IETE

The Institution of Electronics and Telecommunication Engineers

NEWS LETTER

From President's Desk

Dear Members,

Welcome to the latest issue of IETE Newsletter.

Even though the Issue date says Jan-August 2020, we are bit late in releasing it due to prevalent set of circumstances and challenges. Nevertheless, this issue offers a great variety of activities and reports waiting for you to look into and to see the true breadth of the work being done within the IETE by its many Centres, volunteers and members.

I begin with conveying my sincere thanks & gratitude to all my colleagues in the Governing Council for re-electing me as the President of IETE for the year 2020-21. This second term would give me an opportunity to serve the fraternity for one more year. I thank all the members for their messages of greetings and good wishes. I shall endeavour to carry forward the high standards set by my predecessors and serve this august office to the best of my ability.

Friends, IETE recently conducted its 63rd Annual IETE Convention on "Role of 5G in building a more resilient and adaptable Organization" through online. Shri Abhijit Kumar Majumder, Vice President & Chief Information Officer, TCS, graced the occasion as the Chief Guest and Shri Jayarajan, Outstanding Scientist & Chairman BARC Safety Society Council, Mumbai, as Guest of Honour. The event featured the 52nd Bhabha Memorial lecture by Shri Jayarajan and Dr Ram Lal Wadhwa Award Lecture by Prof Animesh Biswas, Director, NIT, Rourkela. Both addresses were informative and received well by the participants. The event also saw conferment of high honours of the Institution – IETE Distinguished Fellowships on Col Balraj Anand (Retd) and Shri C K Haridas; IETE Lifetime Achievement Award-2020 on Dr Surendra Pal, Past President and Distinguished Fellow of IETE. The efforts put in by IETE TPPC Committee, Zonal Mentor, Chairman Mumbai Centre and his team were commendable in organizing this online event.

I would like to congratulate all IETE Student Awardees for their excellent academic achievement and the Main Awardees who have made significant contributions to the profession and have won IETE Awards in various categories. We acknowledge the hard work and dedication of the awardees -2020, while publishing their details in the issue. Congratulations to all of them and I wish them the very best for their future endeavours.

Talking of other aspects, I am happy to state that all sections of IETE HQs carried out their activities setting the priorities in such unusual circumstances. The IETE Publications recorded an all time high Impact Factors (IETE Technical Review- 1.845 and IETE Journal of Research-1.125) earning a good name on the global platform. Though at the beginning of the year, there were atypical delays, but IETE Publications turned this crisis into an opportunity and worked hard to bring out the issues in time. The new membership applications were also completed within the stipulated time by IETE Membership section. To encourage membership count, the fraternity is being offered COVID specific discount on memberships for lifetime, valid only till year end. We managed to conduct the online Centre elections successfully. Events like IETE Mid-Term Symposium, World Telecom & Information Society Day were organized effectively via webinar amidst the pandemic situation. Another important event organized was the "Interaction & Induction Meet" which was a huge success. I would like to acknowledge the special role being played by Professional Activity Centres (PACs) in enhancing the visibility of IETE, viz., IETE Australia PAC and Nagercoil PAC, doing extremely well under their devoted leaders, Shri Atul Garg and Dr Arumuga S Perumal, who are leading the mission of furthering the IETE's aims and objectives. The detailed report of these activities are included in the Issue.

Furthermore, IETE's June-2020 exams, which were to be held from 15 to 22 June 2020, have been postponed due to Covid-19 pandemic and will now be held from 01 to 08 Oct 2020 following the necessary protective guidelines against Covid-19. A committee has also been set up to explore the possibility of conducting IETE exams through online mode under such circumstances.

Regarding recent developments on the establishment of IETE University, I would like to share that the DPR (Detailed Project Report) had already been submitted to the Jharkhand State officials and the virtual inspection of existing organization is completed by them but the Letter of Intent is still awaited and expected soon.

Finally, I would like to express my gratitude to the outgoing members of the IETE Governing Council for their wonderful contribution during their term and extend my heartiest welcome to the newly elected GC Members. I invite all to work together towards the betterment & visibility of IETE.

With a hope that we will soon see this pandemic end, I conclude and urge the fraternity to take all necessary precautions and stay safe!

Best wishes!

Prof (Dr) J W Bakal

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IETE HQs, New Delhi

THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS • INDIA •

President re-elected

Prof (Dr) J W Bakal (F-174662L), President IETE has been re-elected as the President of the Institution of Electronics and Telecommunication Engineers for another term, *i.e.* 2020-21.

Our Congratulations and Best Wishes to him!

IETE Announces its Distinguished Fellows -2020

Shri C K Haridas, former Dy Gen Mgr (Telecom) with four decades of distinguished service to the telecom department & the Founder Chairman of IETE Palakkad Sub-Centre; and *Col Balraj Anand (Retd)*, who has over 30 years of experience from a wide and varied range of sectors and positions. These individual professionals are being recognized by their peers for their sustained outstanding contribution to the Society.

Shri C K Haridas (DF-005141L) is a mathematics graduate with GradIETE degree from IETE. He is the Founder Chairman of IETE Palakkad Sub-Centre that started in 2003 with handful of members and today stands tall with 300 plus corp members on its roll including a building with two floors of its own at a prime location. Shri Haridas has worked for IETE with a ground level understanding and was instrumental in opening an IETE Sub-Centre at Kozhikode, a number of Professional Activity Centres and IETE Student Foras in his state jurisdiction. He has played a vital role in achieceving the institution's vision, *i.e., "*Reaching the Unreached" within his short period of association and strengthening membership-base from Kerala & undeveloped rural areas of Malabar. Shri Haridas was elected in the IETE Governing Council in 2012 and ever since has been contributing significantly towards the growth of students and organizing technical activities for the institution. He has served on various IETE Committees and Boards as Chairman/ Co-Chairman/ active member. As the Zonal Mentor, he successfully organized three notable events in the South Zone, *viz,* National Technical Paper Contest at Chennai; 2nd ISF Students' Congress at Coimbatore and the South Zone Seminar at Trivandrum, clubbed with the 1st South Zone Chairpersons' Meet. He actively supported IETE Kochi Centre in conduct of AIC during 2017; motivated more than 20 IETE Centres for conduct of women empowerment programs/ activities during 2018-19.

He takes a special credit for developing and establishing a good long rapport with student community. Getting involved into their problems and pursuing aggressively till it is resolved, is his unique characteristic. He utilized the Student Interactice Cell at IETE HQs effectively for this purpose. His contribution towards intensifying and strengthening IETE Alumni Association as Chairman of AAC in 2016 was noteworthy including his vigilance for regular updates on IETE Website. He took initiatives in sorting out job related issues for IETE alumni in India or outside by calling IETE Governing Council's attention to the fact. His contribution can be seen in diversified activities, such as conduct of workshops, PMKVY programs, hands on trainings, internships *etc.*, of, by, for IETE Palakkad Centre for revenue generation. Presently, he is working towards the Centre's need for undergoing digital transformation much needed requirement under present lockdown scenario.

Col Balraj Anand (Retd) (DF-109714L) is MSc in Physics with Electronics (Hons School), Punjab University; MBA in Information Systems & LLB (Hons) from Indore University and a graduate of Technical Staff College from Indian Institute of Armament Technology, Pune. He has served in Defence Telecom Deptt for 27 years & held different assignments. He possesses rich experience in the field of operations & maintenance of Telecom Networks & Project Management and was actively associated in providing reliable & fail safe communications during Kargil War. He has been awarded commendation card by Vice Chief of Army Staff for his commitment & devotion to duty. He was the head of a specialized Defence Telecom Organization (1999-2002), which is responsible to provide ground to air radio communications. He worked in the corporate sector for 13 years. He was the elected member of IETE Governing Council from 2011 to 2014 and the Chairman of IETE Delhi Centre during 2008–2010. He has taken many initiatives to promote skill development programmes in the IETE. At present Col Anand is pursuing his interest in legal profession & practicing at Delhi High Court & Supreme Court of India.

