational talk. Prof C Murali, former Vice President IETE gave a technical presentation on "5G and Beyond."
- **ISF at Dept of CSE of SVCE, Bangalore**, organized a one-day webinar on "Introduction to DS & Algorithm and Roadmap for Programming" on **May 29, 2021**. The program was organized in collaboration with Coding Ninjas, Bengaluru and IETE-ISF Chapter. Prof Anjali Grover, Mentor, Coding Ninjas, Bengaluru and Ms Shriya Prasanna, Alumna, SVCE, Bengaluru were the speakers. Dr Linga Reddy, HoD, presided the event. Prof G Prakasha was the coordinator and delivered vote of thanks. On **May 30, 2021**, the Dept organized a one-day webinar on "Roadmap for Cracking Internships & Placements" for 3rd and 4th year students. The program was organized in collaboration with Coding Ninjas, Bengaluru and IETE-ISF Chapter and presided over by Dr Linga Reddy, HoD, Prof G Prakasha, the coordinator, delivered vote of thanks.
- **ISF at Dept, E&TC, of MES's College of Engineering, Pune**, organized a webinar on the "Role of SDR and SDN in Next-Generation Communication (Mobile and Data Communications)" on **May 29, 2021**. Prof Nabegha Masood arranged this webinar for students. The speaker Shri Vishal Deshpande Head-CSP and Digital Solution Ericsson India, explained role of SDR and SDN in 5G in details and life after 5G. He also explained the role of SDN in IoT.
- On **May 29, 2021**, ISF and the **Department of ECE at Nitte Meenakshi Institute of Technology (NMIT), Bangalore**, held a technical webinar on communication. Speaking on the topic of "5G and Beyond-New Technologies Driving Mobile Communications," Dr M H Kori, Vice President of IETE, Technology Consultant, Consultant of the Telecom Standards Development Society of India (TS-DSI), and former Technical Director of Alcatel-Lucent Technologies, delivered the lecture. Faculty Coordinators Dr Sagarika Das, Associate Professor, and Ms Ayesha Siddiqua, Assistant Professor were in attendance as well as Dr Prasanna G Paga, Associate Professor, Dept of E&CE, NMIT, Bengaluru. Dr Ramachandra. A C was the Convener, and Student Coordinator was Shri Gagan Karthik.
- **ISF at Sambhram Institute of Technology, Bengaluru**, conducted a workshop on Project Base Learning Using Proteus **May 29, 2021**. One more webinar was conducted on 'No Tobacco Day' by the ISF on 31st May 2021. Earlier the ISF conducted a webinar on orientation program on K-Tech Centre of Excellence in Aero -space and Defence.
- **ISF at ECE Dept of Jeppiaar Institute of Technology Chennai**, organized a Career Planning webinar through online **June 01, 2021**. The chief guest on the occasion was Kathir Thangamani senior AR associate at Technosoft corporate. The theme of the webinar was **Planning for your career**. The webinar went very good and interesting. The participants asked their queries.
- **ISF at E&TC Dept of AISSMS's Institute of Information Technology, Pune** organized an expert lecture on

“Overview of Schematic and PCB Design” on **June 01, 2021**. Shri Sanket Nartam, Lead Engineer, Mahale Group, Pune, delivered the expert lecture. This lecture was jointly organized by Smt Nilima Warade, Shri Amol Chaudhari, Smt Shobha Nikam and Ms Sandhya Ahire.

