From President's Desk

Dear Members!

It has been 70 illustrious years since this Institution was established. Reflecting on our institution's journey fills me with immense pleasure and contentment over the accomplishments. We have had significant achievements as well as occasional obstacles; yet, our primary focus has always been on striving for excellence and making progress.

Initially, IETE was just known as ITE. The Institution commenced its yeomen services from November 2nd, 1953, almost 70 years ago. The founder team, led by Shri B R Batra, the founder President of IETE, embarked on their quest with perhaps a few numbers, without any regulars or financial records, but with much optimism. Their story is full of challenges but faith in the future. Over time, these ambitious goals were sustained by other members. Under the influence of this sanctity, the organization has thrived and flourished for almost three quarters of a century.

Without a doubt, the combined efforts of our previous presidents and exceptional members have brought us to where we are now. Because of their diligent and ongoing support, we are able to take pride in our heritage.

I am pleased to send out this edition of the newsletter to members and Centres. Our dedication to servicing our members has been unwavering for the past 70 years. Our ability to connect and deliver is also increasing. In this newsletter, we have included a number of events that clearly show the institution's growth and expansion over time. I am certain that this year will provide considerable development and exciting opportunities for everyone involved with IETE.

The 70th anniversary celebration of the institution's Foundation Day was initiated by a keynote address delivered by the distinguished Chief Guest, Prof Jagadesh Kumar, Chairman, UGC, who also serves as the Editor-in-Chief of IETE Technical Review. In December, the IETE signed three Memorandums of Understanding with IEEE AP-S, IEEE-MTT-S, and IEEE-EMC-S, three worldwide societies. With the theme "SEMICON@2030: Trends and Technologies for Viksit Bharat," we successfully conducted the 55th Mid-Term Symposium in April 2024 in Ahmedabad . Furthermore, on May 17, 2024, all IETE units on a national scale commemorated the 56th World Telecommunication & Information Society Day, with an emphasis on "Digital Innovation for Sustainable Development." Prof Venu Gopal Achanta, Director of CSIR-NPL, New Delhi, delivered the 28th C V Raman Memorial Lecture at IETE Hq's on March 7, 2024, on the subject of "Electronics Quantum in Metrology." The Institution's encouraging trend has been further bolstered by the numerous technical events that our Centers, ISFs, and other Units have scheduled in the future months.

We appreciate the unwavering commitment of the Editorial Board members and reviewers of IETE journals, who have consistently been open to assist us for more than seven decades. Thanks to the outstanding work of our chief editors and their team, our publications have a stellar reputation both domestically and abroad. We are grateful for the guidance and support provided by Prof Shiban Koul, Prof Jagadesh Kumar, Prof Raj Senani, Prof Arun Kumar, and Prof Ranjan K Mallik in ensuring that the journals were directed in the right direction without any interruption. The fraternity is receiving the finest from IETE journals.

I am appreciative of the significant contributions made by each and every member of the organization. This is the stage of an institution's development during which all members, regardless of their position, are required to enhance the quality of their work and generate innovative ideas and initiatives. To achieve this, it is imperative to surpass member's expectations by implementing innovative strategies and offering exceptional services. Our members should be able to rely on us as a dependable advisor and we contribute to the growth of our institution by interacting with prospective individuals, streamlining operational processes, enhancing our connections, and exploring revenue generating opportunities.

Finally, I am happy to greet Shri Sunil as the President-elect of IETE, for the session 2024–25. He has been an immensely motivating, highly connected individual and has the influence required for elevating the institution's status to greater heights. I extend my congratulations to Prof KTV Reddy, Past President IETE and Prof H S Bhatia, a senior Fellow member, on their election as Distinguished Fellows of IETE.

We anticipate everyone's proactive and constructive contributions as we walk ahead in this journey together.

Best wishes !

Prof (Dr) A K Saini
President, IETE

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IETE HQs, New Delhi

Newly Elected IETE President (2024-25)

Shri Sunil has been elected as the IETE President (2024-25). With his vast expertise and strong leadership skills, Shri Sunil has been an outstanding member of the IETE Governing Council for the last three years. His distinguished 35-year career in broadcasting includes many important positions, such as leading All India Radio and Doordarshan's Technology, Global Outreach, Marketing, Distribution, Central Archives, and External Services Division.

He is credited with experience of extensive coordination meetings with PMO, Cabinet Secretariat, NITI Aayog, Ministry of Finance, MHA, Ministry of External Affairs (MEA), Ministry of I&B, DoT, MeitY, DST, and various ministries of Government of India and on the Public Broadcaster side credited with the planning and execution of India's first Direct-to-Home (DTH) platform, which attained a record reach of 58 million homes with DD Freedish signals, in addition to the successful integration of private broadcasters through auctions. His contributions have significantly influenced the Indian broadcasting landscape and in the global context.

Shri Sunil has been the recipient of numerous distinguished accolades, including the IETE- S N Mitra Memorial Award in 2016 for his exceptional contributions to the field of radio broadcast science and technology. In 2018, the Asia-Pacific Broadcasting Union (ABU), the world's largest broadcasting union, also bestowed upon him the Broadcast Excellence Award. He has held a variety of leadership positions, including Vice President of the Asia-Pacific Broadcasting Union, President of the Broadcast Engineering Society of India (BES), Vice Chairman of ABU Malaysia's Technical Bureau, and a jury member for international organizations such as The Association of International Broadcasters (AIB) in the UK and ABU in Malaysia.

Shri Sunil is dedicated to advancing the goals of IETE, fostering innovation, and increasing the Institution's influence in the field of electronics and telecommunication engineering as he assumes the position of President (2024-25) with effect from 1 Oct 2024. His proved leadership and extensive experience will be invaluable in directing IETE toward new levels of recognition and success.

The Members of IETE extend their heartfelt congratulations to their newly elected President.

News from IETE Headquarters

55TH MID-TERM SYMPOSIUM OF IETE – A REPORT

The **55th Mid-Term Symposium** of IETE, organized by the Ahmedabad Centre in partnership with Pandit Deendayal Energy University (PDEU), took place on 13th-14th April 2024. The symposium focused on the theme **"SEMICON @ 2030: Trends and Technologies for Viksit Bharat"** and was conducted in an impressive manner.

The dignitaries on the platform lit the lamp, followed by PDEU students performing Saraswati Vandana. The IETE and PDEU officials welcomed the dignitaries with saplings. **Dr Dharmesh Shah**, the host Chairman, IETE Ahmedabad, presented an opening address at the event and expressed gratitude to the Director General of PDEU for their tremendous support in hosting this event at their campus. **Dr Dhaval Pujara**, Director, School of Technology at PDEU, provided a concise overview of the program and also explained the details of PDEU to the audience. The goal of the Mid Term Symposium (MTS) was explained by **Dr Nilesh Kasat**, the Zonal Mentor (West). **Dr A P Thakare**, the Chair TPC (Technical Programmes Committee) spoke to the participants about the prominent activities of the Institution of Electronics and Telecommunication Engineers and provided information about MTS 2024. The keynote speaker for this MTS, **Dr S Sundar Manoharan** DG, PDEU Delhi, delivered a speech on the significance of semiconductors in the present day and how PDEU is fulfilling the nation's future needs in this field. In addition, he presented **Shri Vishwanath Ramaswamy**, Vice President of Micron, as the Principal Guest of the event to the audience. Shri Vishwanath Ramaswamy presented his formal speech, discussing the future needs of the Semiconductor industries and Gujarat's role in guiding the nation towards becoming a hub in this field. **Prof AK Saini**, President IETE, expressed his opinions on the theme and also commended the efforts of the host Centre team for successfully organizing this event.

During the event, **Shri Kartikeya Sarabhai**, the Director of the Centre for Environment Education, was invited to give the **51st Vikram Sarabhai Memorial Lecture**. He honoured the occasion by sharing some quotes from the books of Vikram Sarabhai and discussing the true essence of Viksit Bharat. This concept goes beyond simply becoming a multi-trillion economy, but rather

focuses on ensuring sustainable growth and development for every individual in the country.

The key note session was conducted by **Dr Nilesh Desai**, Director, Space Applications Centre at ISRO in Ahmedabad. He discussed the ways in which ISRO is contributing to India's development trajectory and detailed the organization's initiatives in the semiconductor sector during his address. His presentation was both informative and captivating, and the participants appreciated the SAC-ISRO's contributions to the nation.

MTS Souvenir was released by all dignities on the dais namely **Dr S Sundar Manoharan** DG, PDEU, **Prof (Dr) AK Saini,** President, IETE, **Dr Nilesh Desai,** Director **SAC-ISRO, Prof (Dr) Ajay P Thakare** TPC Chair**, Dr Nilesh N Kasat,** Zonal Mentor (W), **Dr Dhaval Pujara,** Director, SOT, PDEU, **Dr Dharmesh Shah,** Chairman, Ahmedabad Centre, **Gp Capt Sonpal Singh (Retd),** Secretary General IETE and **Shri Rajesh Ajwaliya**, Secretary, IETE Ahmedabad Centre. Invited guests were felicitated by mementos.

The National Anthem was recited as the inaugural event came to a close with votes of thanks from **Gp Capt Sonpal Singh,** (Retd) Secretary General of IETE.

The Technical Sessions commenced with talks by **Dr Sushil Manohar Samvatsar**, Director Ace Techno Services, Aurangabad, Maharashtra and **Ms Shweta Srivastava**, Jaypee Institute of Information Technology, Noida, UP, who were the recipients of the prestigious IETE-Lal C Verman Award. Both awardees presented their work, which led them to get their award, and their interaction with others was exceptional. In his address, **Dr Samvatsar** highlighted Bharat's progress towards becoming a manufacturing hub. He opined that if the country wants to build a manufacturing and agricultural economy that can last, it needs to think about its large pool of skilled and unskilled workers, its established industrial foundation, and the technology that is both domestically and internationally available. Scalability of company and low-scale production numbers should be carefully considered. Appropriate technology at every level provides a solid solution in the given issue. Appropriate technology isn't just about scaling up or down; it's inventive and goal-oriented. In the context of calibration, appropriate technologies were examined together with their suitability in his presentation. **Ms Shweta Srivastava** presented her research work on designing of array & MIMO antennas, filters and microwave components using substrate integrated waveguides and microstrip technology. Initiatives like Innovation Hub, high-end computing, VLSI Lab and set-up for 5G-use-cases lab were highlighted.

Shri Parag Naik from Sankhyalabs Pvt Ltd, Bangalore, gave an informative presentation on startup initiatives in the telecommunications sector, specifically focusing on the Make in India campaign. The event primarily addressed the challenges and opportunities faced by Telecom companies, with a particular focus on India as the central subject of discussion. The speaker gave multiple perspectives on the topic.

The first technical session after lunch was conducted by **Shri Hitesh Garg**, Vice-President & Country Manager NXP Semiconductors, India. The topic of his lecture was "Driving New Opportunities in Systems and Silicon with Automotive Context' with a focus on the automotive industry. He discussed the need of the automotive sector in terms of developing systems and silicon to meet future needs. It was quite captivating. **Dr Sankalp Singh**, a representative from Synopsys, delivered a presentation on the Electronic Design Automation (EDA) tool, which serves as the central component in the development of semiconductors and will play a vital part in achieving the goals set for the year 2030.

The first panel discussion on **"Opportunities and Challenges for Semicon 2030 Vision"** was moderated by **Dr Dhaval Pujara**, Director SOT, PDEU. The panel consisted of experts, namely **Shri Ruchir Dixit**, Head-Siemens EDA, Shri Nagarajan, IAS, Collector Mehsana district, **Dr Pradip Thaker**, Country Head & VP, d-Matrix, and **Shri Sudhir Naik**, IESA Gujarat Chair and Founding Member of einfochips. In order for India to achieve self-reliance by 2047, it is crucial to recognize that semiconductor manufacturing in India must be in a state of good health by 2030. Panelists discussed the obstacles to achieving this vision, as well as the opportunities it presents for academic, industrial, and research organizations throughout the country to make Viksit Bharat a reality. The conversation was exceedingly interactive.

The final technical session of the first day was conducted by **Shri Shantanu Sinha** from SAC-ISRO Ahmedabad. The subject of his presentation was the development of packaging technologies for space and RF devices. He showcased the facilities at SAC and the extensive use they have been put to use in the Indian space programs. The efforts of their team were highly appreciated by all participants.

Day one was packed with experts from across India and several fields, fueling India's Viksit Bharat. J G School of Performing Arts students performed a cultural evening at IETE Ahmedabad Center to close the day. All attendees enjoyed it. President IETE

Prof A K Saini and the IETE HQ team presented mementos to all members of the Ahmedabad Centre's Local Executive Committee, past chairmans, organizing team members, **Shri Nilesh Ranpura** from eInfochips, and others for their zeal and sincere efforts to organize MTS.

The second day commenced with a presentation by **Shri Navin Bishnoi**, Marvell Head India & AVP Engineering, on the topic of **IP to SoC: The Role of Semiconductors in Communication and Storage.** He elaborated on the role of semi-conductors in the optimization of resources for the implementation of the infrastructure necessary for communication and storage networks.

Shri Deepak Shapety, a representative of Morphing Machines, recounted the success of his venture in the fields of data center and communication. His presentation was highly motivating, and the interaction with the audience enhanced its value. **Shri Kamaljeet Singh**, Director, SCL Chandigarh, discussed the challenges faced by the foundry and the manufacturing eco system. He discussed the facilities at SCL and also encouraged the participating institutes and organizations to utilize the facilities to achieve their semiconductor dreams.

Dr Dharmesh J Shah, Chairman IETE Ahmedabad Centre and

Provost, Indrashil University, Gujarat, moderated the second panel discussion on the long-term Semicon vision for the Telecom and Defense cluster. **Dr Nihar Mohapatra**, IIT, Gandhinagar, **Commodore (Dr) Jawahar Jehangir**, Pre-President, Manipal University (MUJ), and **Shri Dhaval Raval,** Abhyudaya defense mega cluster were the experts on the panel. The panel deliberated on the role of academia and industry in bolstering the vision over the long term. They also deliberated on the necessity for academic institutions to unite and provide support for the ideas of defense and telecommunications firms, as well as the Viksit Bharat initiative. The panel discussion was intensely interactive.

The valedictory sessions, which were chaired by President IETE **Dr A K Saini** and **Shri Sudhir Naik** from eInfochips, concluded just before noon on the second day with the conclusion of technical sessions. **Dr A P Thakre** provided a summary of the event, and **Dr Nilesh Kasat** concluded by expressing his gratitude to the IETE Ahmedabad team. **Shri Sudhir Naik** requested that the President provide a list of immediate action items with a timeline following the two-day deliberations. The President assured Shri Naik that the IETE will certainly address the matter. The vote of thanks was given by **Shri R J Ajwaliya**, the Hony Secretary, IETE Ahmedabad Centre.

56th World Telecommunications and Information Society Day (WTISD) 2024 IETE HQs – A Report

World Telecommunications and Information Society Day (WTISD) was celebrated at the IETE Hqs, New Delhi, on 17th May 2024. It is observed annually on May 17th to commemorate the establishment of the International Telecommunication Union in 1865. This event serves to increase awareness of the global digital divide and emphasize the advantages of digital technologies. The theme for this year was **"Digital Innovation for Sustainable Development."**

The program commenced with the illumination of the divine lamp and Saraswati Vandana. The dignitaries who took the dais were **Prof Prateek Sharma**, Vice-Chancellor of Delhi Technological University; **Dr (Mrs) Amita Dev**, Vice-Chancellor of Indira Gandhi Delhi Technical University for Women; **Mrs Meenakshi Agarwal**, Scientist E at the Ministry of Electronics

and IT, Government of India; **Shri Peeyush Vaish**, TMT Leader at Deloitte South Asia; **Prof (Dr) AK Saini**, President of IETE; **Prof (Col) SL Kapoor**, Vice President of IETE; and **Gp Capt Sonpal Singh (Retd),** Secretary General of IETE.

In the video message delivered by **Secretary General ITU, Ms Doreen Bogdan Martin** underscored the significance of digital innovation in the attainment of the 17 Sustainable Development Goals of the United Nations that were adopted in 2016. In her message she stated that digital technology can facilitate the communication between physicians and patients, the connection between educators and students, and the development of intelligent transportation systems and cities. Nevertheless, she expressed apprehension regarding the fact that 2.6 billion individuals, or one-third of the human population, remain unconnected to the internet. Digital technologies can assist in the attainment of 70% of the objectives outlined in the United Nations Sustainable Development Goals, including the eradication of hunger and poverty and the mitigation of climate change. In the digital age, it is more imperative than ever to engage in innovative thinking and action in order to establish a sustainable future. The opportunity to investigate the ways in which digital innovation can facilitate the connection of all individuals and the

unlocking of sustainable prosperity for all is presented by World Telecommunication and Information Society Day 2024.

Prof Prateek Sharma in his address, traced humanity's innovative landscape from mariner's compass to internal combustion engine to internet & smart phone, highlighting how digital technology is ushering in AI, ML, robotics, etc., opening new horizons for humanity's wholesome development. IC chips now rule cars, which were mechanical 40 years ago. How sensor-based faucets reduce water waste and help reach UN sustainability targets. IOT is used to turn off lights when exiting. Internet democratized education by reaching poor students in remote locations and allowing large numbers to compete in competitive tests like IIT's JEE and receive quality education. E-commerce reduces customer commuting, reducing carbon emissions, another UN SDG. The relentless march toward growth is having unanticipated climate impacts. AI algorithms and data centers use a lot of electricity, and therefore we must discover ways to limit their environmental impact. He stressed the importance of eco-friendly material research.

Dr Amita Dev's address commenced with Gandhi's assertion that "We should leave this planet a better place to live than what we found it." She said that since the beginning of the global web in August 1991, we are flooded with emails and data from social media, calling it a "data tsunami." Our lives are getting better thanks to AI, ChatGPT, digital twins, and quantum computing made possible by IOT. Amazing facilities include Google Maps that can guess when you'll arrive, wristwatches that can measure blood pressure, driverless cars that can deliver fridges and furniture to homes, robots that can do complicated surgeries and make factories more productive, and AI algorithms that help doctors find cancer. India's demographic dividend will lead to a creative environment that will help everyone in a big way: Scientists in the labs are getting things done. As part of the "Digital India" vision, students can now access more than 300 courses on NPTEL that were created by teachers at IISc and IIT. Also, over 42 million eager students can choose from over 1200 classes on the "Swayam" platform in fields like engineering, law, management, the environment, and social sciences. Foreigners come here today to get medical care and instruction. Based on the state of the land, agriculture drones decide when to plant seeds and how much water to drop. Harvesters are sent by robots. E-commerce has grown quickly and now has 25 crore users. India is a world hub for e-commerce, which is growing 18% a year. About 10 lakh delivery boys got work in the $100 billion sector. In the past five years, there have been more startups run by women. UPI, which is another Indian success story, lets you send money in your own language. We're happy to be Indian because of all these great changes. Even though communications have come a long way with 5G, 6G, AI, ML, IoT, drones, and other new technologies, there is still inequality. The percentage of people in Africa who use the Internet is much smaller than in the EU or Arab countries. For people who are cut off from the digital world, even health care and education are bad or not available. This digital divide is a threat to everyone in the world. She concluded her address with another Gandhi quote: "This earth has plenty for everyone's needs but not for greed".

Ms Meenakshi Agarwal gave an overview of MeitY's efforts aimed at achieving the Sustainable Development Goals of the United Nations. MeitY's emphasis on digital technology adoption makes innovations possible that are essential to promoting sustainable growth by striking a balance between social progress, environmental preservation, and economic development. Furthermore, Industry 4.0—which includes cyber-physical systems and robotics—is being ushered in with a focus on utilizing robots to drastically cut time to market. The goal is to have a populace that is empowered by technology through the adoption of new trends like as telemedicine, 5G, IoT, and online education. She shared some intriguing facts: The Rs.76,000 crore 'Semicon India Program' aims to create a $1 trillion digital economy by 2025–2026; software exports of $194 billion in 2023; India ranks 3rd in the Start-Up ecosystem and Unicorns; Over 100 contributions to international Standards 3GPP, ITU, ORAN, IEEE, TSDSI; 5G test-bed established with eight Indian academia and research organizations; 'Low Mobility Large Cell' for rural India as a requirement in ITU; 6G: Sub-THz Wireless Communication with Intelligent Reflecting Surfaces; Metro Area Quantum Access Network.

Shri Peeyush Vaish emphasized that India's telecommunications industry had significant growth in recent years, fueled by inexpensive pricing, increased accessibility, expansion and implementation of mobile networks, and changing consumer behavior. He disclosed that over 25% of the towers in India receive fewer than 12 hours of power supply, resulting in the Telecom electricity cost accounting for approximately 90% of the industry's network costs. Mobile towers typically utilize diesel generators, resulting in each tower releasing approximately 33 tons of carbon dioxide per year. In contrast, in China, nearly 70% of towers are connected via optical fibers. However, he also enumerated the positive aspects: In order to promote environmentally sustainable growth, the sector has allocated a budget of $4.1 billion for the fiscal year 2023-24 specifically for environmental, social, and governance (ESG) initiatives. The sharing of towers among three operators is a mutually beneficial arrangement. The future of our telecommunications industry seems promising as we have successfully implemented a rapid deployment of 5G networks nationwide, accompanied by a significant increase in the usage of over-the-top (OTT) platforms in rural areas. It is worth noting that India has now become the second-largest consumer of smartphones. In contrast to five years ago when we primarily imported mobile devices, we have now transitioned into exporting

phones valued at over Rs. 1200 billion in the last fiscal year. It is hardly surprising that our Gross Domestic Product (GDP) is experiencing an annual growth rate of 7% while others remain stagnant. However, despite the increasing popularity of renewable alternatives such as solar panels and electric vehicles, the usage of 100 million tons of coal every month in thermal plants and industry remains a significant concern. We must enhance the energy efficiency of our telecommunications networks while considering the innovative strategies employed by firms such as Amazon. Amazon, for instance, is now developing the most environmentally friendly data center in the world and has allocated $100 million towards reforestation efforts.

Gp Capt Sonpal Singh (Retd), the Secretary General, expressed thanks on behalf of the Governing Council to all stakeholders for their valuable contributions that led to the successful outcome of the event. The celebration finished with the recitation of the national anthem, followed by dinner.

28th Sir C V Raman Memorial Lecture-2024

Sir Chandrasekhara Venkata Raman, Nobel Laureate, is an inspiration to all of us. In observance of **National Science Day** and in honour of **Sir CV Raman**, IETE solicits the "Sir CV Raman Memorial Lecture" from a distinguished speaker. On alternate years, it is held at the IETE Bangalore Centre and the IETE Headquarters in New Delhi. The **27th** Memorial Lecture was held by IETE Bangalore Centre on 26th Feb 2023. This year, on March 7, 2024, IETE had the honour of having **Prof Venu Gopal Achanta**, Director, CSIR-National Physical Laboratory, New Delhi, present the **28th Sir C V Raman Memorial Lecture** on the subject of **"Electronics for Quantum Metrology".** The chief guest **Prof Achanta**, holds two PhDs, one from Tokyo University and one from TIFR, Mumbai. He is a Fellow of the Metrology Society of India and became a Director at National Physical Laboratory (NPL), New Delhi in June 2021. The other dignitaries on the dais include: **Prof (Dr) A K Saini**, President IETE; **Lt Gen (Dr) AKS Chandele, PVSM, AVSM, (Retd),** DFIETE & Past President, **Brig V K Panday (Retd)**, DFIETE & **Gp Capt Sonpal Singh (Retd)**, Secretary General, IETE.

Prof (Dr) A P Thakare, Chairman, Technical Programs Committee, who joined the programme online, welcomed the gathering and spoke a few words about this doyen of Indian science (Sir C V Raman) whose work on light-scattering led to the discovery that when light traverses a transparent material, the deflected light changes its wavelength due to an energy-state transition in the material's molecules. He was given the Nobel Prize in 1930 for his work on the Raman Effect and was made a Fellow of the Royal Society of London. He was knighted in 1929, and in 1933 he was appointed head of the department of physics at the Indian Institute of Science, Bangalore. In 1947, he was named director of the Raman Research Institute. He contributed to the building up of nearly every Indian research institution in his time; founded the *Indian Journal of Physics* and the Indian Academy of Sciences.

Prof (Dr) A K Saini highlighted how during the Platinum Jubilee year, IETE is proactively tackling evolving challenges by keeping up with industry and academia's mind-boggling technical advances, driven by a supportive policy ecosystem. With 1.25 lakh members in 63 centres, sub-centres, ISFs, and PACs, IETE's mission relies on ICT. Through seminars, workshops, webinars, and three internationally renowned periodicals, the organisation is moving forward with confidence. Last December, the institution signed MoUs with the IEEE Antennas and Propagation Society (AP-S), Microwave Theory and Techniques Society (MTT-S), and Electromagnetic Compatibility Society (EMC-S). Adding value to global connections gives our members a legitimate platform and improves their possibilities.

After giving a short summary of what NPL does, **Dr Achanta** talked about Quantum Metrology, a relatively new field of study that lets you measure physical parameters with great accuracy and resolution. It has better measurement methods that let us notice things with a lot of sensitivity over a wide range of dynamic ranges, like temperature and magnetic fields, or get very accurate readings of things like time, position, and gravity. It opens up new areas of study and makes us think of new ways to use technology in ways we can't even imagine now. Quantum metrology can be used in navigation, communication, and health, among other things. Notable others are GPS navigation and satellite transmission, which can use it to make clocks more accurate. Also, magnetic resonance imaging (MRI) can gain from it because it can make MRI more sensitive and clearer.

Memento was presented to the Chief Guest by **Lt Gen (Dr) AKS Chandele, PVSM, AVSM, (Retd),** DFIETE & Past President. **Gp Capt Sonpal Singh**, Secretary General proposed vote of thanks. It was followed by high tea.

IETE Zonal Seminars and ISF Congress

IETE Allahabad Centre

The **Zonal Seminar** and **ISF Congress** on *Modern Communication Utilising AI* was jointly organised by the **IETE Allahabad Centre** and **J K Institute of Applied Physics** and **Technology, University of Allahabad.** The event took place on 17th -18th Feb 2024 at the S N Gosh Auditorium, University of Allahabad, located at the IETE, Allahabad Centre. **Prof JK Mandal**, the former chairman of the Kolkata Centre and former vice chancellor of Raiganj University in West Bengal, was invited to be the chief guest. **Prof KK Bhutani**, a Distinguished Fellow of the IETE and former director of UPTECH, graced the occasion as the guest of honour. Other notables present were: **Brig V K Pandey** DFIETE**, Dr Gyaneshwar Rao, Dr Shiv Kumar,** and members of the Governing Council. **Dr Ajay Kumar**, the IETE Zonal Mentor (East), and **Prof RS Yadav**, the Chairman, IETE Allahabad Centre, were present on the dais**. Dr Arun Kumar,** the Chairman, Lucknow Centre and other members from affiliated centres, was also in attendance including **Dr GS Darbari, Er PN Gupta, Er RN Mishra, Er MK Singh,** and others.

Prof SG Prakash extended a warm welcome to the chief guest and the delegates. **Prof K K Bhutani** provided a concise introduction to the IETE and the IETE Allahabad Centre. **Dr Shiv Kumar** and **Dr Ajay Kumar** shared their perspectives. **Prof JK Mandal** presented a lecture on the **Applications of Artificial Intelligence in Modern Scenario of Communication**. **Prof RS Yadav**, Chairman IETE Allahabad Centre, delivered the vote of thanks. Following the high tea, **Dr Shiv Kumar** presented an invited talk. Technical presentations were presented in a number of sessions over the course of two days, on February 17 and 18, 2024.

IETE Aligarh Centre

IETE Zonal Seminar & ISF Congress on Robotics, Automation, AI, and Applications- a two-day conference hosted by **IETE** and the **Dept** of Computer Engineering, was inaugurated at the **Zakir Husain College of Engg and Technology Aligarh Muslim University**. The 2nd Mar 2024 event brought together IETE dignitaries and senior members from across the nation. The event began with a welcoming address by **Prof Izharuddin**, the Chairman, CSE Dept. Dr Abdus Samad, the Organizing Chair of the event, gave a brief but comprehensive review of the two-day seminar's goals and expected outcomes. **Prof MM Sufyan Beg**, College Principal, spoke on AMU's history and academic prowess. He discussed the college's undergraduate and graduate programs and their accomplishments. Special souvenirs were given to guests as a token of thanks. The first guest speaker, **Prof AP Thakare**, Chairman, Technical Programmes Committee, spoke about the importance of AI education and its growing importance in computer science.

IETE North Zone Mentor **Brigadier VK Pandey** stressed the necessity for standards, comparing IETE to IEEE. **Prof Muzaffar A Siddiqi**, Chairman, IETE Aligarh Centre, discussed recent advances in artificial intelligence and its significance in modern technology after the session. Prof Mohammad Gulrez, Vice-Chancellor, discussed AI's impact on healthcare and **related** systems in his interactive lecture. The vote of thanks was delivered by **Mr Tehzeeb Abbasi**, who expressed his gratitude to all the attendees, speakers, and organizers for their invaluable contributions. The IETE Zonal Seminar's inaugural session at Zakir Husain College of Engineering and Technology, AMU, was a significant milestone in the promotion of academic discourse and collaboration in the field of telecommunications and electronics engineering. After tea, **Dr Mushtaq Ahmed** talked on "AI Application and Healthcare." He discussed the growing need for AI and automotive systems in healthcare. AI has the ability to alter healthcare systems and diagnostics, he said. The guests visited Aligarh Muslim University's Strachey Hall, Maulana Azad Library, and Sir Syed House before lunch, enriching their understanding of the university's rich cultural and historical legacy.

Prof MM Sufyan Beg discussed "AI Tools for Effective Research" after lunch. Prof Beg stressed the importance of AI technologies for research efficiency. He advised methodly studying research materials and reading them numerous times to fully understand them. His mathematical and statistical approaches to writing problems were also helpful. **Mr Faraz Ahmad** gave a captivating talk on robotics in the final virtual session of the day. He stressed the importance of understanding engineering tasks and prerequisites for entering the robotics field, whether in mechanical or electronics domains. He also explained the uses and functions of industrial and home robots. Students delivered their technical papers to ZHCET computer engineering faculty members **Dr Nadeem Akhtar** and **Prof. Saiful Islam** on the 2nd day of the seminar. The presentations showcased students' creative research and academic skills. After paper presentations, students showed their hardware-based robotics and programming projects. The interdisciplinary character of engineering education at AMU was underscored by the projects, which encompassed drones and unmanned autonomous underwater vehicles. A poster presentation on underwater vehicle design gave visual dimension to student creativity.

Congratulations to IETE's 2024 Distinguished Fellows Prof (Dr) K T V Reddy Past President IETE and Prof H S Bhatia, a senior Fellow IETE.