IETE -LifeTime Achievement Awardee -2020

Congratulations to **Dr Surinder Pal (DF-062502L),** Distinguished Fellow & Past President IETE on being selected as IETE's Life Time Achievement Awardee this year. This recognition is conferred on his multifarious accomplishments, which extends beyond professional community. IETE takes pride in conferring the Institution's Life Time Achievement Award on him.

News from IETE Headquarters

IETE 51st Mid-Term Symposium (MTS) 2020

The **51st Mid Term Symposium 2020** of the institution was organized digitally on the theme "**Digital Forensics and Information Security**" on 17th May 2020. The event was graced by the President IETE, **Prof (Dr) J W Bakal** as the Chief Guest. **Prof (Dr) Ajay Thakare**, Convener & Chairman Technical Program & Publicity Committee, IETE and **Dr Kulchandra Singh**, Chairman IETE Imphal Centre, together conducted the programme. The distinguished speakers were introduced to the participants by the IETE Governing Council Members, **Shri Tata Sudhakar**, and **Dr Sanjay Singh Thakur.** The overview of the programme was presented by Prof (Dr) Ajay Thakare, who threw light on the conduct of the flagship activity, its objective and how it propagates the latest technologies in the area of ICTs. He stated that to discuss and review the recent technological developments in the area of digital forensics and its impact, IETE decided to hold its 51st MTS on the theme. He added that the share of the knowledge, exchange of ideas and discussions would benefit the participants. The opening remarks were delivered by **Dr Kulchandra Singh**, Chairman, IETE Imphal Centre, who welcomed the participants and thanked everyone for taking the time out and connecting with the event.

Shri R K Vyas, President, CSI (India) and Co-Chairman TPPC, IETE, in his address emphasized on the need for collaborative efforts for digital convergence in general and cyber security in particular. He underlined the importance of joining of two leading professional bodies, IETE and CSI with other professional sister societies in making the meaningful global impact for societal upliftment. CSI supported the event as a technical support partner.

The first presentation in the session was made by **Shri Prasad Patibandla**, Cyber Threat Intelligence Analyst, who brought up the trends in digital forensics; incident handing procedures on cyber-attacks and the forensic investigation tools and procedures for Law Enforcement Agencies. The next speaker, **Dr Anup Girdhar**, CEO, Sedulity Groups and Cyber Crime Investigator, mentioned about an increase of over 90 per cent internet traffic during COVID-19 lockdown period that has thrown open many challenges for experts. The cyber security issues were taken up by the third speaker, **Dr Babu Lal**, Chairman Redefine Dimensions Convergence Pvt Ltd & Former Executive Director, BHEL. He talked about hacking, malware attacks, data and software corruption due to computer viruses, breaking of secured passwords, taking control of computers from remote locations which have increased and become a area of key concern. He said that the issue of cyber security is a matter of global concern in the 21st Century and needs coordinated response from all quarters. **Dr Pawan Duggal**, Advocate, Supreme Court & Expert on Cyber Law, accentuated the need for propagation of cyber laws related issues across the public domain to check on unwanted cyber crimes. He opined that such activities have become the most challenging issues during the Corona period. The following speaker, **Shri Anupam Tiwari**, Joint Director (C&C), Govt of India, Bhopal, spoke on Blockchain Technology for Cyber Physical Systems enabled on IPFS. He was of the view that since digital currency like Bitcoin and the Blockchain security are the matters of great concern, more research should be carried out in these areas in coming times. **Prof (Dr) J W Bakal** informed the participants about the strategic step of IETE that it would soon be launching its Centres of Excellence on Cyber Security and Critical Infrastructure Security and its march on the transformation path.

The program was attended by the IETE Governing Council members and Centre Chairpersons, Office Bearers of Centres across the country. Vote of thanks was proposed by **Shri Ajay Kumar**, Zonal Mentor (East Zone), IETE. The program was successfully coordinated by **Dr Shiv Kumar**, Co-Chairman, IETE, Skill Development & Industrial Coordination Committee.

52nd World Telecommunication and Information Society Day – 2020 on "Connect 2030: ICTs for the Sustainable Development Goals (SDGs)"

IETE celebrated 52nd World Telecommunication and Information Society Day by deliberating on the theme chosen by ITU, namely **"Connect 2030: ICTs for the Sustainable Development Goals (SDGs)"** on 17th May 2020 through the digital platform.

IETE President, **Prof (Dr) J W Bakal** graced the meeting as the Chief Guest. The Convener & Chairman, TPPC, IETE **Prof (Dr) Ajay Thakare**, welcomed the participants and highlighted the intention of celebrating this day, which was to help increase consciousness of the possibilities that the use of the Internet and other information and communication technologies (ICT) can bring to society, as well as of ways to overpass the digital divide.

Talking of the transformation that was taking place, **Dr Manpreet Singh Manna**, Ex Director AICTE, MHRD, New Delhi, in his address said that the changes from the traditional to digital enablers could usher the nation to a new tomorrow. He said new technologies are powerful tools to tackle the world's most pressing challenges, including the pandemic.

Prof (Dr) Raghunath K Shevgaonkar, Vice Chancellor, Bennett University & Ex. Director IIT Delhi, in his address deliberated on the role & responsibilities of the educational institutions for development of the resources, like manpower with right thinking and skills. He asserted that if the opportunity is rightly handled, it will give a good chance and has a great potential to speed up the human development and bridge the digital divide. This in turn would help mould the nation's future with correct ethical values and assured sustainability. According to him, ICT would play a very important role in achieving higher standards of professionalism in the sector. **Shri Samar Mittal**, Vice President & Market Head, NSW, India, Nokia, informed that on their part they have been driving digital transformation and redefining telecommunications at the back of their comprehensive portfolio for network equipment, software, services and licensing opportunities. He apprised the participants of the recent developments taking place in the areas of Internet of Things (IoT) Security and Automation with the help of case studies.

Referring to the theme, **Prof (Dr) J W Bakal**, President IETE, said that it focuses on the advances and benefits of ICT that could be helpful for a changeover to smart and sustainable development and to better solutions. The program was concluded with a vote of thanks by **Shri R K Vyas**, Chairman CSI & Co-Chairman IETE TPPC. Programme was coordinated by **Dr Shiv Kumar**, Co-Chairman, IETE SD&ICC.

Newly Elected IETE Governing Council Members (2020-23)

Congratulations to all!

Prof M N Hoda (F-150560L), MCA, PhD, is working as a Professor of Computer Science & Director, Bharati Vidyapeeth's Institute of Computer Applications & Management (BVICAM), New Delhi. He has over 23 years of experience in academics in different capacities. He is an expert member of many board level committees of DST, CSIR and MHRD. He has served in various capacities at GGSIP University, New Delhi, including being member of the University Court, Board of Management and Academic Council. He has extensively served in various capacities to CSI, IETE and ISTE. He has also served as the Sectional President (ICT Including Computer Science) of Indian Science Congress and is the Chairman of the Technical and Professional Activities of the IEEE Delhi Section. His current areas of research are information system audit, software engineering, computer networks, artificial intelligence, ICTs and innovative pedagogies for 21st century teaching learning system. He has published over 100 papers in the international journals and conferences. He has authored many books and proceedings published by reputed publishers. He is the Editor-in-Chief of the *International Journal of Information Technology*, a SCOPUS indexed journal, published quarterly by Springer Nature. He is a Senior Member of IEEE, Fellow of IETE, Fellow of CSI, Fellow of IITP, Member of IE(I), ISTE, ISCA, ACM and NHRD.