- Technomela 2021 was held in **Shivajirao S Jondhle Polytechnic, Asangaon** on **June 05, 2021** via online mode due to pandemic situation. The final year project always plays a crucial role in the teaching-learning process. It is also a way of identifying the ability of the student to do an industrial project or apply research linked to the knowledge discipline. The Polytechnic tried to promote innovation and creativity among polytechnic students through Techno-mela project competition. Event was inaugurated by Dr Sneha H Jondhle, Principal Shivajirao S Jondhle Polytechnic, Asangaon and other dignitaries. Students presented different projects from emerging trends of electrical, computer, civil, mechanical and electronics fields. Participants was judged by Prof Madhuri Rodage, HOD EXTC SSJCET, Asangaon; Prof Smita Lonkar, SSJCOE Dombivili; Prof Pramod Rodage, SSJCOE Dombivili; Prof Y S Patil, SSJCET, Asangaon.
- **ISF at ECE Dept of Aarupadai Veedu Institute of Technology (AVIT) Paiyanoor, Chennai and Industry Academia Cell & Centre for Industry Relations**, jointly organized a webinar on the topic, “Mentoring – Learning Post Pandemic and Future of Education & Learning” on **June 9, 2021**. The expert speaker was Prof Ujjwal K Chowdhury, Prof Vice Chancellor, (PR & Media), Adamas University, Kolkata and Prof Sir Bashiru Aremu, Vice Chancellor, Crown University Intl, Oa Vinci University. Another webinar was organized on **June 10, 2021** on the topic “Approaches for Implementing Steam Education” by Dr Rania Lampau, Global Educator, Stem Instructor, Greek Ministry of Education & Religious Affairs, Directorate of Educational Technology and Innovation. On the same day another webinar titled, “Human Artificial Intelligence for Hyper – Performance in Education” was arranged which was delivered by Prof Agnis Stibe, Academic Director, Artificial Intelligence, Professor of Transformation, EM Normandie Business School, Paris. Dr Prof Sandeep Sancheti, Vice Chancellor, (Provost) Marwadi University, Gujarat on **June 10, 2021**, delivered a very interesting talk on the topic, “NEP 2020 – Implementation of ABC Scheme”. A panel discussion on ‘Skills & Employability: Global Challenge’ was organized on **June 11, 2021**. The speakers included: Mr Wordsworth Ayyadurai, Founder & CEO Salem Infotech Inc, USA; Mr

Jean Meslie, CEO, Techno Gems Inc, USA; Ms Anita Selwyn, MD, Nila Apps, USA & Ms Sripriya N, President, Qualsoft Inc, USA. Next, a webinar on the topic “Skill & Scale” was conducted on **June 11, 2021** by Dr Prof B Ramaswamy, Vice Chancellor, OPJS University, Rajasthan, Expert Committee Member – UGC, Govt of India. ISF at ECE Dept and Industry Academia Cell & Centre for Industry Relations, jointly organized a webinar on the global event of about a week on “World Education Summit 2021: Beyond Pandemic One”. On **June 13, 2021**, Dr G Kulanthaivel, professor, Dept of ECE, NITTR, Chennai, spoke on the related topic, “Integrating ICT In Education to Address Industrial Revolution 4.0”, while Dr Prof Anoop Swarup, Chairman Centre for Global Nonkilling Hawaii, Founder Chairman Global Knowledge Alliance, Former VC Jagran Lakecity University & Shobhit University, Formerly UN Representative, chose to speak on “The Paradigm and Precepts of Emerging Disruption in Global Higher Education Landscape”.

- **ISF at Anand International College of Engineering, Jaipur**, organized a industry-academia interface for all the students of I, II & III year in association with ISF on **June 10, 2021**. The speaker, Er Anjali Choudhary, Assistant Manager, CNS, Airports Authority of India, Jaipur, under Ministry of Civil Aviation, shared her views about role of engineers in AAI and told about the importance of skills required for that. Hon’ble Vice-Chairperson of Institute Ms Monika Mittal, Institute’s Principal Prof Vijay Kumar Sharma & Vice-Principal Prof Praveen Agarwal started the program with welcome remarks. Online distributed the certificates to all the participants. The program was conducted under the guidance of Shri Vivek Bhojak, HOD, ECE & IETE, Faculty Coordinator, Students’ Forum, Anand –ICE, Jaipur. Around 189 participants were present in the program.
- **ISF at Jawaharlal Darda Institute of Engineering and Technology, Yavatmal**, organized a one-day online workshop on Towards the Implementation of Internet of Things (IoT) with ESP32 hosted by Prof B M Faruk and Prof A B Rathod for students of IETE Yavatmal Sub-Centre on **June 16, 2021**.
- **ISF at Dept of ECE Anil Neerukonda Institute of Technology & Sciences (ANITS), Visakhapatnam**, conducted a yoga event on **June 21, 2021** on the eve of “International YOGA Day” for all the students and faculty in association with “Art of Living” organization. The event was organized in online platform due to COVID-19 situations.