Prof (Dr) KTV Reddy (DF-131317): The Institution of Electronics and Telecommunication Engineers has elected Prof (Dr) KTV Reddy as a **Distinguished Fellow**. He served as its President in 2017 and 2018. He has earned both an MTech and a PhD in communication from the Indian Institute of Technology, Bombay. He was the Professor and Head of the Department of Electronics and Telecommunication Engineering at the Fr. C Rodrigues Institute of Technology in Vashi. Served as the Principal of Padmabhushan Vasantdada Patil Prathishan's College of Engineering in Sion, Mumbai for three years, the Principal of Terna Engineering College in Nerul for two years, the Director of PSIT Kanpur for two years, and the Principal (SVIT) and Technical Director of PRES, Loni for more than three years. He is currently the dean of the FEAT at the Datta Meghe Institute of Higher Education and Research in Wardha. Digital health, telemedicine, AI in health care, signal processing, high-speed communications, and 5G and beyond networks are among his research interests. In addition to overseeing MTech and UG projects, seven students have successfully completed their PhDs, and eleven scholars are currently in the process of doing so. Published more than 150 articles in journals and conferences. Delivered expert presentations at the IEEE Asia Pacific Communication Conferences in Japan and Vietnam in 2008 and 2012, respectively. He is a life member of ISTE, ACM, and CSI, and a Senior Member of IEEE. He was instrumental in the inauguration of more than 30 IETE-ISFs and served as the chairman of the IETE Mumbai center from 2001 to 2012. The Mumbai center acquired its building in 2009 and arranged two successful ATCs during his tenure as Chairman: 2009 and 2012. Additionally, he served as Vice Chairman of the IEEE (AP/ED) Mumbai chapter in 2004 and 2010.

Received numerous accolades. Some of the accomplishments include the "4th IETE B R Batra Memorial Award" in 2006 and selection in Who's Who in Science and Engineering, USA in 2007. Selected as one of the 2000 most distinguished scientists in the world in 2008, received the "Lifetime Education Achievement Award" in 2007, and was recognized as a "outstanding teacher" by the International Rotary Club in 2009 and 2011. National "Rashtriya Vidya Gaurav Gold Medal Award" (2011), "Best Educationist Award" (2011), "Gold Star Asia International Award" (2012), "Asia Pacific International Award" (2012), and "Best Principal Award" (2016). In 2011-2014 and 2015-2018, Professor Reddy was elected to the IETE council. He was elected as the youngest President of IETE in 2017 and reaffirmed in 2018 as a result of his extensive academic and administrative experience. Digitization, online elections, and a reduction in meeting expenses were among the numerous reforms that he implemented during his time as President. Regained IETE membership in the Governing Council of AICTE and NIELIT.

Prof Harjinder Singh Bhatia (DF-141729) is another individual to be elected as a Distinguished Fellow of the Institution this year. Prof Bhatia earned his BSc from the Govt Science College Jabalpur in 1965, his BESc in Telecom Engineering from the Govt Engineering College Jabalpur in 1968, and his MTech in Radar and Communication Engineering from IIT Delhi in 1979.

He served as a Radar Scientist at the Electronics and Radar Development Establishment (LRDE) in Bangalore from 1969 to 2004, where he contributed to the design and development of numerous technology-rich, state-of-the-art radar systems for the armed forces. These systems included the NSR and NTR for the Navy, the 3D-CAR for the IGMDP, the BFSR for border security, and the LCA-MMR. After retiring as Additional Director of LRDE in 2004, he served as Professor, Head of the ITE Department, and Principal at the KNS Institute of Technology in Bangalore for a period of ten years. He is recognized for his innovative teaching and learning processes, as well as his ability to organize participants-centric FDPs, SDPs, seminars, and workshops.

Prof Bhatia served at the IETE Bangalore Centre for over two decades in a variety of capacities. He performed as the Hony. Secretary for two terms (2012-14, 2016-18), the Centre Chairman from 2018 to 2022, and a Governing Council Member of IETE from 2021 to 2022. Additionally, he was a Co-opted Member of several committees, including TPC, AIUC, and PUBS. He played a critical role in the Bangalore Centre's acquisition of the Best Centre Award on two separate occasions in the years 2018-20 and 2016-18. He was the Organizing Chair of the inaugural IETE International Conference India 2018 (IICI-18) in Bangalore, and he served as Co-Chair of its second iteration, IICI-23. He is an active member of numerous professional societies, including MIEEE, FIETE, LMSEE, IMAPS-I, ISSS, ISOI, and socio-religious organizations, where he holds office bearer responsibilities.

He is the Former Chairman of IDST Bangalore and the Central Council Member of IDST HQ. Additionally, he served as the Chairman of IMAPS-India.

Currently, Prof Bhatia serves as a Guest Faculty member for the MTech in Defence Technologies program at the Institute of Defence Scientists and Technologists in Bangalore, where he teaches Radar Systems and Associated Technologies.

IETE National Technical Paper Contest (NTPC-2024)

On April 1st - 2nd, 2024, **IETE Professional Activity Centre** at **Pravara Rural Engineering College, Loni Ahmednagar,** hosted the **National Technical Paper Contest (NTPC)** for the year 2024. A Review Committee consisting of **Dr S A Shaikh, Dr S M Gulhane, Mr A H Ansari,** and **Ms S S Lavhate** examined 150 technical papers that were submitted by UG, PG, and PhD students, the majority of whom were from the West Zone. The papers were rigorously reviewed in the presence of the Convener, **Dr M N Bendre** and **Dr S K Korde** for final presentation. The technical committee appointed **Dr Prerna Autade, Dr Rana Mahajan,** and **Dr R R Deshmukh** as judges to assess the selected papers based on the presentations. **Dr A K Saini, Dr N N Kasat, Dr R R Deshmukh, Dr U B Shinde, Dr A P Thakre, Dr S L Badjate, Dr Salim Chavahan,** and **Dr S M Gulhane** attended the inauguration and keynote. The top three papers selected after evaluation were as follows: **Rajshree K Gondekar** from Sipna College of Engineering & Technology, Amravati secured the first position for her paper titled **"***Analysing the Reliability of Spo2 Monitoring in Healthcare Systems***"**. **Karale Swapnil, Nalkar Samarth,** and **Borde Vidhan** from PREC, Loni obtained the second position for their paper on **"***Enhancing Safety in Autonomous Electric Vehicles through Integrated LiDAR and Ultrasonic Sensor Systems***"**. **Prateek Palliyath** and **Priyal Venkatesh** from KCCEMSR, University of Mumbai achieved the third position for their paper on **"***Counterfeit Product Detection using Blockchain Technology***"**.

Dr A K Saini, President of IETE, presided over the valedictory session. Dr N N Kasat, Dr U B Shinde, Dr A P Thakre, and Dr S M Gulhane also shared their opinions on the paper presentations. Dr N N Kasat, the mentor for the West Zone of the IETE, provided an explanation of the context of the NTPC activity organised by IETE and presented certificates to the participants. **Dr S M Gulhane**, Governing Council Member and the Organiser of NTPC 2k24, proposed the vote of thanks.

News from IETE Centres /Sub- Centres

AHMEDABAD

• The commemoration of **Engineer's Day** and the **IETE Ahmedabad Centre Foundation Day** took place on 29th Oct, 2023. More than 25 corporate members and invited guests participated. **Dr D J Shah**, Chairman IETE Ahmedabad Centre, welcomed the audience and delivered a speech on the theme of Engineer's Day, focusing on **Engineering Innovation for a more resilient world**. The recipient of the IETE–Dr Sudhakar Rao Award 2023 lecture was delivered by **Shri Sanjeev Kulshrestha,** a Scientist/Engineer-G, MSAD/ASG, SAC/ISRO, on the topic of **Realization of multilayer planar antenna and its characterization Indigenization perspective**. Chief Guest **Shri Ashok Mankani**, Scientific Officer- H, Head of Ultra High Voltage System Division, Institute for Plasma Research addressed the audience & delineated his research area. **Shri R J Ajwaliya**, the Hony Secretary, delivered the vote of thanks. Smt Preeti Agrawal, a Fellow and Executive Committee member, organised and hosted the programme.

• The **70th IETE Foundation Day** was celebrated on 9th Dec 2023. The event focused on the theme "**Vision of a Developed India: Role of Futuristic Technologies."** In his welcome presentation, **Dr DJ Shah**, Centre Chairman, provided an overview of the Centre's activities, discussed the IETE Foundation Day, and highlighted the topic of the celebration. In addition, he read the message from the President of IETE, Prof (Dr) AK Saini, for the event. The **IETE - BV Baliga Memorial Award lecture-2023** was delivered by **Shri Pradeep Soni**, the SCI/ENGR SG of SAC/ISRO Ahmedabad. The lecture provided an overview of the imagers and cameras used in the lander and rover of Chanrayaan 3. The Chief Guest, **Shri Ujjwal Kumar Baruah,** Project Director of ITER-India at IPR, Gandhinagar, delivered a speech on the theme "**Vision of a Developed India: Role of Futuristic Technologies."** In his address, the Chief Guest emphasised that a country's growth is measured by quality of life, income, education, health, infrastructure, industrialization, and technology. Scientists want controlled fusion on Earth to provide a potentially infinite energy source for humanity as fuel. ITER is a massive scientific project that aims to create energy and show controlled fusion of tritium and deuterium. Using a 'tokamak' concept, India, China, USA, Russia, Korea, Japan, and EU are building it in southern France. The superconducting magnets in a tokamak maintain plasma at temperatures over 100 million ^{0}C. ITER's regulated 500MW power output from 50MW input would pave the way for fusion reaction-generated electricity. IT-based financial technology advances in India are outstanding. Artificial Intelligence (AI) has changed data interpretation, offering up new applications in many fields. Recent stress in semiconductor foundries and easy access to electronics manufacturing roots can only spur Indian innovation. The country's electronics ecosystem will benefit more from the IETE. Professionals in electronics and computing would accelerate Indian development. Dr D J Shah, Chairman, and Shri R J Ajwaliya, Hony Secretary, IETE Ahmedabad, handed mementos to the chief guest and some senior members **Smt Smriti Dagur** (DF- 052519 & Past President IETE) and **Shri K N Mankad** (F-098772) were honoured during the occasion. Ms Preeti Agrawal, Shri RJ Ajwaliya, and Shri RM Movaliya personally honoured and met senior members at their homes who were unable to attend due to health issues. The members of IETE Ahmedabad (2020-2022) were also honoured. The programme was effectively organised and managed by Asst Prof Ruchi Gajjar, from Nirma University and a member of the LEC. A total of almost 35 IETE members were in attendance.

• While attending MAPCON 2023, IETE President **Prof (Dr) A K Saini** and Secretary General **Gp Capt Sonpal Singh (Retd)** that took place at Ahmedabad on 11th Dec 2023, they also visited the Centre the next day.

• From 15th–22th Dec 2023, **theory examinations for AMIETE and DipIETE** (Old and New Syllabus) were conducted. Students taking the exam at Centre were only two for AMIETE. Shri R M Makwana, Immdt Past IETE Ahmedabad Centre Chairman, was in charge of organising the exam.

• On 2nd Feb 2024, **IETE Student's Day** celebration was organised by the ISF at the **EL-EC Depts of BVM Engineering College in Vallabh Vidyanagar, Gujarat, and the Ahmedabad Centre.** EC member Dr J M Rathod welcomed everyone and gave an overview of the ISF chapter. The message from IETE president Dr A K Saini was read by **Dr Depak Vala**, Assoc Prof EC Dept.Dr T D Pawar, Chairman ISF from College, highlighted the importance of this chapter for students. The keynote speaker was by **Dr I N Patel,** Principal of BVM Engineering College. He talked about the role of electronics engineers in building a nation and said, "Electronics engineers can play a pivotal role in several key areas, such as Smart manufacturing and Industry 4.0, healthcare technologies, education technologies, urban planning and smart cities, cyber security, agricultural technology, space technology, entrepreneurship and start-ups, including with their scientific knowledge, electronics experts can help India grow by working in these areas. This needs a focused effort from the government, business, academia, and the engineering group in the community." The vote of thanks was proposed by **Dr Arjun Bambhniya**, the EC faculty advisor for IETE. There were more than 100 faculty members and students present.

BANGALORE

The Centre held a series of activities as under:

- **Engineer's Day** was observed on 8th Oct 2023. **Dr S G Shivaprasad Yadav**, the Hony Secretary, extended a welcome address. **Dr CV Ravishankar**, the Vice-Chairman, elucidated the importance of Engineer's Day. **Dr Puneet Kumar Mishra,** the Vice-Chairman, presented **Ms Nigar Shaji**, the Project Director-Aditya L1 at URSC, ISRO, Bangalore, who delivered a precise and insightful technical presentation on **Mission Chandrayan-3.** Dr CP Dwivedi, the Chairman, presided over the event. Dr DG Rao, the Hony Treasurer, proposed the vote of thanks.

- **Dr D C Pande** conducted a workshop on **Advanced EMI/EMC Technologies for Military** & **Medical Electronics Applications** for M/s Bharat Electronics Limited executives from 11th -13th Oct 2023.

- A technical talk was organised by Sambhram Institute of Technology on **XR Unleashed: Navigating the Realities of Virtual, Augmented and Mixed Worlds** on 20th Oct 2023.

- From 10th Oct 2023 to 13 Jan 2024, IETE Bangalore held a **10-week hands-on course on Cyber Security**. Speakers included **Dr Gopinath** from CDAC, Dr R Balaji executive director of CDAC and **Dr Manish Kumar** from RIT Bangalore. A lot of attendees were from C-DoT, DRDO Labs, ISRO Centre, BEL Units, IITs, NITs, and other places.

- On 22nd Oct 2023, **Ayudh Pooja** was performed by the priest **Shri Sriram** and sweets were distributed.

- **IETE Foundation Day'23** was celebrated on 5th Nov 2023. **Shri Alok Srivastava**, former Assoc Director, URSC Bangalore was the chief guest who delivered the theme Lecture on **Vision of a Developed India: Role of Futuristic Technologies**. **Dr C P Dwivedi**, Centre Chairman presided over the function. The Hony Secretary **Dr Shivaprasad Yadav**, welcomed the attendees, and an EC member, **Dr K M Sudarshan**, read the IETE President's message. The Vice Chairman, **Dr CV Ravishankar**, introduced the dignitaries. **Shri Satyanandan**, Immdt Past Centre Chairman, Editor-in-Chief of 'IETE Bengaluru Magazine'

spoke about the Magazine. The lecture was delivered by **Dr Sandeep Joshi,** BITS, Pilani, who was awarded with the **Prof NV Gadadhar Memorial Award 2023**. Three distinguished senior members of IETE Bangalore were honoured for their exemplary service to the organisation. 'IETE Bengaluru Magazine' (16th edition) was officially released by the chief guest. The Chief Guest **Shri Srivastava** provided a concise synopsis of the numerous space missions that culminated in the ISRO's successful Moon landing. Regarding the potential impact of front-end technologies on India's progress, he stated that AI/ML-based systems, data mining, additive manufacturing, robotics, drones, gene editing, and other related technologies are in high demand worldwide. Several nations, India being one, have outperformed expectations; however, it is now imperative that all sectors and academic establishments assimilate this rapid growth trajectory and fulfil the nation's needs. We must incorporate cutting-edge technologies into healthcare, such as 3D printing of organs. Quantum computing, autonomous vehicles, and nanotechnology are additional fields. Opportunities such as self-driving cars and space tourism are imminent. In his Gadadhar Memorial Lecture, **Dr Sandeep Joshi** elaborated on the engineering requirements of 5G and beyond, including increased data rates, decreased latency, and reduced interference, among others, and analysed potential solutions to the obstacles encountered. 'Connectivity everywhere, anywhere' was, according to him, the ultimate objective. **Dr D G Rao**, Hony Treasurer proposed the vote of thanks.

- One week skill development programme on **Python** and **Data Analytics** by Sambhram Institute of Technology held on 15th-22nd Nov 2023.

- **Dr S G Shivaprasad Yadav**, Hony Secretary conducted a practical training on **Embedded Systems** & **Design** spanning 10 weekends for working professionals wef 19th Nov 2023.

- **An Emerging Radar Technology Training** was conducted for Bharat Electronics Limited Executives during 27th -29th Nov 2023.

- From the 4th to 6th Dec 2023, Former Chairman of IETE Bangalore Centre, **Prof HS Bhatia**, conducted a corporate training session on **Photonics** for executives of M/s Bharat Electronics Limited. Subsequently, from the 7th to 9th Dec 2023, he conducted a training session on Modern Radar.

- **Dr DC Pande**, Former Chairman, Bangalore Centre conducted a training on **Advanced EMP Protection for C4I Mission Critical Systems** for M/s Bharat Electronics Limited executives on 13th -15th Dec 2023.

- The **AMIETE Examinations** were administered from 15th Dec to 22nd 2023, under the supervision of Dr D C Dwivedi, Centre Chairman.

BHOPAL

The Bhopal Centre hosted several events, including a celebration of **World Habitat Day** on 2nd Oct 2023, **World Standards Day** on 14th Oct 2023 with 26 participants, a celebration of **IETE Foundation Day** on 2nd Nov 2023 with 75 participants, and a lecture on the **New Education Policy** on 10th Nov 2023, which was attended by 28 participants. An expert lecture on **Chakra measurement, Healing Science, and Pandemic duration Prediction, incorporating Astrological Aspects,** took place on 3rd Dec 2023. The event was attended by 19 individuals. On 10th Dec 2023, a lecture on **Violence against Women** was held, with 35 participants in attendance. Additionally, a **National Energy Conservation Day** event was organized on 14th Dec 2023, which saw the participation of 19 individuals.

BURDWAN

A webinar on "**Recent Advances in Sensor Designs (SIW Antennas, Array, and RFIDs)**" was hosted under IETE seminar series by IETE Burdwan Sub-Centre and the Department of Physics at The University of Burdwan, West Bengal on 8th Jan 2024. **Dr Suvadeep Choudhury** from University of Pisa, Italy, spoke at the event. **Prof Tanmoy Banerjee** and **Dr Joydeep Chakravorty**, the former secretary of IETE Burdwan, extended a warm greeting to all of the MTech students, research scholars, professors, and educators from various colleges. There were thirty-five participants.

CHANDIGARH

The Platinum Jubilee Year **IETE Students' Day** was observed by the IETE Chandigarh Centre in a hybrid manner on 5th Feb 2024. Saraswati Vandana and the inaugural lamp lighting kicked off the programme. On this auspicious day, **Dr Amod Kumar**, the Centre Chairman, welcomed the expert speaker, **Shri Gurcharan Singh,** Faculty for Cyber Crime at the Central Detective Training Institute, the Bureau of Police Research & Development, the Ministry of Home Affairs, the Government of India, the Chandigarh; as well as the EC members, past chairman, senior corporate members, and student participated. The message received from IETE President, Prof (Dr) Anil Kumar Saini, was read out by **Dr Sanjeev Kumar**, Centre Hony Secretary. The theme centred on giving the students a stage on which to demonstrate their technical and creative abilities, impart knowledge, and establish credibility in the specialisations or sectors they had chosen. Their engineering education and post-graduation career advancement—particularly in the job search and interview—also heavily depend on these abilities. The audience was addressed by **Shri Gurcharan Singh**. He addressed the subject of "**Cyber Security and Smart Phone Vulnerabilities,**" highlighting several types of cybercrimes committed using smartphones along with

countermeasures that may be implemented. Everyone in the audience appreciated the presentation since it sparked a lot of interest in cyber security issues, which was further evidenced by the lengthy Q&A period. At the event, over 120 students and corporate members of IETE took part. A formal vote of thanks was given by **Dr Piyush Kumar Awasthi**, Hony Treasurer of the IETE Centre. Important dignitaries attended include: Gp Capt RC Goyal, (Retd); Dr RP Bajpai; Dr Sanjeev Kumar, Hony Secretary; Dr PK Awasthi, Hony Treasurer; Shri SK Angra; Shri RC Agnihotri; Dr GS Singh; Wg Cdr Gurmail Singh (Retd); Shri Sanjeev Mahajan; Shri SC Jain, Immdt Past Centre Chairman; Dr Amit Laddi, Principal Scientist, CSIR-CSIO Chandigarh; Dr Umesh K Tiwari, EC Member; Shri Kulvinder Singh; Shri NS Gill, Fellow, Dr BK Sharna and Dr PK Khosla.

CHENNAI

IETE Chennai Centre organized the following activities:

• The **Ayudha Pooja celebration** attended by 12 members of the Executive Committee on 24th Oct 2023.

• The Centre organized an International Webinar Series "**Advance Transitions from Conventional Electronics to Self – Sustainable Smart Wearable Electronics**" by **Dr Loganathan Veeramuthu,** on 28th Oct 2023**,** Research Asstt Prof, Institute of Organic & Polymeric Materials, Research and Development Centre of Smart Textile Technology, National Taipei University of Technology, Taiwan.

• International Webinar Series, session titled **"Reconfigurable Antennas for Future Wireless Communication Systems"** was held on 4th Nov 2023. The webinar was conducted by **Dr Thennarasan Sabapathy**, a faculty member at the Paul Putur Main Campus, University Malaysia (Uni MAP) in Arau, Perlis, Malaysia. The event was attended by 95 individuals.

• Industry Expert Webinar Series, Session titled, '**ERP – Global Opportunities and Challenges**' was handled by **Ms Samundeeswari Thangadurai**, Lead Technical Consultant, Doha, Qatar on 7th Nov 2023.

• A webinar titled "**Opportunities in DRDO**" was conducted on 10th Nov 2023. The session was led by **Shri T Panneer Selvam**, Scientist G, Additional Director (Arjun ToT) Combat Vehicles Research & Development Establishment (CVRDE), DRDO, Avadi, Chennai.

• The Centre hosted an International Webinar Series titled **"Planar Microwave Resonators for Real Time Sensing"** presented by **Shri Vishal Balasubramanian**, a Graduate Research Student at the University of British Columbia, on 17th Nov 2023.

• A webinar series titled **"Fibre Optic Sensors and their Real-World Challenges"** was conducted on 29th Nov 2023. The speaker for the series

was **Dr C R Uma Kumari**, an Asstt Prof at KCG College of Technology in Chennai.

- The Centre organised a Research Webinar Series titled "**Navigating the Future: Mastering the Art of Applying for Post-Doctoral Fellowships**" on 13th Dec 2023. The webinar was conducted by **Dr G Sumathi**, Senior Assistant Professor in the School of Electronics Engineering, Vellore Institute of Technology, Vellore.

COIMBATORE

- **Dr Sriram K Vasudevan,** Lead Tech Evangelist, Intel conducted **Hands-on Workshop - Introduction to AI/ML using OneAPI and how ChatGPT Works** on 23rd Aug 2023, focusing on (*i*) Fundamentals of AI and ML and (*ii*) Introduction to OneAPI. The hands-on session provided step-by-step instructions on setting up the OneAPI toolkit and working with AI models. It focused on practical implementation, allowing participants to gain hands-on experience in creating, training, and deploying AI and ML models using the OneAPI toolkit. This practical approach facilitated a deeper understanding of the concepts presented. As a special incentive, Intel India provided all participants with access to the 'Intel Developer Cloud' which offered the opportunity to continue their exploration of AI and ML technologies using Intel's advanced resources.

- Workshop on **Raspberry Pi and Computer Vision** held on 21st Nov 2023 provided comprehensive understanding of the integration of Raspberry Pi and Computer Vision offering both theoretical insights and hands-on experiences. **Shri Aadhithyaa**, a 2nd year CSE student introduced Raspberry Pi, and explained its advantages over other platforms. **Shri Mohan**, a 4th year CSE student delved into the crucial aspect of data pre-processing for machine learning, explaining the steps involved in image pre-processing using 'Python Imaging Library'. Attendees were actively involved in loading images, applying filters, rotating, resizing etc. Lastly, **Shri Varun Narayanan**, a 3rd year CSE student presented a demo to elucidate the concept of Edge Impulse with Raspberry Pi, showcasing the practical applications of the technology in the realm of computer vision.

- The **Docker Workshop** organized by IETE Club at Amrita Vishwa Vidyapeetham, Coimbatore, on 1st Dec 2023, introduced the concepts of docker, linux kernels, and web development. Shri **Saran**, a 2nd-year AIE student, began the workshop with a brief introduction to Docker. **Navabharaathi,** a 3rd-year AIE student, explained installation of git bash, a crucial tool in the world of version control. **Amirtha**, another 2nd-year AIE student, then delved into the intricacies of process and resource management in the operating system shedding light on fundamental concepts relevant to Docker. **Balasuriya**, a 3rd-year AIE student, highlighted Docker theory and conducted a hands-on session on DockerHub. During afternoon session, **Aadharsh Aadhithya**, a 4th year student, conducted a Docker hands-on session using Flask app and Docker Compose. Following hands-on-session **Balasuriya** conducted the Dockerization Competition. The **first prize** was claimed by the talented trio of Vigneshwar E, Hari Prasath, and Kishoar Hari, all third-year AIE students. The **second prize** went to Sakthi Swaroopan, Manjunath, and Shirish Krishna, all from the third year of AIE. The awarding of prizes added a competitive and rewarding element to the learning experience, recognizing the exceptional efforts and skills demonstrated by the winning teams.

- **Dr Shriram K Vasudevan**, Lead Tech Evangelist, Intel, delivered a captivating keynote address on 11th Dec 2023, discussing the **Role of Women in AI with oneAPI** and their impact on technological innovation. He explained the capabilities and advantages of Intel's oneAPI technology. A panel of accomplished women in AI shared their experiences and insights discussing challenges faced, opportunities available, and the future of AI for women. Participants had the opportunity to witness and learn from women-led AI projects. There was practical understanding of implementing oneAPI in AI projects and networking opportunities for attendees to connect and collaborate.

DELHI

- **Prof (Dr) A K Saini**, the President, was the Chief Guest at the **Silver Jubilee and Alumni** gathering held on 14th Oct 2023, at the IETE Delhi Centre's premises in Janakpuri. **Shri B B Rishi**, the Centre Chairman, extended a warm welcome to the President IETE. Prof Saini spoke to the members of the Governing Council, the Executive Committee members, and alumni, urging them to maintain the momentum of activities by networking with one another. **Dr Tarun Rawat**, Hony Secretary, delivered a vote of thanks.

- The National Level Conference of **SSPR 2023 (NLCSSPR 2023)** was organised in partnership with **Swanirman Sunirmit Publications of Research**. The conference focused on the theme of "**Modern Technologies and Satellite Navigation**" and took place on 9th Dec 2023. Keynote Speakers were **Prof Shiban Kishen Koul**, Emeritus Prof, Centre for Applied Research in Electronics,IIT Delhi; **Dr Satya N Gupta**, NGNaguru- Secretary General, ITU-APT-Foundation of India, Vice-President, DCIF and Chairs BIF committee on Rural Digital Infrastructure; **Dr Prof VH Sailaja**-IOCL-Chair Professor in Department of Environmental Sciences, Andhra University; **Shri R K Singh** – Broadcast Media and ICT Consultant and Former Engineer in-Chief, Doordarshan, **Ms Leena Bokil**-NASA- Honeywell Space Educator, Science & Technology Communicator. A total of 75 individuals participated in the webinar including members of the EC, staff members and students from IETE, members of SSPR, and students from IGNOU.

• The IGNOU TEE December 2023 examination took place from 1ˢ Dec 2023, to 9ᵗʰ Jan 2024. Approximately 17,000 students took part.

• **Dr S K Varshney**, the Advisor and Head of International and Bilateral Cooperation at the Department of Science & Technology, Govt of India, served as the chief guest at the event on 14ᵗʰ Jan 2024. The event focused on an address concerning **Gender Equality in Science & Engineering, Government Endeavours**, and was conducted in a hybrid mode. The programme was coordinated by WEEC IETE, led by **Dr Jyoti Singhai,** and assisted by **Ms Meenakshi Vij**, representative of WEEC, IETE, Delhi Centre.

The information provided by Dr Varshney was on: • Women's access to programmes and opportunities within the Department of Science and Technology, the University Grants Commission, and other government agencies aimed at promoting gender equality; • The reasons for and methods by which women should adapt to the rapid development of technology; and • Guidelines for drafting international collaboration project proposals. The speaker provided a perspective on the purpose of achieving gender equality. Various strategies were elucidated with the objective of fostering inclusivity and reaping the accompanying benefits for national development. The speaker provided an overview of the several financial grants offered by the Govt of India for research in the fields of science and engineering. He emphasised that the exactness of topic selection and the prestige of the journals in which research is published are crucial factors in project approval and the subsequent allocation of cash. He provided numerous examples related to the actual difficulties encountered in the process of research and obtaining grant approvals, drawing from his extensive knowledge and expertise in the sector. A total of 102 persons joined the event remotely, while about 50 participants were physically present at the location. **Shri B B Rishi**, the Centre Chairman, delivered a proposal for a vote of gratitude.

• **Republic Day** was celebrated by hoisting the tricolour at IETE Delhi Centre on 25ᵗʰ Jan 2024.

• The Centre commemorated **IETE Students' Day** on 22ⁿᵈ Feb 2024. **Mrs Meenakshi Vij**, Hony Treasurer, Delhi Centre, began the programme by honouring Ma Saraswati, the Goddess of Wisdom. Mrs Anita Kumar, Admin Head, Delhi Centre, welcomed Mrs Meenakshi Vij. **Mrs Anita Kumar** read the IETE President's message. **Mrs Meenakshi Vij** delivered a talk on **Cyber Security**, including its relevance, cyber risks, their impact, types, controls, preventive measures, and industry best practices. It was followed by student questions. Student debate and Antakshri competitions were held.

HYDERABAD

• The Centre coordinated the **IETE-R S Khandpur Award Lecture-2023**, which was presented by **Dr Yarlagadda Padma Sai**, a distinguished recipient of the honour and current Dean of Student Progression at VNR Vignana Jyothi Institute of Engineering & Technology in Hyderabad, on 10ᵗʰ Dec 2023. She presented a talk on **"The Role of Wavelet Transforms in Bio-Medical Signal Processing".** This memorial lecture is part of a series of many events scheduled for the period of 2023-24. Attendees included members of the executive committee, distinguished scientists, past chairmen, GC members, coopted members, special invitees, distinguished members, faculty, and students.

• The **Knowledge Sharing Session- 118: Webinar-151** was conducted on 17ᵗʰ Dec 2023 by **Dr D Krishna Reddy**, Prof & Head, Dept of ECE, Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad. He delivered his talk on **"Position Fixing Techniques of LBS in 5G".**

• The **Republic Day Flag Hoisting Ceremony** took place at the IETE Hyderabad Centre on 26ᵗʰ Jan 2024. The National Flag was hoisted by Chairman **Prof Nuli Namassivaya**. Participants in the programme included staff, students, Governing Council members, EC members and co-opted members.