Prof (Dr) A K Saini (F-101917L) is working as a Professor and Dean in GGS Indraprastha University, New Delhi. He is holding the charge of Director- Development and Director–IQAC Cell of the University. Before joining this University, he was holding a senior academic position at University of Delhi. He carries with him blend of industrial and academic experience of more than 34 years out of which six years in the industry in responsible capacities. Dr Saini has to his credit ten published books and over one hundred ten research papers in national and international journals/conferences. He has travelled extensively abroad and has visited Europe under Teacher-Exchange Programme for teaching. He has been pro-actively involved with professional associations and is Fellow of CSI and IETE apart from being the Life Member of AIMA, and Operational Research Society of India (ORSI). Dr Saini has served as Governing Council member of IETE for two terms and has been Chairman of IETE Delhi Centre. He also served as Chairman of the National Nomination Committee of Computer Society of India and is currently the Vice-President-cum-President-elect of Computer Society of India. Dr Saini is a member of the Board of Studies of several Universities and has guided fourteen PhD scholars. He is a part of the Advisory and Editorial team of several National and International Journals.

Dr Niranjan Prasad (F-120832L), Scientist-G (Level-14 equivalent to JS Rank) has been working in DLRL, DRDO since more than 3 decades. His academic qualification includes BE (ECE) from BIT, Ranchi University; ME in microwave and radar engineering and PhD from University College of Engineering (Autonomous), Osmania University, Hyderabad. He has been instrumental in the design, development of broadband antennas for GCC Aakash of prestigious IGMDP Missile Programme, Radar ECM Sub-Systems and Integrated Systems for the Indian Navy, Indian Air Force and Indian Army under many projects and programmes. Till recently, he has been heading as Deputy Project Director (Radar Segment) of Project National Open-Air Range (NOAR). Presently, he is working for the design and development of AI/ML based Cognitive EW Systems as a part of Futuristic EW Technologies.

He has served IETE Hyderabad Centre as Member EC, Chairman of many Sub-Committees. Authored more than 25 technical papers published in reputed national and international journals & conferences in India and abroad. Guided more than 100 BE/BTech, ME/MTech students and currently 5 research scholars are doing their PhDs under his supervision. He is recipient of Technology Group Awards for his significant contributions in Defence Projects. He is FIETE; Member IGU; Member IGNSS, Australia and Member of Association of Old Crows (AOC), USA.

Dr M H Kori (DF-116028L), one of the leading wireless & mobile telecommunications & RF experts, has more than 40 years of experience in telecom, RF, microelectronics & IT. His research, industrial and academic experiences include work at Alcatel-Lucent Technologies as Technical Director & also as Head of Hyderabad R&D Unit; Head of Wireless Division C-DOT; VP Geosoft Technologies; Head Telecom DSQ Software; IIT Bombay; University of Duisburg, Germany; Advisor Validus Technologies USA, Consultant TSDSI. His professional contributions include extensive research work in wireless & mobile communications, head of architecture team in Lucent Technologies working on many technologies leading to 5G; digital microwave development at C-DOT; Visiting Fellow at University of Duisburg Germany, designed MMIC Chips fabricated at Daimler Benz MMIC Foundry, Germany; Member of several advisory & standards committees - Study Group NWG 9 of ITU-R; guided students for MS/PhD at IISc/BITS & other Institutes; Member of Advisory Committee / Academic Council for many Institutes / Universities.

He has published and presented many papers in journals & conferences, conducted workshops at national & international conferences, has been the Chair, Co-Chair of several conferences,

co-author, contributing editor and co-editor of the books, conference proceedings. He is the Organizing Chair of the International Radar Symposium and International Symposium on Microwaves. Dr Kori is the immediate past Chairman of International Microelectronics & Packaging Society (IMAPS) India; past TPC Chairman of IETE; past Chairman IETE Bangalore Centre; past Vice Chairman of IEEE MTT & ED Society and past EC Member IET. He is the recipient of RVCE World Telecom Day Award & IETE Batra Memorial Award. Dr Kori holds PhD from IIT Bombay.

Prof (Dr) Ashwini Kunte (F-146516L) is working as Professor and Head of the Department in Thadomal Shahani Engineering College, Bandra Mumbai, for past 20 years. She is also the Vice Principal of the institute. She has completed BE, ME and PhD from BAMU Aurangabad and has teaching experience of 30 years. She has worked on various committees of University of Mumbai, Pune and BATU. She is recognized research guide in Mumbai University and successfully guided PhD students working in the areas of energy harvesting, wireless networks, and miniature antennas. She has many research papers to her credit. She has presented research papers in IEE/IEEE conferences at Malaysia, China, Dubai and has been on the panel of various selection committees constituted by Mumbai and Pune Universities, on various state and central government organizations such as MPSC, ICRE *etc.*

Since 2002 she is actively involved with IETE and contributed immensely in the development of IETE Mumbai Centre. She was Hony Treasurer (2006-2008), Secretary (2010-2012) and Chairperson of Mumbai Center (2012-2014). During her tenure as Chairperson, IETE Mumbai Centre reached greater heights and won the Best Centre Award. In 2013 Mumbai Centre successfully conducted Annual Technical Convention- a flagship event of HQs. She has put in maximum efforts to increase the visibility by organizing various technical events for professionals and students. Special technical event 'Oscillations' was crafted for engineering students during this period and even today it is very popular among student fraternity.

Prof Baswaraj Gadgay (F-170125L) is BE (E&CE), ME (Communication Systems), and PhD (E&CE). He has over 26 years of experience as academician and administrator at various capacities. At present he is working as Professor and Regional Director (I/C) at VTU, Kalaburagi. Dr Gadgay has rich and diverse experience in both academic and administrative fields. He has been a member of various committees such as Research Registration Committee; PhD Registration Expert Committee; Recruitment Committee; Local Inspection Committee (LIC) *etc.*, at Visvesvaraya Technological University (VTU), Belagavi. He has served as member of Board of Studies of Gulbarga University, Kalaburagi. In his tenure as HoD, Dept of E&CE, GNDCE, Bidar, he has brought laurels to the department by way of getting NBA and other accreditations. He has also been the coordinator for KSCST (GoK) and TEQIP. He has guided more than 30 PG and PhD students. As a part of cultural exchange programme, he has visited universities/institutes like MIT, Harvard, New England, Brown University, in the USA. He is the Honorary Citizen, City of Quincy, Massachusetts State, and has received Letter of Appreciation from House of Massachusetts State, and from the Mayor of Rhode Island, USA.

He is an active fellow of IETE for many years and has been the Chairman of IETE Gulbarga Sub-Centre during 2012-2014.

Gp Capt R C Goyal, VSM (Retd) (F-063736L) received BE (EE) in 1964 from Delhi College of Engineering. He has served IAF for 33 years and held prestigious assignments including Director Telecom at Air Hqrs. He has been awarded Vishishit Seva Medal by the President of India for distinguished services of high order. He served Aeronautical Society of India as Secretary for 10 years. He has been actively associated with IETE Chandigarh Centre since past 8 years and has also served as its Vice Chairman. His contribution towards professional growth and development of the Centre is significant. His major contribution was getting refund of extension fee from UT Chandigarh in favour of IETE Chandigarh Centre.