This event had a total of 85 attendees, including students and faculty. Shri Siddarth Rajagopal, Product Customer Success Manager, APAC, Coursera, and Ms Soumya, HR Consultant, Armour, were invited to demonstrate yoga-asanas to the participants on behalf of the "Art of Living" organization. "Vajrasana, Vakrasana, Kapalbhathi, and Nadisodhana" were taught throughout this event, with dhyana completing the program (meditation). There are numerous benefits of meditation, including stress reduction, anxiety control, emotional wellness, self-awareness, attention span extension, and assistance with addictions.

- **ISF at Cummins College of Engg for Women (CCOEW), Nagpur**, conducted a 6-day online STTP on "Comprehensive Future in Artificial Intelligence" from **June 22 to 27, 2021**.
- **ISF at ECE Dept, University College of Engg Narasaraopet (UCEN), JNTUK, Guntur**, conducted a workshop during **June 26 & 27, 2021** on Learn Arduino Applications. Dr Yogesh Mishra, Prof ECE, GMRIT Rajam, was the resource person. Shri A Gangadhar, Asst Prof & HOD JNTUK, was the convener of the programme. Another workshop on MATLAB was organized on **Jul 16 & 17, 2021** by Dr T S N Murthy, Asst Prof, JNTUK.
- **ISF at ECE Dept at IEEE Photonics Society, Chennai**, organized a two-day FDP on "Advances in Photonics and Fiber Optics Technologies" on **June 21-22, 2021**. The speakers on the occasion were :Dr V V Raghavendra Sai, Associate Professor, Biomedical Engineering, Dept of Applied Mechanics, IIT Madras, Chennai; Dr K Srijith, ECE, Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Kancheepuram; Dr Shankar K Selvaraja, Photonics Research Laboratory (PRL), Centre for Nano Science and Engineering (CeNSE), Indian Institute of Science (IISc), Bangalore & Dr Gopalkrishna Hegde, Dept of Instrumentation & Applied Physics, Indian Institute of Science (IISc), Bangalore.
- **ISF at School of ECE, REVA University, Bengaluru**, in association with IEEE Student Branch REVA University, IEEE Bangalore Section & IEEE VTS Bangalore Chapter organised a virtual webinar cum demo on Wireless Module on **June 30, 2021**.
- The ISF at **SRM Valliammai Engineering College, Tamilnadu**, organized a seminar on "Flexible and Wearable Antenna for Wireless Communications" delivered by Ms T Annalakshmi, Associate Professor, ECE Dept, New Prince Shri Bhavani College of Engineering and Technology on **July 16, 2021** via online mode. About 54 students and 20 faculty members benefited through this program. **ISF** also organized a webinar on "Trends and Innovations in Industrial IoT". A lecture delivered by Shri Harishankar B, Senior Platform Software Developer, Automotive-Electronic Control Unit, Robert Bosch Engineering and Business Solutions on **Aug 17, 2021**. He discussed the significance of the MQTT protocol in IoT.
- **ISF at Kongu Engineering College, Erode**, organized the inauguration of ECE Association and IETE Student Forum (ISF) on **Aug 24, 2021**. The chief guest of the inauguration was Shri Sukumar Shanmugam, Director, Pactron (I) Pvt Ltd, Coimbatore. The event was formally inaugurated in the presence of Principal, HOD, faculty members of ECE Dept and students of ECE Association ISF members. Dr T Meera Devi, Prof & Head of ECE Dept, welcomed the gathering. Dr K Senthilkumar, Associate Prof of ECE Department, introduced the office bearers of ECE Association and Dr A Arulmurugan, Faculty Advisor of ISF, introduced the office bearers of ISF 2021-2022. The felicitation speech was given by Dr V Balusamy, Principal, Kongu Engineering College. Shri M Vishal, Chairman of ISF, read the annual report of the ISF activities for the academic year 2021-2022. The chief guest Shri Sukumar Shanmugam gave an inaugural speech on "How to become an entrepreneur?" At end of his speech, he responded the queries from the students. This was followed by vote of thanks by Ms T Sukivarshini of Treasurer, ECE Association and the function came to an end with national anthem.
- **ISF at BMS Institute of Technology and Management (BMSIT&M), Bengaluru**, organised a five day open course on "Advanced Networking and IOT Applications". Shri Abhijith Telang, Business Development Manager at Softcell Technologies Pvt. Ltd. conducted an expert session titled "Introduction to IOT Automation Applications" during the five-day open course. Topics such as an introduction to the Internet of Things, its characteristics, and its automation in a variety of applications were highlighted. The comprehensive insight into innovation in IoT and its automation in a variety of applications, including cross-disciplinary domains, as well as the current state and future prospects of IoT, were explored in detail. He also demonstrated some IoT projects that he had been working on up to this point. The session was really educational; numerous ideas regarding IoT projects were clarified. Prof Thejaswini S (IETE Coordinator), Asst Prof, Dept of ETE,