• On 11ᵗʰ Feb 2024, the Centre organized a number of events to commemorate **IETE Students' Day**, including a project exhibition, technical quiz, poster presentation, tech extempore, and tech crossword. The Center's Hony Secy, **Shri Ashwani Kumar Sangmker**, provided a brief history of Students' Day. President's message was read by TPC Sub-Committee Chairman **Dr V Rama Rao**. The significance of Students' Day was explained by **Dr I Sarath Chandra**, while **Dr N Srinivas Rao** proposed vote of thanks. *Project Expo competition* winners were : **Shri G Harish, Shri J Spandan,** and **Shri T Hari Hara Vinay, from** Govt Polytechnic, Medchal. They won first prize for their project, "AI Based real-time ECG Signal Analysis." For their project, "Home Surveillance with Robotic Eye," **Shri Y Sanjana and Shri K Akhil** of Matrusri Engineering College in Hyderabad, took home the second place prize. **Shri J Spandan** and **Shri S Anil** of Govt Polytechnic, Medchal, were awarded the first prize in the *Technical Quiz*. **Ms B Maneesha** and **Ms Ch Neha** of Bhoj Reddy College of Engineering for Women, Hyderabad, were awarded the second prize. For *Poster Presentation*: "Touch Screen Technology," represented by **Shri S Vaishnavi** and **Shri P Sandeep** of the AVN Institute of Engineering & Technology, won the prize. **Ms N Deepika** of the Vidya Jyothi Institute of Technology won the *Tech Extempore competition*, and **Ms B Mallika** of the Bhoj Reddy College of Engineering for Women in Hyderabad won the *Technical Crossword competition*.

JAMMU

The **IETE Students' Day** was held on 1st Mar 2024, at the Research Skill and Innovation Hub Government Degree College (GDC) in Akhnoor, jointly with the Dept of Physics and Computer Application, and IETE Jammu Sub-Centre. **Dr Romilla Malla Bhatt,** Principal GDC Akhnoor and Vice-Chairman, Sub-Centre welcomed the gathering, followed by address of Chairman, Sub-Centre, **Shri Joy Ganjoo**. **Dr Vijay Sharma**, Hony Secretary gave overview of the program. The IETE President's message was read by **Er Sameer Sharma**, AEE (PDD), J&K Govt and Vice-Chairman, Sub-Center. **Major Gen S K Sharma AVSM (Retd)** Member Governing Body MIET (Autonomous) Jammu was the chief guest. The Python talk was given by **Prof Pawnesh Abrol**, Head of the Electronics Department, Jammu University. **Prof Parveen Lehana**,

former HOD Electronics Dept, University of Jammu delivered talk and conducted technical workshop on **IOT based Smart System design.** Participants included students and teachers from GDC Akhnoor, GDC Marh, GDC Khour, and GDC Paloura. They learnt how to use the ESP8266 wifi module in the real world by doing it themselves. The feedback of the programme was given by **Dr Shammi Kumar,** HOD Physics and **Dr Deep Kumar**, HOD Computer Applications. The Hony Teasurer, **Dr Radhika Khanna**, delivered the vote of thanks.

KANPUR

The IETE Kanpur Centre, in collaboration with the Allenhouse Group of Institutions in Kanpur, commemorated the **IETE Students' Day** on 26th Feb 2024. **Prof Narendra Kohli**, Centre Chairman, extended a warm welcome to **Dr Raghvendra Chaudhary,** the Chief Guest and Assoc Prof, Dept of EE at IIT Kanpur, as well as all the attendees. The Centre's HonyTreasurer, **Prof J Ramkumar** delivered the President's Message on Students' Day. **Prof Varun Shukla**, the Dean (Research), Allenhouse Institute of Technology in Kanpur, introduced Dr Raghvendra Chaudhary to the attendees.

Dr Raghvendra Chaudhary stated in his presentation that antenna technology has witnessed a significant transformation. This transition has resulted in groundbreaking advancements in wireless communication and networking on a global scale. The efficiency, adaptability, and multifunctionality of antennas have been enhanced by recent technological advancements. The production of miniature antennas for smart watches, laptops, and mobile phones is a significant accomplishment. Antenna design has also been transformed by meta materials. Meta material antennas are designed with intentionally constructed RF structures that possess distinctive electromagnetic properties in order to offer unconventional functionality. The antennas have been enhanced in terms of their effectiveness, expanded frequency range, higher signal intensity, and reduced size. Circularly polarized antennas generate circular waves through electromagnetic propagation, which guarantees reliable signal transmission in a variety of environments. These antennas are exceptional in the fields of radio astronomy, remote sensing, RFID, and satellite communications. The introduction of MIMO antennas is a significant development. These MIMO antennas optimize performance by dynamically adjusting their operating parameters to real-time ambient and user requirements, utilizing cognitive radio technology. A new era of capability and invention has been begun by recent advancements in antenna technology. This has facilitated unparalleled connectivity, communication, and functionality, thereby satisfying the requirements of the cellular industry. Er Prashant Kumar, the Honorary Secretary, conveyed his gratitude and praise. The event drew a crowd of 110 from HBTU Kanpur, IIT Kanpur, IETE Kanpur Centre, and Allenhouse Group of Institutions, Kanpur.

KOCHI

The **IETE Students' Day** was collaboratively arranged by the Kochi Centre and ISF at the KMEA Engineering College, Aluva, Kerala on 26th Feb 2024. This event offered an excellent platform for students to exchange and engage in discussions on new concepts. Other ISF units connected to Kochi Center showed remarkable involvement. More than 30 students, including those from KMEA Engg College, MGM College of Engineering, and ToC H Institute of Science & Technology, were present. A **Quiz programme** and an **Idea competition** were organised. A total of 62 students enrolled for the Quiz. A total of 28 students enrolled in the idea competition, which offered a unique opportunity for them to showcase their innovative ideas and maybe transform them into a successful startup. **Shri Jaimon Jacob**, Director, Model Finishing School, and **Shri Ramesh C R**, an expert in System and Firmware, served as judges for the Idea competition. They selected four proposals out of 28 submissions. The final rounds took place on 25th Feb 2024.

Dr Smitha K M, the Dean of Academics at KMEA Engineering College and a member of the EC Kochi Centre, extended a warm welcome to the guests. **Sri P Krishnakumar**, Hony Secretary, Kochi Centre, provided a comprehensive summary of the initiatives undertaken by the IETE Centre. He urged all members of the IETE Student Forum to

make the most of the various opportunities presented to them through the events organised by ISF. He emphasised the significance of the industrial exposure that the students will gain through their participation in ISF activities. Subsequently, **Dr Amarnishad T M**, Principal, KMEA Engineering College, delivered a special address. **Shri M N Narayanan**, Chairman, Kochi centre, officially commenced the event and read out the message from Prof (Dr) A K Saini, the President of IETE. The staff coordinators under Kochi Centre of ISF were honoured with a certificate of appreciation for their valuable contributions to the growth of ISF activities at each institution. **Dr Manju Bhaskar**, a member of the EC, introduced the names of the ISF staff coordinators who were to receive certificates. She also provided an introduction to each of their respective ISFs. Subsequently, the Vice Principal, **Dr Rekha Lakshmanan**, proceeded to distribute the prizes. The recipients of the **Quiz competition** are: The first prize was awarded to **Hana V K** (KMEA Engineering College, Pukkattupady), while the second prize went to **Gireesh Suresh** (Saint Gits Engineering College, Kottayam). The winner of the **Idea competition** was **Alwin George** (MGM College of Engineering and Technology, Pampakuda). His winning invention was termed *Aquagenix*. **Dr Ansiya Eshack**, Hony Treasurer of the Centre, presented a vote of thanks.

KOZHIKODE

• The IETE Kozhikode Sub-Centre, in collaboration with the IEEE Malabar Subsection and Educational Activities IEEE Kerala Section, arranged a technical presentation on the subject of **Sensors for Electric Vehicles** on 19th Oct 2023. **Dr Bindima T** greeted the attendees and presented the speaker to the august gathering. **Prof Muhammed Kasim S**, Chair, IEEE Kerala Section, inaugurated the event. **Dr Gilesh MP**, Vice Chair of the IEEE Kerala Section, and **Dr Sabiq PV,** Chairman IETE Kozhikode Sub-Centre, spoke to the people in attendance. Dr Sathiya S, Assistant Professor, Dept of Electrical & Electronics at NIT Calicut, conducted the session. She offered a comprehensive understanding of the several sorts of sensors employed in electric vehicles.

• A workshop titled "**Data Visualisation and Story Telling using Power BI**" was arranged on 30th Oct 2023 by the Dept of Information Technology, in collaboration with IEEE. The workshop was inaugurated by **Dr Sabiq P V**, Principal of KMCT College of Engineering and Chairman Sub-Centre. The workshop was led by **Dr Shailesh S**, an assistant professor in Computer Science Department, CUSAT, Cochin. It was divided into three sections: i) **Introduction to Data Science, ii) Data Visualisation and Storytelling,** and **iii) Interactive Dashboard Creation**. Pupils were permitted to bring laptops with Power BI preinstalled. With Power BI, users can generate interactive dashboards, reports, and visualisations using a self-service analytics tool. Through interactive dashboards, students could explore numerous metrics, dive down into data, and perform various data analysis operations.

• A technical lecture on "**Electricity Market**" was held on 15th Nov 2023 by IETE Kozhikode Subcentre in collaboration with IEEE Malabar Subsection and Educational Activities IEEE Kerala Section. **Dr Bindima T** greeted the attendees and introduced the speaker. **Dr Sabiq PV**, Chairman IETE Kozhikode Sub-Centre, spoke to the gathering. **Dr Vivek Mohan**, Asst Prof Dept Electrical and Electronics Engineering, NIT Calicut, conducted the session.

• The Subcentre in collaboration with IEEE Malabar Subsection and GEC Kozhikode, conducted a 5-day **Faculty Development Programme** on "**Metaverse, AR, and VR**" from 11th to 15th Dec 2023. The FDP was inaugurated by **Dr Agnes Jacob**, Professor & HoD Applied Electronics and Instrumentation at GEC Kozhikode. Ms Udaya K Unnikrishnan, Specialist, Digital Practice AI/ML, Transportation BU, Tata Elxsi, Cyber Park, Kozhikode, delivered a session on AI. The FDP offered participants the opportunity to create, develop, and get firsthand expertise in designing their own virtual reality applications, with a focus on integrating VR technologies for creative purposes.

• On 19th Dec 2023, IETE Kozhikode Sub-Centre, in collaboration with IEEE Malabar Subsection and Educational Activities IEEE Kerala Section, hosted another technical talk on "**AI Applications across Industries.**" **Ms Udaya K Unnikrishnan,** a specialist in digital practice AI/ML for the Transportation BU, from Tata Elxsi's Cyber Park in Kozhikode, led the talk.

LUCKNOW

• The Centre hosted an expert lecture by **Dr Prabhat Chandra Shrivastava**, assistant professor, Dept of Electronics, the JK Institute of Applied Physics & Technology, Allahabad University, on the topic of "**Hardware Approach for Designing of Digital Filters**" on 7th Oct 2023. The spreaker imparted his insightful knowledge on the subject topic. He said that designing circuits for digital systems is getting harder and harder as they become quicker, more powerful, more complex, and more capable. First of all, as a system's capability and complexity increase, more limitations and goals must be taken into account simultaneously. There are moments when these objectives clash. Consider power consumption and system complexity. The ability to minimise area and reduce power becomes more challenging as circuit complexity rises. Second, just a subset of the goals the designer wants to accomplish is achieved through the optimization of solutions because of the limitations of design tools. Put another way, rather than offering globally optimised solutions, the tools merely offer locally optimised ones. Thirdly, designers find it more difficult to overlook the unfavourable impacts on other parameters when adjusting one or more of the design parameters in complex systems since there are always more of them and they interact closely with one another.

• On 4th Nov 2023, **Dr Prabhat Chandra Shrivastava** gave a presentation on the **significance of interdisciplinary courses in the New Education Policy of 2020**. He presented the main aspects of NEP 2020 and highlighted how the New Education Policy 2020 emphasises the importance of inter-disciplinary courses in changing the educational environment. The goal of inter-disciplinary education is to create well-rounded educational experiences by drawing from a variety

of fields. These courses facilitate the integration of several academic disciplines, prompting students to investigate the interrelationships between diverse fields. Through the cultivation of a multidimensional perspective, they provide learners with versatile skill sets that are essential in the ever-changing modern world. Interdisciplinary studies promote the development of critical thinking, problem-solving, and creativity by tackling challenging real-world situations that go beyond individual academic fields. Interdisciplinary courses foster collaboration among students and faculty members from diverse backgrounds, stimulating the development of innovative solutions to global challenges such as climate change, healthcare, and technology. Furthermore, these courses improve employability by fostering individuals who are capable of adjusting to various job settings.

• The **70th IETE Foundation Day,** 2023 was organised by the IETE Lucknow Centre on 17th Dec, 2023. The programme, which was attended by **Dr Arun Kumar Singh, Shri Yatish Katheria, Mrs Neelam Srivastava, Shri Prabhakar Dubey, Dr O P Singh,** and other participants to commemorate the occasion. The Centre felicitated **Shri Ravi Aggarwal**, a senior member of IETE. He was presented with IETE's memento and shawl.

• On 22nd Dec 2023, the Centre organised another expert talk at Rajkiya Engineering College Kannauj. The talk by **Dr Arun Kumar Singh**, the Centre Chairman, "**Design and Implementation Issues for 5G/6G Wireless Communication Networks"** explored the revolutionary path of 5G, from the abstract ideas to the real-world applications. He said that 5G wireless communication networks represent a paradigm shift, promising revolutionary advancements in connectivity, speed, and data handling capabilities. 5G is essentially the next generation of networking that combines state-of-the-art technology such as Massive MIMO (Multiple-Input, Multiple-Output), millimeter-wave spectrum utilisation, software-defined networking, and network function virtualization. These parts allow for revolutionary uses in fields like healthcare, smart cities, autonomous cars, and more by laying the groundwork for ultra-low latency, huge device connectivity, and unparalleled data rates. Participants engaged in discussions on the practical aspects of 5G implementation, exploring case studies, simulation tools, and real-world deployment scenarios. To better understand the possibilities and threats posed by 5G/6G technology, they explore the complexities of network slicing, edge computing, and Internet of Things integration.

MHOW

• The IETE Sub-Centre at Mhow MCTE hosted a lecture on the topic of **Space Security of Indian Satellites** on 21st Feb 2024, in celebration of **IETE Students' Day**. **Gp Capt Ajey Lele (Retd)** spoke during the event held at Iyappa Hall MCTE Mhow. The participants of the student

forum and the professors of MCTE greatly appreciated the illuminating and educational talk given by the speaker.

• A lecture on **Latest Cyber Trends and Forensic** was arranged on 12th Mar 2024. **Lt Col Santosh Khadsare (Retd)** delivered the lecture at Batra Hall, MCTE Mhow.It was a thought-provoking and informative lecture, which was well-received by both student forum members and faculty members of MCTE.

MUMBAI

• The IETE Mumbai Centre and Navi Mumbai Centre commemorated the **IETE Foundation Day** together on 28th Nov 2023. **Dr Smita Lonkar**, the Centre Chairman, Mumbai, extended a warm greeting to the Chief Guest, **Dr Chintan Ozha**, **Dr PVS Rao**, a senior member, and the esteemed guests. **Prof Dhananjay Dakhane**, Centre's Hony Secretary, introduced the guests to the audience. **Dr Smita Lonkar** provided the audience with an overview of the Centre's recent operations and emphasised the significance of the Fundation Day. Subsequently, **Dr Mukesh Patil**, Chairman IETE Navi Mumbai, presented the President's message and honoured **Dr PVS Rao** with a shawl, shriphal, and memento. **Dr Chintan Ozha** spoke on the theme of the event, which was "**Vision of a Developed India: Role of Futuristic Technologies".** Dr Dakhane proposed vote of thanks. Principals of engineering colleges, academicians, department heads, industry representatives, ISF coordinators, and students were present.

MYSURU

The IETE Mysore Centre hosted the **IETE Students' Day** (2023-24) on 1st Feb 2024. Education, networking, and collaboration were the goals of the daylong event for electronics and telecommunications students, professionals, and enthusiasts. On the day IETE Mysore Centre held an electronics and communication engineering quiz for ISF students. The NIEIT ISF coordinator in Mysore, **Shri Harish S V**, was the facilitator of the event. About 160 pupils took the first online quiz. Multiple rounds of the exam tested participants' knowledge of fundamental ideas,

contemporary technology advances, and field awareness. Around 65 students attended the quiz, and 26 qualified for the second round. Three students won the quiz and Rs 500 each. IETE Centre Chairman **Prof C R Natraj** addressed Executive Committee members, Corp members, and 160 students from various ISFs during the students' day function. He also gave away the prizes to the Quiz winners. Post-event, feedback was collected from the participant on quiz structure, difficulty, and improvements. **Dr Bhagyashree S R**, IETE Mysore Vice-Chairperson, ended the programme with a vote of thanks.

NASHIK

The activities conducted under IETE Nashik Sub-Centre during October to December 2023 are as follows:-

- The Dept of E&TC Engineering at Guru Gobind Singh Polytechnic (GGSP) in Nashik, in collaboration with IETE Sub-Centre, held a workshop on **"Project development using Proteus & Keil Software"** for III Yr students, with assistance from **Prof Sanjeev A Shukla** of Sandip University, Nahsik. More than 30 students attended the 6th Oct 2023 workshop. Mrs S V Karande, Shri P P Dadhich, and Shri R S Taday coordinated the event. Over 30 students participated. Students were awarded certificates.

- The K K Wagh Institute of Engineering Education & Research (KKWIEER), Nashik, in collaboration with the IETE Nashik Sub-Centre, organised a webinar on **"Inner Engineering"** by **Shri Krishan Dhan**, a motivational speaker, author, spiritual seeker, Dean at Vidya Vinay Gurukul, and Monk at ISKON, Nashik. The webinar took place on 14th Oct 2023 for a total of 104 students studying electronics & telecommunication engineering and information technology.

- The Sub-Centre and Rajarshi Shahu Maharaj Polytechnic in Nashik invited **Shri Vivek Patil**, Founder and CEO of Sarth Training & Consultancy, for a guest lecture on **'Need of Personality Development'** on 18th Oct 2023. The speaker explained how personality develops, improves, and changes. The speaker stressed on personality importance and advised on personal aspirations. Shri Vivek Patil defined personality as a person's attributes and attitudes based on consistent behavioural and cognitive patterns. Motivation is a human trait that helps people achieve goals including greater productivity, mental and physical health, personal growth, and fulfillment, he asserted. Whether in formal or informal education, it is essential for lifelong learning and success. These concepts were further elaborated upon throughout the session.

- A guest lecture on the topic of **"Entrepreneurship and Development"** was conducted in collaboration with Rajarshi Shahu Maharaj Polytechnic, Nashik, on 20th Oct 2023. The presentation was made by **Shri Gaurav Laxman Patil**, CEO of Shivshambhu Enterprises. He provided guidance to student on the true meaning of "entrepreneur" and "entrepreneurship." In addition, he recounted his experiences as an entrepreneur. A total of 84 students were present. Mrs G P Rikame was in charge of coordination.

- A webinar on "**A Walk through on UPSC**" by **Shri Harshad Dhananjay Bele**, Director, Connect India IAS Academy, Nashik, was organised on 21st Oct 2023, by the ET Dept at the K K Wagh Institute of Engineering Education & Research in Nashik in cooperation with the IETE Nashik Sub-Centre.

- The ET Dept at K K Wagh Institute of Engineering Education and Research, Nashik, in collaboration with IETE Nashik Sub-Centre, has organised several activities. These include a workshop on "**Deep learning using MATLAB**" by **Shri Ankit Kumar,** Application Engineer, DesignTech System Pvt. Ltd., on 25th Oct 2023; an expert lecture on **"Channel Coding: Importance of Error Correction Mechanism in Noisy Environment"** by **Shri Shrikant Joshi,** Assistant Professor, VIIT, Pune, on 26th Oct 2023; a webinar on **"Entrepreneurship-Primary Wealth Creation"** by **Shri Vishal Jategaonkar,** Centre Director TIME, Nashik, on 28th Oct 2023; a webinar on **"Need of Electronics as Automization in Industry"** by **Shri Sanjay Chaudhari,** Director Electronics Study Centre Nashik, on 30th Oct 2023; and a 3-day workshop on "**Industrial Approach in Electronics**" by **Shri Sanjay Chaudhari** from 6th Nov to 8th Nov 2023. A lecture titled **"Hands on Practices on Computer Hardware"** was conducted by **Shri Dattatray Patole**, a senior hardware support and network engineer, on 24th Nov 2023. Another three-day workshop on **"Industrial Approach in Electronics"** was conducted by **Shri Sanjay Chaudhari,** Dir, Electronics Study Centre Nashik, during 4th Dec to 6th Dec 2023.

PILANI

- The IETE Centre and ISF, BK Birla Institute of Engg & Technology (BKBIET), Pilani, celebrated **IETE Foundation Day** by hosting a lecture by **Dr P K Basu**, a retired professor from the Institute of Radio Physics and Electronics at the University of Calcutta. The lecture, which took place on 3rd Nov 2023, focused on the topic of the **"Emerging Ge_{1-x} Sn_x Alloy in Si Photonics Interconnects and its applications in Electronics, Photonics, and Plasmonics". Shri Pramod Tanwar,** the Hony Treasurer, expressed his gratitude to the guests and commended the efforts made by CSIR-CEERI to increase knowledge in technological sectors. The President's message for the day was read by **Ms Sakshi Yadav**. The programme ended with a vote of thanks given by Dr Krishna Meel, Hony Secretary of the Centre.

- The ISF-BKBIET and IETE Pilani Centre commemorated **"IETE Students' Day"** by arranging a guest lecture by **Dr Udit Narayan Pal**, a Senior Scientist & Group Head, and a visit to the Plasma Research Lab on 21st Feb 2024. The lecture focused on the subject of "**Indigenous Development of Pulsed Power Plasma Sources and Technologies for Societal and Industrial Applications"**. The welcoming address was delivered by **Dr Krishna Meel**, representing the IETE Pilani Centre, while Ms Sakshi Yadav read the President's message. Dr Udit Narayan Pal provided a comprehensive explanation of Plasma Sources and technologies, including thermal plasma and cold plasma. He discussed the necessity of cold plasma technologies and the various components involved in cold plasma. Additionally, he highlighted the advantages of plasma in agriculture and food processing, specifically focusing on PAW (Plasma Activated Water) for Agriculture. Lastly, he highlighted the significance of plasma in the medical field. Following the educational session, the students were taken on a visit to the Plasma Research laboratory, where they were shown state-of-the-art machines used to make cold plasma and its respective uses. Dr Krishna Meel, from the IETE Pilani Centre, offered a memento to the speaker as a gesture of remembrance. She appreciated the guest speaker's knowledge and time for IETE members. She also thanked BKBIET and CSIR-CEERI for their help. She also appreciated **Shri Pramod Tanwar**, Hony Treasurer, IETE Pilani Centre, for organising student knowledge sharing seminars.

RAJKOT

- The IETE Rajkot Centre commemorated the **IETE Students' Day** in collaboration with the Dept of Computer Science at Saurashtra University, Rajkot. An expert talk on **"New Research Directions in Computer Science"** was organised on 7th Feb 2024. The keynote speech was given by **Professor (Dr) Nicolae Goga**, who is affiliated with the Ing. University Politehnica Bucharest and serves as a Senior Researcher at the University of Groningen. Additionally, he holds the position of Honorary President of HL7 Romania. The programme commenced with a rendition of the Saraswati Vandana Stuti by the students. Subsequently, the dignitaries were bestowed with bouquets as a mark of honour. The

welcome address was presented by **Prof (Dr) C K Kumbharana**, the Head of the Computer Science Dept at Saurashtra University in Rajkot. **Prof Atul M Gonsai**, Centre Chairman provided a comprehensive overview of the current progress of the IETE and its introduction. Dr Divyesh R Keraliya, the Hony Treasurer of IETE Rajkot, read the message of the IETE President to the audience. **Dr Nilambari Dave**, the Vice Chancellor of Saurashtra University Rajkot and the chief guest, expressed that the technical talk would greatly benefit the students. She also urged the administration to arrange similar technical lectures in the future. Dr Rahul D Mehta, the Hony Secretary of IETE Rajkot, delivered the vote of thanks.

- The Centre hosted a lecture on **"Women Empowerment for Rising India"** delivered by **Dr Aarti S Oza**, a Statistical Officer at the Statistical Cell of Saurashtra University, Rajkot, to commemorate **International Women's Day Celebration** on 10th Mar 2024. **Prof (Dr) Atul M Gonsai**, Centre Chairman, extended a warm welcome to the attendees. According to Dr Oza, women empowerment refers to the act of empowering women by encouraging their involvement in various aspects and sectors of society, such as the economy, politics, social life, culture, and other areas. Education is the key aspect in empowering women. Education is the sole means through which true women's empowerment may be achieved. Dr Oza elucidated the subject matter by providing numerous illustrations. The audience engaged in an enlightening conversation on this theme and posed numerous questions, which added vitality and drive to the event. The participants expressed their gratitude towards the authorities of IETE Rajkot Centre for their commendable efforts in organising beneficial programmes for women. They also extended their thanks to all the IETE officials, expert faculties, and staff members. A total of 35 women took part in this event. Dr Divyesh R Keraliya, Hony Treasurer of IETE Rajkot, delivered a vote of thanks.

VIJAYWADA

- The Vijayawada Centre, in collaboration with technical support provided by Efftronics Systems Pvt Ltd in Mangalagiri, Andhra Pradesh, organised a **Curriculum Workshop** from 17th Nov to 19th Nov 2023. **Shri D Ramakrishna**, CEO, Efftronics Pvt Ltd, Mangalagiri, and **Shri Bhavani Shankar**, also from same firm, served as resource persons.

- The **IETE Students' Day - 2024** was commemorated by the Vijayawada Centre on 1st Feb 2024. **Dr Sujith Kalluri**, the Hony Secretary, read and shared the message from the President of IETE. Additionally, messages for IETE Students Day were given by **Dr B Rajasekhar**, Chairman of the Centre, **Dr J Lakshmi Narayana**, the

Principal of PSCMRCET, and **Mrs A V Kiranmai**, the HoD Electronics and Communication Engineering at PSCMRCET. The promotional film of IETE was screened. The ISFs in the Vijayawada Centre Region

were awarded the prestigious Best IETE Student Forum (ISF) Award and received appreciation certificates. The ISF of the ECE Department at PSCMRCET honoured **Dr B Rajasekhar**, Centre Chairman, **Dr Sujith Kalluri,** Hony Secretary, and **Dr B Surya Prasada Rao**, Hony Treasurer. The occasion was attended by the former Chairman, members of the executive committee, corporate members, and student members. More than 200 individuals were present. Dr B Surya Prasada Rao, Hony Treasurer, delivered vote of thanks.

YAVATMAL

• The IETE Yavatmal Sub-Centre, in collaboration with the Jawaharlal Darda Institute of Engineering and Technology (JDIET) in Yavatmal, observed the **'Antiragging Week'** from 12th to 18th Aug 2023 marking the observance of the **Anti-Ragging Day**. Students from JDIET, Yavatmal were motivated to engage in activities such as slogan composition, logo creation, and poster design contests. The assessment of the Slogan, Logo,

and Poster competition was carried out by **Prof Anil S Fendar**, from JDIET, Yavatmal. The winners were felicitated with certificates and prizes on 15th Aug 2023. The event was coordinated by **Dr Rajesh P Wankhede**, Asstt Prof in the Department of Mathematics, and **Prof Padmini G Kaushik** and **Prof Pragati D Pawar**, Asstt Prof in the ETE Department. The ETA & ISF club of the ETE & EE Department of JDIET, Yavatmal, in collaboration with IETE Yavatmal Sub-Centre, organised a **Circuit Design Competition** on Engineer's Day, which was held on 16th Sept 2023. The event saw participation from engineering

students of JDIET, Yavatmal, Govt Engineering College, Yavatmal, and Jagdambha College of Engineering, Yavatmal. In addition, the Diploma students from Govt Polytechnic, Yavatmal took part in this event. **Prof UW Kaware** and **Dr PM Pandit**, both from JDIET, Yavatmal, served as the judges for the event. Approximately 59 students took part in the event. The cash reward, memento, and certificates were awarded to the winners and runners up from the UG and Diploma group. The event was coordinated by **Prof Pragati D Pawar, Prof Padmini G Kaushik**, from the Dept of ETE.

• A two-day workshop on **'Drone Technology & its Application'** was organised by the Dept of ETE in collaboration with Concepts Lab, Amravati. The workshop was conducted by **Shri Nilesh Deshmukh**, the founder of Concepts Lab, and **Shri Rajesh Lekurwale**, a trainer at Concepts Lab, Amravati. The workshop took place on the 12th & 13th Oct 2023. A total of 31 students from the second, third, and final year of the ENTC Department participated in this session.