Ex-Officio Members of the IETE Governing Council (2020-22)

Bharat Bhushan Rishi (F-211948L) is a pass out of 1978 batch of IETE, New Delhi. He retired from MTNL Delhi in July 2011 as Dy Gen Manager. He was elected to EC IETE Delhi Centre during 2010-12 and then as Treasurer for the year 2012-14. In 2016-18, he was elected as Hony Secretary in EC, Delhi Centre and as a Hony Treasurer in 2018-20. He was currently elected as Chairman, IETE Delhi Centre for the year 2020-22. During his tenure in Delhi Centre, he has been involved in execution of some very important projects in different capacities, and helped the Centre rise to new heights. Three computer labs with 212 computers started functioning for online exams by different agencies. A lift was also installed connecting all 4 floors of the centre to assist differently abled students. In his tenure a generator of 25 kWA was also installed to ensure power backup along with a solar panel system of 45 kWA, which was installed on the building rooftop. Although the current pandemic situation has curtailed activities at the Delhi Centre, but efforts are being made to start day to day activities following strict social distancing and other safety precautions.

Gnaneshwar Rao Kamtam (F-146846L), the present Chairman of IETE Hyderabad Centre holds BTech (ECE), MTech (CSc) and pursuing PhD from Osmania University, Hyderabad. Since October 1988, he has been working as an Engineer Grd-1 & Technical Head in Educational Multimedia Research Centre, Osmania University, Hyderabad. In 2009, he was selected and sponsored by USTTI & IEEE (USA) for the course on "New Technologies in Broadcasting" at Voice of America, Washington DC, USA from 6th to 22nd May, 2009 to study the Digitalization of TV Production and Transmission. He is the recipient of UGC National Award in "Sound" category for the video programme titled "Bookfare". He has won many UGC-MHRD (National) & Sony Corporation Japan (International) Awards for the educational videos, documentaries for which he extended technical support. He has actively participated in the operationalization of "Satellite Interactive Terminals (SITs)" for the UGC-MHRD EDUSAT Network. He has produced and directed 100 educational video documentaries and extended technical support for 1500 plus educational video documentaries and e-content programmes, which were broadcast on National TV network. He has vast experience in training the faculty, scholars & students for educational video programme's production and honing their presentation skills. He is the Guest Faculty for OU affiliated engg colleges and IETE. He has also worked as 'EMS Software Developer' on People Soft for Telegence Corporation, Canada. His technical write-ups are published every year in the Souvenir of BES. He has presented number of technical papers in conferences and seminars. He has served IETE-Hyd Centre in the past as its EC Member, Hon Secretary and Vice Chairman. He is a Life Fellow of IETE & Life Member of BES, ISOI and BVB.

C Satyanandan (F-114895L), Chairman IETE Bangalore, served the Indian Broadcasting Engineers' Service (IBES) and before retirement rose to the position of the Chief Engineer, Doordarshan & AIR. He was Superintending Engineer/Director of Engineering of the major Doordarshan Kendras, namely- Bangalore, Thiruvananthapuram and Hyderabad, before becoming the Chief Engineer in charge of all Doordarshan and AIR Centres and Transmitters in the South Zone covering the four South Indian States including Union Territories of Pondicherry, A&N and Lakshadweep. During his tenure at Bangalore, Shri Satyanandan was instrumental in setting up Bangalore's first Television Relay Centre and subsequently establishing the full-fledged Studios, High Power Transmitter and Satellite Up-linking facility. During his subsequent service at Trivandrum and Hyderabad, he set up Earth Stations to facilitate statewide transmission of DD programs. During the digital age in broadcasting, he was involved in conversion of the television transmission chain from Analog to Digital. Shri Satyanandan received advanced Television training at NDR, Hamburg, Germany. He also has Management qualifications from IIM Bangalore and NITIE

Mumbai. He was associated with IETE as a Co-opted Member of EC at Trivandrum and Hyderabad and was EC Member at Bangalore (2016-18) and Hony Secretary (2018-20). Shri Satyanandan is a Member of Broadcast Engineering Society (India) and takes active part in the Bangalore Chapter of BES (I). His other interests include reading, writing and editing *etc*.

N Venkateswaran (F-234388L), an IETE graduate is the new Chairman of IETE Chennai Centre. He obtained his PhD from Anna University, Chennai, in information and communication engineering for his thesis on "Image Compression"; MTech degree in ECE from Pondicherry Engineering College, Pondicherry University. Since beginning, he actively participated in all activities of IETE Chennai Centre. For more than 13 years, he served as Professor at Sri Venkateswara College of Engineering, Sriperumbudur. Having more than 23 years of experience in teaching, research and 8 years in industry, he designed a few courses for the autonomous curriculum and has been a BOS member at a number of colleges. He has to his credit many research articles and a couple of book chapters, published by Springer. Authored/co-authored over 100 papers in the national and international journals/conferences. He has organized faculty development programmes (FDPs) and one national conference. He is serving as a member of various international technical committees and review panels. He has guided 5 PhD students, who presently are at leadership positions in academia; 4 students still pursuing their PhDs under him and supervised 30 students with their ME thesis. His areas of interest include image and signal processing, machine learning, wireless communication and optimization techniques. He is also involved as a Principal Investigator in an ISRO-SAC funded project. He is a Fellow of IETE, Senior member of IEEE and Life member of ISTE. Presently, works at ECE Dept of SSN College of Engineering Chennai.

Prof (Dr) R D Kharadkar (F-233928L) is ME (electronics) & PhD (electronics engg). He has 34 years academic experience & 02 years industrial experience. From last thirteen years, he has been working as the Director of G H Raisoni Institute of Engineering & Technology, Wagholi, Pune, wherein he has set up the IIT Bombay Remote Center, NPTEL Center, Innovation Center, and Virtual Lab Nodal Center, which made the Institute secure 24 merit ranks in SP Pune University.

Dr R D Kharadkar was earlier associated with IETE Pune Center as its Vice Chairman, Hony Secretary and now as its Chairman. He has rich research experience and presented 32 journals papers and 11 conference papers. His research areas include signal processing & artificial intelligence. He is the Managing Editor for "*International Journal of Advanced Computing & Knowledge Discovery*". He is PhD guide for SP Pune University and has guided ten PhD students. He filed five patents, published a number of articles on quality education and on technology development in the leading English and Marathi newspapers. He visited the leading Universities of USA, Singapore and Dubai to study best

practices in engineering education. He was the member of Board of Studies of SP Pune University, Bharti Vidyapeeth, Pune and Solapur University and contributed for curriculum development; and member of Faculty of Engineering, SP Pune University. He is active member of NGO "Snehaseva" and involved in CSR activities like aids to orphanages, education to unprivileged class of the society. Recently, he has received the "Best Director Award" of SP Pune University.