and Prof Saritha I G, Asst Prof, Dept of ETE, co-ordinated the program.

- **ISF of Mepco Schlenk Engineering College, Sivakasi**, organized a guest lecture on “Automotive Embedded Development” on **August 27, 2021** for the II, III and IV ECE students. The lecture was given by Shri Siva V Girish, System Analyst, SRM Technologies Pvt Ltd, Chennai. The function was inaugurated by Dr R Shantha Selvakumari, Prof & Head, ECE Dept, Mepco Schlenk Engg College, Sivakasi. Faculty advisors Dr A Kamaraj, Assoc Prof/ECE & Mrs V Gnanalakshmi, AP/ECE arranged this session. Ms B Soniya, Member of ISF welcomed the gathering and Shri E K Karthik Vishnu, Member of ISF introduced the guest speaker.
- **Gandhi Engineering College, Bhubaneswar**, in cooperation with IETE, hosted a one-day motivational webinar

on **Aug 28, 2021**. Around 150 individuals from various colleges took part. Dr Pravash Ranjan Tripathy, Dean Academics, GEC, Bhubaneswar, coordinated the programme. Satyanshu Bhushan Patjoshi, Senior Technical Program Manager, Amazon India, was the keynote speaker at the event. The webinar’s title was “Push Yourself for Tomorrow.” Prof (Dr) A Baradeswaran, Principal, GEC, Bhubaneswar, opened the event with a welcome note. Dr Pravash Ranjan Tripathy (Dean Academics) addressed the purpose of hosting a webinar for students. The speaker covered the software industry’s current requirements. He also emphasized the importance of preparing for future industrial requirements. Shri S K Brahma (IETE) attended the conference in his capacity as IETE’s representative and briefed participants on the organization’s activities. Prof Kaustav Das, HoD, ECE, concluded the session with a vote of gratitude on behalf of Gandhi Engineering College, Bhubaneswar.

IETE Women Achievers



Dr S Geetha (F-501789), an outstanding scientist of ISRO, is the Program Director for ISRO’s Space Transportation System vertical at the Vikram Sarabhai Space Centre in Thiruvananthapuram. She is responsible for all operational satellite launch vehicle programmes. She holds the distinction of being the first woman to hold this position and the first lady to serve as the GSLV Project’s Associate Project Director (Mission). Dr Geetha is in charge of mission design and planning, as well as hardware development for the PSLV and GSLV projects. Under her supervision, designs and systems were validated in 34 PSLV flights and 10 GSLV flights. Dr S Geetha previously served as Associate Programme Director for STS, where she led the control Guidance and simulation team, and as Associate Project Director (Mission and Simulations) for GSLV, where she was responsible for the mission design for four GSLV flights, including the first successful developmental flight with an indigenous cryo stage, GSLV D5. She was instrumental in the design and development of the ISRO’s Digital Autopilots for several satellite launch vehicles. She received the IEI’s Suman Sharma award in 2008 for her excellent contribution as a woman engineer, the IEI’s Aerospace Engineering division prize in 2017, the ASI and ISRO’s best woman scientist award in 2017, and the renowned ISRO merit award in 2018.