IETE Students' Forum (ISFs) Activities

• **ISF at ECE Dept, PSR Engineering College, (PSREC) Sivakasi, Tamil Nadu,** reported conducting a variety of activities, including:(*i*) Session on 'Youth Changemaker's contribution in Innovation and Entrepreneurship' on **Jan 12, 2023** on the eve of the National Youth Day in association with the Institution's Innovation Council. The resource person Er Venkatesh, Distributor of Hatsun Agro Products, Arun Ice Creams & value added products of milk, in his lecture highlighted the benefits of becoming an entrepreneur. Three students presented their innovative products and start-up details, namely E Jegannath & A Abishek, II year ECE – 'Lithium ion Power Bank with Updated Circuit' and K Karuppasamy, II year ECE – software-based start-up named, 'Destrosec'. The student innovators were rewarded for their innovations with prizes by the chief guest. (*ii*) A two-day workshop on "LoRaWAN for Innovative IoT Applications" during **Jun 15-16, 2023.**

The resource persons were Dr K Subramanian and Er S Dinesh Babu from Enthu Technology Solutions India Pvt Ltd, The topics covered include hands-on-training on interfacing sensors with Raspberry Pi and send to cloud, LoRaWAN applications, Artificial Intelligence with Jetson Nano board and Multi MCU IOT trainer kits. 32 students and 5 faculty members attended. (*iii*) An Intra Institutional Idea Competition (Ideathon 2023) on **Oct 12, 2023** in association with the Institution's Innovation Council**.** The juries for the competition were Dr R Meena Prakash, Assoc Professor, ECE & Dr G Karthikeyan, Assoc Professor, ECE. 79 student innovators presented their innovations/ prototypes. The resource persons gave valuable suggestions and provided guidance in converting their innovations into start-ups. Dr K Valarmathi, Prof & Head, ECE Dept gave away the prizes. (*iv*) An online seminar on 'Ubiquitous and Cognitive AI' on **Oct 18, 2023** for II year students in association with the

College's Innovation Council. The resource person Dr P Mohankumar, Assoc Professor, Dept of Database Systems, School of Computer Science and Engineering, VIT, Vellore. The speaker delved on the topics of natural language processing, human computer interaction, artificial intelligence, deep learning, data mining, machine learning and their inter-relations. He cited case studies on how ubiquitous and cognitive AI is deployed to develop solutions that make smart decisions, increase human creativity, and optimize costs, high precision operations etc. 125 students and 4 faculty members attended. (*v*) An online seminar on 'Creativity and Innovation for Entrepreneurship' on **Nov 14, 2023** for II year students in association with the Institution's Innovation Council. The resource person Er Jegan Chandran, CEO, Waxwing Group listed the skill-sets required to become successful entrepreneurs. He discussed the thrust areas of entrepreneurship including e-vehicles, automation in agriculture and industry, waste management etc. 140 students and four faculty members attended. (*vi*) Hands on training on 'Fundamentals of MATLAB programming' on **Nov 14 - 20, 2023** for I year students. Dr J Sivadasan, Assoc Professor, ECE and Dr B Manjurathi, Assoc Prof, ECE were the resource persons. The topics covered included- Introduction to MATLAB, basics of mathematics and physics using MATLAB, basics of mathematics, logical operations and physics using Simulink and development of applications. 115 students benefited. (*vii*) A seminar on "Advanced Trends in Nano Electronics" on **Nov 21, 2023** for II year students. Dr D Nirmal, associate professor, dean engineering and technology, Karunya Institute of Technology and Sciences, Coimbatore was the resource person. He explained the fundamentals of Nano Electronics, Evolution, Nano Electronic Devices and their applications, CMOS devices and future of Nano CMOS technology. He also discussed about MOSFET design and its optimization for low-power applications. 120 students and six faculty members benefited from the session. (*ix*) A workshop on "Full Stack Development" during **Dec 28 – 30, 2023** in association with ACM chapter by the resource person Prof Richard K Min, Dept of Computer Science, The Erik Jonsson School of Engineering and Computer Science, The University of Texas, Dallas, USA. He gave hands-on-session to the participants on Full Stack Development, an end-to-end application software development covering the topics of front end technologies, back end technologies and database. 32 Final Year ECE students benefited. (*x*) A workshop on "Programming in Java Script" during **Dec 28 – 30, 2023** in association with ACM chapter. The resource person for the workshop was Dr Jey Veerasamy, Director of Center for Computer Science Education and Outreach, Professor of Instruction, CS Department, The University of Texas, Dallas, USA. He gave hands-on-session to the participants on programming, testing and web development with Java Script. 35 final year EC students attended. (*xi*) National Youth Day celebrated on **Jan 12, 2024** in association with the Institution's Innovation Council by felicitating young innovators for their innovative projects. 47 young innovators presented their innovative projects and they were awarded with prizes. Dr P Marichamy, Dean appreciated and presented prizes to the innovators. (*xii*) Certification Program on "VLSI Design and Verification – Level 1 and 2" during **Jan 22–29, 2024**. Resource persons Er Nepolean Mani, Sr Design Engineer and Er Jawahar, Design Engineer, Tessolve Semiconductor, Bangalore handled the sessions. The topics covered include digital systems design, VLSI design using Verilog System Verilog. 108 students and 5 faculty members benefited.

● **ISF at ETE Dept of Shah and Anchor Kutchhi Engineering College, Chembur, Mumbai** and IETE Mumbai Centre launched SAKEC IETE Centre of Excellence on **Jul 28, 2023** by Shri Jayantilal Keshavji Chhadva, Chairman and Shri Navin Karamshi Shah, Managing Trustee of SAKEC. Chairperson Mumbai Centre Ms Lonker delivered the Keynote address, emphasizing the importance of technological innovation and collaboration in the modern world. Dr Bhavesh Patel, Principal SAKEC expressed his views. A comprehensive overview of the IETE Center of Excellence was presented, highlighting its mission, goals, and areas of focus. Ms Meenaskshi Singhvi from DD Kendra, Mumbai presented a technical talk on "The Future of Video technology" covering topics of 5G technology, IoT advancements, and the future of telecommunications. MoU was signed between the IETE and SAKEC, marking the beginning of promising collaborations. Attendees had the opportunity to explore cutting-edge technologies and innovations through interactive exhibits and demonstrations. * Organized the 'Telecommunication at Glance' event on **Aug 19, 2023** aimed at providing attendees with insights into the world of telecommunications. The event featured technical talk by department faculty member and a visit to the SAKEC IETE Center of Excellence to enhance participants' understanding of the field. 85 diploma students of St. Xavier's Technical Institute, Mahim, Mumbai and 6 staff participated. Ms Monika Budania, Asst Prof delivered technical talk covering a wide range of topics, Evolution of telecommunication, Emerging technologies in telecommunications, 5G and its impact on the industry, AR/VR applications of 5G, The Future and scope of the telecommunication field, Telecommunication infrastructure and networking. Participants had the opportunity to visit the SAKEC IETE Center of Excellence, which provided hands-on experience in telecommunication technology. Attendees were able to: Explore advanced telecommunication equipment like vector network analyzer, spectrum analyzer, modulation and demodulation analog and digital trainer kits , microwave test bench, Antenna components and many more in the laboratories; Witness live demonstrations of cutting-edge technologies and projects of EXTC students like air quality index monitoring, line follower robot, agricultural quadcopter, smart dustbins, smart robots etc; Interact with faculty and experts to gain practical knowledge. Students were also shown a VR technology live demonstration. * Expert talk on 5G Technology on **Oct 11, 2023** by Shri Amey Gawde, Manager, Reliance Jio, addressing various aspects of 5G, including its impact on industries, infrastructure, and its potential to reshape communication globally. Discussed its potential applications in autonomous vehicles, smart cities, healthcare, and beyond. This glimpse into the future left attendees excited about the possibilities that 5G brings. Number of participants were 53.* Hand-on workshop on 'Applications of DSP concepts in Speech & Music Domains' on **Oct 14, 2023** by Dr Shrikant Joshi , Asst Professor, ETE Dept, Vishwakarma Institute of Information Technology, Pune, focussing on Praat/MATLAB based teaching approach for the discrete / real-time signal processing. Topics covered included Fourier transform, Laplace transform, Fourier Spectrum (including Fast Fourier Spectrum) analysis: spectrograms and windowing. spectogram analysis for audio signals. The workshop mainly consisted of computer demonstration or simulation that relates the theory to real-world signals, especially speech signal processing and their applications. Students also learnt about Praat software. A quiz based on the workshop was conducted.

* A six-day Faculty Development Program on "AI Evolution: From Foundations to Generative AI" was organized by IETE-SAKEC, IETE CoE, and TechSaksham (TSP) in collaboration with Edunet Foundation. Supported by TechSaksham (TSP), a joint CSR initiative of Microsoft and SAP, and implemented by Edunet Foundation on **Jan 1-6, 2024**. The comprehensive program covered various AI topics, starting with foundational concepts and progressing to advanced models, with hands-on sessions and expert talks. Dr T P Vinutha, HoD, ETE Dept welcomed participants. The program ensured a gradual learning curve, covering AI basics, machine learning, deep learning, neural networks, NLP, and Generative AI. Notable sessions included exploring advanced deep learning models and a detailed study on ANN, CNN, RNN, LSTM, NLP, and Generative AI by expert speakers like Shri Ramar and Shri Mayank. The international perspective was provided by esteemed speakers Dr Sanjan T P Gupta from Corporate Research Labs, USA, and Shri Prateek Verma from Stanford University, USA, who delved into applications in healthcare and multimodal Generative AI, respectively. About 144 students participated. * Student Development Program in the form of a hands-on workshop on the Applications of AI on **Jan 6, 2024**, featured two distinguished international speakers: Dr Sanjan T P Gupta, a Machine Learning Scientist from the Biosciences Cluster, Corporate Research Labs, USA, and Shri Prateek Verma, an expert international speaker from Stanford University, USA. Dr Gupta's session focused on "Explore Generative AI & NLP in Healthcare," offering a comprehensive overview, theoretical foundations, and a hands-on workshop exploring applications in medical image analysis, patient records, and clinical decision support. Shri Verma's session, on "Dive into Multimodal Generative AI: Seeing, Hearing, Reading," delved into advanced topics within Generative AI, emphasizing integrating visual data, textual information, and auditory components for comprehensive healthcare solutions. Combining theoretical insights, hands-on activities, and expert discussions contributed to a well-rounded learning experience. Participantswere 30 in number. * 'InnovateX: Crafting Tomorrow's Solutions', on **Mar 23, 2024** showcased the talent and creativity of SAKEC students, reaffirming the institution's commitment to nurturing future leaders in technology. The event aimed to foster innovation in cutting-edge technology by providing participants with opportunities to engage in a Technical paper writing workshop and a presentation competition. It sought to enhance participants' skills in crafting compelling technical papers using LATEX and presenting innovative projects effectively. 30 students participated. * 'TechVision, the Project Poster Presentation' on **Apr 3, 2024**, an exhilarating showcase of innovation and creativity in the field of electronics and telecommunication engineering under the flagship of Oscillations 2024, the event brought together students, faculty members, industry experts, and enthusiasts to witness and celebrate cutting-edge projects developed by talented individuals. Shri Amey Gawde, Manager at Reliance Jio, and Shri Rakshith Poojary, Senior Analyst at Accenture judged the entries.

● **ISF at Department of ECE, Nandha Engineering College (NEC), Erode, Tamilnadu** organized following activities: (i) A workshop on "Advances in Robotics" on **Aug 5, 2023**. Dr S Kavitha, Prof & Dean / ECE, NEC, welcomed the group and stressed the relevance of robots for industry. Ms Sowmiya Santhanam, founder & CEO, Seventh Sense School of Robotics, Erode, led the session. (*ii*) On **Sep 2, 2023**, the ECE Dept and IETE Erode Centre held a workshop on"Android APP Development". The resource person, Shri R K Bhoopesh, Software Engineer Trainee, Aspire Systems, Chennai, led the workshop. This programme was attended by ECE III yr students. (*iii*) On **Sept 26–27, 2023**, Shri R K Bhoopesh, Software Engineer Trainee, Aspire Systems, Chennai, led the Java Programming workshop. Dr S Kavitha, NEC, welcomed the group and highlighted the Java's relevance in IT. Ms P S Niji and Shri T Jayachandran, Asst Profs of ECE, organised the workshop. (*iv*) On **Sept 29, 2023**, Tessolve Semiconductor Pvt Ltd in Bangalore assisted with a webinar on "Job Opportunities in VLSI and Embedded IoT," which was moderated by Dr S Madhavapandian, Design Lead, and Shri Napolean Mani, RTL Design Engineer. Prof Dr S Kavitha, NEC, greeted the group and highlighted VLSI design and embedded systems. The workshop was organised by Assoc Profs of ECE Shri P Logamurthy and Ms P S Niji. (*v*) Shri M Jeyhind, Solution Architect, Elemica Frankfurt, Germany, conducted the seminar on 'Future Scope in AI for Entrepreneurs' on **Oct 10, 2023**. Ms P Kokila Asst Prof/ ECE and Ms R Monica, Asst Prof/ ECE organized the workshop. (*vi*) On **Jan 9, 2024,** ISF and IETE hosted an industrial symposium with the theme "Advances in the Cellular Mobile Data Communication and Networking." The assembly was welcomed by Dr S Kavitha, Prof & Head/ECE of NEC, who also spoke about the significance of cellular mobile data communication for students in the core industry. The resource person was Prof K Jayaraman Iyer, a former senior scientist at the Vikram Sarabai Space Centre (VSSC) and the Honorary Director of the Industry Institute of Interaction at M/S United Electronics in Bengaluru. The seminar was planned by assistant professor of ECE Ms V Parameshwari.

● **ISF at EC & CS Dept of Thakur College of Engineering, (TCET) Mumbai,** held following 10 activities. (*i*) A seminar titled, "Emerging Field of IOT" was organized on **Aug 11, 2023** by Shri Hrishikesh Indulkar. The speaker explained IOT and its importance and also discussed the growth of IOT. Students learned how it works through interactive exercises. He later stressed how IOT devices collect large volumes of environmental data. Connectivity, smart devices, industry applications, problems, security, and real-time monitoring were all covered. Then, he discussed IOT topics including edge computing, 5G connectivity, and AI for improved decision-making. Everything was cleared up in a Q&A session at the end. Dr Hemant Kasturiwale (IETE Branch Counsellor & HOD E&CS) and Shri Sumit Kumar, IETE Faculty in-charge guided the proceedings, prepared by Ms Shreeya Tiwari. A total of 63 students participated. (*ii*) "Emerging Field of Cyber Security" seminar was led by Shri Hemat Chaubey on **Aug 25, 2023**. He gave a summary of cyber security's key components and its significance. He described the development and possibilities of this area. He provided a fascinating case study that elaborated on the essential knowledge and resources required to start a career in cyber security. The speaker continued by outlining the steps involved in creating an extensive project portfolio and a strong resume with a cyber security concentration. Additionally, insightful information was provided about how to look into off-campus cyber security career opportunities and how to ace interviews in this field. (*iii*) On **Sept 12–13, 2023**, a department-level SIH review session was held in order to find and choose creative ideas from members that might be included in the Smart India Hackathon (SIH). The ideas submitted were carefully evaluated by a team of experts who focused on their originality,

viability, and fit with the department's goals. The ideas with the highest ranking were selected for additional study and possible incorporation into SIH, demonstrating sincere dedication to promote creativity and helping to resolve practical issues. Opportunities for mentorship were also provided to assist participants in refining their ideas. The evaluators were Dr Hemant Kasturiwale (IETE Branch Counsellor & HOD E&CS), Dr Sanjay Patil, Mrs Jyoti Kori, Mrs Rupinder Kaur & Shri Varun Mishra. Also present was Shri Sumit Kumar (IETE Faculty in-charge). (*iv*) Conducted a seminar in conjunction with "Zest Global Education" to impart knowledge regarding global education on **Oct 12, 2023**. A representative from Zest Global Education provided a concise summary of the organization's mission and its crucial function in enabling worldwide educational experiences that bring about significant change. Each points addressed by the speaker was an essential aspect of global education. The participants engaged in an examination of the importance of international exposure, the quest for scholastic distinction, and the specialised programmes provided by Zest. Incorporating perspectives on research avenues, language proficiency, career prospects, and individual development in a global framework enhanced the event's value as a comprehensive manual for prospective students. The presentation effectively incorporated real-world examples and success stories to provide concrete illustrations of the transformative potential of global education on both personal and professional paths. The proceedings were overseen by Dr Hemant Kasturiwale, IETE Branch Counsellor and HOD of E&CS, and Shri Sumit Kumar, IETE Faculty in Charge. (*v*) Conducted a seminar in collaboration with "EduGuide Overseas" to provide insights on global education on **Oct 19, 2023** for a total of 100 students. The key speaker captivated the audience by decoding the $E = MC^2$ formula in the context of education. The acronym was ingeniously redefined, *viz.*, E = *Empowerment*: The importance of studying abroad in empowering individuals through exposure to diverse cultures, ideas, and academic environments was emphasised by the speaker. This expanded viewpoint fosters individual development and cultivates a global awareness. M=*Management*: International education instils effective time management, adaptability, and resourcefulness in students. It equips them with the skills needed to navigate various challenges in a foreign academic setting. C = *Communication*: Studying abroad enhances communication skills, breaking down language barriers and fostering effective cross-cultural communication. This is a crucial skill in today's interconnected global society. C = *Confidence*: The experience of studying in a foreign country builds confidence, resilience, and self-reliance. Overcoming challenges in an unfamiliar environment contributes significantly to personal and academic development. The speaker also emphasised goal-setting and offered advice on developing and achieving educational goals. The conference also covered international UG and PG courses, their benefits, and career options. Dr Hemant Kasturiwale (IETE Branch Counsellor & HOD E&CS) and Shri Sumit Kumar (IETE Faculty in-charge) supervised the proceedings. (*vi*) Ms Jalpaben Bhatt, Asst Prof and Shri Sumit Kumar, IETE faculty in-charge, led an industrial visit to Vervali Systems Pvt Ltd, Vasai-Virar on **Oct 21, 2023**. Shri Nilesh Jain explained the company's journey, emphasising on finances and operations. The session included a facility tour to demonstrate business processes. The event ended with a networking session for attendees and industry experts. Participants gained a wider understanding of entrepreneurship

from this comprehensive experience. (*vii*) At IETE-TCET on **Feb 2, 2024**, Dr Jalpaben Bhatt taught students how to write research papers professionally. Effective research paper writing abilities were covered at the session. Participants were instructed on IEEE format and diagram and flowchart use. The guides' real-world examples and practical applications enhanced the session. Networking opportunities with peers and teachers allowed participants to collaborate and share expertise. (*viii*) Held a hardware hackathon "ThinkML" from **Feb 8–15, 2024**, to boost students' inventiveness and ML application experience. Sh Hemant and the IETE team gave an outstanding opening session. Students received data sheets and problem statements to start the Altair hackathon. Students presented project progress and discussed development ideas. This online session included core members, faculty in-charges, Dr Hemant Kasturiwale and Industry expert Fayyaz Shaikh from Smowcode. (*ix*) Shri Fayyaz Shaikh, who helped design and promote Smowcode as a leading IoT platform, held a seminar on "Smowcode IOT" on **Feb 14, 2024**. The speaker covered IoT development basics like coding proficiency, logical frameworks, and code execution delays. Smowcode was demonstrated in real-world applications, from LED flashing to servo motor control. His engaging instructional style and debugging skills helped participants understand key concepts and solve problems. (*x*) Held a "Pre-Conference Workshop Inauguration & Expert lecture on Critical Thinking & Innovation" on **Feb 17, 2024**, with Dipan Sahu, Asstt Innovation Director, Ministry of Education's Innovation Cell & AICTE, Govt. of India. He stressed the significance of critical thinking and review for industrial growth and sustainability. Darwin's notion of survival of the fittest applies to today's opportunity-driven entrepreneurship and its role in innovation, the speaker said. The speaker underlined the importance of time management and skill acquisition to be competitive in a changing world. This session benefited a group of 150 individuals.

● The Dept of Electrical and Computer Engineering (ECE) at **Budge Budge Institute of Technology-Kolkata**, in partnership with the BBIT Chapter of the IETE Students Forum (ISF), conducted a practical workshop entitled "Arduino & its Actuator Interfacing (AAI-2023)" for the students on **Aug 25, 2023**. The main objective of the workshop was to provide students with a foundational understanding of the interfacing process between actuators and embedded systems, followed by an exploration of its practical applications across multiple domains. Approximately 32 ECE students were in attendance at the workshop. Dr Sumanta Bhattacharyya, ISF-BBIT Coordinator, was the resource person for the event. Mrs Kakali Sengupta Das delivered the welcome address, which was followed by the addresses of Ashok Kumar Shaw, Prof (Dr) Siladitya Bandyopadhyay, Prof (Dr) Probhas Bose, and Narendra Nath Jana. The vote of thanks was proposed by Mrs Nibedita Mukherjee, Co-coordinator of ISF-BBIT, to the attendees, the resource person, and other dignitaries.

● On **Aug 29, 2023**, **ISF** at **K J Somaiya Institute of Technology (KJSIT), Sion, Mumbai**, held "Celebrating smashing success of IETE-Shri P P Malhotra Memorial Award 2022 and an Expert Talk on Generative AI". Dr Vikas Gupta (Hony Secretary), Shri Kartik Parikh (Special invitee), Shri N K Karnani (IETE Mumbai EC Member), Dr T P Vinutha (IETE Mumbai TPC Convener), Shri Yash Sanghavi (Founder of Yanisa), Dr Suresh Ukarande, and Dr Sunita Patil attended the event. IETE-KJSIT Convener and event host Dr Priya Hankare thanked the

committee members for their contributions. Hony Secretary Dr Vikas Gupta highlighted IETE Mumbai Centre's initiatives and highlighted the importance of P P Malhotra Award. The IETE Mumbai Centre recognised KJSIT Principal Dr Suresh Ukarande for his accomplishments. He later emphasised the event's relevance in promoting academic success. Dr J W Bakal, Past President of IETE New Delhi, then gave a video message about his experiences. Dr Milind Nemade also spoke about IETE awards, inspiring attendees to excel. After that, Shri Yash Sanghavi's Generative AI lecture engaged participants. Later, during the Q&A session, all event questions were answered on the spot in clear, concise, and well-explained ways. The event's dedicated portions promoted IETE's goal and encouraged participation. Dr Medha Asurlekar graciously thanked all attendees, presenters, and organisers to end the event.

● The **ISF** at **Progressive Education Society's Modern College of Engineering (PES(MCOE)), Pune** and the Electronics and Telecommunication Department hosted an expert discussion on "Recent developments in VLSI Technology and Verilog Design" on **Sept 15, 2023**. The session was led by Mrs Archana Matade, Senior VLSI Engineer, WIPRO, Pune. The guest lecturer began by explaining VLSI, CMOS, and CMOS fabrication. She discussed and simulated circuit design using DSCH and Microwind software. Latest FINFET technology was also discussed. Before concluding, she explained Verilog. Important dignitaries present include- Dr (Mrs) R S Kamathe, Dr (Mrs) M S Kanitkar, Mrs S G Watve, Dr (Mrs) D P Adhyapak, Dr (Mrs) AP Laturkar. An expert talk was arranged on "Overview of JavaScript Frameworks and their Application for Web Development" for II Yr students on **Oct 07, 2023.** The Speaker Amrita Lakade, Project Manager KalpTechnologies Pvt Ltd, Pune, led the session. Students mastered JavaScript's grammar, basics, and best practices for effective coding. Students learned to construct sophisticated web apps in framework-specific courses. The speaker explained JavaScript, AngularJS, Node.js, and Vue.js. The notables present were Dr (Mrs) R S Kamathe, Mrs S Thuse, Mrs V N Jirafe.

● **ISF** at **ECE Dept, Lakireddy Balireddy College of Engineering (LBRCE), Mylavaram, AP,** in association with the Vijayawada Centre organized a guest lecture on 'Exploring the synergy between Computer Architectures and FPGA Implementation' by Dr B Naresh Kumar Reddy, asst professor, ECE Dept, NIT Tiruchirappalli on **Sep 15, 2023**.

● **ISF** at **E&T Dept, Dr Rajendra Gode Institute of Technology and Research (DRGITR), Amravati, Maharashtra,** was installed on **Sep 25, 2023**. Chief guest Dr A P Thakare, IETE Vice President & Chairman, TPC, Dr A V Parwate, Principal DRGIT & R, Amravati, Dr R M Deshmukh HOD (EXTC), and Departmental ISF Coordinator Prof K M Pimple inaugurated the function. Dr Deshmukh explained the ISF installation's purpose and academic value in his address. Dr Thakare described IETE's engineering and technical contributions. Dr Parwate encouraged students to enter Technical Paper Presentation and Project contests. Prof Pimple introduced the student ISF committee and their roles. The Chandrayan and Sustainable Energy poster competition followed the ceremony. Dr A P Thakare inaugurated and evaluated the competition. Thanks to Hon'ble Shri Yogendraji R Gode, President IBSS, the programme was successful. Vote of thanks was proposed by Prof K M Pimple at the end.

● The seminar titled "Industrial IoT and Predictive Analytics" was jointly organised by the **ISF at KGISL Institute of Technology, Coimbatore** for the inaugural of 2023 ISF batch with 125 Students on **Sept 26, 2023**. Dr V Anantha Narayanan, Hony Secretary of the IETE Coimbatore Centre at Amrita School of Engineering, Coimbatore, served as the resource person.

● **ISF** at **ECE Dept of Vivekanandha College of Technology for Women (VCTW), Elayampalayam, Tiruchengode Tamil Nadu,** conducted a webinar on 'Recent Trends in FPGA' on **Sep 29, 2023.** The Guest speaker Dr M B Praveen Kumar, Asst Prof, Dept ECE, Hindustan Institute of Technology and Science, Chennai provided an overview of FPGA and implementation and execution with the Xilinx, where VHDL and Verilog coding are also executed. He explained front-end and back-end processes.The Executive Dir, Prof (Dr) S Kuppuswami, Vivekanandha Educational Institutions, graced the occasion along with Prof (Dr) M Karunanithi, Chairman & Secretary, Vivekanandha Educational Institutions & Hospital, who presided over the function. Another guest lecture by Dr M Prabu, Assoc Prof, CSE Dept, National Institute of Technology, Calicut on 'Machine Learning and its Usage' was organized on **Feb 29, 2024.** Ms S Sandhiya 3rd yr EC welcomed the gathering and Ms L L Limla Shanoo 4th yr EC introduced the chief guest. The speaker explained that Machine learning is an application of artificial intelligence that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Ms B Subhapriya 3rd yr EC proposed vote of thanks Paricipants were 133 in number. The ECE Dept set up a hands-on training session on "Embedded and IOT" on **Mar 1, 2024**. The event was graciously hosted by Ms V Deepika, who welcomed everyone, and Ms P Aswni presented the speaker, Sh R Praveen, who is the lead technical at SAN Technovation in Erode, gave a presentation on Arduino software. The vote of thanks was made by Ms L L Limla Shanoo. 72 students showed up.

● The inauguration of the **ISF** at the ECE Department of the **Nalla Narasimha Reddy Education Society's Group of Institutions School of Engineering (NNRESGI), Hyderabad,** took place on **Sept 30, 2023**, through the 'IETE Congregation' event. The chief guest was Dr V Gunasekhar Reddy, Retd-DIG, Police Officer & the then President-IETE, and the guest of honour was Dr K Jaya Sankar, Professor, ECE, Methodist College & Vice-President, IETE. Dr C V Krishna Reddy, Dir, NNRESGI and member of the GC; Er Nuli Namassivaya, Assoc Prof, ECE, MVSR and Hyderabad Centre Chairman; Dr S Ravi Chand, Professor and Head, ECE, NNRESGI serving as IETE Convener; Dr K Rameswariah, Professor and Head, CSE, NNRESGI; and Dr B Hari Prasad Naik, Associate Professor, ECE, NNRESGI serving as IETE Coordinator were present. Also in attendance were ISF-elected students, faculty and staff, including BTech (ECE) and other departmental personnel. The primary objective of this programme was to enhance the knowledge and comprehension of the teaching, research, and student communities regarding the mission and purpose of the IETE organisation and ISF forum. There were 143 students and 24 faculty and staff in attendance. NNRESGI was granted "Organisational Life Membership" status with IETE. The ECE Dept, NESIP Team effectively conducted a five-day workshop titled "Machine Learning/Deep Learning Algorithms for Image Processing Applications Using Python & MATLAB" for IV BTech students from **Oct 16 -21, 2023**.The symposium elucidated the significance of deep learning and

machine learning algorithms in the realm of digital speech and image processing. During the workshop, faculty members of the department deliver theoretical lectures and exhibit software and toolboxes. There were 30 participants in the workshop. The students gained knowledge of toolboxes for signal processing, image processing, MATLAB, and Python. Following the session, students gained the ability to implement programming code, construct car models utilising MATLAB and Python, analyse image, audio, and speech signals, and employ Machine Learning tools. Faculty Coordinators for the five-day workshop included Shri Ch Phanidra, Dr V Sravan Kumar, Mrs K Madhavi, Dr S Karthick, and Mrs E Suneetha. The workshop was inaugurated by Director of NNRG, Dean-School of Engineering and Head of the Department, ECE. Dr S Ravi Chand, HoD-ECE, Dr C V Krishna Reddy, Dr G Janardhana Raju, and the Director, NNRG Dean-SoE, addressed the gathering. A one-week Student Development Programme (SDP) on "Advanced VLSI Design: RTL to GDS II" was held for IV BTech students from **Oct 16-21, 2023**. This SDP aimed to provide insights and experience on advanced design and verification EDA technologies. SDP focused on designing, implementing, and verifying Digital VLSI Logics using Verilog HDLs and Advanced IP cores. Another hands-on workshop covered physical layout design, implementation, and verification utilising backend EDA tools. Final-year students used sophisticated Artix-7 FPGA, Zynq-7000 SoC, and Xilinx Vivado ML Enterprise for design, verification, and synthesis. After completing the student development programme, they could design, verify, synthesise, simulate, and realise digital logics using IP Cores and sophisticated FPGAs. All 42 SDPparticipants received participation certificates from the institute. Ms K Shiva Prasanna, Dr B HariPrasad Naik, Ms N Lavanya, and Shri K Ramesh, Ms VV Nandini, Dr T Rajasekhar coordinated the one-week SDP as resource persons. The program ended with a valedictory session, in the presence of Director, Dr C V Krishna Reddy and HoD, Dr S Ravi Chand. The Dept of ECE , along with the Institution's Innovation Council (IIC) and newly formed ISF, organised a SDP on "Ideas to Reality: Embedded Systems & IoT" from **Oct 16-21, 2023** through the newly formed club NNRG Embedded & IoT Nerds (NeIoN) Team. This programme was specific to BTech (ECE)-IV year, I Sem students in the Embedded Systems & IoT sector and aims to teach them concepts, ideas, and current trends and applications. Dr Ravi Bolimera led the NEIoN Team, which included Asst Prof K Rambau, Asst Prof Nitesh Gaikwad, Asst Prof M Sharath Chandra, Asst Prof B Saidulu, and Asst Prof Koustubh Kulkarni. 57 students (19 Project Batches) attended all workshop sessions. The NICoN Research group of the Department of ECE successfully organised a one-week workshop titled "Entrenching Ansys HFSS & MATLAB for communication & Networking" for IV Yr BTech students during **Oct 16** to **Oct 21, 2023**. The objective was to offer a comprehensive understanding of the significance of ANSYS HFSS and MATLAB Software in fostering student development in the areas of wireless communication, signal processing, and antenna design, among others. The workshop consisted of theoretical lectures and demonstrations of the software and several toolboxes by department faculties. The students were introduced to MATLAB code, V2V communication, LIFI technology, antenna design, and communication toolboxes. A total of 15 students, divided into 5 project batches, participated in the programme. The workshop was held in collaboration with the ISF. Dr S Rekha and Shri P K Kulkarni

served as Faculty Coordinators for the one week programme. "IETE Foundation Day" was organized on **Nov 2, 2023,** to commemorate the IETE's founding. On the day, the department held a "Project Expo". As part of their small project, seniors displayed working models. Students from third year attended the project fair. Final-year students enthusiastically addressed many questions at the event. The students heard from Fellow-IETE and department Assoc Prof PK Kulkarni. He discussed the roles of IETE and ISF forums in several sectors. He also discussed IETE student forum relevancy and its student use.