Col Ashok Kumar Bhanot (Retd) (F-109703L) possess 53 years of rich valuable and varied experience in the field of administration, training, HRD, IT, Telecommunications, and Resource Management. He is MTech (Electronics & Communications) from IIT, Roorkee. During the Army Service from 1967 to 2000, he has been doing the assignnments varying from that of a Technical Manager to the CEO of a Telecommunication outfits and Chief Operating Officer and Consultant to an independent Force Commander with work force of more than 50000. He also had the opportunity of assignment of a Professor and Head of the Department in Military College of Telecommunication Engineering, Mhow. Having Distinguished on an IT course, he got exposure to information technology for plus 4 years during which he was responsible for raising the Army HQ's MS Branch Computer Centre and managing the Project of Personnel Appraisal System of Indian Army Officers. Superannuated in 2000 as Director Projects for Signal Intelligence, he was responsible for planning, and mustering of resources for execution of hi-tech, multi-crore, and surveillance & monitoring projects of national importance. From 2002-2019, he was associated with industry as a consultant and project manager. First, in the field of electronic equipment for intelligence collection processing and security, subsequently to a power and telecom solution provider and then a telecom company for test equipment, network testing, hardening of devices and security of networks. He has been associated with IETE Noida Centre in an active manner during 2010-2020. He performed the duties of Honorary Treasurer of IETE Noida Centre during 2018-20. He is a Life Member of CSI and Member, AIMA.

Subhash Chander Jain (F-062817L), Chairman IETE Chandigarh Centre, is MTech from IIT Delhi in 1976. He started his career as an Optical Engineer in an Optical Instruments Company, New Delhi, where he served for 5 years. In 1981 he joined CSIR-CSIO Chandigarh, as Scientist and was engaged in research, design & development of Optical Fiber Technology and Fiber Optic Sensors. After 31 years of his service, he superannuated as Chief Scientist/Additional Director from CSIR-CSIO in 2012. For the development of Fiber Optic Sensor, EFPI, for health monitoring of the structures for the first time in the country, Shri Jain received the Year 2004 K Suryanarain Rau Memorial Award of ISAMPE, Bangalore for 'Smart Technology Development'. He has been awarded DAAD Fellowship (1984-85); IIT Delhi MTech Fellowship (1974-76); and National Merit Scholarship (1972-74). As DAAD Fellow, he worked as a Visiting Scientist at the Institute for High Frequency

Techniques, Karlsruhe University, Germany for 20 months (1984-85) and Heinrich Hertz Institute Berlin, Germany for 3 months (1992). He also visited M/s Tui Lasers, Munich, Germany, for one week (2004) for training on Industrial Excimer lasers and M/s Teraxion, Canada for 2-weeks (2007) to work on Fiber Bragg Grating Writing System. He has published over 80 research papers in national/ international journals & conference proceedings and delivered several invited lectures, holds five patents and supervised theses of several graduate and postgraduate students. Shri Jain is Fellow of IETE and OSI and Member of CSI and IPA. He served IETE Chandigarh Centre as the Hony Treasurer during 1991-93; Hony Secretary during 2018-20 and the Chairman, CSI, Chandigarh Chapter in 2007-08. Presently, he is actively associated with a NGO-Mahavir International, with a motto "Love all and Serve all" to render selfless service to persons in distress and to weaker and less privileged section of the Society.

Parag Walinjkar (F-066353L), Chairman, IETE Mumbai Centre is a senior scientific officer in one of the premium research organizations of India, BARC. He has expertise in microcontrollers and embedded systems. He has worked as BE project examiner for Mumbai University. He is also a recognized project guide for graduate and undergraduate engineering students. He has 47 publications to his credit in various journals, symposium and conferences. He has over five years of experience in teaching and conducting examinations for the certificate courses organized by BARC. He has also worked as a member of the examination board. He got associated with IETE in 1996. Since 2006, he worked for IETE Mumbai Centre in various capacities. During his tenure as Hony Secretary, he contributed actively in successful conduct of Annual Technical Convention at Mumbai. The Centre was awarded twice as the Best IETE Centre while he was serving as an office-bearer in the EC during two terms. He has the experience of organizing national and international conferences in various capacities. He has organized a number of technical activities for the Mumbai Centre in the past, and has been instrumental in starting online training and internship programs during the pandemic situation as a revenue-generating means for IETE Mumbai.

Dr Jyotsna Kumar Mandal (F-232495L) is an incoming Chairman of IETE Kolkata Centre. He is MTech in Computer Science from University of Calcutta in 1987, PhD (Engineering) in Computer Science and Engineering from Jadavpur University in 2000. Presently, he is working as Professor of Computer Science & Engineering, at University of Kalyani. He is a Former Dean, Faculty of Engineering, Technology & Management, KU, for two consecutive terms during 2008-12; Director, IQAC and Chairman, CIRM, Kalyani University. He served Kalyani Government Engineering College, as a Professor Computer Applications for two years; North Bengal University as an Associate Professor of Computer Science for 8 years & as Assistant Professor for seven years; NERIST, Itanagar as lecturer for one year. Dr Mandal has a total of 34 years of teaching and research experience in coding theory, data and network security

and authentication; remote sensing & GIS based applications; data compression, error correction, visual cryptography and steganography. He has guided 23 PhD students with their thesis (one submitted and 8 are pursuing); supervised 03 MPhil students; 80 plus MTech and 130 plus MCA Dissertations. Guest Editor of MST Journal (SCI indexed) of Springer, Dr Mandal has published more than 400 research articles in national and international journals; 8 books from Springer, LAP Germany, IGI Global *etc*. His recent published text book on *Reversible Steganography and Authentication via Transform Encoding* from Springer is available at https://link.springer.com/book/10.1007/978-981-15-4397-5. He has organized about 35 international conferences. He is on the editorial board of Springer, IEEE and Elsevier for edited volumes and conference publications. He has completed five research projects for which grants were received from AICTE and Govt of West Bengal. He served as Hony Secretary, IETE Kolkata Centre, Chairman CSI Kolkata Chapter and CSI Siliguri Chapter. He has also been conferred with "SikshaRatna" award for his outstanding performance in education in 2018 by the Higher Education Dept, Government of West Bengal, India.

Dr Pramod Kumar Singhal (F-068409L), Chairman IETE Bhopal Centre has obtained BE degree in electronics engineering from Jiwaji University, Gwalior in 1987, MTech in microwave electronics from the University of Delhi, Delhi in 1989, and PhD in electronics engineering from Jiwaji University in 1997. He started his career as Lecturer in Madhav Institute Technology & Science, Gwalior (A Govt aided UGC Autonomous Institute), wherein he was first promoted as Reader in 1996 and later as Professor in 2004. He completed six tenures of two years each as Head of the Department. Presently, he is working as Controller of Examination since 2017. He also worked as Dean (Academic) for one term of two years. Dr Singhal has completed a number of research projects sponsored by Dept of Science and Technology, Govt of India; All India for Technical Education, New Delhi; University Grants Commission, New Delhi; and MP Council of Science and Technology, Bhopal. He has been the recipient of the AICTE Career Award.

Dr Singhal has published over 150 research papers in international and national journals, including IEEE Transaction & in conferences. He has supervised 7 students who have been awarded PhD degrees and a number of research scholars are still being supervised for their PhDs, guided over 100 ME/MTech dissertations, organised number of conferences in association with IETE, CSI, and IEEE, organised number of FDPs with the financial support of AICTE, New Delhi. He is senior member of many professionl sister societies. He worked as Honorary Secretary for IETE Gwalior Sub-Centre and Chairman, IE (I) Gwalior Chapter. He is now elected as Chairman of IETE Bhopal Centre.

IETE gets New Secretary General

Shri Pankaj Kumar Sharma (F-198423L) has taken over as Secretary General of the IETE, w.e.f. 1st July 2020. He has over 32 years of experience in Administration and Office Management Affairs. After having served MTNL, a Public Sector Undertaking, for almost 16 years, he retired voluntarily from the post of Senior Manager, under VRS scheme. He also had a short stint with Modi Xerox Ltd, Rampur, UP, where he worked as Manager (Production & Quality Control Dept) during 1987-88. His areas of specialization include: spectrum transmission, wireless communication, communication system implications with introduction of new plans, telephone exchanges, optical fiber planning and operations. He also has good knowledge in office management proficiencies, RTI Act and legal proceedings.