Message

“Nurture a dream destination, acquire requisite skills and strive hard to tread towards that, with inspiration derived from role models”

—Dr S Geetha

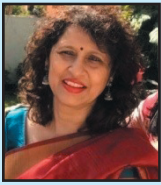


Dr Sneha Jondhle (F-232765) received the BE degree in electronics and telecommunication from Mumbai University, Mumbai, India, in 2009, and the MTech degree in electronics engineering from Veermata Jijabai Technological Institute (VJTI), Mumbai, India, in 2011. In 2017, she got a PhD in the field of hybrid energy management systems from VJTI’s Department of Electrical Engineering. She served as a senior research fellow at a centre of excellence for complex and nonlinear dynamical systems (CoE-CNDS) from 2017 to 2019. She assumed the position of Principal of Shivajirao S Jondhle Polytechnic, Asangaon, in 2019. In 2020, she founded a start-up company JD Enerbiz Private Limited. Enerbiz is aimed at implementing a complete end-to-end design and development of a solar PV system. The start-ups prime focus will be on designing of hardware and software solutions for Solar PV operation and maintenance including remote monitoring, in order to reduce both the time and cost involved with site visits. The start-up has a lengthy client list in Maharashtra, India, including academic institutions and huge housing societies. She has been co-opted to the EC for the term 2020-22. She has made significant contributions to the centre’s upgrade to a CCTV surveillance system. She participates actively in the centre’s activities as needed.

Message

“Be very cautious of success that is not earned through sheer determination and hardwork”

— Dr Sneha Jondhle



Dr Manjaree Pandit (F-166140) is the Dean of Academics and a Professor of Electrical Engineering at MITS Gwalior. She has spent the last 35 years with MITS. She is an alumnus of Bhopal's Maulana Azad National Institute of Technology. Dr Pandit is actively engaged in research in the areas of hybrid renewable energy systems and applications of bioinspired computational methods to electrical power system optimization. She has contributed to the receipt of approximately 1.5 crore in research grants from Central Funding Agencies such as AICTE, DST, and UGC, has published over 95 articles and book chapters in reputed national/international journals, and has guided over 60 PG dissertations and 05 PhD candidates. Her works have received a high number of citations in Google Scholar (2655 to date), Scopus, and Web of Science (1143 to date), with an H-index of 24 and 19, respectively. Dr Manjaree Pandit has also received the ISTE National Research Award in 2002 and 2004, a certificate of merit from the Institution of Engineers in India, and a UGC research award for postdoctoral work conducted between 2009 and 2016.

Dr Pandit has been recognised as a top peer reviewer by the international reviewer database site Publons (Clarivate Analytics) for being in the top 1% of reviewers in Engineering (2017, 2018 & 2019) and also for being in the top 1% of reviewers in cross-disciplinary fields in 2018-19. She is a Senior Member of the IEEE, USA; a Member of the IET, UK; a Fellow of IETE (India) and IE (India), and a Life Member of ISTE. She is the Chairperson of the MITS-ISTE chapter in Madhya Pradesh, which was received the finest chapter in the state award in 2019.

Message

"Intelligence supported by Diligence is the key to a successful career"

—Dr Manjari Pandit

THE INSTITUTION OF ELECTRONICS & TELECOMMUNICATION ENGINEERS (IETE)

CORPORATE MEMBERSHIP DETAILS

- This information is required to update your details in IETE database for future communication.
- All the fields are mandatory to be filled in CAPITAL LETTERS.
- Please send it at IETE, # 2, Institutional Area, Lodi Road, New Delhi – 110003 duly filled and signed or mail it to membership@iete.org

Membership Number:

Date of Enrollment:

Name:.....

	Title	First Name	Last Name
Sex: Male / Female		
Father's Name:		
Date of Birth:		
Qualification:		
Occupation:		
Designation:		
Specialization:		
Correspondence Address:		
City/State:	Pincode:
E-mail Id:		
Mobile No:		

SIGNATURE

Awards & Achievements

Dr S Pal (DFIETE-062502), former Associate Director and Distinguished Scientist, Former Vice-Chancellor-DIAT Pune, has been nominated by the **Astronautical Society of India** as a **Distinguished Fellow (DF-0026)** on September 01, 2021, in recognition of his significant contributions to Astronautics in general and space-based navigation in particular.

Dr S Pal, Congratulations on another feather in your cap!!

Dr RK Tyagi (F-103153) former CMD, Hindustan Aeronautics Ltd (HAL) and Pawan Hans, has been nominated as **Member of University Court of JNU** for three years w.e.f. Oct 11, 2021. Dr Tyagi is a turnaround specialist cum strategy leader in Petroleum, Civil Aviation and Defence manufacturing sectors of Indian economy now turned into an educationalist recently. He is also currently the Chairman, Board of Governors of Malviya NIT, Jaipur.