● **ISF at Panimalar Institute of Technology (PIT), Chennai, TN**, in the ECE Dept (i) Arranged a lecture by certified nutritional adviser Smt Gayatri Karthik on the subject of "Optimal Health for Women" for IEEE Day celebration 2023, which was held on **Oct 2, 2023**. She provided helpful advice on women's wellbeing. (ii) Arranged a guest lecture by Dr M Sowmiya Manoj on **Oct 20, 2023**, titled "Interplay of AI and Biometrics: Challenges and Opportunities," which covered security and privacy issues pertaining to biometrics and AI. Using examples from real-world situations, she emphasised the benefits of these technologies for law enforcement and healthcare. She also discussed how AI and biometrics work together and looked at potential futures. (iii) Hosted a webinar titled "Let's Explore Xtreme" on **Oct 21, 2023**. The speaker, Ms Sushmitha, Chairman of the IEEE PIT SB, REM scholar, member of the organising committee of the IEEE MAS SAC, and Technical Co-Lead of the IEEE MAS MDC, explained the purpose of IEEE Xtreme, its rules and regulations, the competition's history and structure, the salient features of the 16.0 edition, and the prizes given to the winners.

● On **Oct 3, 2023**, the EC Dept of **ISF, Govt Polytechnic Chhotaudepur, Vadodara, Gujarat**, facilitated a technical visit to Railway Locoshade Chhani Vadodara with the help of Shri Aashish Patel, Railway BRC. It provided technical training to personnel in groups 'C' and 'D' of the Electrical dept across all four disciplines: Electric Loco and MEMU Maintenance and Operation, Traction Supply Distribution, and General Services, which encompasses air conditioning and train lighting. Shri V H Ghanchi, Ic HOD EED, and S R Mehta, Lecturer EED, guided thirty students as they travelled to the railway locomotive. On **Oct 7, 2023**, a visit was arranged for KJDE engineers, a design engineering firm located in Vadodara. The facilitator was Shri Aashish Patel, the director of the company. Electrical Engineering and Design firm KJD Engineers provides services to the manufacturing, oil and gas, chemical, HV/EHV substation, renewable energy, and infrastructure sectors. Twenty students, under the guidance of Ic HOD EED Shri V H Ghanchi, observed the complete design process and specifications of a chemical plant. The ISF hosted an expert presentation on recent trends in "Switchgear and Protection" on **Oct 18, 2023**, having Shri Prahant Pandya, Director of Adaptive Engg Pvt Ltd, Vadodara, as the chief guest. According to him, as a result of the rapidity with which the government is advancing smart grid initiatives, various types of switchgear that are more compact, dependable, environmentally friendly, and require minimal installation and commissioning time are required for smart grid operation. The "Industrial Automation" one-day workshop was held on **Dec 16, 2023**. The mentor for the one-day theory and practical workshop was Principal I/c Shri K R Chaudhri, and the EED lecturers Shri VH Ghanchi and Shri SY Gandhi of Alphatech Automation (Prolific)-PLC SCADA Training

in Vadodara coordinated the event. The two-session course provided students with practical experience on a variety of systems, including PLC, SCADA, and HMI. The first session covered industrial automation theory and discussion. Students spent the second part developing a variety of PLCs and HMI systems. Industrial Automation was the topic of a theory and practical workshop hosted by the EE Department at ISF, Govt Polytechnic, Chhotaudepur, Vadodara, Gujarat, on **Feb 26, 2024**. The workshop was organised in collaboration with Vadodara Centre and Safcon India Training, Vadodara, and was overseen by Shri KR Chaudhri, I/c Principal of Government Polytechnic, Chhotaudepur. The first session covered theoretical material, while the second session provided students with practical experience with systems such as PLC, SCADA, and HMI. The lecturers Shri VH Ghanchi and Shri SY Gandhi coordinated the event. The following two events were scheduled for **Mar 11, 2024**: A discussion of (i) "The Function of Substations in Distribution" and " AC Machine Performance Analysis" by Hiren Patel, Assoc Prof in the EE Dept at The MS University of Baroda, Gujarat. The event was attended by Shri KR Chaudhri, I/c Principal, Shri V H Ghanchi, I/c HOD, and Shri RM Kantharia, lecturers.

● The **EC Dept of ISF, PSG College of Technology (PSGCT), Coimbatore, Tamil Nadu**, hosted Prologue'23 on **Oct 4, 2023**. In an engaging address, faculty advisor Dr P Saravanan detailed the institution's aspirations, objectives, and vision for the coming academic year. The day's distinguished guest, Mrs Pournima Venkatraman, imparted knowledge and insightful experiences to the audience in her eloquent address. On **Oct 30, 2023**, Inquizition was organised in the form of two sessions. Eleven teams of two individuals each. The format of this competition was two rounds. Approximately eleven teams of two participants commenced. In the first round, Engram, participants were divided into pairs: one answered questions while the other committed arbitrary image clues to memory. Five teams participated in the second round of Bioquest, determined by their scores from round one. **Dec 10, 2023**, hosted the online event Fail Tales, which aimed to illuminate the lesser-known experiences of scientists who persevered despite career setbacks and failures to make significant contributions to their respective disciplines.

● The **ISF** at the **ECE Dept** of **Sri Sairam Engineering College (SSEC) West Tambaram, Chennai, Tamil Nadu**, organized the following activities: *(i)* A placement lecture entitled "Understanding the Job Market" on **Oct 4, 2023**. According to Shri Santhana Krishnan, a data engineering analyst at Accenture Solution Pvt Ltd, Chennai, it is imperative for individuals aspiring to become professionals in the fields of engineering and information technology to have an in-depth understanding of the job market. In order to align their skills and qualifications with the demands of the job market, job applicants must remain informed about industry trends and emerging technologies. Engaging in professional networking, participating in industry events, and consulting career counsellors can yield significant insights pertaining to prospective career trajectories and employment prospects. Additionally, in order to flourish in the highly competitive fields of engineering and IT, it is critical to maintain a flexible mindset and consistently enhance one's skill set. This practice guarantees a solid foothold in the dynamic labour market. *(ii)* An alumni lecture on "Resume building" presented by Ms Dharshini, Pega Developer at Infosys, on **Oct 12, 2023**. The

webinar centred on the process of constructing an impactful resume that would secure a job with one's ideal employers. In addition to providing a broader perspective on what should be included on a resume, the speaker elaborated on this by relating her interview experiences and the current opportunities available to engineers. There were 125 attendees in attendance. *(iii)*The"Zenista 2K23 Symposium-Electrony" was convened on **Oct 19, 2023**. Ms R Santhabharathi, senior Space Scientist at the UR Rao Satellite Centre, ISRO Bengaluru, served as the chief guest. She underscored the significance of fundamental subjects in electronics and communication that are indispensable for practical applications and innovations. With 225 attendees, she also emphasised the importance of establishing a future vision or objective and the necessity for students to achieve their goals through determination, passion, and effort *(iv)* On **Nov 20, 2023**, a Tech talk entitled "Recent Advancements in Integrated Circuit Design for IoT Applications" was delivered. *(v)* On **Nov 25, 2023**: An online quiz event titled "Processors – MICROVERSE" was arranged. The participants explored the core of computing, placing particular emphasis on processors. Acquired invaluable knowledge regarding the complexities of processors, encompassing fundamental operations as well as the most recent advancements that are reshaping the digital environment. *(vi)* From **Nov 27** to **Dec 1, 2023**, a five-day value-added course entitled "Embedded System & IoT with Raspberry Pico and Node MCU." Shri A Vignesh Kumaran and Shri R Ramachandran of Pantech e Learning, Chennai, served as resource persons. *(vii)* Sharath Kumar R G, AI/ML Data Science Engineer Trainee at Sify Technologies, presented a webinar titled "From Algorithms to Intelligence: Demystifying AI, ML, Deep Learning, and NLP" on **Nov 28, 2023**. *(viii)* On **Dec 14, 2023**, an alumni lecture titled "Empowering Dreams and Envisioning Thoughts" was delivered by Ms Saliha Bathool A, an associate dedicated to packaged app development, Accenture.

● Together with the IETE Vijayawada Centre, the **ISF at the ECE Dept of Chalapathi Institute of Technology (CIT), Mothadaka Guntur, AP,** hosted a four-day symposium on "Embedded systems using IOT" from Oct 4-7, 2023. The ISF hosted an elocution contest on **Dec 2, 2023**, regarding the "Importance of the Vote in Democracy."

● **ISF** at the **ECE Dept of Usha Rama College of Engineering & Technology (URCET) in Gannavaram, Krishna Dist** jointly with IETE Vijayawada Centre hosted a one-week training programme on "Raspberry Pi Pico and its practical applications" from **Oct 4–11, 2023**.

● The **ISF** in the **ECE Dept of RMK Engineering College (RMKEC), Tiruvallu Kavaraipettai, Tamil Nadu**, arranged the subsequent activities: (i) organised a 'Photography Competition' on **Oct 5, 2023**, showcasing many categories including nature, portrait, architectural, and creative photography. Participants were given the chance to submit a maximum of two unique images each category, with the possibility of winning enticing prizes. A total of 65 individuals were present. (ii) Hosted a 'Quiz Competition' on **Oct 11, 2023,** specifically for II, III, IV-year students. The event had a total of 55 participants. (iii) Hosted a 'TED Talk Competition' for II, III & IV-year students on **Oct 11, 2023.** This event served as a forum for participants to demonstrate their inventiveness and passion on the TEDx stage, where innovation, creativity, and eloquence came together. A total of 45 individuals were present. (iv) Hosted a 'Code Jam' event on **Oct 12, 2023**, specifically for

II, III, IV-year students with an aim to provide a platform for students to demonstrate their exceptional coding abilities and problem-solving talents. Students engaged in an environment filled with innovation and creativity as they confronted difficult tasks to expand the limits of their coding skills. A total of 65 individuals took part. (v) On **Oct 13, 2023**, ISF arranged an 'ASTRO-QUIZ' for students in their II, III & IV years. The purpose of this event was to allow students to delve into the enormous enigmas of the cosmos through an exhilarating quiz competition, where they could demonstrate their understanding of celestial bodies, cosmic events, and the marvels of space. The number of participants was 65. (vi) Hosted a 'Code Conquest' event on **Oct 19, 2023**, providing students with the opportunity to demonstrate their coding expertise and problem-solving abilities in a thrilling competition. The opportunity provided students with the chance to delve into intricate problems, break boundaries, and unleash their coding ingenuity. A total of 55 students were present. (vii) On **Nov 9, 2023**, a 'Mind Map competition' was organised. The Eco Club organiser has been leading several influential environmental projects, overseeing countless significant activities during the academic year. The club has constantly promoted sustainability by organising a successful tree plantation drive that enhanced the greenery on the campus and implementing a trash reduction campaign to limit the usage of single-use plastic.

● The **ISF** of the **Dept of ECE, Velagudi Ramakrishna Siddhartha Engineering College (VRSEC), Vijayawada, Andhra Pradesh,** in collaboration with the Vijayawada Centre, hosted a seminar on 'Career Opportunities in VLSI' on **Oct 6, 2023**. The seminar was conducted by Shri M Venkata Sai Krishna, a senior VLSI Design Engineer at NVIDIA, based in Bangalore. The ISF also commemorated the birth anniversary of Dr APJ Abdul Kalam (15th October) as 'Innovation Day' on **Oct 16, 2023**. A model/proto type presentation for the 'Innovative Idea Contest Best Start-Up' (Central Level) was demonstrated at this event.

● **ISF** at **ECE Dept, SRK Institute of Technology (SRKIT), Vijayawada, AP** in association with the IETE Vijayawada centre organized a guest lecture on 'lmage Processing & its Applications" on **Oct 6, 2023 by** Dr B Rajasekhar, Chairman Vijayawada Centre, Vijayawada, AP.

● On **Oct 7 & 8, 2023**, the EC Dept of **ISF, Madhav Institute of Technology and Science (MITS), Gwalior, MP**, hosted Codathon 2.0, an intercollegiate coding competition, designed to inspire aspiring programmers. 380 people participated in the event, which was sponsored by Social Eatia, Eco Fitness, and Coding Ninjas and had a Rs 15,000 prize reward. Dr Vandana Vikas Thakre, Prof Rachit Jain, and Prof Prateek Bhadauria were the faculty coordinators. Dr P K Singhal, the Centre Chairman, and Dr R K Pandit, the Dir of MITS, were thanked for their unflinching support. The succeeding rounds covered subjects including strings, recursion, link lists, 2D arrays, stack, tree, and queue, while the first two rounds consisted of multiple-choice questions (MCQs) covering OOPS concepts and basic code creation. Dynamic programming questions were asked in an open-book format during the last round. Every round had eliminations, and the winners could win up to 15,000 in addition to Coding Ninja merchandise. Contestants from round two received coupons for Social Eatia. Together, IETE members created Codathon 2.0, a vibrant coding showcase enabling students to showcase their skills. It ended on **Oct 8, 2023**, with Nodal Level Rounds 3 and 4. The competition assessed algorithmic thinking and problem-solving abilities in addition to fundamental coding knowledge through challenging questions. In Round 3, participants confronted algorithmic challenges and intricate data structures. In this round, competitors had to apply their theoretical understanding and practical skills to solve real-world problems. The last round, round 4, competitors were put to the test with more difficult coding issues that called for more coding expertise and analytical thought. The winning pairs were (i) Paras Khandelwal and Ritika Yadav (ii) Harsh Sahu and Rudransh Shrivastava (iii) Pranav Malao and Bhavesh Yaduwanshi. In order to commemorate the triumph of Codathon 2.0, ISF arranged an Institute Level award ceremony called Vijay on **Oct 20, 2023**. The occasion provided a forum for honouring and recognising the outstanding accomplishments of the coding competition competitors. Dr Manish Dixit, Dr P K Singhal, and Dr Vandana Vikas Thakre were present during the event. Codathon 2.0 came to a close with an award ceremony, when 70 participants from the institute showcased their coding skills. The prize distribution, where victors received goods from Coding Ninja and a portion of the Rs 15,000 prize pool as a token of appreciation for their exceptional performance, was the high point of the event. With certificates recognising their involvement, all participants were given recognition and encouragement in addition to the winners. On **Oct 22, 2023**, 70 people took part in the online mode, which provided a forum for thanking Dr RK Pandit, the Director of MITS, for his steadfast support. The institute presented an online webinar on **Nov 4, 2023**, with the topic "Campus to Career: On-Campus Placements" at the Institute level. The webinar offered insightful information about the shift from college life to professional careers. The webinar, which was held in association with Sateek, included mentors Shri Ayush Dubey, Shri Ishan Shrivastava, and Shri Sangmitra Tamrakar. These mentors, who are currently working at Visa, Browser Stack, and Oracle, respectively, and have bachelor's degrees from Jabalpur Engineering College, offered their knowledge and experiences in the industry. The goal of the webinar was to help students navigate the complexities of preparing for general placements by providing them with useful guidance and real-world understanding of the workings of on-campus placements. A thought-provoking online webinar titled "Campus to Career: Off-Campus Placements" at the Institute Level was presented by the institute on **Nov 5, 2023**. Mentors Shri Sameer Bamanha and Shri Ayush Dubey were included in this webinar, which was organised in association with Sateek. The purpose of the programme was to give students useful advice on how to prepare for off-campus opportunities through general placement. The mentors provided insights into the special opportunities and challenges that come with off-campus placements by sharing their knowledge and personal experiences. Effective resume writing, interview techniques, and the abilities required to succeed in the job market were among the subjects discussed. The mentors effectively led students by sharing their personal experiences and real-life ideas, which struck a chord with the audience, based on their own experiences in the tech business. There were 69 people in attendance during the webinar. A thought-provoking online workshop called "GATEway to Success: Navigating the Future" was hosted on **Nov 17, 2023.** Renowned principle Scientist Er Yasho Vijay Singh Yadav of IIT Kharagpur led the workshop. The purpose of the webinar was to inform the students about job opportunities in the core

and to assist them in preparing for the GATE IETE is grateful to Dr P K Singhal, IETE chairman, Dr Vandana Vikas Thakre, faculty coordinator, and Dr R K Pandit, director of MITS, for their unwavering support and direction.

- **ISF at ECE Dept, RISE Krishna Sai Prakasm Group of Institutions, Ongole, AP** in association with the Vijayawada Centre organized a workshop on 'Advanced IOT applications" from **Oct 9 – Oct 11 2023**, by Shri K Sambasiva Rao, scientist-E, RCIDRDO, Hyderabad.

- **ISF at ECE Dept, Guntur Engineering College (GEC) Guntur, AP** in association with the IETE Vijayawada Centre organized a 5 Day Boot Camp on 'IOT & its Applications" on **Oct 9-13, 2023**.

- The **ECE Dept at Roever Engineering College (REC), Elambalur, Perambalur, Tamil Nadu**, organised the following activities as part of the ISF: A workshop titled "Tinkercad 3D Design using Arduino" on **Oct 10, 2023** by Shri S Ebenezer Paul, an Embedded and IOT Developer. The participants were educated about a browser-based electronic circuit simulator that is compatible with the Arduino Uno microcontroller. The session proved to be highly engaging and valuable for both students and faculty members, enabling them to conduct research and pursue creative real-time initiatives. There were a collective of 55 students present. *(ii)* A one-day workshop "PCB Design & Fabrication" conducted on **Oct 12, 2023** by Shri KC Tamil Venthan, Dir, Industrial Training Centre, LIFT India, Trichy. The workshop's objective was to impart information on comprehensive PCB designs, which includes using simulation tools to evaluate electronic circuits in a software environment, as well as the process of fabricating these circuits. A total of 72 youngsters took part. *(iii)* On **Oct 27, 2023**, Dr A Alfred Kirubaraj, Asstt Prof, Dept of ECE, Karunya Institute of Technology and Sciences in Coimbatore, conducted a webinar titled "Challenges of E-waste Management." The students and faculty members were educated on the appropriate methods of disposing and recycling electronic products. The seminar was highly engaging and effectively raised awareness among many stakeholders with the aim of mitigating the issue of inappropriate disposal of E-waste. A total of 118 individuals took part in the activity. *(iv)*Arranged a programme on **Oct 31, 2023**, entitled 'E-Waste Collection'. The occasion was commenced by the esteemed Chairman, Dr K Varadharaajen, of Roever Group of Institutions. Dr M Periyasamy, the Principal Incharge, made the Presidential address, while Dr Kalaiselvan, Professor and Head, offered the welcome address. The training proved quite beneficial for acquiring knowledge on the categorizations of E-Waste. Approximately 100 individuals were present. *(v)* Dr A Yogeshwaran, Asst Prof/ECE, Dhanalakshmi Srinivasan Engineering College (Autonomous), Perambalur, Tamilnadu, delivered a guest lecture on 'Feedback Amplifiers and Oscillators' on **Dec 7, 2023**.

- The **ECE Dept** at **Manakula Vinayagar Institute of Technology (MVIT), Kalitheerthalkuppam, Puducherry, TN** organised the following activities as part of the **ISF**: *(i)* An Endowment lecture was delivered on **Oct 11, 2023** by Shri V S Raju, ITS, Joint Advisor at the TRAI Regional Office in Hyderabad. This lecture is part of the 'Telecom Regulatory Authority of India consumer outreach programme'. Regulatory bodies such as the Telecom Regulatory Authority of India (TRAI) frequently organise consumer outreach initiatives to inform and involve citizens in different parts of the telecoms industry. These programmes

have the objective of educating consumers about their entitlements and obligations, delivering current information on rules and policies, and gathering feedback on their encounters with telecommunications services. In addition, they prioritise consumer rights, advocate for digital literacy, and tackle accessibility and inclusion concerns to ensure universal access to telecom services. There were a total of 135 participants. *(ii)*Additionally, a guest lecture was organised on **Oct 14, 2023**. The lecture focused on the theme of 'Emerging Technologies in Artificial Intelligence in Wireless Communication' and was delivered by Shri Premkumar, a data scientist from Quantiphi Analytics Solution Pvt Ltd in Bangalore. Students derive substantial advantages from programmes that concentrate on developing technologies in Artificial Intelligence in wireless communication. A total of 135 individuals were present. *(iii)* Arranged an Endowment lecture on **Nov 4, 2023**, entitled "Immersive Experience in AR/VR Technology" by Shri Sanjay Kumar and Shri Senthil Kumar, Trainers from VY Ventures, Chennai. The lecture took place in the simulation lab and was specifically for II Yr ECE students. The number of participants was 110.

- **ISF** at **ECE Dept**, **Sri Venkateswara College of Engineering (SVCE), Sriperumbudur, Chennai Tamil Nadu,** organized the following activities: *(i)* A national level technical symposium called UPAGRAHA'23. Smt Ramya Gowri Sankaran, AGM, NEC, was the notable guest for the inauguration ceremony held on **Oct 11-12, 2023**. The welcome remarks were delivered by Ms Snekaa, the Secretary-RAIC. The chief guest who spoke on networks and 5G technology. Ten events were organised, with five events taking place on each day. Students in their II and III Yr from various departments and institutions comprised the intended audience. Competitors were evaluated on the basis of their problem-solving, critical thinking, and creative prowess; the victors of each event were subject to close scrutiny. Dr V Narayanan, Director LPSC, ISRO, presided over the valedictory ceremony as the principal guest. *(ii)* "Ice-Breaking Session" was scheduled for **Oct 17 & 18, 2023**. The purpose of this assembly was to extend a cordial welcome to the college and department. The perspectives of seniors regarding college life were invaluable, with an emphasis on the significance of academic and extracurricular participation. There were 75 attendees. *(iii)* Organised a guest lecture on "Autonomous Cars" for students in their III & IV years on **Oct 18, 2023**. Shri C Dhanasekar, electronics team leader (hardware expert), Valeo India Private Limited, Chennai, oversaw the session. The event was highly interactive, and students gained a deeper understanding of the various components utilised in global automobiles. In attendance were 110 individuals. (iv) On **Nov 8, 2023**, a "Robotics and Artificial Intelligence Club (RAIC)" was organised. The session began with a concise overview of the Arduino board and its corresponding connections. It was demonstrated to the participants how to install Arduino IDE and its interface and features were described. Arduino code fundamentals for connecting an LED, sensors, and actuators were taught to the students. Mentors discussed and described the functions of various libraries. (v) On **Dec 20, 2023**, an encryption and decryption-based event called "ENIGMA" was organised for first-year ECE students. In order to foster healthy competition and improve the technical abilities of the students, the event was planned. Students had the opportunity to hone their critical thinking abilities through participation in this activity, which involved encryption and decryption. There were 85 attendees.

● The **ISF** at **Easwari Engineering College (EEC) Ramapuram, ECE Dept, Chennai, Tamil Nadu**, coordinated the following activities: (i) Oganised the "அடத்தஇலக்கு2.0"career guidance programme on **Oct 12, 2023**, for a total of 65 students enrolled at Chennai High School, Thousand Lights. (ii) On **Oct 13, 2023**, a similar programme was organised for the students of Koilpillai Memorial Matriculation Higher Secondary School, Ramapuram, Chennai. Seventy-five individuals attended. (iii) On **Oct 30, 2023**, an inauguration was held to welcome the new office bearers for the 2023-24 term. Distinguished guest Shri K Karthikeyan offered insightful advice. Following addresses, introductions, and a retrospective video, the ceremony culminated in an interactive session that provided students with the opportunity to directly interact with the guest. (iv) Convened a "Tech Talk – Inception 2K23" on **Nov 6, 2023**, which was an opportunity for students to examine and deliberate on state-of-the-art subjects within the realm of technology. There were 55 participants.

● **ISF** at **ECE Dept, School of Electronics Engineering VIT University, Andhra Pradesh (VIT-AP)** in association with the Vijayawada Centre organised a program on 'Reality Blend - Ademo Fusion Navigating through AR &VR' on **Oct 12, 2023**, by Shri Visweswaran J, ARK Info Solutions Bangalore.

● **ISF** at the **Dept of ECE, Seshadri Rao Gudlavalleru Engineering College (SRGEC), Gudlavalleru, Andhra Pradesh,** in collaboration with the Vijayawada Centre, hosted a lecture on the topic 'Applications of Internet of Things (IOT) for Enhancing Interdisciplinary Research'. The talk was delivered by Dr Vishnu Yarlagadda, Assoc Prof at Manipal Institute of Technology, Bangalore, on **Oct 12, 2023**. The events of Treasure Hunt, Drawing, Video promo, Project Expo, and Technical Quiz were organised to celebrate the ISF Formation Day on **Nov 2, 2023**. Dr GVSNRV Prasad, Principal, SR Gudlavalleru Engineering College, served as the chief guest.

● The **ISF** at the **ECE Department of Bapatla Women's Engineering College (BWEC) in Bapatla, Andhra Pradesh**, in collaboration with the Vijayawada Centre, hosted a workshop on 'PCB Design and its Practical Applications' from **Oct 12 to 14, 2023**. The workshop was conducted by Shri C Sudhakar Reddy, a senior Embedded Developer at SRC e_solutions Pvt Ltd, Vijayawada, along with his team. The ISF, in collaboration with the Vijayawada Centre, hosted the 'World Students Day Celebrations' to commemorate the birth anniversary of Dr APJ Abdul Kalam on **Oct 16, 2023**. This programme included the organisation of paper presentations, elocution competitions, and documentary activities. Conducted a workshop on "Android Applications Development and its Practical Applications" from **Oct 16 to 18, 2023**. Dr C Sudhakar Reddy, a senior embedded developer at SRC e_solutions Pvt. Ltd. in Vijayawada, served as the resource person along with his team.

● The **ISF** at the **ECE Department of Potti Sri Ramulu Chalavadi Mallikharjuna Rao College of Engineering & Technology (PSCMRCET)**, **Vijayawada, AP**, in collaboration with the IETE Vijayawada Centre, hosted an event called "World Students' Day" on **Oct 13, 2023**, to commemorate the birth anniversary of Dr APJ Abdul Kalam. This programme included various competitions such as paper presentation, poster presentation, power point presentation, and essay writing contests. The ISF, in collaboration with the Vijayawada Centre,

hosted a technical seminar on **Oct 16, 2023**, with the theme of "Make Innovation a Core Value'. The resource person for the event was Shri V Raj Kumar, who serves as the deputy project director at DRDL in Hyderabad. The 70th anniversary of the IETE Foundation Day was celebrated on **Nov 2, 2023**, featuring several technical events.

● **ISF** at the **ECE Dept of Malineni Lakshmaiah Women's Engineering College (MLWEC) Guntur, AP,** in collaboration with the IETE Vijayawada Centre, organised the 'World Students' Day Celebrations' on **Oct 14, 2023**, to commemorate the birth anniversary of Dr APJ Abdul Kalam, a renowned scientist, Bharata Ratna recipient, and former President of India. This programme organised power point presentations and project expo events. Conducted a conference titled "Opportunities and Recent Trends in VLSI Design" on **Nov 6, 2023**, having Shri Siva Makutam, an Independent Director of BEML and a Senior Director, Invecas Technologies, as the Chief Guest. Shri Siva Makutam is also the founder of Ahalya Foundation.

● **ISF** at **ECE Dept, Devineni Venkata Ramana and Dr Hima Sekhar MIC College of Technology (DVR & Dr HS MIC College of Technology), Kanchikacharla, Andhra Pradesh** in association with the Vijayawada Cente celebrated, Dr APJ Abdul Kalam Birth Anniversary (15th October) as 'Innovation Day' on **Oct 14 , 2023**.

● On **Oct 14, 2023**, in honour of Dr APJ Abdul Kalam's birthday, which is Oct 15th, the Vijayawada Centre in collaboration with the **ISF** at the **ECE Department of the Andhra Layola Institute of Engineering & Technology (ALIET), Vijayawada**, **Andhra Pradesh**, hosted "World Student's Day." This programme included JAM events, poster presentations, and paper presentations for the Innovative Idea contest.

● In commemoration of Dr APJ Abdul Kalam's birth anniversary on the day of Students Day celebration on **Oct 15, 2023**, the **ISF** of the **ECE Dept** at **Vignan's Nirula Institute of Technology and Science for Women (VNITSW),** Guntur, Andhra Pradesh, in collaboration with the IETE Vijayawada Centre, organised a series of events including paper presentations, elocutions, and documentaries.

● A Samyak workshop on 'Cube Design' was organised from **Oct 16 to 18, 2023**, by the ISF of the **ECE Dept at KL University, Vaddeswaram, Andhra Pradesh** in collaboration with the IETE Vijayawada Centre.

● **ISF** at **Sri Sairam Institute of Technology(SSIT) West Tambaram, Chennai**, conducted "National Level Technical Symposium Zenista 2k23 Symposium - ElectroSynchrony" on **Oct 19, 2023,** under IETE Chennai Centre Chief Guest Ms R Santhabharathi, Senior Space Scientist, UR Rao Satellite Centre, ISRO Bengaluru, and guest of honour, alumni Ms VC Keerthi, Director-Head of Third Party Risk Management, Cognizant Technology, Chennai, attended. The conference underlined the importance of electronics and communication for everyday needs and inventions. She also emphasized creating a future goal and requiring students to work hard to achieve it. Guest of honour spoke on about cyber security and electronics and communication. "Recent Advancements in Integrated Circuit Design for IoT Applications" was the topic of a tech talk on **Nov 20, 2023**. The tech talks were given by Ramakrishanan Sriram, Bhavadharene M, Sanjaykumar S, VishwanthAdhavan, and Mukesh Kumar. On **Nov 25, 2023**, a webinar hosted a "Processors-Microverse" quiz. Students learned about processors in computers. Explored the evolution, structures, and

breakthroughs that drive modern technology, learned about processors' basics and the latest digital advances. A 5-day value-added course on "Embedded System & IoT with Raspberry Pico and Node MCU" was led by Shri A VigneshKumaran and Shri R Ramachandran from Pantech e-Learning, Chennai, on **Nov 27, 2023**. Participants learn about embedded systems and IoT using cutting-edge technologies like Raspberry Pico and Node MCU in this thorough training program. A structured curriculum helps students build and implement creative solutions, enhancing their technical skills. On **Nov 28, 2023**, Sharath Kumar R G, AI/ML Data Science Engineer Trainee, Sify Technologies, led a webinar on "From Algorithms to Intelligence: Demystifying AI, ML, Deep Learning, and NLP". This enlightening discussion examined the technologies' underlying concepts, real-world applications, how algorithms evolve into intelligent systems, and AI's disruptive potential in changing the future. Ms Saliha Bathool A, Packaged App Development Associate, Accenture, spoke on 'Empowering Dreams and Envisioning Thoughts' on **Dec 14, 2023**. She described how she turned dreams into reality. The important part that education played in developing their goals and the actions that were done to achieve them will be explored in these motivational talks.

● On **Oct 25, 2023**, **ISF** at **ECE Dept, Sri Ramakrishna Institute of Technology (SRIT), Coimbatore, Tamil Nadu** held a webinar on 'Hands on Training in IoT using Tinkercad software'. This program's resource was Dr P Ramani, Asst Prof (SG), SRM Institute of Science and Technology, Ramapuram Campus, Chennai. ISF coordinator and associate professor/ECE Dr A N Jayanthi welcomed everyone. Dr P Ramani explained IOT sensors and actuators. She briefed pupils on real-time project design. Ms A K Kavitha, Asstt Prof/ECE, proposed the vote of thanks. About 30 final-year ECE students benefited from this program. On **Mar 9, 2024**, a seminar was held on project management with Shri S Balamurugen, Project Manager, Tata Digital Services, Bengaluru. Dr A N Jayanthi, ISF Coordinator and Assoc Prof /ECE, greeted everyone. Shri S Munaf, Asst Prof / ECE, introduced the resource person, who described 'product-based' and 'service-based' job-creating organizations. He covered database, SUI, data warehousing, and project management. Assistant professor/ECE Shri S Thiyagarajan proposed the vote of thanks. 35 participants attended.