IETE is pleased to welcome Shri Pankaj Kumar Sharma as IETE's Secretary General and is optimistic that he will steer IETE towards success.

The Induction cum Interaction Online Meet with IETE Centres

The 2nd Induction cum Interaction Online Meet was arranged by IETE HQs on 22nd Aug 2020 for Centres from *East & West Zones* and on 23rd Aug 2020 for Centres from *North & South Zones* with an aim to encourage & familiarize all Office Bearers with the working and operations of IETE. It was intended to introduce IETE Secretariat, New Delhi so that all Centres are familiar with the working staff of IETE HQs. The **1st Interaction Meeting** of the same kind was held way back in 2008 at IETE HQs under the leadership of **Prof S Narayana, Past President and DFIETE,** and was much appreciated. This year too, when new EC members were to be welcomed into the IETE family and physical meetings were difficult to organize due to the ongoing Corona pandemic,

Prof (Dr) J W Bakal, President IETE, desired to have this meet online for one to one Centre connection. He formed a Special committee for the purpose, headed by **Brig V K Panday (Retd), Chairman PARGC Committee** to give a common platform for flow of ideas. The motive was to make incoming new members aware of the importance of Byelaws, Rules and Regulations and Standard Operating Procedures (SoPs) that govern the Centres for its smooth and efficient functioning; promote interaction amongst IETE Ex-officio members of Centres/Sub-Centres/Governing Council members/Hqs; review present resources, identify new resources and deliberate upon possibility of adding new resources with number of members; discuss additional activities that may

be undertaken under its extended activities; to make members aware of various issues concerning HQ, Centres; clarifications on financial matters, like calculations of the grants given to Centres; what reports and returns are required to be submitted by Centres, deductions applicable, compliance with GSTs, need for organizing technical activities, Skill development programmes, taking measures to generate revenues with the help of HQ IETE and so on.

This zoom interactive meeting succeeded in bringing a number of Office Bearers from almost all Centres/Sub-Centres out of 63 Centres to one platform, developing a sense of esprit de corps amongst the members. It was the interaction of ideas, individuals and Centres of the institution. The meeting was graced with the presence of **Prof (Dr) J W Bakal**, President IETE; **Prof (Dr) K T V Reddy** and **Lt Gen (Dr) A K S Chandele, PVSM, AVSM (Retd)**, Immdt Past Presidents; **Prof (Wg Cdr) P Prabhakar (Retd)**, Vice President IETE and Chairman CCC; **Prof S K Khedkar**, Vice President, IETE and Chairman BOA; **Dr B Prabhakara Rao**, Vice President IETE and Chairman CAC; **Brig V K Panday (Retd)**, Chairman IETE PARGC Committee; **Shri Viney Kakkar**, Hony Treasurer; **Shri R K Vyas**, Chairman, Publications Committee; **Prof (Dr) Nilesh N Kasat**, Zonal Mentor (West); **Shri Ajay Kumar**, Zonal Mentor (East) and Co-Chairman PARGC; **Prof (Col) S L Kapoor (Retd)**, Zonal Mentor (North) and Co-Chairman Publications; **Dr D C Pande**, Zonal Mentor (South) & Co-Chairman BoRIS; **Prof (Dr) V Gunasekhar Reddy**, **DIG (Retd)**, Chairman Membership Committee; **Shri S Ramaswamy**, Chairman WEEC; **Prof (Dr) A P Thakare**, Chairman TPPC; **Dr K Jaya Sankar**, Chairman Academic Committee; **Shri G Ramesh**, Co-Chairman Membership Committee; **Dr Shiv Kumar**, Co-Chairman SDICC; Newly elected Governing Council members; Elected Office Bearers from IETE Centres/Sub-Centres and **Shri Pankaj Kumar Sharma**, Secretary General IETE.

Shri Pankaj Kumar Sharma initiated with brief introduction of Officers from IETE HQ. In the opening remarks, **Prof (Dr) J W Bakal**, President IETE, expressed his happiness for conduct of such a meet giving opportunity of meeting one and all at a single platform. He also informed about the commencement of a new website by the name "IETE Digital Horizon" by IETE Bangalore Centre. **Lt Gen (Dr) AKS Chandele, PVSM, AVSM (Retd)** in his address informed the ongoing efforts being made by IETE for IETE University at Jharkhand, Ranchi. He said that the papers have been submitted to the State Govt and inspection completed but the Letter of Intent was being awaited. He also lauded the efforts of all involved in pursuing the activity especially of IETE Ranchi members. **Prof (Dr) K T V Reddy** emphasized on the timely completion, submission of reports by IETE Centres to IETE HQs for quick compilation. He encouraged all participants for their concerted efforts towards IETE Membership drive and consider opening of Centres of Excellence at their Centres. **Brig V K Panday (Retd)** took a trip down the memory lane of IETE history by presenting throwback pictures. He was of the view that IETE Vision & Mission of IETE should be revised, to move with times. Speaking on revenue generation plans, he requested Centres/ Sub-Centres to speculate on installing mobile towers at their Centres. He said he would soon be writing them

on the proposal individually for their work. **Prof (Wg Cdr) P Prabhakar (Retd)**, VP, in his speech encouraged the Centres/ Sub-Centres to conduct their own technical activities including seminars & symposia to be self-sustaining. **Prof S K Khedkar** in his address, informed about the structure of IETE Governing Council, Committees & Boards including TRAC / Ethics. He added that Centres may think of having their own federal structure. **Prof (Dr) Nilesh N Kasat** and **Shri Ajay Kumar**, West & East Zonal mentors, respectively, spoke about the progress and activities made by their zonal regions. **Prof (Dr) V Gunasekhar Reddy, DIG (Retd)** shared his long association with IETE and IETE Hyderabad Centre and tried drawing attention towards benefits of commencing of Endowment Lectures at Centres as a means for generating revenue. He also mentioned about the IETE decision taken for quicker actions on Corporate membership forms and updates with the help of Centres. He said quick approvals would be given in urgent cases (Membership forms), priority to I-card uploads and online application forms. He highlighted Covid-19 discounts being given to make the membership drive attractive. **Shri G Ramesh,** Co-Chair Membership, emphasized the need for update of membership data. **Prof (Col) S L Kapoor (Retd)** lauded the conduct of such a meeting after a long time and underlined the need for update of the website making it dynamic.

During the interactive session, the members came up with their views, suggestions. The roles of various committees were introduced. **Prof S K Khedkar,** Chairman Board of Awards, briefed on the various awards being given by IETE to recognize the excellence of its members. **Dr Shiv Kumar** informed about the Centres of Excellence being proposed at IETE Hyderabad, Ranchi Centres. **Shri Viney Kakkar** requested the Centres/Sub-Centres Chairpersons to conduct various technical activities or short term courses in order to clear their outstanding loans, and to submit GST returns on time. He also shared a detailed presentation for better understanding. **Dr B Prabhakara Rao** specified the need of data update & augmentation of the Centres/Sub-Centres. **Prof (Dr) A P Thakare** informed about the possibility of conduct of upcoming Annual IETE Convention (AIC) at Navi Mumbai and conduct of National Technical Paper Contest by the IETE Pune Centre. He urged convening the quality technical programmes by Centres/ Sub-Centres, SDICC and others. **Shri R K Vyas** highlighted the popularity and recent increase of Impact Factors of IETE Journals. He thanked **Prof S C Dutta Roy, DFIETE** for giving royalty rights share to IETE for both of his books namely – Circuits, Systems and Signal Processing (CSSP) and Signal Processing (SP). **Dr D C Pande** highlighted the activities of IETE Research Fellowship and MTech stipends. **Shri S Ramaswamy** underlined the aims & objectives of WEEC. **Dr K Jaya Sankar** mentioned the important role of academic committee. He suggested arranging the Convocation in close association with BoESA and to make the labs ready for conducting the practical classes. Expressing his expectations from Centres, he said IETE courses should be aptly promoted by Centres in their regions. Students should be guided about exemption policy and the rules for student membership extensions. In absence of **Brig (Dr) V D Abraham, SM (Retd)**, Chairman BoE, **Dr H C Mahendru**, COE, presented the important role of BoESA and informed about changes in exam dates due to Covid-19. He emphasized on the need for timely grievance redressal of the students.