Many Congrates Dr Tyagi, on gaining another feat!!

In Memoriam

We are deeply saddened to notify you of the deaths of the following IETE members. All of them were important members of our organization who will be missed greatly. The entire IETE community joins us in sending our deepest sympathies to the grieving families and offering our prayers in their time of need.



Dr Amarjit Singh Padma Vibhushan, (DF-008039L) Former founder director of CEERI, Pilani and one of IETE's senior most Distinguished Fellow expired on August 17, 2021 in Chicago, USA. He died quietly at the age of 96, surrounded by his family. May God grant him eternal rest for his soul. Our sincere sympathies to his family.

He had a long and distinguished career, and he was devoted to his country, community, and family. Dr Amarjit Singh comes from a well-educated family with a long tradition of helping each other out. S. Jagdish Singh, his father, was a science teacher who eventually became the headmaster of a high school. Smt. Ishar Kaur, his mother, was a homemaker. His father's lab demonstrations as a school teacher sparked his early interest in science, and it sent him first to Government College in Lahore and then to Harvard University, where he earned his PhD in 1949. After finishing his PhD, Dr Amarjit Singh returned to India to work in the country's growing electronics industry.

For more than two decades, he was the director of CEERI, a national electronics research facility. Successes in indigenous development made possible self-reliance for India's emerging electronics industry under his direction as Director of CEERI. Dr. Amarjit Singh took great pride in his affiliation with CEERI. Dr. Singh was honored with India's highest civilian honor, the Padma Bhushan, in 1984 for his achievements. This honour is granted to someone who has rendered very valuable service to their country. Dr Singh had a deep respect for all major religions, influenced by the teachings of Mahatma Gandhi, Mother Teresa, and Acharya Vinoba Bhave. He encouraged peace and harmony in the community and led a life of steadfast honesty, exemplifying a firm dedication to truth and nonviolence.



Shri Satya Pal (F-000785) the IETE's founder Fellow, former Telecom Secretary, and MTNL Chief, who was a well-known figure for numerous industry firsts, expired on May 28, 2021, after a battle with Covid-19 infection. He is credited with founding the Telecom Commission, which was renamed the Digital Communications Commission (DCC) in 2018, the sector's highest policy-making authority. As a result of

his extensive expertise in both the public and commercial sectors, he is also credited with framing the Cabinet note for the establishment of the Telecom Commission in 1989 on the model lines of the Space Commission. In 1977, while working as the General Manager of the Telecommunication Training Center, he prepared a project report for the establishment of an Advanced Level Telecom Training Centre for telecom department officers under the United Nations Development Program (UNDP). The report was adopted by the ITU. In January 1989, he commissioned India's first optical fibre cable system between Ahmedabad and Vadodara. Following his retirement, Shri Satya Pal joined Max India as a telecom advisor, where he worked closely with Aniljit Singh, the Max Group's founder and chairman, and maintained his relationship with Hutchison Essar, Vodafone Essar, and later Vodafone India Ltd.



Shri Harsh Vardhan (F-039016L) the IETE Fellow Member and Past IETE Governing Council Member passed away at his home in Noida in 2020. He established various programs as Chairman of the IETE Delhi Centre, which had propelled the Centre's extraordinary growth. From 2012 to 2015, he was the member of the IETE Governing Council for one term. He retired from Doordarshan as Chief Engineer. He contributed significantly to the expansion of India's terrestrial and satellite television services. For his book on *Radio Broadcast Technology*, he received the Bhartendu Harish Chandra Award from the Ministry of I&B. He was also an IE&BES Fellow Member (India).



Dr P V Subbaiah (F-053401L) Senior Fellow Member expired on May 9, 2021. He previously served as Honorary Secretary (1995–1997) and Chairman (1997–1999) of the IETE Vijayawada Centre. He was last employed as an examinations controller at V R Siddhartha Engineering College in Kanuru, Vijayawada.



Dr A Sudhakar (F-190632L) the senior Fellow Member has expired on 27th April 2021. He was employed as Principal at R V R & J C College of Engineering in Chowdavaram, Guntur.