● On **Oct 25, 2023**, **ISF** at **ECE Dept, Hindustan Institute of Technology & Science (HITS) Padur, Chennai, Tamil Nadu** held a winter webinar Series on 'Machine learning-based Applications for Acoustics and Noise Control' by Mr Giuseppe Ciaburro, Prof Architecture and Industrial Design, University of Campania Luigi Vanvitelli, Campania, Italy with 135 participants.

● **ISF** at **ETE Dept of S S Jondhale College, Asangaon Mumbai** organised a workshop on **Oct 30, 2023.**

● The following two activities were conducted by the **ISF** at the **ECE Dept of SRM Valliammai Engineering College (SRMVEC) in Kattankulathur, Tamil Nadu**: (i) On **Nov 2, 2023**, a workshop was conducted on "Cadence EDA Tools," directed by Shri S Senthilmurugan and Dr N Jothy. The training session for 160 students was conducted by the principal guest, Shri V Navaneethakrishnan, senior Field Application Engineer at Entuple Technologies Pvt Ltd, Bengaluru. The national-level technical symposium "TARAS 2K23" was convened by Dr M Murugan and Dr Komala James on **Nov 4, 2023**. The principal guest, Shri M

Ganesh Babu, Sub Inspector of Police, Special Branch, Kancheepuram District, was welcomed by coordinators Dr N Subhashini and Shri A Pandian. A total of 523 students were in attendance.

● On the day of IETE Foundation Day**, ISF** at **ECE Dept, QIS College of Engineering (QISCET), Ongole, Andhra Pradesh** in association with the IETE Vijayawada Centre by conducting conducted technical events like PPT, Quiz Elocution etc, on **Nov 2, 2023**, wherein Dr Yavarani, Retd Director, DRDO was the chief guest.**The Dept**, jointly conducted a technical session on "Signal Processing Applications in Industry and Opportunities" on **Nov 4, 2023** by Dr V Sandeep, Head & Prof, EE Dept NIT, Tadepalli Gudem, AP.

● **IST at Birla Institute of Technology (BIT), Jaipur, Rajasthan** held Intra-college debate competition on **Nov 3, 2023**, where 30 participants attended.

● **ISF** at **ECE Dept of The Maharaja Institute of Technology (MIT), Thandavapura, Mysore,** commemorated IETE's 70th Foundation Day on **Nov 6, 2023**. The Guest of Honour was Prof Nataraj C R, Chairman IETE Mysuru, and the Chief Guest was Dr Rajalakshmi M C, Prof, ECE Department, Vidya Vikas Institute of Engineering and Technology Mysuru. The other dignitaries included :Principal Dr Y T Krishnegowda, Jt Secretary, MET; Dr H K Chethan, HoD; Dr Srinivasa M G, and IETE Mysuru Member Shri Manjunath SM were in attendance.The technical session was titled "Bridging Horizons: 4G to 5G Growth in Wireless Technology". Students learned about wireless technology generations and how 5G would improve communication compared to 4G from Dr Rajalakshmi. A technical talk by Balasubramanys K, Retd Principal, BSNL, RTC, Mysore, on "Introduction to Mobile Technologies" on **Dec 19-20, 2023**. The session covered the mobile ecosystem, including iOS and Android, boosting mobile app development skills. This included learning about mobile development, user interface design for mobile devices, and the complete lifetime of mobile apps from inception to maintenance. The session also covered mobile security, networking, and performance monitoring analytics. Students learned about augmented reality, cross-platform development tools, and legal, ethical, and industry best practices in mobile technology.

● **The ISF** at **ECE Dept of Vellore Institute of Technology (VIT), Chennai, Tamil Nadu**, in collaboration with the IETE Chennai Centre, hosted a Faculty Development Program on 'Wearable Technology in Healthcare' from **Nov 15** to **Nov 17, 2023**. The program had a total of 152 participants.

● **ISF at ECE Dept**, **Mohamed Sathak A J College of Engineering (MSAJCE) Chennai, TN** organized two seminars. One on 'Recent Development in Robotics' by Shri V Yuvaraj, asst technical officer, Robotics / Research, Chennai on **Nov 17, 2023,** aimed to raise robotics awareness. The other on 'IT Product Management' by Mr Sen Wilson, IT Product Owner, Expeditors International, Chennai, on **Nov 17, 2023.** Event aimed to promote IT product management skills. After the lesson, a competition was held to produce items by drawing, picturing, and marketing them to our participants.

● **ISF at ECE Dept, SRM Institute of Science and Technology (SRMIST), Kattankulathur, Chennai, Tamil Nadu** hosted a "Logo Contest" on **Nov 25, 2023** to choose the logo for 5G Uses Case Lab,

financed by the Department of Telecommunications, GOI, to build student and startup competences and involvement in 5G and beyond technologies. This logo contest let students and instructors show off their talents and compete for prizes. There were 60 students in all.

● The **EC Dept** at **ISF**, **Rajeev Institute of Technology (RIT), Hassan, Mysuru, Karnataka** held following four invited talks by area experts. The topic of "Beyond Degree: A Way to Civil Services" was discussed by Anil Kumar Bulla, Founder & MD of Credenceias, Bangalore, on **Nov 25, 2023**. Jobs and prospects in the Indian civil service were described by him. He provided guidance on how engineers could prepare for these exams and recommended daily reading material for civil service candidates. Shri Harshith D, an associate engineer at Unisys India Pvt Ltd in Bangalore, next delivered a presentation entitled "A Roadmap to Entrepreneurship." He addressed the topics of job seekers, job providers, and the process of a job prospect becoming a job provider. Furthermore, he elaborated on the manner in which senior officials and employees interact. On the same day, a talk was delivered titled "Journey towards Entrepreneurship," by Shri Harish S, Project Manager and HR at Mindset IT Solution and Consultants, Bangalore, where he highlighted the long journey, challenges, and opportunities of being an entrepreneur. This talk provided a glimpse of the entrepreneurial experience. His subsequent presentation was on "Embedded Systems and their Applications." He began with the concept of microprocessors and microcontrollers and progressed to embedded systems. He defined their implementations in household and industrial devices. On **Dec 19, 2023**, the E&CE Dept personnel, in collaboration with IETE, IIC, and ED Cell, organized a technology festival called "Tech Connect 2023" with the assistance of final-year students on behalf of ISF. It included four distinct competitions: "Avishkar" (Project Exhibition), "Tech Xplore" (Poster Presentation), "Yaksha Prashna" (Technical Quiz), and "Chakravyuha" (Coding Hackthon). Dr Mahesh PK, Principal, and Dr Prakash HN, Chairman of the IIC, served as the inaugural speakers for the technology festival. The Principal addressed the audience and provided a comprehensive overview of the college, emphasizing its accomplishments in a variety of areas, including academics. In addition, he encouraged students to take an active role in intercollegiate events in order to acquire knowledge and to coordinate the national tech fest in the near future. Dr Aravind BN, Prof and HoD, E&CE, expressed his perspective.

● On **Nov 28, 2023**, **Mauli Group of Institution's College of Engineering and Technology (MGI), Shegaon Dist Buldhana, Maharashtra** held an International Conference on "Sustainable Multidisciplinary Advances in Research and Technology (SMART-2023)" in a hybrid mode. The successful conduct was supervised by ISTE, New Delhi; IE, IETE, New Delhi; and IIC's Innovation Council on campus. Its industry partners were Metaroll Industries, Ashida Electronics, and ME Energy. The Chief Guest was Dr S M Kherde, Principal, SIPNA College of Engineering, Amravati, and the Guests of Honour were Dr A P Thakare, Vice President, IETE and Head E&TC Dept, and Dr NN Kasat, GC Member, IETE and Prof/ETC Dept, SIPNA College of Engineering, Amravati. Dr Tushar Jaware, Dean, R&D at R C Patel Institute of Technology, Shirpur, and Er Faizan Khan, All India Technical Head at Metaroll Ispat Pvt Ltd, Jalna, were keynote speakers. 120 papers were presented covering the following domains: computer science engineering/ information technology, electronics telecommunication engineering,

electrical engineering, mechanical engineering, civil engineering, and applied science and humanities. The conference commenced by offering prayers to Maa Saraswati and customary lamp lighting. The dignitaries were welcomed by Prof Anuja Wadekar. Dr Tushar Jaware and Er Faizan Khan delivered keynote presentations. The conference was successfully organized by Dr PM Ardhapurkar, HOD, Mechanical Engineering, Organizing Secretary, Dr R R Karhe, Assoc Professor, ENTC Department, and the organizing Committee Members, all faculty members, and Advisory Board under the patronage of Shri Dnyaneshwar P Patil, Hon'ble Chairman, LPHGPSS, Shegaon.

● **ISF at Sambhram Institute of Technology (SAIT) Bangalore, Karnataka** organized following activities with the support of the IETE-Bangalore section. The Dept of CSE, ISE & CSE (Cyber Security) organized the "Cyber Security Awareness" Seminar and Celebration of International Computer Society Day on **Dec 5, 2023**. Dr CV Ravishankar, HoD ECE Dept, delivered a lecture on the topic of cybersecurity. On **Dec 29, 2023**, the ECE Dept conducted training sessions in the areas of Personality Development, Personal Hygiene, and Start-Up Talk. Founder of Bhookha Haathi, Shri Abhimanyu Rishi, addressed the audience on the topic of "Training on Aspects of Start-Up Talk & Personality Development." On **Jan 9, 2024**, the Dept CSE, ISE & CSE (Cyber Security) and ISF SaIT hosted a seminar on Mastering the Future: Exploring Careers in AI Security, Data Protection, and Cyber Security. Shri Santosh Chaluvadi presented Mastering the Future: Exploring Careers in AI Security, Data Protection, and Cybersecurity. On **Jan 25, 2024**, the Dept of ECE and ISF SaIT organized the Student Empowerment Program with IETE-Bangalore support. The empowerment initiative aimed to motivate and equip pupils for globalization. Supporting kids in getting the tools and information they need to learn on their own was told to be known as "empowerment." Creating a supportive and inclusive learning environment that encourages critical thinking, problem-solving, and creativity is a critical component of empowering students. Resource Person Dr E Kavitha, HOD – Dept ETE, Sir M VIT, Bangalore, spoke about student empowerment. The Dept of CSE, ISE & CSE (Cyber Security) organized a talk on "Hackathon on Cyber Security" on **Feb 6, 2024**. The event was held in collaboration with the IETE student chapters of SaIT and was supported by the IETE-Bangalore branch. The Dept CSE, ISE & ECE held Advanced IT Skill Training on "Data Analytics" for final-year students from **Feb 9** to **Feb 29, 2024** in cooperation with SaIT ISF & and IETE-Bangalore Centre. Prof S Sowndeswari, Asst Prof, Dept ECE, SaIT, coordinated the event. The Dept of CSE, ISE & CSE (Cyber Security) hosted an internal evaluation of "Hackathon On Cyber Security" on **Feb 21, 2024** for final and pre-final year students in cooperation with SaIT IETE student chapters and IETE-Bangalore section. The Dept ECE conducted a celebration of World Radio Day on **Feb 23, 2024** for the final year and pre-final year students of ECE. The event was held in cooperation with the ISF of SaIT and supported by the IETE-Bangalore division. Dr S G Shivaprasad Yadav, an Assoc Prof in the Dept ETE at M S Ramaiah Institute of Technology in Bangalore, gave a talk on the topic of "Introduction to Embedded Systems & Design." National Science Day was organized by the Dept of Basic Science on **Feb 28, 2024** for the I Yr students. Mini-Project Exhibition cum Competition was organized by the Dept of ECE on **Mar 01, 2024** for the II & III Yr students of ECE in association with IETE student chapters of SaIT,

supported by IETE-Bangalore section.

● **ISF** at **Anand International College of Engineering (AICE), Jaipur,** held a one-day seminar on "Campus Tales- Building a Career in Green Building Consulting Services" with ISF, Anand-ICE, on **Dec 8, 2023**. The objective was to improve student employability. How students prepared for industry as needed. Students can assess their skills against industry standards by learning about industry needs. Ms Rshmi Kasliwal, HR Manager, Kamal Cogent Energy Pvt Ltd, spoke about industrial skills and their importance. She advised young students about sustainability careers. Hon'ble Vice-Chairperson of Institute Mrs Monika Mittal Agarwal, Principal Prof Vijay Kumar Sharma, and Vice-Principal Prof Praveen Agarwal welcomed the speaker and participants and stressed on the topic's relevance. Shri Vivek Bhojak, Coordinator & Adviser, IE (India), Anand–ICE, Jaipur, and Shri Anup Kumar Dube, Co-coordinator, led the program. About 87 people attended the programme. On **Jan 16–17, 2024**, Rajasthan Technical University, Govt of Rajasthan, Kota, and Anand International College of Engineering, Jaipur hosted the "Hybrid 4th International Conference on Recent Developments in Engineering & Technology (ICRDET'24)" in association with IETE, ISF, and Anand-ICE.The 4th ICRDET-2024 aimed toward the UN 2030 Agenda for Sustainable Development: "Transforming our world" by supporting SDG 03, 08, and 12 and implementing the 2030 Agenda. The conference focused on engineering and technology innovations and sustainability for peace and prosperity for people and the earth today and in the future. Conference Inauguration Ceremony Chief Guest Prof Santosh Kr Singh, Hon'ble VC, RTU, Kota, Guest of Honor Prof AK Dwivedi, RTU, Kota, Guest Speaker Prof Ali Taheri, University of Sussex, United Kingdom, and General Chair Dr Deepak Bhatia, RTU, Kota spoke in the conference and about its importance and engineering applications. About 115 paper authors registered and all conference speakers presented significant insights. A one-day seminar on "Outcome-Based Education for Enhancing Teaching & Learning Quality" with the Institution of Engineers (IE) ISF, Anand-ICE, Jaipur, was held on **Jan 20, 2024.** Dr Praveen K Jain, SKIT, Jaipur addressed the techniques and UGC AICTE requirements for PBE and pros & cons. Hon'ble Vice-Chairperson of Institute Mrs Monika Mittal Agarwal, Principal Prof Vijay Kumar Sharma, and Vice-Principal Prof Praveen Agarwal gave the welcome address and stressed the importance of the topic. Vivek Bhojak, Coordinator & Adviser, IE (India), Anand –ICE, Jaipur, and Dharmendra Kumar, Co-coordinator, led the program. About 114 people attended the program. A five-day workshop was organized on "Recent Trends in Artificial Intelligence and Machine Learning for Smart Computing " in association with IETE, ISF, Anand-ICE, Jaipur on **Feb 12-16, 2024**. The objectives were to empower students with a comprehensive understanding of the latest advancements in AI and ML, enabling them to enhance their pedagogical competence and incorporate hands-on skills. This program aimed to promote interdisciplinary collaboration, address ethical considerations in AI development, and provide networking opportunities, preparing participants to effectively navigate the evolving landscape of smart computing and contribute meaningfully to the integration of these technologies across diverse academic domains. Following 10 experts shared their expertise: Dr Mushtaq Ahmed (MNIT, Jaipur), Dr Harish Sharma (UD, RTU, Kota), Dr Sandeep Kumar (CHRIST, Bengaluru), Dr Sanjay Kumar (UIT, HP University, Shimla), Er Nitesh Kumar Jangid

(Govt of Rajasthan), Dr Mukesh Kumar Gupta (SKIT, Jaipur), Dr Sunil Pathak (Amity University, Rajasthan), Dr Ramesh Chandra Poonia (CHRIST, Ghaziabad), Dr Sandeep Joshi & Dr Neha Chaudhary, both from (Manipal University, Jaipur). Around 145 participants were attended the program. Hon'ble Vice-Chairperson of Institute, Institute's Principal & Vice-Principal and Coordinator & Adviser, IETE, Faculty Coordinator, and others were present. A one-day seminar on "Career Pathways in Entrepreneurship, Innovation, and Sustainability after Engineering" was conducted on **Mar 22, 2024,** in collaboration with IETE, ISF, Anand-ICE, and Jaipur. Shri Jitendra Tiwari, an educationist by profession and the founder of Made Easy in New Delhi, provided his perspective on the subject. He discussed the significance of the GATE and ES examinations, as well as the process of applying to various funding agencies and startups. The program was attended by approximately 156 participants.

● "IETE Awareness Programme" was held on **Dec 11, 2023** at **Mysuru Royal Institute of Technology, (MRIT), Mysore, Mandya, Karnataka.** The seminar's objective was to cultivate an environment of knowledge exchange and collaboration, as well as to offer students a platform to explore contemporary issues, advancements, and innovations in the field of Electronics/Telecommunications/related fields. Nirmitha K L, a student of 5th semester of the SEM, delivered a cordial greeting address to commence the seminar. During the inaugural ceremony, C R Nataraj, Chairman IETE Mysore unit, provided valuable insights into the importance of such forums in influencing the future of engineering students. Additionally, the seminar promoted networking opportunities among industry professionals, students, and faculty. Participants were able to establish connections with individuals who shared their interests through informal discussions and networking sessions, which fostered a sense of community within the ISF.

● The **ISF** at **Dept of ECE** at **Lords Institute of Engineering & Technology (LIET), Hyderabad,** successfully conducted a two-day workshop on LED Manufacturing on **Dec 11 - 12, 2023**. Approximately 150 students participated enthusiastically in the event. Present-day importance of LED technology was stressed by the ECE Dept Head in the workshop's opening address. A prominent industry expert gave the inaugural keynote on LED manufacturing trends and breakthroughs. LED Technology was introduced in technical sessions. The first technical lesson explained LED technology, including its operating principle, materials, and evolution. LED manufacturing techniques were covered throughout the seminar. In the afternoon hands-on workshop, participants worked in groups to assemble and test LED gadgets. This interactive workshop clarified theoretical ideas. Second year ECE and EEE had a hands-on workshop on day two. In Quality Control and Testing: a complete overview of LED manufacturing quality control and testing procedures to assure product reliability and performance was given. Industry Applications and Future Trends: The program finished with a review of LED technology's current applications in lighting, displays, and healthcare. Future LED manufacturing trends and advancements were discussed. Participants raved about the hands-on workshop's practical lessons. The event successfully connected LED manufacturing theory with practice. Shri Madan Gopal Mekala, a corporate trainer and placement consultant, at VLSIT&P Services Pvt Ltd, Bangalore, was the resource person for the "Career Opportunities in VLSI" seminar, which was organized by the ECE Dept on **Jan 31, 2024**. He outlined the

brief history and evolution of VLSI, the design process, current trends and advancements in VLSI, an overview of ASIC (Application-Specific Integrated Circuit) and FPGA (Field-Programmable Gate Array), the role of VLSI in electronics, communication, and other industries, and the significance of VLSI in emerging technologies (IoT, AI, 5G, etc.). He also elaborated on the various career paths available in the field of VLSI.

● **ISF** at **Swami Keshavanand Institute of Technology, Management (SKIT), Jaipur** held one-day seminar on 'IOT and its Applications' on **Dec 13, 2023** where 20 members attended. A week-long lecture series on "Technological Advances in Electronics and Communication Engineering" was organized by IETE-WEEC (Women Empowerment Engineering Committee) and the IETE Jaipur Centre in collaboration with the ECE Dept at Swami Keshavanand Institute of Technology, Management, and Gramothan. On **Feb 19–23, 2024**, the program was overseen by Prof Jyoti Singhai, Chairman WEEC–IETE; Prof Ghanshyam Singh, Chairman IETE–Jaipur Centre and Prof Monika Mathur, Hony Secretary–IETE Jaipur Centre. Prof Sampat Raj Vadera, Dy Director at IIT Jodhpur Hydera (Former Director of DRDO Defense Laboratory Jodhpur), was the program's chief guest. He exhorted pupils to improve their networking and social skills in addition to their technical proficiency. Prof Seema Verma, NITTR Bhopal, who was the program's guest of honour, spoke about how to get more students involved in the technical side of the aviation industry. The vast potential and chances for technological advancement in the fields of electronics and communication were emphasized in this lecture series. Speakers during the five-day lecture series addressed a range of electronics and communication-related themes; Prof Seema Verma concentrated on the prospects and potential in the Indian aerospace industry. The Indian Telecommunication Department's Dr Prabhu Dayal and Dr Ajit Sharma provided insight on telecom services and cyber security. Prof Garima Mathur spoke about the uses of communication technology, and Dr Amit Sharma gave a thorough explanation of quantum computing. Dr Sai Krishna spoke about the Internet of Things' (IoT) major effects on our society from CSIR-Central Scientific Instruments Organization, Pilani, Jaipur Centre. The program's final session was held at IETE Bhawan in Malviya Nagar.

● **ISF at ECE Dept, Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad, Telangana** organized the following activities:* On **Dec 13, 2023**, an online event entitled "IdeaStream" was held with the theme "Ignite your Ideas on our Screen" to highlight the innovative ideas and perspectives of students on current engineering topics. Students articulated their ideas, thoughts, and perspectives on the screen. The event continued until **Jan 26, 2024**, with the introduction of a new topic each week. The students were required to consider their perspectives and evaluate the current state of the subject matter, record a candid video, and submit it to the organizing team in order to participate in the event. Additionally, the social media account featured the most suitable video for each subject. Afterward, the students who submitted the most impressive videos were presented with Appreciation certificates. This Event was carried out on 3 topics namely: (a) Can Robots Completely Replace Humans? In what ways will robots replace humans in the disciplines of technology and science? (b) Tech & Education - Enhancing learning in digital era. Igniting the notion of the "Digital Era of Learning" in which technology assumes the role of a teacher. When educators are

proficient in digital literacy and comprehend how to incorporate it into the curriculum, student learning can be significantly influenced by ICT. (c) Smart cities- Transforming urban living with technology: Understanding the current smart cities & the challenges and limitations of various technologies. *Coordinated three events on **Feb 23-24, 2024**: (a) Blow the Cup: A competition in which two participants attempt to blow up a cup into a designated third box. The game was played on a table that contained five boxes. A cup was situated in front of each participant, preferably at the table's edge. Both participants blew on their cups simultaneously on both sides, with the intention of propelling them into the third box located at the opposing ends of the table. The challenge was won by the first participant to effectively blow the cup into the third box. (b) Wrong Answers only- It entailed posing a few inquiries regarding general knowledge, engineering, and science. The victor was determined to be the participant who responded to the incorrect answer within 15 seconds. (c) Guess the Movie: This activity entailed the screening of various images that were based on a specific film. Subsequently, participants were requested to correctly identify the title of the film within the designated time frame.* ISF and ECE Dept CBIT organized "Quiz Masters" a Technical Quiz as a part of Dhyuthi for Engg students from various colleges under "Synapse 2024" by ECE department for Sudhee - The Annual Technical Fest of CBIT on **Feb 26, 2024**. The main aim was to create an interest among students to take part in quizzes and test their knowledge in the field of electronics. There were over 73 registrations including solo and group registrations from students of CBIT and few other engineering colleges. The Quiz was conducted in 3 rounds. Round 1 comprising general questions was conducted in two batches and the top 20 teams were selected for the second round. Five teams from round 2 were selected to participate in round 3. Quiz winners were facilitated with certificates and cash prize. Dr D Krishna Reddy, HoD, ECE graced the occasion. Shri T Sridhar, Smt B Neeraja & Dr A Vani coordinated. *The IETE-ISF CBIT organized a Web Blitz (Web designing contest) on **Feb 26** & **27, 2024** with the objective to create the website's front end. The contestants were allowed to select one of the three themes: real estate, travel/tour agency, and IETE website. Two rounds comprised the competition. Round 1: Presentation and Preparation Prior to the contest day, participants were obligated to develop their initial web design at home. On the day of the event, students individually presented their web design to the evaluators and audience.Each student's presentation was assessed, and their scores were determined by the excellence of their design. Students who achieved the qualifying score advanced to Round 2. Round 2 (Design on the Spot) Students who advanced to Round 2 were allocated a topic on the spot, which ensured fairness and tested their capacity to design within a limited time frame. Participants were granted 30 minutes to prepare after obtaining the topic. This likely entailed the planning and conceptualization of their design. After the preparation, students were granted only one hour to execute and finalize their web design in accordance with the assigned subject matter. The contest was awarded to the design that was deemed to be the most exceptional. The HoD ECE Dept Dr D Krishna Reddy, announced the winners of the competition at its conclusion. Later on in the valedictory ceremony, the merit certificates were distributed. Total award in cash was Rs 2000/-. The contest's top designs were from: 1) Dheeraj, the CBIT winner (sports theme) 2) From MGIT, Sandeep Reddy and Nitin-

RUNNER (Theme: OTT) 3) Prashant, the CBIT, RUNNER (sports theme). * The event "Knox "O" Box" was arranged by ISF CBIT on **Feb 26** & **27, 2024**. Student coordinators proceeded by formulating the boxes, supplying riddles, and continuing the Tower of Hanoi game within the allotted time. In general, the event provided students with the opportunity to participate in a diverse array of cognitive challenges, including practical skills such as resistor color coding and the Tower of Hanoi, as well as logical riddles. It also fostered entertaining moments in the realm of technical challenges and possessed the capacity to establish connections across various sources. Akhilesh Tellidevulapalli was awarded a cash prize of Rs 1000/-. *The Circuit Safari, which was held on **Feb 26** & **27, 2024**, offered participants the flexibility to select a time that was convenient for them. The event was divided into numerous slots over the course of two days. Game Flow: Station 1 • Electronics Bingo: Each participant received a bingo card that featured electronic component images in place of numbers. Components, functions, or principles were described by the caller. If they have a match, players indicate it on their cards. The first player to achieve a full line or blackout wins. Station 2 • Technical charades: A straightforward game of "dumb charades" in which the individual is required to determine the electronic item that their companion was attempting to imitate. Station 3: Drawing the initial participant would be presented with a diagram and was obligated to replicate it by drawing on the back of the second individual. Subsequently, the second individual tried to replicate the drawing on the third individual's back. Success is obtained when the drawing on the third person's back closely resembles the original diagram. Station 4 • Component Hunt: Utilized the riddles provided to locate four concealed locators that were dispersed throughout the college. The team assembled the electric components necessary for the circuit once all four locators were located. Station 5: Construct the circuit as demonstrated by the organizers. Participation certificates were given to all other participants later on. Total number of participants: 32. Winners included: Yash Bhingawade Reginold A Soorya VA. *The inaugural phase of Escape Room was organized to simulate rapid thinking in students and offer them a distinctive puzzle-solving experience. The event description comprised the assignment of students to a chamber where they were required to solve puzzles using the hints or clues provided and locate the four-digit code to unlock the room within the designated time frame. Students from CBIT and numerous other colleges in Hyderabad contributed substantially. The Escape Room offered flexibility over the course of two days, allowing participants to select a time that was convenient for them. The total number of participants was 114. Sai Nihan Chowdary and Chintada Pravalika were the champions from the ECE-3, 1st year, CBIT. * A "clash of minds" debate took place on **Feb 27, 2024**, as part of the Technical Fest of CBIT. The debate was conducted at two levels, with participants qualifying for level 2 upon effectively completing level 1. The first level debate addressed the topic of "Digital Addiction: Impact on Individuals and Society," while the second level debate concentrated on the adoption of autonomous vehicles. The topic for level 1 was announced in advance of the event, while level 2 was disclosed on the spot. The event was adjudicated by Dr Deepika Komireddi, and it was coordinated by Dr S Radha, and Dr M Ramana Reddy. The student coordinators were M Leela Sai Santosh, Rama Rohith, S Prasanth, and Prasoona. The event was attended by Dr NV Koteshwar Rao, Director of IQAC, Dr Krishna Reddy, HoD ECE Dept, Dr M Sushanth Babu, Director of Academics, and Dr CV Narasimhulu, Principal and Chairman of IQAC. G Rami Reddy emerged winner out of 52 participants. *On **Mar 9, 2024**, Dr Tuti Sandhya, Chairperson, Women Empowerment Subcommittee at IETE, Hyderabad, delivered a guest lecture entitled "Gender equality for sustainable tomorrow" in commemoration of International Women's Day. Twenty-five students participated. Dumb charades and anthakshari were implemented as enjoyable diversions. Gifts were distributed to the winners. Later, a "Handprint" session was held, which was headed over by the quote "Women: shaping history one handprint at a time." Students and female faculty members were encouraged to participate.

● The IETE Club of LDCE organized "Meme-Palooza" in virtual format on **Dec 15, 2023**, at the **EC Dept of ISF, Lal Bhai Dalpatbhai Engineering College of Engineering (LDCE), Ahmedabad, Gujarat**. The club president led the event, and all members, with their enthusiasm and abilities, took the initiative to ensure its success. IETE hosted an unforgettable event that combined creativity and innovation, revealing the digital battleground where the wittiest memes compete for the ultimate title of the greatest meme of the event. Fifteen students participated.

● The event, "Web3Insight - Power of Decentralization," was organized by the **EC Department at ISF, Dharmsinh Desai University (DDU), Ahmedabad, Gujarat**. The event brought together prominent companies to share insights on block-chain technology and its applications on **Dec 16, 2023**. The speakers from QoneQt, The Graph India, Router Protocol, and ConnectVerse provided valuable information in a user-friendly manner. Quizzes were administered throughout the event, which incorporated an interactive component. The overall engagement was improved by the sponsors' provision of swag to the quiz victors. A sticker was distributed to each participant, which served as a memento of the occasion. The power of decentralization was effectively demonstrated through interactive sessions and captivating presentations at the event.

● The **ISF** at **EC Department, Indus University, Ahemedabad,** successfully conducted the Certification Program titled "Internet of Things (IoT) & its Applications: From Theory to Practical Implementation" from **Dec 18-23, 2023**. The program, jointly organized by the IETE Student Chapter and Sigma Trainers and Kits, had the objective of imparting comprehensive understanding of the IoT area and bridging the divide between theoretical knowledge and practical application of IoT to 53 participants from various domains through practical learning experiences. The 30-hour lesson was organized by Asst Prof Miloni Ganatra and Asst Prof Zalak Patel.

● ISF at **ECE Dept, Jerusalem College of Engineering (JCE), Chennai, Tamil Nadu,** held a three-day online national faculty development program on the "Joy of Learning Python" on **Dec 20–22, 2023**. Attendees from numerous institutions throughout multiple states acquired knowledge from the event. Through practical instruction, Shri M Tharik Anwar taught the faculty members the fundamentals of Python. He also discussed the value and uses of Python coding, as well as the research opportunities it presents across a range of disciplines.