The meeting concluded with a lively question answer sessions on both days, *i.e.* 22nd-23rd Aug 2020. Various suggestions and problems were presented by the Office Bearers of Centres and Sub-Centres like – Ahmedabad, Aurangabad, Bhopal, Nagpur, Navi Mumbai Pune, Guwahati, Kolkata, Patna, Burdwan, Varanasi, Rajkot, Coimbatore, Palakkad, Vijayawada, Kanpur, Gwalior, Goa etc. **Prof (Dr) J W Bakal** in his closing remarks appealed for concerted efforts from all for betterment of IETE. He emphasized on the institution's effectual presence and positive contribution at the national level programmes and asked the Office Bearers for their constructive feedback in strategies, plans and policies of the Institution.

This 2nd IETE interaction meeting also provided a platform for various Centres to discuss their success stories. It ended with an expectation from all that such meetings would become an event of the alternate year within the framework of the IETE. Formal vote of thanks proposed by **Shri Pankaj Kumar Sharma.**

24th Sir C V Raman Memorial Lecture 2020

24th Sir C V Raman Memorial Lecture and **National Science Day Celebrations** were celebrated together by IETE Bengaluru Centre on 28th Feb 2020.

The Chief Guest gracing the occasion was **Prof P M Soundara Rajan**, Former Scientist, DRDO & Professor, NIAS. **Shri Jidhu Mohan**, Lead Research Engineer, Siemens R&D, Bangalore, attended the event as the Guest of Honour, wherein he delivered his talk on **"The Intelligent Edge – Next Generation IoT"**. It was well received by the audience. Earlier, the welcome address was given by **Shri Gangaprasad**, Centre Vice Chairman. **Shri C Satyanandan**, Centre Hony Secretary, conducted the proceedings and welcomed

the students from Sambhram College, who had won the prizes in the state level project competition. The Centre felicitated **Dr C V Ravishankar**, EC member & the HoD/ E&C Dept of Sambharm College and the students. **Prof H S Bhatia**, Centre Chairman also addressed the gathering. The concluding remarks were given by Shri KS Ravi, EC member.

IETE Zonal Seminars and ISF Congress

➢ The **IETE Palakkad Centre** organized **South Zone Tech Fest (ISTF2K20)** and **Chairpersons' Meet** during 27th-28th Jan 2020 at NSS College of Engineering, Palakkad. On the first day some technical competitions for ISF students were organized under the chairmanship of **Prof P Nandakumar**. Students from various colleges actively participated in the events. Performances were adjudged and winners announced for the events like the best paper presented, innovators' meet, quiz competition, code contest, poster competition and technical games. The seminar session was inaugurated by **Dr Saji Gopinath**, CEO Kerala Startup Mission and Director IIITMK. The speaker in his address encouraged using technologies like Artificial Intelligence (AI) for betterment of society. **Prof (Dr) J W Bakal**, President IETE, presided over the function and explained the importance of IETE in the present scenario for reaching the technological developments to the colleges through its activities. **Dr V Devi**, Centre Chairperson, welcomed the gathering. **Prof P Nandakumar**, Chairman Organizing Committee & Past Centre Chairman, **Dr T Sudha**, Principal NSS College of Engineering and **Shri C K Haridas**, Founder Chairman & Ex GC Member, also addressed the gathering. **Prof K Kavin Kumar**, Kongu Engineering College, Erode, delivered a talk on "ISF: A Motivating Force to Students". **Dr D C Pande**, South Zone Mentor, in his felicitation speech

briefly explained the latest developments in the Radar Systems. **Dr S V Baskara Rao**, Dean R&D, SV University, Tirupati & Director- UGC-SVU, delivered a keynote address on the theme "Engineering Opportunities in Machine Learning". He expounded on the 4th industrial revolution and the growing opportunities in the field of ML. Certificates and awards were presented to the winners of IETE South Zone Tech Fest. Vote of thanks was proposed by **Shri Begi K Mathew**, Centre Hony Secretary.

The **Chairpersons' Meet** was conducted on 28th Jan 2020 at NSS College of Engineering in connection with the **IETE South Zone Seminar**. The following chairpersons/representatives attended the meet. **Prof (Dr) J W Bakal**, President IETE chaired the session and **Dr D C Pande**, Zonal Mentor conducted the proceedings. **Shri C K Haridas**, Founder Chairman, delivered

a brief introductory address. He expressed his happiness over the participation of 10 Centres out of 18 in the meet along with more representatives from Sivakasi, Erode, Coimbatore, Kochi and Palakkad. Dr V Devi, Chairperson welcomed the representatives. Dr J W Bakal initiated proceedings and requested Centres' representatives to also give solutions while pointing out the problems. The Zonal Mentors kick started the discussions. Necessary clarification and directions were given during the programme. The group got the chance to share their new ideas and approaches for the betterment of the IETE activities. All members from various Centres expressed their appreciation for organizing the seminar and the meet.

➢ An initiative was taken by the **IETE Navi Mumbai Centre** to organize an online **IETE West Zone Seminar** on "Outcome Based Education (OBE)" and the **West Zone Chairpersons' Meet** on 19th- 20th Jun 2020 under **ISF Congress.** The programme was conducted digitally because of the COVID-19 pandemic with kind support and guidance of **Prof (Dr) Nilesh N Kasat**, West Zone Mentor, **Dr A P Thakare**, Chairman, TPPC and **Prof (Dr) J W Bakal**, President IETE.

The Convenor & Co-Convenor for the event were **Dr Baban U Rindhe**, Chairman, IETE Navi Mumbai and **Dr Mansi Subhedar**, Hony Secretary, IETE Navi Mumbai, respectively. The opening remarks in the inaugural session were by Dr Rindhe followed by the welcome address by Dr Nilesh N Kasat. TPCC Chairman, Dr A P Thakare also addressed the event. **Prof (Dr) J W Bakal,** in his address appreciated the efforts made by the West Zone Mentor and the organizers to conduct the event in corona pandemic. The overwhelming response received from the participants from Maharashtra, Gujarat, Madhya Pradesh and Goa, was also highlighted. The Chief Guest for the event, **Prof (Dr) K K Aggarwal**, Chairman, National Board of Accreditation, gave significant insights to the outcome-based education in the country, in his address. The participants considered it to be a golden opportunity listening directly to his views and opinion over the platform. The event was spread over two-days, divided into various sessions, conducted by **Dr Milind Pande**, **Dr Abhay Wayal, Dr Faruk Kazi, Dr M S Ali,** and **Dr P D Gawande**. Participants joined from various parts of the country.