IETE MAIN AWARDEES-2021

The categories that had winners this year were:

- **IETE - Ram Lal Wadhwa Award**
Awardee: Prof (Dr) Jayadeva, IIT Delhi
- **IETE - Hari Ramji Toshniwal Award**
Awardee: Dr Satish Kumar, CSIR- CSIO, Chandigarh
- **IETE - Bimal Bose Award**
Awardee: Prof Bijaya Ketan Panigrahi, IIT Delhi
- **IETE - Lal C Verman Award**
Awardee: Dr Raj Kumar, CSIR-CSIO, Chandigarh
- **IETE - IRSI (83) Main Award**
Awardee: Dr Jahagirdar, DRDO, Hyderabad
- **IETE - IRSI (83) Young Scientist Award**
Awardee(s) : Mrs Vineetha Joy, CSIR-NAL, Bangalore, Gogulamudi Sampath Kumar, CRL, BEL, Bangalore, Mahaboob Jani Shaik, CRL, BEL, Bangalore & Verandra Kumar, Defence Laboratory, Jodhpur
- **IETE - FIt Lt Tanmaya Singh Dandass Memorial Award**
Awardee: Dr Harry Garg, CSIR-CSIO, Chandigarh
- **IETE - Prof K Sreenivasan Memorial Award**
Awardee(s): Prof(Dr) B K Sujatha, Ramaiah Inst of Technology, Bangalore & Dr Nagnath Bhagwat Hulle, G H Raisonni Inst of Engg and Technology, Pune
- **IETE - Prof SVC Aiya Memorial Award**
Awardee: Prof(Dr) Ram Bilas Pachori, IIT Indore
- **IETE - Prof S N Mitra Memorial Award**
Awardee: Dr Chinmoy Saha, IIST, Dept of Space, Trivandrum
- **IETE-Bapuseetharam Award**
Awardee: Prof Ajay Agarwal, IIT Jodhpur
- **IETE - BV Baliga Memorial Award**
Awardee: Prof(Dr) Subrat Kar, IIT Delhi
- **IETE-NV Gadadhar Memorial Award**
Awardee: Renukaprasad V Sulakhe, LRDE,DRDO, Bengaluru
- **IETE - B R Batra Memorial Award**
Awardee: Dr Prasad G, NRSC, ISRO, Hyderabad
- **IETE - R S Khandpur Award**
Awardee: None
- **IETE – Brig M L Anand Award**
Awardee: Dr Bijoy Chand Chatterjee, South Asian University, Delhi
- **IETE - Biman Behari Sen Memorial Award**
Awardee: Dr Sunil Kumar Vuppala, Ericsson R &D, Bangalore
- **IETE- Smt Manorama Rathore Memorial Award**
Awardee: Dr Satyajit Chakrabarti, Inst of Engineering & Management, Kolkata
- **IETE-Smt Ranjana Pal Memorial Award**
Awardee: Dr Sukomal Dey, IIT, Palakkad
- **IETE-Smt Triveni Devi Gupta Memorial Award**
Awardee: Dr Shubhangi Digamber Chikte, VTU, Kalaburagi
- **IETE-Technomedia Award for Young Women in Engineering**
Awardee: S Mohana Sundari, CVRDE,DRDO, Chennai
- **IETE-Shri Devi Singh Tyagi Memorial Award**
Awardee(s): Prof (Dr) Janakarajan Ramkumar, IIT Kanpur & Prikshat Sharma, HAL, Bangalore
- **IETE-Shri P P Malhotra Memorial Award Winning Organization(s):** GH Raisonni Inst of Engg & Tech, Pune(G00366) & Sri Sairam Engineering College,Chennai (G00586),
- **IETE- Dr Sudhakar Rao Award**
Awardee: Dr Nacer Chahat, SWOT Mission, NASA, USA

IETE CORPORATE AWARDEES 2021

- **IETE–Corporate Award for Performance in Computer & Telecommunication Systems:**
(Large Enterprise (LE)- **NIL** & (Micro/Small/Medium Enterprise (MSME) - **NIL**)
- **IETE-Corporate Award for Performance in Development of Software (LE):**
Awardee: M/s Bharat Electronics Limited, Bangalore
- **IETE-Corporate Award for Performance in Development of Software (MSME):**
Awardee: M/s Coempt Edu Teck Pvt. Ltd, Hyderabad
- **IETE-Corporate Award for Performance in Electronic Components:**
LE- **NIL** & MSME- **NIL**
- **IETE Corporate Award for Performance in Electronic Instruments and Instrumentation (LE):**
Awardee: M/s Adani Defence Systems and Technologies Ltd, Ahmedabad
- **IETE Corporate Award for Performance in Electronic Instruments and Instrumentation:**
MSME-**NIL**