● The **ECE Dept** with the **ISF of GSSS Institute of Engineering and Technology for Women, Mysore, Karnataka** held two-day training

program on 'Competitive Programming /skills using C & C++' for 7th semester students on **Dec 28-29, 2023.** The resource person was Dr Ramprasad H C, Head-Academics & Operations, 10 Seconds, Bengaluru. Dr Rajendra R Patil, Prof & Head, ECE Dept welcomed the students and emphasized the importance of the training program for their career. The resource person showed students how interviews are performed and what interviewers look for in candidates. The technical training began with C programming basics. Discussions included programming challenge solutions and methods. Example-based programming topics like variable declaration, asymptotic notations, time complexity, and space complexity followed. Later in training, the resource person explained C++ object-oriented programming. Declaring classes and objects and using access specifiers with parallels were shown. Discussion included pointers and overarching ideas. Students gained IT placement-relevant programming abilities from this workshop. The event was wished for success by Smt Vanaja B Pandit, Hony Secretary, GSSS (R), Sri R K Bharath, CEO& MCM, GSSS (R), Smt Anupama B Pandit, Administrative Officer, GSSS (R), and Dr Shivakumar M, Principal, GSSSIETW.

● **ISF** at **ECE Dept, Gandhi Engineering College (GEC), Bhubaneswar, Odisha**, conducted the following activities: * The inter-institutional competition "Hackathon" on **Jan 5, 2024**, under the supervision of Dr KVNS Rao, Director of GEC Bhubaneswar, Dr A Baradeswaran, Principal GEC, and Dr Pravash Ranjan Tripathy, Dean of Academics, GEC Bhubaneswar. Students from CSE, CSE-AIML, Data Science, and MCA participated. Python and other open source software were employed to code by 260 students, who were divided into 26 groups. * A one-day workshop on "Design Thinking, Critical Thinking & Innovation Design" was organized on **Feb 21, 2024.** The program commenced with the inauguration by Dr KVNS Rao, Dir, GEC, in the presence of the speaker, Dr Pravash Ranjan Mohapatra, HOD of MBA. He elucidated to students the significance of innovation and design thinking in the current era, explaining how they are changing the students' perspective. The objective of this workshop was to optimize the utilization of the learning platform that students were provided with, thereby aiding in the stimulation of youthful minds and the development of a more effective approach to problem-solving and decision-making. The workshop was attended by over 150 ISF members and faculty members from various departments. The workshop concluded with gathering of feedback from the participants, and Dr Pravash Ranjan Tripathy, Dean of Academics at GEC Bhubaneswar, proposed a vote of thanks. * National Science Day celebrated on **Feb 28, 2024.** The program was inaugurated by Dr KVNS Rao, Director, in presence of Principal Dr A Baradeswaran. Dr Bikash Kumar Jena, Principal Scientist IMMT, Bhubaneswar, the chief guest shared numerous real-life experiences that were pertinent to the field of science and also articulated the significance of the subject in a manner that was engaging. The Day also emphasized the importance of science and technology in addressing critical societal issues, including healthcare, energy, agriculture, sustainable development, and the environment, through events and discussions. This event was attended by over 341 students and 83 faculty members. The participants were solicited for feedback at the end of the workshop. Dr Pravash Ranjan Tripathy proposed vote of thanks.

● The Industry-Academia Interface was jointly organized by the IETE Kolkata Local Network, IEEE COM SYS Kolkata Chapter,

IETE Kolkata Chapter, and IETE Hyderabad Centre, as well as the **ISF at Adamas University (AU), Kolkata**, on **Jan 5-6, 2024**. It aimed to disseminate the modern industry practices in the domain of 6G, cyber-security, AI, high frequency engineering, data analytics and ML for chip design. Dr Tanushyam Chattopadhyay, Head of Industrial AI at AI Labs of Adani Enterprise Ltd, opened the conference with a lively speech. Adani research laboratories use AI and other innovative techniques to solve problems, according to Dr Chattopadhyay. Sri Chanchal Chakraborty, MD, ATMI Pvt Ltd, (ATM Towers), presented a global comparison of 5G and 6G options in the next session. In context of 6G wireless communication technology, the speaker also showed future job options. Dr Pallab Ganguly, CISO Generation & Alt CISO, presented the final session of day-1 on cyber-security in smart grids and daily life. Cybersecurity and smart grid threats and employment opportunities were also covered by Dr Ganguly. Dr Amartya Banerjee, TCS Research, spoke about the importance of RIS for 5G and beyond communications and high frequency engineering employment opportunities on the second day of the conference. Dr Banerjee credited Sir J C Bose and Sister Nivedita for developing 5G and mm-wave technologies. In the second session on Jan 6, Shri Arindam Banerjee, Senior Data Scientist, Ernst & Young, discussed data's importance in modern industries and its security and privacy. He also discussed data types and how modern portable devices capture it. Dr Animesh Basak Chowdhury, Machine Learning Researcher, ML for SoC Design, Qualcomm AI Research, San Diego, delivered the seminar's final session from the US in the morning. Machine learning can discover chip problems faster and more accurately, according to Dr Chowdhury. In addition, Dr Chowdhury discussed current system on chip courses for students and instructors. The seminar was registered by 352 participants. The School of Engineering and Technology & ISF, Adamas University, Kolkata, West Bengal, India, organized a guest lecture on "Nation Building through ISRO and its Chandrayaan-3" by Sri Debajyoti Dhar, Outstanding Scientist & Deputy Director, Signal & Image Processing Area, Space Applications Centre (ISRO), Ahmedabad alongwith Dr Jolly Dhar, Group Director-MSRG, SAC, ISRO Ahmedabad on **Jan 8, 2024**. The talk by Sri Debajyoti Dhar underscored the importance of image processing and the utilization of telescopic cameras, as well as the signal processing components of this technology, in the study of space and celestial bodies such as planets, their surfaces, and other aspects. The speaker also educated the students on the importance of fundamental concepts during the interview sessions at ISRO. The presentation also encompassed the integration of computer vision and image processing to investigate planetary and space observations. The second session, which was conducted by Dr Jolly Dhar, offered a concise summary of the activities that are conducted by ISRO and its centers scattered throughout India. The discussion included the specifications of Chandrayaan-1, 2, and 3, the concepts of phased arrays, and the synthetic aperture radar (SAR). The speaker reviewed the accomplishments of Chandrayaan-1, 2, and 3, as well as a few recent activities at ISRO, such as the Aditya L1 satellite. He discussed the launch vehicles that ISRO developed, as well as its current and past joint initiatives with NASA and other reputable space agencies. The speaker also emphasized the importance of ground penetrating radars, which were developed by ISRO, and the Antarctica missions that were conducted by an ISRO scientist. Lastly, the two scientists exchanged a few valuable details regarding the age

limit, recruitment guidelines, and recruitment timelines/phases during the entrance examination and interview at ISRO. 192 students, including 20 students from Adamas World School, attended the guest lecture and awareness session. The session ended with the vote of thanks delivered by Shri Jeet Banerjee, Advisor to IETE ISF at Adamas University.

- On **Feb 2, 2024**, the IETE Students' Day Celebrations'24 were conducted by **ISF** in the **ECE Dept of Mepco Schlenk Engineering College (MSEC), Sivakasi, Tamil Nadu**. The function was organized by Dr R Shantha Selvakumari, senior Prof & Head, ECE Dept. The ISF incharges, Dr A Kamaraj, ASP/ECE, and Mrs V Gnanalakshmi, AP /ECE, served as the coordinators. The gathering was warmly welcomed by Ms Karthika V, ISF member. The President's message for IETE Students' Day was read by Shri N P Praveen, Chairman ISF. Several events, including the Technical Paper Presentation, Eucritic Circuits, Digitalify, Cognitaire, Cryptical Coding, and Best Manager, were held on that day. The events were attended by over 60 ISF members. The paper presentation examined the potential talents of the engineers. In the paper presentation, 14 technical papers were selected and presented from a variety of trending domains in the field of electronics and telecommunications and its applications. The students' presentations were evaluated by Shri J Dani Reagan Vivek, AP ECE, in detail. The student winners were awarded prizes. Finally Ms Karthika V, ISF Member delivered the vote of thanks to the gathering. **The EC Dept** conducted an online workshop on 'PYNQ Python Productivity' on **Feb 13, 2024** for the students. Shri Vishnudev Gowda of CoreEL Technologies and AMD-Xilinx explained the concepts of PynQ framework and programming the PynQ FPGA board using python. The speaker showcased PynQ board features. The PynQ FPGA board programming technique was also highlighted. Demo codes were handed to pupils. ZynQ board programming with Vivado HLS was also covered. He then explained HLS design flow and best practices. Speakers made sessions more participatory. Participants clarified their questions during the session. He shared knowledge-sharing reference resources. The workshop helped 54 students.

- The VT Patel Department of Electronics & Communication Engineering at Chandubhai S Patel Institute of Technology, in collaboration with the IETE Vadodara Centre and **the IETE-ISF CHARUSAT** at **Charotar University of Science & Technology (CHARUSAT) in Changa**, organized the department-level event "Innovative and Creative Project Ideas Showcase" on **Feb 07** & **09, 2024**, in commemoration of the IETE Student's Day Celebration. The objective of the activity was to motivate students to develop indigenous models that are founded on their own ideas and to implement them in the future.The event was held over two consecutive days and involved a total of 55 students. Students were encouraged to construct indigenous models that were inspired by their chosen subjects. Dr Poonam Thanki, Dr Kanwar Preet Kaur, and Dr Sagar Patel, all from EC, CSPIT, CHARUSAT, coordinated.

- **ISF** at **ECE Dept**, **Santhiram Engineering College (SREC), Nandyal, AP,** conducted 'Entrepreneurship Awareness Program on Drone Technology: Opportunities and Enterprise Establishment Guidance' on **Feb 9, 2024**, where Shri K Vamsi Krishna, Director, Drone India Academy, Hyderabad, was the resource person. Ms B Alekya Himabindu, Asst Professor, ECE Dept was the coordinator. Students learnt workshop practice of different operations for their use in drone

manufacturing; perform assembly practice of Agri drones, and to fly drones with full knowledge of different legal limitations. An MoU was signed with Drone Academy, Hyderabad.

- **ISF** at **ECE Dept**, **Jaywant Shikshan Prasark Mandal's (JSPM-NTC), Narhe Technical Campus, Pune, Maharashtra** conducted (*i*) 'Posterrific: poster presentation competition" and 'Sambhashan: A group discussion' on **Feb 10, 2024,** that showcased the talents and intellect of tech enthusiasts from various branches and years of college. Stunning handmade posters, exploring the realms of innovation and design were displayed. The competition encouraged descriptive presentations, pushing participants to articulate their ideas effectively. 'Sambhashan' involved group discussions tackled a range of topics including current events, business and economy, sports, technology, and social issues. Participants delved into these subjects, sharing insights and perspectives with fellow enthusiasts. Prizes were awarded to the top performers and the participants received e-certificates.(*ii*) Organized an industrial visit to Giant Metrewave Radio Telescope (GMRT-Tata Institute of Fundamental Research Narayangaon, Junnar, Pune), Pune on **Feb 28, 2024** (National Science Day). This visit aimed to teach students about antennas, the Radio Telescope, its components, and hardware-software co-design. After the introduction, all students saw the huge antenna in action and learned its capabilities. An approximately 1 sq. kilometer compact central array housed fourteen of the thirty devices, which were scattered randomly. For the other sixteen dishes, the longest interferometric baseline was 25 km and they were spread out along the three limbs of a "Y"-shaped design. The GMRT used 30 telescopes spread across 25 km to collect and synthesize data to create images. At the start, a technician explained the facility's basics and showed them a miniaturized model of all the GMRT telescopes. He defined a radio telescope by explaining each term in the phrase "Giant Metrewave Radio Telescope." Students learned antenna rotation and height control due to their inside access to the facility.

- **The EC Dept** at **ISF**, **Manav Rachna University (MRU), Faridabad, Haryana,** organized a 2-day MATLAB workshop on **Feb 15-29, 2024**, conducted by Shri Aryan Singh Chauhan and his team including Ms Ishpreet and Shri Shivam & students of ECE Sem4 under the guidance of Dr Charu Pathak. MATLAB was demonstrated on **Feb 15, 2024**. The session taught MATLAB basics. Basic Matrix operations and MATLAB interface were taught to pupils. In the 2nd session, students were introduced to Simulink and other engineering tools of MATLAB. Basic programs including signal generation, plotting of graphs etc were taught. A quiz was conducted. Live webcast of the program 'Namo Drone Didi' held on **Mar 11, 2024.** The Manav Rachna University Department of Electronics and Communication Engineering hosted a live webcast of the program "Namo Drone Didi". It featured the speech by Prime Minister Narendra Modi. The program supplied 1000 agricultural drones to women in rural areas. These women were trained to use drones for crop sowing, monitoring, and pesticide spraying. Students were motivated to create cost-effective and functional agricultural drones for Indian villages.

- **ISF at ECE Dept, Vignan's Institute of Information Technology (VIIT), Visakhapatnam, AP,** organized an activity entitled EPL-IGNITE-2K24 (Electronic Component Expo, Poster Presentation, Live Project Expo) on **Feb 16, 2024**. The event was designed to inspire

young minds with the innovative ideas of III BTech ECE students. Prototype projects, such as the Victim Saver surveillance robot, robotics and automation, and electronic measuring devices, were developed by ECE students to address recent societal issues in a cost-effective and efficient manner. This activity served as a platform for the dissemination of engineering knowledge from research in the field of electronics and communication engineering to high school students in the 7th, 8th, 9th and 10th grades. A total of 46 BTech students, 240 school children, faculty members, and school instructors participated. The **ECE Dept** at **ISF** organized an Industrial Visit for II BTech ECE students to "Satish Dhawan Space Center (SDSC) SHAR, Sriharikota, Nellore Dt, AP on **Feb 28, 2024.** 77 students visited SHAR Library, Launch Pads 1 and 2, Static Test Centre, Space Museum, Mission Control Center and Launch Control Center. Faculty members, Shri K Chaitanya, Asst Professor, Shri K Appalaraju, Asst Professor and Ms PVS Charisma, Asst professor, engaged the students with the assistance of Shri Ramanujulu, technical engineer (SDSC) SHAR. Dr V Madhushan Rao Rector, CEO N Srikanth, Dr J Sudhakar principal, and Dr Ch Ramesh Babu, HoD ECE facilitated the activity.

● The **ISF** at the **EL-EC Departments** of **Birla Vishvakarma Mahavidyalaya Engineering College (BVM), Vallabh Vidyanagar, Gujarat**, and the **IETE Ahmedabad Centre** collaborated to conduct a workshop on the topic of "How to write a quality research paper" on **Feb 17, 2024**. The workshop was overseen by the HoD, Dr T D Pawar, Dr B C Gordiya, the faculty coordinator, Dr Deepak Vala, Dr A B Bambhaniya, and Dr J M Rathod. Dr Jayesh Pitroda and Dr Darshan Dalwadi conducted expert sessions on the critical components of scientific papers, which included the title, abstract, keywords, introduction, literature review, materials, methods, results and discussion, conclusion, acknowledgement, and references. Dr Dalwadi addressed the fundamentals of research, writing procedures, paper categories, formatting styles, and resources such as IEEE and Taylor & Francis author centers. The event was attended by Dr Shimpi, Dr Kaushika Patel, Prof Palk Patel, and other faculty members. IETE's EL-faculty advisor, Dr Deepak Vala, proposed a vote of thanks.

● **ECE Dept** at **ISF**, **Guru Nanak Dev Engineering College (GNDEC), Ludhiana, Punjab,** organized a two-week value-added workshop on 'Hands-on training program on Development in Communication Engineering and Electronics'on **Feb 19** to **Mar 1, 2024**. Held under the guidance of the Principal Dr Sehijpal Singh, Head of ECE Dept, Dr Narwant Singh Grewal, coordinators -Dr Munish Rattan and Dr Baljeet Kaur and co-coordinators -Dr Gurpurneet Kaur and Er Kuldeepak Singh and Secretary ISF, Prof Shivmanmeet Singh, the workshop covered multiple skill enrichment topics by internal faculty members of the institute and a few external experts Dr Divneet Singh Kapoor, Dr Mehtab Singh, Shri Amit Saini and Shri Harinder Singh. The topics included: Internet of Things: Making a Thing, Intellectual Property Rights Awareness/ Introduction to Wireless Communication, Study and Hands-on training on Raspberry Pi, PLC and Programming, Study and Hands-on training on ARM and Arduino, Free space Optics: Challenges and Applications, Study and Hands-on training on Antenna Design using IE3D, Hands-on training on Optisystem, Hands-on training on 2D and 3D VLSI devices using Cogenda TCAD, Research Paper Writing/ AI tools used for research, python programming, project management

and Hands-on training on Xilinx Vivado. Topics covered were a mix of latest topics on skill enhancement in Communication Engineering and Electronics. Dr HS Rai, Officiating Principal, inspired students during the valedictory function.

● On **Feb 20, 2024**, the **E&TC Department of ISF Amrutvahini College of Engineering (AVCOE), Sangamner, Ahmednagar District, Maharashtra**, hosted a guest lecture by Shri Amit Shenkar, Mentor, Chaitanya Tutorials, Pune, on the topic of "Competitive Examination Preparation and Public Speaking, Communication Skills." All of the attendees found the lecture to be helpful in addressing issues in their everyday lives and finding solutions that promote a culture of happiness. Everything needed to prepare for the competitive examination was given to the students. Through interaction, students learned skills in public speaking, effective communication, and teamwork. Dr Ramesh Sahadu Pawase oversaw the 61 participants in the event.

● The **ECE Dept** at **ISF, Don Bosco Institute of Technology (DBIT), Mumbai, Maharashtra**, hosted a session on "Beyond the Books: Thriving in the IIM Environment" on **Feb 23, 2024**. The session was led by Dr Sundaravalli Narayanaswami, a Professor at IIM, Ahmedabad, with the objective of offering students the opportunity to excel not only academically but also in the dynamic and competitive environment of an institute such as IIM. The speaker underscored the importance of students' role in the holistic development of students by emphasizing the necessity of fostering their non-academic skills, including communication, leadership, and teamwork, and encouraging them to be more inventive. She encouraged the students to step outside of their comfort zone and engage with individuals from a variety of backgrounds and cultures, acknowledging that these interactions can broaden one's perspective. The participants were encouraged by Mrs Pratibha Dumane, the ISF Coordinator, to improve their soft skills in addition to their technical abilities. The College Principal, Dr A B Koteswara Rao; HoD Prof N Deepika Rani graced the occasion, coordinated by Dr B Keerthi Priya.

● On **Feb 24, 2024**, the ECE Dept at **ISF, Gayatri Vidya Parishad College of Engineering (GVPCE) Visakhapatnam, Andhra Pradesh,** conducted a hardware expo. The chief guest was Dr D V Rama Koti Reddy, CEO, Dept of IT & ECE at the AP Information Technology Academy, Government of AP. 62 teams, comprising of 248 students, presented their hardware projects in a variety of fields, including industrial automation, bio-medical, agricultural, green technology, smart home services, rescue operations, and disaster management. The event was a resounding success, promoting collaboration, learning, and recognition among the student body. The projects demonstrated inventive solutions that capitalized on emerging technologies and addressed real-world challenges. The following prizes were awarded to the winners: First Prize (Rs. 5000/-): "IOT Enabled Climate Conditioning" from Government Polytechnic College Pendurthi; Second Prize (Rs. 3000/-): "Home Automation Using AR" from GVPCE (A); Third Prize (Rs. 2000/-): "Agriculture Rover Based on Solar Power" from NSRIT. Dr A B Koteswara Rao, Principal, attended the event, which was coordinated by Dr B Keerthi Priya.

● The **ECE Dept** at **ISF, Anil Neerukonda Institute of Technology and Sciences (ANITS), Visakhapatnam, Andhra Pradesh**, conducted a workshop on "Drone Technologies" as part of the pre-fest event of

"ELEKTRA 2024," a national-level Techfest event that took place on **Feb 26-27, 2024**. The workshop was designed to equip students with an in-depth knowledge of the design and development software, drone components, and hands-on experience in drone design. Space Chase, a pioneering aviation company headquartered in India, conducted the workshop. The company is dedicated to the design and development of military UAVs, industrial UACs, and a variety of aerospace technologies. Shri Animisha Alagappa, an accomplished Aerospace Engineer and Expert in UAV, and Shri Piyush Jha, Co-Founder of Space Chase, an Aerospace Engineer and Educator, conducted the workshop. The workshop was divided into four sessions, with two sessions taking place on the first day and the remaining two on the second day. In the morning session of the first day, the focus was on the overview of multi-rotor dynamics. This included an introduction to multirotor flight, knowledge of pitch, roll, and yaw dynamics, drone anatomy, sensor physics, ESC functionality in drone systems, and an overview of diverse motor types. The initial session of the second day addressed the Flight Controller, a critical element in the development of drones. The drones that were developed and calibrated during the workshop were evaluated and flown on the premises of the institution. Participants were permitted to operate the drones during flight on the third day. In general, the workshop offered students practical experience in the design and development of drones, as well as valuable insights into drone technologies. A total of 104 students participated.

- The **EEE Department** of **ISF, Hyderabad Institute of Technology & Management (HITAM), Gowdavelly, Telangana,** held a three-day Faculty Development Program on Electric Vehicle Trends on **Feb 29– Mar 2, 2024**. It discussed EV and technology uncertainties and obstacles through knowledge and information sharing sessions. The goal of this FDP was to showcase new technologies in the above areas. The FDP offered a hands-on session on hybrid electric vehicle battery management systems and state-of-the-art research challenges to improve institutional education on recent breakthroughs. Dr D Sreenivas Rao, Assoc Prof, EEE Dept, NIT Warangal; Dr Vinay Kumar T, Asst Prof and Dr L N Sastry, Director, RT Limited, NIT Tadepalligudem, spoke. About 161 people attended. **Mar 27, 2024** saw an industrial visit to Singur Project, Sangareddy, Hyderabad, under the supervision of Dr M Chiranjivi, Assoc Prof and Dr M Siddhartha, Asst Prof. Innovative energy solutions using the Manjeera River in the Godavari Basin were shown at the Singur Hydroelectric Project in Sangareddy, Telangana. The Southern Hydroelectric Region's energy system benefits from this 15 MW plant in the heart of the region. A small-scale hydroelectric project with a capacity of 3-25 MW, the Singur Project combines sustainability and efficiency. This hydropower project generates clean electricity and boosts the state's renewable energy portfolio. The state-owned Singur Hydroelectric Project, managed by APGENCO, symbolizes collaboration for a greener future. This project meets Telangana's expanding energy needs without interbasin challenges or sharing arrangements. The kinetic energy of flowing or falling water is used to create electricity at a Singur hydroelectric power station. This sustainable energy uses water's natural movement. This industrial visit underscored the significance of renewable energy sources, such as hydropower, by highlighting the environmental advantages of this sustainable energy option and discussing the technological advancements in hydroelectricity generation. 80 students visited the plant.

- The **E&TC Dept** at **ISF, AGTI's Dr Daulatrao Aher College of Engineering (DACOE), Karad, Maharashtra**, conducted a Project Competition under the auspices of IETE on **Feb 29, 2024.** The event was attended by Dr S R Patil, Professor E&TC Dept.Dacoe Karad, and Ms Reva V Jagtap, Assistant Professor Mech DACOE. Students' technical abilities were enhanced and motivation was fostered through the analysis and guidance of projects by faculty members and jury members. The subsequent event was the "Prototype Modelling (Arduino-based project competition under IETE)" competition, which was conducted on **Mar 19, 2024.** The principal guests were Dr SK Patil, Dean of Student Welfare at GCEK, Karad, and Shri Sagar Shinde, proprietor of Amplifier Electronics Pvt Ltd, Karad. Students were provided with practical experience in real-time projects that were based on Arduino. The competition was divided into two phases. Qualified students were advanced to the second round, which involved prototype modeling, following the completion of the first round, which consisted of an exam on Arduino knowledge.

- The **ISF** at the **ECE Dept** of the **Vidya Jyothi Institute of Technology (VJIT) Hyderabad** organized "Udhbhav-2024," a national-level techno-cultural sports festival on **Mar 1-2, 2024**. The event was designed to enhance the co-curricular abilities of students and to introduce them to the most recent developments in the technical and professional sectors. Under the supervision of HoD Prof Dr Rajendra Prasad, the event featured three activities: Funfuse, Electronics IN and Quizverse. The first Funfuse activity involved the process of combining clues to determine the image analysis, which required the use of a variety of cues and information to accurately identify a motion picture. Analytical thinking and an understanding of the clues provided were frequently necessary. There were 57 participants from a variety of engineering departments. Dr S Pradeep Reddy coordinated the event, which was conducted by Mrs Jayalakshmi and Ms Shanthi Priya. In the next activity Electronics IN, participants were initially excluded from the circle. Participants entered the circle when the host stated the name of an electronic component (*e.g*., resistor, diode), and remained outside the circle otherwise. There were 33 participants from the electrical engineering and electronics divisions. Dr S Pradeep Reddy served as the event coordinator and conducted by Mrs K Tarangini and Mrs K Mohana Leela. Lastly, Quizverse featured 19 participants from a variety of engineering departments. Dr Shuvanka Maji and Mrs J Sridevi conducted the event, which was coordinated by Dr S Pradeep Reddy. The quiz was administered in three phases, each consisting of questions related to general knowledge, technical skills, and current events. The participants were divided into groups. The winners were felicitated.

- The **ECE Dept** at **ISF, Dnyanshree Institute of Engineering and Technology (DIET), Satara,** conducted a competitive event entitled "Tech-Nexus: Integrating Circuits and Code across Engineering Disciplines" on **Mar 7, 2024**. The objective of the event was to foster interdisciplinary collaboration and improve the practical skills of students in circuit design and computing. The competition included a variety of engineering disciplines, such as electrical engineering, computer science and engineering, and electronics and telecommunication engineering. It consisted of two rounds: MCQ-based test paper for electronics and telecommunication engineering and electrical engineering students, and a coding challenge for computer science and engineering students, in the first round. Circuit building was the focus of the second

round for candidates of electrical engineering and electronics and telecommunication engineering. Throughout the competition, the participants exhibited exceptional skills and enthusiasm. Winners were determined in each category through a thorough assessment of their performance. The competition attracted a total of 34 participants. The event was effectively managed by Dr S S Mulla, the Head, E&TC Dept, Prof U B Kharade, ISF coordinator, Prof NV Deshmukh, Asst Prof in CSE Dept, and Prof S M Nadaf, Asst Prof in the Electrical Department. The Institute's ISF was promoted by Hon'ble Guest Dr S P Kosbatwar, Head, CSE Dept, who encouraged aspiring engineers to become members of IETE. Vote of thanks was proposed by Pro UB Kharade.

● **ISF** at **Dept ETE, Phaltan Education Society's College of Engineering (PES COE), Phaltan, Maharashtra** held "Kurukshetra 2023-24" with Dr Abhijeet Ghorpade, Chairman, Green Field India, Pune, on **Mar 9, 2024**. The chief guest, in his address advised students to prepare for entrepreneurship and gain the necessary knowledge and abilities. Mrs Lalita Rajesh Paisode and Prof M G Khandalkar judged 28 papers. Vaibhavi Nikam and Varad Inamdar, PES COE, won, followed by Chaitanya Khamkar and Snehal Potekar. Project competition had 98 competitors. Judges Shri Ajay Mahadev Ghadge and Prof D D Jadhav IETE coordinator named winners Anushka Rajemahadik & Avanti Salunkhe KBP, COE Satara and runners-up Dadas Reshma, Kshirsagar Harshada, and Balgude Rutuja, PES COE. Shreemant Sanjeevraje Naik Nimbalkar, Shri Bhojraj Naik Nimbalkar, Shri Shirish Hambirrao Bhosale and Shri Arvind S Nikam graced the occasion.

● The **EC Dept** of **ISF, Dr MGR Educational & Research Institute, Chennai, TN** held a seminar on "New Technologies—AI and IIOT" on **Mar 11, 2024**, with Shri Duraisamy Udayan, a leading AI and IIOT expert from NISCOM Tele-infra Pvt Ltd. Dr U Jayalatsumi, HOD-ECE, greeted everyone. Shri KVS Bindu Sri, a third-year ECE student, presented the speaker, who discussed smart manufacturing, predictive maintenance, IIOT in supply chain management, cloud computing in industry, and M2M communication. Dr T Vimala, professor/ECE, coordinated the event, while third-year ECE student Y Hema Priya gave the vote of thanks.

● The workshop "Envision Future Technology Trends with MATLAB" was organized by the **ISF** at the **Department of ECE, Excel Engineering College (EEC), Komarapalayam, Tamilnadu** on **Mar 14, 2024**. The workshop was conducted by Dr Vivek Ashokan, Regional Manager of ARK Infosolutions Pvt Ltd, Chennai. The event was attended by Dr K Bommanna Raja, the College Principal, and Dr K Tamilarasi, the Head, ECE. There were 55 participants and faculty members in attendance. The attendees were greeted by Shri S Satheeshkumar, an Asstt Prof of ECE, who also emphasized the importance of the ISF. The resource person was introduced by Dr G Jagajothi, Prof ECE. Dr Ashokan conducted sessions that were both persuasive and straightforward, focusing on the fundamental components of MATLAB and their respective functions. The workshop was organized by Shri S Satheeshkumar, Asstt Prof ECE, and concluded with a vote of thanks.

● An invited talk on "Studies on Sub-THz Micro-Fabricated Vacuum Electron Devices" was organized by the **EC Dept at ISF, BK Birla Institute of Engineering & Technology (BKBIET), Pilani,** **Rajasthan,** on **Mar 14, 2024**. The speaker was Prof Nikita M Ryskin, a distinguished authority in the field of vacuum electron devices from the Kotelnikov Institute of Radio Engineering and Electronics RAS Saratov State University, Russia. Prof Ryskin elucidated that the research team obtained breakthroughs that have the potential to revolutionize high-frequency devices in electronics through innovative methodologies and rigorous experimentation. Sub-THz vacuum electron devices have the potential to revolutionize wireless communication technologies and enable advanced sensing and imaging applications. There is a wide range of potential applications. Notable attendees included Dr S M Prasanna Kumar, Director of BKBIET-Pilani, Shree KK Pareek, GM-Commercial of BKBIET-Pilani, Dr Anil Sharma, Principal, Dr Santosh Jangid, HoD ECE, and Dr Krishna Meel, Hony Secretary of the IETE Pilani Centre.
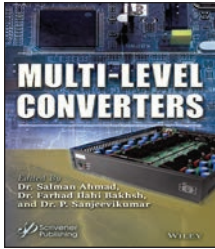
● A new **ISF** was established on **Mar 20, 2024** at **ECE Dept, Anurag University, Hyderabad, Telangana,** by Prof Nuli Namassivaya, Chairman, Hyderabad Centre**.** Other dignitaries present on the occasion were Hony Secretary A K Sangamkar, Hony Treasurer Dr N Srinivas Rao, Dean School of Engineering Dr V Vijay Kumar, and Prof N Mangala Gouri, HoD, ECE, shared valuable insights into IETE's operations and future plans. The importance of continuous learning for pupils in the field of electronics was underscored by Chairman Er Nuli Namassivaya. He informed that IETE membership is not required to participate in IETE, but one can improve knowledge and skills, promoting inclusivity. He encouraged students to express their talents and join the vibrant IETE community. Hony Secretary Shri AK Sangamkar reiterated his thoughts, underlining IETE's diverse opportunities. Technical competitions, workshops, and seminars allow students to explore other subjects and receive practical knowledge that complements their studies. Dr N Srinivas Rao reaffirmed the commitment to quality and innovation. Future events and activities will allow students to display their originality and resourcefulness, he said. Dr V Vijay Kumar, Dean School of Engineering, and Prof N Mangala Gouri, HOD, ECE, provided significant insights into IETE's operations and future. 48 people participanted.

● **EC Dept** at **ISF, Vignans Institute of Engineering for Women (VIEW) Visakhapatnam, Andhra Pradesh** organized a guest lecture on "Career in Navy" on **Mar 22, 2024** by Lieutenant Commander, T Shraddha, Indian Navy. The speaker gave a presentation that informed the audience about the Indian Navy's career opportunities in a variety of fields, emphasized the opportunities for women to work for themselves in a variety of sectors, and provided them with a foundational understanding of the Indian Navy's success in advancing the nation. He urged the female participants to become more self-assured by educating them about the Indian Navy's daily technological breakthroughs.

● On **Mar 23, 2024**, Prof Nuli Namassivaya, Chairman Hyderabad Centre, inaugurated the **ISF** in the **ECE Department** and conducted a Membership Awareness Programme at **Visvesvaraya College of Engineering and Technology in Hyderabad, Telangana**. During his speech, he provided specific information about the discount offered for IETE membership to members. He also encouraged people to take advantage of this opportunity. The Hony Secretary, Shri AK Sangamker, discussed the various events and facilities offered by IETE for both students and teachers. A total of 56 students and faculty members attended the event.

Awards & Achievements

Dr Sudhakar Rao (F-217690), Technical Fellow, Northrop Grumman Aerospace Systems, USA has been selected as the recipient of **2024 IEEE APS Distinguished Industry Leader Award** for his distinguished industry leadership, pioneering contributions and innovations to advanced antenna technologies for satellite, air and ground communications. The award will be conferred on him at the awards banquet during the IEEE APS/URSI International Symposium in Florence, Italy on July 17, 2024. He is also the recipient of **Lifetime Achievement Award by the IEEE Vizag Bay Section & AP-S Chapter in March 2024 for his distinguished research contributions in the area of antennas for space, vehicular and ground applications."** Dr Rao became an IEEE Fellow in 2006 and a Fellow of IETE in 2009.

Dr Salman Ahmad, Dr Farhad Ilahi Bakhsh, and **Dr P Sanjeevikumar (F-501049)** are the editors of the recently published book "**Multilevel Converter Topologies, Control Methods, and Applications,**" which is published by Scrivener Publishing and Wiley. The operation, modulation, and control strategies of multilevel converters, as well as their diverse applications in renewable energy generation, power systems, and variable speed motors, are thoroughly examined in this book. The book will be a valuable resource for academic researchers, university students, and practicing engineers who are involved in the field of multilevel converters. This book comprises 17 chapters that address the topologies, modulation, control, and applications of multilevel converters.

Dr TS Rathore (F-049768) was honoured with the **'Pillars of Hindustanee Society'** award for the year 2024-25 during the Silver Jubilee celebrations of Trans Asian Chambers of Commerce and Industry (TACCI) on 25th February 2024 at ITC Maraathaa Hotel, Andheri, Mumbai. The award was presented by Shri Dooshant Bucktowar, the office-in-charge of the Consulate of Mauritius. In addition, he has been awarded a **'Certificate of Appreciation'** for his contributions as the Editorial Board Member of the *International Journal of Advances in Applied Sciences (IJAAS)* from December 2020 to November 2023. He was awarded a **'Certificate of Appointment'** acknowledging his selection as an **Editorial Board Member** of the International Journal of Advances in Applied Sciences (IJAAS) for a three-year period, commencing on 1 January 2024 and concluding on 31 December 2026.

We extend our congratulations to our members for their exceptional accomplishment.

New IETE Members Enrolled/Upgraded during 1st January to 30th April 2024

S.N.	Mem	Cat	Name	S.N.	Mem	Cat	Name	S.N.	Mem	Cat	Name	S.N.	Mem	Cat	Name
1	504213	AM	Ithape, Rupali Vijay	88	504238	F	Vijayarajan S M, Dr	175	504309	F	Patel, Vishnukumar B	262	504391	F	Singhal, Sangeeta
2	504270	AM	Jain, Dipika	89	504239	F	Sampathkumar, P	176	504310	F	Sagar Jvr, Dr	263	504392	F	Maddali, Lalith
3	504333	AM	Ambooj	90	504240	F	Kaur, Harleen	177	504311	F	Rajashree M R	264	504393	F	Dhaliwal, Neha
4	196204	AM	Sarate, Vaibhav H	91	504241	F	Sudhakar S	178	504312	F	Jakir Hussain G K	265	504394	F	Kulkarni, Amol
5	230605	AM	Kumar, Mohit	92	504237	F	Gajulapally, Adithya	179	504313	F	Venkatesh K	266	504395	F	Kaushik, Madhuri
6	187483	AM	Kumar, Manish	93	228067	F	Ameena Banu, M	180	504314	F	Harne, Radhika Ramdas	267	504396	F	Gaddam, Sunil Kumar, Dr
7	238512	AM	Kumar, Amish	94	158487	F	Harikumar R, Dr	181	504315	F	Bhattacharjee, Debotosh, Dr	268	504397	F	Kulkarni, Shamsundar Murlidhar, Dr
8	202070	AM	Mahanta, Kalpeshwar	95	202397	F	Kota, Solomon Raju, Dr	182	504316	F	Sasmal, Soumitra Sasmal	269	504398	F	Goutam Kumar Das, Dr
9	224185	AM	Reshma D S	96	216378	F	Kumar, Sanjeev, Dr	183	504317	F	Singh, Kuldeep	270	504399	F	Devanaboyina Venkata Ratnam, Dr
10	237312	AM	Mohanty, Atashi Baran	97	221206	F	Takale, Sachin Balasaheb, Dr	184	504318	F	Yadav, Vishal	271	504400	F	Laxmi Srinivas S
11	132171	AM	Bhasker M	98	229922	F	Sisodia, Dilip Singh, Dr	185	504319	F	Jhariya, Dhamendra Kumar, Dr	272	504401	F	Shaligram Prajapat, Dr
12	238184	AM	Agarwal, Akshay	99	235864	F	Sunny Dayal, P A, Dr	186	504320	F	Paroha, Abhay Dutt	273	504402	F	Chowdary, Pavankumar P
13	217000	AM	Uma Kumari	100	237002	F	Dinesh, P M, Dr	187	504321	F	Saravanan S, Dr	274	504403	F	Kale, Satyanand
14	080722	AM	Prasad, Pramod	101	501492	F	Beniwal, Rohit, Dr	188	504322	F	Bhattacharya Suman, Dr	275	504404	F	Bhatia, Ramneet
15	238538	AM	Kumar, Arun	102	502914	F	Kaur, Gurpurneet, Dr	189	504323	F	Tripathi, Prabal	276	504405	F	Shrivastava, Arpit
16	222102	AM	Jadhav, Vidya Dilip	103	504230	F	Gambhire, Shankar J, Dr	190	504324	F	Pawar, Suryappa J, Dr	277	504406	F	Saha, Shambhu Nath
17	217777	AM	Sarkar, Purnima	104	504242	F	Gupta, Ashish	191	504325	F	Chakraborty, Subhalaxmi, Dr	278	504407	F	Kavitha G, Dr
18	231515	AM	Kumar, Agraj	105	504243	F	Koley, Chaitali, Dr	192	504326	F	Nagpal, Arpita, Dr	279	504408	F	Garg, Prerak
19	187304	AM	Ranjan, Rakesh	106	504244	F	Kabra, Sneha, Dr	193	504327	F	Srinivasulu P, Dr	280	504409	F	Anish Ahmad, Dr
20	215074	AM	Bhosale, Ashvini Balasaheb	107	504245	F	Sahana, Sudipta, Dr	194	504334	F	Srivastava, Ajai Kumar	281	504435	F	Vivek C, Dr
21	204821	AM	Sherkane, Vikram Dilip	108	504246	F	Anand S	195	504335	F	Sehrawat, Sunil Kumar	282	504436	F	Sudha M, Dr
22	213501	AM	Singh, Mahendra	109	504247	F	Kumar, Sanjeev	196	504336	F	Sheltan T T	283	504437	F	Niture, Deeplaxmi V, Dr
23	221269	AM	Asharani S R	110	504248	F	Kumar, Trivesh, Dr	197	504337	F	Jaya Krishna T	284	504438	F	Verma, Robin
24	224617	AM	Yekendra Khuman M	111	504249	F	Yadav, Archana Balkrishna	198	504338	F	Thakar, Vishvjit K, Dr	285	504439	F	Vaidya, Yogita M, Dr
25	234184	AM	Verma, Brijesh Kumar	112	504250	F	Kaur, Harminder, Dr	199	504339	F	Venkateswarlu C	286	504440	F	Patekar Poonam Suhas
26	224972	AM	Chavan, Satish Govind	113	504251	F	Patil, Sangita Bapu, Dr	200	504341	F	Anand, Manish Raj	287	504441	F	Virender Dhiman
27	211547	AM	Ghosh, Paromita	114	504252	F	Bolem, Sai Chandana	201	504342	F	Bhargava, Dheeraj, Dr	288	504442	F	Manjunatha S K
28	215056	AM	Savaliya, Nikunjkumar J	115	504253	F	Asudani, Deepak S	202	504343	F	Deshmukh, Abhijit Anand	289	504443	F	Anandan S, Avm, Avsm, Vsm(Retd)
29	504357	AM	Joseph, Gloria	116	504254	F	Mannam, Praveen Kumar	203	504344	F	Pradhan, Satyabrata	290	504444	F	Kapse, Yogita Dinkar
30	170410	AM	Chakraborty, Raja	117	504255	F	Kuppam, Manoj	204	504345	F	Punnarao B C	291	504445	F	Kamala V
31	234324	AM	Singh, Oinam Kiranjit	118	504256	F	Lopes, Joel	205	504346	F	Naga Ramesh P	292	504446	F	Bansal, Babul
32	190878	AM	Gogoi, Deepjyoti	119	504257	F	Mendhe, Vikas, Dr	206	504347	F	Arun Sekar R, Dr	293	504447	F	Palash Ghosal, Dr
33	230350	AM	Kumar, Rajiv	120	504258	F	Ziauddin, Fnu	207	504348	F	Hemalatha B	294	504448	F	Kumar, Apurva
34	504415	AM	Malvatkar, Pratiksha S	121	504259	F	Mahant, Roshan	208	504349	F	Amrita S	295	504450	F	Biswas, Sujoy Kumar, Dr
35	504416	AM	Thenmozhi M, Dr	122	504260	F	Bammidi, Tirupathi Rao	209	504350	F	Friban Almeida	296	504451	F	Paitya, Nitai, Dr
36	504417	AM	Suresh S, Dr	123	504261	F	Manjunath M V	210	504351	F	Singh, Jatin Pal	297	504452	F	Kaur, Jaswinder, Dr
37	504418	AM	Saravanan M	124	504262	F	Syed Mohamed Thameem N	211	504352	F	Sreedhar Y	298	504453	F	Lokhande, Netra Manoj, Dr
38	504419	AM	Prem Kumar R	125	504263	F	Budaraju, Raja Rao	212	500762	F	Punitham V	299	504454	F	Kumarasamy, Somasundaram
39	504420	AM	Pushpalatha N	126	504264	F	Chinthekindi, Ramprasad	213	172919	F	Kumar, Jitendra, Dr	300	504455	F	Mulla, Rehan
40	504421	AM	Geetha M, Dr	127	504271	F	Mehra, Pawan Singh, Dr	214	198427	F	Sisodia, Narendra Kumar	301	504456	F	Senthil, Bharanidhar B V
41	504422	AM	Gunapriya D, Dr	128	504272	F	Aditya Avinash	215	208185	F	Basu, Adrijit	302	504459	F	Varam, Nithin
42	504423	AM	Rajan Babu W, Dr	129	504273	F	Maneesh S	216	227401	F	Sharath Chandra I, Dr	303	504460	F	Venkata Vamsi Krishna, S V
43	504424	AM	Suganyadevi K	130	504274	F	Sandeep K V, Dr	217	228082	F	Yadav, Dinesh, Dr	304	504461	F	Adke, Pallavi Gaurav, Dr
44	504425	AM	Thamarapmanalan T, Dr	131	504275	F	Fawad, Iffath, Dr	218	237467	F	Joshi, Jayant Gajanan, Dr	305	219718	M	Ghanekar, Kaustubh Ravindra
45	504426	AM	Muthukumaran N, Dr	132	504276	F	Vyas, Bhuman Sanatkumar	219	502066	F	Banerjee, Partha Sarathi, Dr	306	504200	M	Vyas, Ritesh, Dr
46	504427	AM	Anand Kumar V, Dr	133	504277	F	Poddar, Shashi, Dr	220	504358	F	Malik, Navdeep	307	504201	M	Singh, Virender, Dr
47	504428	AM	Sathish Kumar D, Dr	134	504278	F	Sodhi, Gagandeep Singh	221	504359	F	Agarwal, Megha	308	504212	M	Andiboyina Vijaya Sri
48	504429	AM	Suganthi Eyangeline C, Dr	135	504279	F	Singh, Kanwardeep, Dr	222	504360	F	Bhatt, Dinesh	309	504222	M	Patil, Amit Kumar
49	504430	AM	Ganesh C, Dr	136	504280	F	Singh, Rupinderjit	223	504361	F	Jain, Mamta	310	504225	M	Pagare, Rajendraprasad A, Dr
50	504431	AM	Nivaashini M, Dr	137	504281	F	Patel, Jayeshkumar J, Dr	224	504362	F	Konduru, Jayasekhar	311	504229	M	Bhosale, Navnath Dattatray, Dr
51	504432	AM	Mahaboob M	138	504282	F	Kumar, Jayendra, Dr	225	504364	F	Raj Kiran, K V	312	504233	M	Jeerla Thippeswamy
52	504433	AM	Babitha Lincy R, Dr	139	504283	F	Dey, Suman Kr, Dr	226	504365	F	Karsh, Ram Kumar, Dr	313	504234	M	Kannika Parameshwari C
53	504434	AM	Sathish Kumar G, Dr	140	504284	F	Kothuru, Sudheer Kumar	227	504366	F	Dayakar Babu, K	314	504232	M	Jeyalakshmi, P
54	109389	F	Sharma, Rajev Kumar	141	504285	F	Chintala, Sathishkumar	228	504367	F	Koushik, Priyanka	315	504235	M	Abdul Samad, P
55	212238	F	Venkateswari R, Dr	142	504286	F	Kumar, Rajesh, Dr	229	504368	F	Sowmya Narayanan S G	316	504236	M	Paranthaman, A G
56	230100	F	Somasundaram K, Dr	143	504287	F	Batchu, Ravi Kumar	230	504369	F	Mittal, Sumit	317	238107	M	Yadava, Abhilotsav
57	501509	F	Ray, Partha Pratim	144	504288	F	Enoch Anbu Arasu P	231	504370	F	Pandey, Nakul	318	500787	M	Nair, Ajin K, Dr
58	501610	F	Kumar, Nitin, Dr	145	504289	F	Rathod, Ketan	232	504371	F	Zafar, Rukhsar	319	504265	M	Kumar, Ravinder, Dr
59	501972	F	Shanmugham B, Dr	146	504290	F	Oku, Krishnamurthy	233	504372	F	Thombre, Sneha Kiran, Dr	320	504266	M	Singh, Shivmanmeet
60	504202	F	Rajendran M	147	504291	F	Devineni, Sreenath	234	504373	F	Landge, Naresh	321	504267	M	Parthasarathy R, Dr
61	504203	F	Pandey, Prateek, Dr	148	504292	F	Dhoni, Pan Singh	235	504374	F	Mehrotra, Nitesh	322	504268	M	Kaur, Harminder
62	504204	F	Guha, Paramita, Dr	149	143004	F	Patel, Jatinkumar J, Dr	236	504375	F	Nageswararao K	323	504269	M	Pannu, Preeti, Dr
63	504205	F	Singh, Narendra, Dr	150	156937	F	Singh, Alok Kumar	237	504376	F	Gp Capt Babu Joseph(R)	324	504328	M	Prathibha Kiran, Dr
64	504206	F	Sharma, Deepak, Dr	151	160663	F	Chauhan, Amit	238	504377	F	Saini, Jaswinder Singh	325	504329	M	Bhattacharya, Anamiya, Dr
65	504207	F	Vamsi Krishna Raja, P, Dr	152	211882	F	Mehta, Usha S, Dr	239	504378	F	Rele, Mayur	326	504330	M	Saranya K
66	504208	F	Peddireddy, Kiran N B	153	225111	F	Sreejith Venugopal	240	504379	F	Gupta, Ravi Shankar	327	504331	M	Jain, Amit, Dr
67	504209	F	Dhola, Hiteshkumar A	154	235927	F	Bhaskar, Manju, Dr	241	504380	F	Thaneeru, Naresh	328	504332	M	Khatkar, Avni, Dr
68	504210	F	Parmar, Darshankumar	155	237657	F	Gajjar, Sandip A	242	504381	F	Prashanth R	329	504340	M	Kar, Nivedita
69	504211	F	Banka, Mythili	156	237805	F	Yadav, Ashok Kumar	243	504382	F	Gayathri S	330	504353	M	Jain, Shubhi, Dr
70	504214	F	Boddapati, Uchinta K	157	500452	F	Bhambri, Pankaj, Dr	244	504383	F	Sankunny J	331	504354	M	Jha, Ranjan, Dr
71	504215	F	Gorantla, Ashok Kumar V	158	503577	F	Saichand S	245	504384	F	Maske, Dilip F, Dr	332	504355	M	Patel, Shrawan Kumar, Dr
72	504216	F	Seth, Anubhav	159	504293	F	Gour, Sanjeev C	246	504385	F	Shah, Varun	333	504356	M	Mustafa Mohd, Dr
73	504217	F	Gude, Venkataramaiah	160	504294	F	Sridhar M	247	504363	F	Suma Sathyakam, P	334	504410	M	Kowsalya K
74	504218	F	Dhingra, Arvind Kumar	161	504295	F	Mohd Ameed Mustafa Shah, Dr	248	116183	F	Nayak, Akshaya Kumar, Prof	335	504411	M	Ragta, Anurag
75	504219	F	Pandiyarasan V, Dr	162	504296	F	Bhardwaj, Arvind Kumar	249	141974	F	Kolhare, Neelima R	336	504412	M	Bhatt, Meena
76	504220	F	Singh, Ravindra, Dr	163	504297	F	Nanda, Umakanta, Dr	250	166245	F	Bedananda Singh, L	337	504413	M	Hima Vijayan V P
77	504221	F	Kaur, Simranjit	164	504298	F	Swetha R, Dr	251	181457	F	Dave, Rasesh J	338	504414	M	Belokar, Rashmi P
78	504223	F	Walia, Gurjot Kaur	165	504299	F	Pushpa B R	252	192378	F	Pithadia, Vijay H, Dr	339	504449	M	Srivastava, Rahul, Dr
79	504224	F	Kaur, Navneet, Dr	166	504300	F	Anitha S	253	237130	F	Vyas, Vibha, Dr	340	504457	M	Chakraborty, Parijat
80	504226	F	Sanyasi Naidu Dadi, Dr	167	504301	F	Sumathi S	254	500938	F	Pradhan, Durga Prasad	341	504458	M	Bhattacharya, Aakashjit
81	504227	F	Abegaonkar, Mahesh P, Dr	168	504302	F	Santhosh B, Dr	255	501067	F	Rasadurai K, Dr	342	G00661	ORG	Rajarshi Shahu Maharaj Polytechnic, Nashik
82	504228	F	Jain, Chahat	169	504303	F	Mahia, Ram Niwash, Dr	256	502554	F	Metkar, Shilpa Prabhakar, Dr	343	G00669	ORG	Sree Rama Engineering College, Tirupati
83	502250	F	Bakare, Rageshri Vishal	170	504304	F	Devaraju R, Dr	257	504386	F	Paulchamy B, Dr	344	G00670	ORG	Sri Eshwar College of Engineering, Coimbatore
84	500866	F	Shakya, Harish Kumar, Dr	171	504305	F	Bharath Kumar, N	258	504387	F	Samant, Prajakta S	345	G00671	ORG	VIT-AP University, Vijaywada
85	160915	F	Ram, Bajro	172	504306	F	Chattopadhyay, Madhurima, Dr	259	504388	F	Khanna, Karan				
86	227398	F	Honade, Shrikant Jagdish, Dr	173	504307	F	Singh, Asheesh Kumar, Dr	260	504389	F	Nori, Jayaram				
87	504231	F	Goel, Tushar, Dr	174	504308	F	Bhargavi G	261	504390	F	Vaddy, Rama Krishna				

AM = Associate Member   **F = Fellow**   **M= Member**   **ORG = Organizational Member**
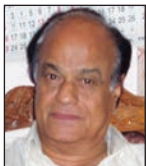
OBITUARY

This edition of the IETE Newsletter contains the unfortunate news of a certain number of passing away. Our deepest sympathies go out to the families of our members who have lost loved ones, and we recognize the exceptional service of all of our members.

Shri Nagarajan Vittal (HF-0:0033): The Padma Bhushan awardee and IAS officer of the Gujarat cadre, 1960 batch, passed away in Chennai on 4th Aug 2023. He was also an Honorary Fellow of the IETE. With the passing of Shri N Vittal, former Telecom Secretary and Central Vigilance Commissioner (CVC), the country has lost the person who had sown the seeds for the growth of the information technology sector four decades ago. He helped the telecom department adapt to the new industry-friendly policies by positioning the Department of Electronics in the lead in implementing measures to enhance software, establish software technology parks, and form strategic alliances with the industry. His introduction of the electronics hardware technology park idea proved to be very successful. Along with leading the telecom industry's liberalization process, he was instrumental in the approval and public announcement of the National Telecom Policy 1994. **In spite of the fact that it is late, the IETE would like to pay tribute to the remarkable contributions he made for the growth of the nation.**

Shri Dharam Pal Goel (F-034022), a former-Scientist at CSIO, Chandigarh left for heavenly abode on 2nd Dec 2023. Regarded as a prominent figure in the scientific community, his influence was undeniably significant. Way back, Shri Goel operated the IETE Chandigarh Centre from his personal office due to the lack of a proper location. He served the Centre as a Chairman (1995-97, 2001-02), Hony Secretary (1982-84, 1989-91, 1994-95), and Hony Treasurer (1985-86, 1993-94) besides being Vice Chairman and an Executive Committee Member multiple times. One of his stand-out achievements was securing a plot from the Chandigarh Administration for the IETE Centre. This was a huge milestone, paving the way for the building where all the Centre's scientific and technical activities happen now. His repeated terms in the EC highlighted his unwavering dedication and leadership. **Shri Goel's legacy and contributions will always be remembered and cherished. May God bless his noble soul with eternal peace.**

Dr Borra Madhava Reddy (F-044014) left for his heavenly abode on 28 May 2024 at age of over 90 years. He was the first to describe the global thermal structure of the topside ionosphere from satellite in situ measurements. He received an invitation in 1983 to join the NASA-Space Shuttle team for the SUNDIAL program, which ran until 1996. His thermal expansion idea was subsequently proven. He demonstrated decisively through a number of studies that the topside plasma densities increase substantially during magnetic storms. His innovative efforts to advance radio communications defined the Indian Radio Environment. Dr Reddy worked at the National Physical Laboratory, New Delhi (1967-95) from where he retired as Head of the Radio Science Division. He was a Visiting Professor at the Institute of Space and Astronautical Sciences of Japan, and also at the Kyoto and Nagoya Universities, Japan. He was Vice-President of the Indian Geophysical Union for several years and Chairman of the Governing Council of Indian Institute of Geomagnetism for ten years. He guided 10 students for PhD and published 150 papers. Dr Reddy won the Vikram Sarabhai Award (1975) for outstanding contributions in the area of Planetary and Space Sciences; Decennial Award by Indian Geophysical Union (1997); and KR Ramanathan Medal in Atmospheric Sciences (1999). **In his passing away, IETE has lost an intellectual giant: May Almighty grant eternal peace to his noble soul.**

Er Chandra Prakash Varma (F-081116L), an assistant professor at Dr Ambedkar Institute of Technology for Handicapped (AITH), Kanpur, passed away on 12th Jan 2024. He held the position of Honorary Secretary from 2016 to 2018 and Past Chairman from 2018 to 2020 at IETE Kanpur Centre. In 2013, he earned a Master of Technology degree in electronics from HBTI, Kanpur. He had authored three books and authored/ co-authored 39 papers. He taught many electronic-oriented courses at AITH, Kanpur. IETE expresses its solidarity with the Executive Committee members of IETE Kanpur Centre and offers its heartfelt condolences to the family members and friends of Er C P Verma.

Prof D Sreenivasa Rao (F-235352), a professor in the ECE Department of JNTU Hyderabad, passed away on 10th February 2024, as a result of a brain hemorrhage. We offer our sincere condolences to the grieving family for this irreplaceable tragedy.

We regret to inform you that, due to incomplete information, we are unable to provide additional data about the deceased members listed below:

Shri P S Deodhar (DF-022323) Dr KM Hebbar (F-049746), Lt Col Raman (F-003922), Shri RK Bagga (F-104017), Shri Alak Banik (F-134003), Dr SB Sharma (F-092660), Shri Rajnikant Gandhi (F-215272), Shri MK Thakar (F-085484), Shri Tanish Zaveri (F-212145), Shri Arvind Shukla (F-134027) Maj Gen Ohri (F-106122), Gp Capt AB Mehta (F-002535), Wg Cdr SK Ghuriani (F-044827), Shri BP Reddy (M-020659), Shri Nilesh Shrikant Deodhar (AM-502268), Shri Vikarant Vij (AM-229966)

IETE Women Achievers

Prof Usha Mehta (F-211882), holds the position of professor and head at the Department of ECE in the Institute of Technology at Nirma University, Ahmedabad. She obtained her bachelor's degree in electrical and computer engineering (ECE) in 1994, master's degree in 2005, and PhD degree in VLSI design in 2011. She possesses more than 23 years of teaching experience. She has mentored over six PhD students and MTech students. She is credited with one patent. She served as the principal investigator for research projects funded by ISRO RESPOND, GUJCOST, and MeitY C2S Scheme. The RHBD Chip, which was designed under her supervision for the Space Applications Centre (SAC) of the Indian Space Research Organisation (ISRO), was manufactured at the Semiconductor Complex Limited (SCL) in Chandigarh. She has authored more than 55 research publications in the field of VLSI design and testing. She has presented numerous technical lectures at various conferences and workshops. She served as the conference chair for prestigious international conferences such as iSES-2023, VDAT2015, NUiCONE2012,

and NUiCONE-2011. She has actively different capacities, such as serving as coordinator, and membership growth the IEEE Gujarat section women-in-years and is actively engaged in promoting holds senior membership in IEEE, membership in ISTE. She has a strong addition to that, she is also engaged in participates in multiple committees implementation, such as the internal research committee, and the academic

Message

The electronics is the key to the future and communication is the fuel to the future. The growth vehicle of India can't survive without electronics and telecommunication. I feel privileged to be part of this IETE group.

– Prof Usha Mehta

contributed to IEEE Gujarat Section in the WIE chair, section secretary, chapter chair. She has served as the chairperson of engineering affinity group for over six and supporting women professionals. She associate membership in CSI, and life interest in teaching and research, and in academic administration. She actively focused on strategic planning and quality assurance cell, the university-level council.

Dr Mamta C Padole (F-203163) is an associate professor in the Department of Computer Science and Engineering at The Maharaja Sayajirao University of Baroda. Her technical contributions are extensive and encompass a wide range of fields within academia, research, and societal engagement. She is the holder of two granted patents and eight granted copyrights from the Copyright Office of the Government of India. These achievements are indicative of the technical work's originality and profundity, as well as the dedication to the dissemination and creation of knowledge.

Her over 40 publications in esteemed journals, conferences, and book chapters, 60% of which are indexed in prestigious databases like SCOPUS, WoS, NLM, etc., demonstrate her scholarly influence and interdisciplinary research prowess. In addition to her publications, she has written two books, one of which was adopted by the Gujarat State Board of School Textbook. This has had an impact on educational curricula and has shaped the minds of future generations. Additionally, her cover story article, "BioInformatics: Ein Gestalt," which was published in CSI Communications, serves as a testament to her capacity to effectively communicate intricate concepts to a broader audience, thereby bridging the divide between academia and society. Her academic pursuits are additionally reinforced by the acquisition of five grants and eight awards. This encompasses the IETE-Technomedia Young Women in Engineering Award (2017).

Dr Padole has made substantial design, technology-mediated teaching has translated the NPTEL course into simulations that can be contributed to development of the next generation exemplified by her roles as a PhD guide, and mentor.She also participates in a organizations, including as IETE, CSI, important positions, such as Chairperson

Message

One Educated Mother is equivalent to thousand teachers. Promoting women in higher education and encouraging professional growth is need of the day.

– Dr Mamta C Padole

contributions to the fields of curriculum and learning, and mentorship. She Gujarati and has developed numerous Virtual Labs. Her commitment to the of IT professionals and innovators is curriculum designer, BoS member, number of academic and professional ISTD, and others, where she has held of the IETE Vadodara Center (2020–

2022). This, along with her involvement at seminars, workshops, and conferences, shows that she is dedicated to collaboration and knowledge sharing within the academic community. Her initiatives to advance gender equality, education, and technical literacy have a noticeable impact on society. Gold medals for female students, the promotion of women's representation in professional organizations, and the encouraging of girls' education are examples of initiatives that demonstrate a dedication to societal advancement and inclusivity.

In summary, Dr Mamta Padole's technical contributions serve as a model for a comprehensive approach to the generation, dissemination, and impact of knowledge on society.

Chief Editors of *IETE Journal of Research* Meet IETE President at IETE HQ, New Delhi on 27th April 2024

Standing from L → R : Gp Capt Sonpal Singh, Secretary-General, Col SL Kapoor, Vice President IETE, Shri Gurmukh Singh, Chairman Publications, Prof AK Saini, President IETE, Prof SK Koul, Editor-in-Chief, Prof Arun Kumar &Prof R K Mallik, Deputy Editors-in-Chief of *IETE Journal of Research*.