IETE BEST PAPER AWARDEES 2021

Awards	Awardees
IETE SK Mitra Memorial Award- The best research oriented paper	Flexible and Compact Spiral-Shaped Frequency Reconfigurable Antenna for Wireless Applications by Ashfaq Ahmad, Farzana Arshad, Syeda Iffat Naqvi, Yasar Amin, Hannu Tenhunen & Jonathan Loo, published in IETE Journal of Research, Vol. 66, No. 1, pp 22-29
IETE JC Bose Memorial Award- The best engineering oriented paper	A Double-Balanced Up-Conversion Mixer Using 90 nm CMOS Technology for 60 GHz Spectrum Frequency by Majid Alotaibi published in IETE Journal of Research, Vol.66, No.6, pp.751-755
IETE MN Saha Memorial Award- The best application oriented paper	Energy Efficiency Analysis by Game-Theoretic Approach in the next Generation Network by Joydev Ghosh published in IETE Technical Review, Vol. 37, No. 4, pp 329-338
IETE KS Krishnan Memorial Award- The best system oriented paper	Adaptive PID Controller with P&O MPPT Algorithm for Photovoltaic System by Jyotirmaya Sahoo, Susovon Samanta & Shamik Bhattacharyya published in IETE Journal of Research, Vol 66, No.4, pp. 442-453
IETE CDIL Award for Industry- The best paper contributed by authors working in Industry	New Insights into the Convective System Characteristics Over the Indian Summer Monsoon Region Using Space-Based Passive and Active Remote Sensing Techniques by Kandula V. Subrahmanyam, Karanam Kishore Kumar and Nelli Narendra Reddy published in IETE Technical Review, Vol 37 No 2, pp 211-219
IETE Gowri Memorial Award- The best paper on topic of general Interest	Recent Techno-Economic Potential and Development of Solar Energy Sector in India by A. Digambar Singh, B. Yog Raj Sood and C. Deepak published in IETE Technical Review, Vol.37, No. 3, pp 246-257
TWO Students' Journal Awards- Two best papers from IETE Journal of Education	A Review on Evolution of Symmetric Key Block Ciphers and their Applications by Appala Naidu Tentu published in IETE Journal of Education Vol 61 No. 1, pp 34-46 Only One Award given this year.

IETE ACADEMIC AWARDEES 2020

The IETE Academic Awards awarded to the AMIETE/DipIETE students for excellence in academics this year are as follows:

Stream wise recommendations for academic excellence in the examinations held in Jun and Dec 2020 are as per the following details:-

- **AMIETE Council Award-II** for securing the highest percentage with 6.5 GPA and above marks and completing Part I of Section B in one attempt without exemptions.

June 2020

AMIETE (ET) **Jagrithi Kumari-** (SG-238513) GPA-7.16

- **AMIETE Council Award-III** for securing the highest percentage with 6.5 GPA and above marks and completing Part II of Section B (except project) in one attempt without exemptions.

June 2020

AMIETE (ET) **R Ravikumar** (SG- 229727) GPA 7.2

Dec 2020

AMITE (ET) **Diwakar Singh** (SG 238425) GPA 8.2

- **DIPIETE Council Prize-III** for securing the highest percentage with 6.5 GPA and above marks and completing Part I of Section B in one attempt without any exemptions.

Dec 2020

DIPIETE (ET) **Upendra Kumar** (SD-238545) GPA 8

- **DIPIETE Council Prize –IV** for securing the highest percentage with 6.5 GPA and above marks and completing Part-II of Section B in one attempt without any exemptions

Dec 2020

DIPIETE (ET) **Muktipada Mallik** (SD-238522) GPA 7.5

- **DIPIETE Council Prize-V** for securing the highest percentage with 6.5 CGPA and above marks and completing DIPIETE in 3 years without any exemptions.

Dec 2020

DIPIETE(ET) **Santosh Kumar Samantha** (SD-238509) CGPA 6.95

Congratulations to all Winners

5th IETE Innovation Industry Meet 2021



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