ISF Congress that was conducted online, witnessed student groups presenting their innovative projects one after the other. The online interactions with the President IETE and other dignitaries were interesting. Later, the Zonal Meet of West Zone Centre Chairpersons' was also conducted successfully. This seminar benefitted the participants significantly.

➢ **IETE, Kolkata Centre**, hosted the **International Conference/Zonal Seminar/Students' Convention** on 27th Jun 2020 on "IOT in Present Wireless Revolution (IOTWR-2020), its Challenges and Issues". It was organized online using Google Meet application. The keynote address of the conference was delivered by **Swami Kamalasthananda**, Principal Maharaj, Ramakrishna Mission Vivekananda Centenary College, Rahara. About 30 papers were presented through online mode in two parallel sessions in presence of 15 Session Judges and two Session Chairs. The IOTWR-2020 was an international Conference out of which 25 presented quality papers has been selected and uploaded for publication in the International Journal of Hybrid Intelligence, Inderscience Publishers.

Inspiring IETE Women Achievers

Dr Indu Gupta, Scientist 'G' in DRDO is a dynamic, committed officer with passion for research. She has pioneered technical innovation in the field of electronics and digital control systems. She played a vital role in the indigenous development and customization of various software centric initiatives in VLSI design, 3D modeling, and material research, targeting self sustenance for the defence forces. More recently, with her vast experience in scientific, administrative and managerial skills, she has led multiple projects and programmes at DRDO. She drove substantial automation, ramping up infrastructure setup. Her dedicated and sincere efforts have reaped fruitful results for project management, improving sanctions, re-appropriation, documentation, audit, and ISO compliance. During the 34 years of her service with DRDO, she has established and streamlined working procedures for Planning & Coordination, Human Resources, and IT services. These enhanced visibility of DRDO fraternity and bolstered DRDO's image with the users and the society. For her contributions, she has won many honours and accolades, including Lab Scientist of the year, Commendation Certificate, and the Meritorious Award. She is a Fellow of Institution of Electronics and Telecommunication Engineers (IETE), and a life member of Institute of Standards Engineers & Computer Society of India.

With more than 27 papers and publications across national and international journals, she has also published a series of educational content, ranging from kindergarten to fifth standard. In her quest to shape the next generation of talent, she has supervised more than 400 engineering students, providing invaluable learning opportunities.

Shashi Moitra (F-035714) is a Principal Technical Officer in CSIR-Central Scientific Instruments Organisation, Delhi Centre, New Delhi; a foremost national laboratory engaged in research, design and development of scientific instruments in the country. Established 'National Facility for Medical Instruments Calibration' (ISO accredited) at CSIR-CSIO Delhi. Being a coordinator & faculty member, organized & trained more than 500 overseas participants sponsored by Ministry of External Affairs under ITEC Scheme & conducted more than 50 HRD programmes for Armed Forces at different strategic locations of the country. Worked as a member of R&D team. She has developed instruments & transferred technology to industry.

She has been associated with IETE Delhi Centre for around 15 years as an Executive Committee Member and Chairman for sub-committees at IETE Delhi Centre. She was instrumental in establishment of Computer Lab & Electronic Lab at the Centre. Worked for enhancement of the library facilities at IETE Delhi Centre. IETE Delhi Centre received the best centre award during her working term.

Message

Analyze, and question your surroundings. Let your mind wander with new ideas. Trust yourself, start doing and don't stop when you are tired, stop when you are done.

— by Dr Indu Gupta

Message

Dream big work hard & be focused.

— by Shashi Moitra

IETE Awardees – 2020

IETE recognizes outstanding achievements amongst its members and other professionals in the broad areas of Electronics, Telecommunication, Computers, Information Technology and related disciplines through annual/biennial awards. This year IETE received good number of nominations. The Awardees -2020 for various IETE Awards including academic awards are as follows. **Congratulations to all the AWARDEES!**

IETE Main and Corporate Awards 2020

IETE - Ram Lal Wadhwa Award
Prof Animesh Biswas, Director, NIT, Rourkela
IETE - Hari Ramji Toshniwal Award
Dr Manoj Kumar Patel, CSIO, Chandigarh
IETE - Bimal Bose Award
Dr Mohan Vithalrao Aware, VNIT, Nagpur
IETE - Prof K Sreenivasan Memorial Award
Dr M Murugan, SRM Valliammai Engineering College, TN
IETE - Prof SVC Aiya Memorial Award
Dr Taimoor Khan, NIT, Silchar
IETE - Prof S N Mitra Memorial Award
Shri M S Duhan, DDG, Doordarshan, New Delhi
IETE - CEOT (94) Award (Biennial)
Dr Umesh Kumar Tiwari, CSIO, Chandigarh
IETE - B V Baliga Memorial Award
Ms Sheena Abraham, VSSC, Trivandrum
IETE - N V Gadadhar Memorial Award
Dr Bharat S Chaudhari, MIT World Peace University, Pune and Dr Govind Rao Doddamani, DRDO, Bengaluru
IETE - B R Batra Memorial Award
Dr Shreenivas R Jog, Dr D Y Patil Inst of Tech, Pune
IETE - R S Khandpur Award
Dr Shantanu Bhattacharya, IIT Kanpur
IETE - Brig M L Anand Award
Dr Vinay Chamola, BITS Pilani
IETE - Biman Behari Sen Memorial Award
Dr Sudhakar Rao, Northop Grumman Aerospace Systems, USA

IETE - Lifetime Achievement Award
Dr Surinder Pal, DF & Past President IETE
IETE - Smt Ranjana Pal Memorial Award
Dr Ravi Kumar Gangwar, IIT Dhanbad
IETE - Smt Triveni Devi Gupta Memorial Award
Dr D Selvathi, Mepco Schlenk Engineering College, Sivakasi
IETE - Technomedia Award for Young Women in Engineering
Dr M Parisa Beham, Sethu Institute of Technology
IETE - Shri Devi Singh Tyagi Memorial Award
Shri Ajay Khare, HAL, Bangalore
IETE - Shri P P Malhotra Memorial Award
Sri Sairam Institute of Technology,Chennai, (Org No. G00506)
IETE - Smt Manorama Rathore Memorial Award
None

The categories that received no nominations this year:
- IETE - Lal C Verman Award
- IETE - Corporate Award for Performance in Computer & Telecommunication Systems (LE&MSME)
- IETE - Corporate Award for Performance in Electronic Components (LE & MSME)
- IETE - Corporate Award for Performance in Electronic Instruments and Instrumentation (LE & MSME)
- IETE - Corporate Award for Performance in Development of Software in MSME Category

The categories that received single nomination and not considered this year:
- IETE - Flt Lt Taymaya Singh Dandass Memorial Award
- IETE - Corporate Award for Performance in Development of Software in LE Category

IETE Best Papers' Awards 20202 given for Articles Published in 2019 IETE Journals

Awards	Best Paper with name of Awardees
IETE SK Mitra Memorial Award- The best research oriented paper	**Two-Degree-of-Freedom Robust Controller Design Approach for Fuzzy Parametric Uncertain Systems using Particle Swarm Optimization by** Srinivasa Rao Danaboyina, Siva Kumar Mangipudi & Ramalinga Raju Manyala published in **May-June 2019 issue of IETE Journal of Research**
IETE JC Bose Memorial Award- The best engineering oriented paper	**FPGA Realisation of n-QAM Digital Modulators** by J A Galaviz-Aguilar, J C Nuñez-Perez, F J Perez-Pinal & E Tlelo-Cuautle published in **May-Jun 2019** issue of **IETE Technical Review**
IETE MN Saha Memorial Award- The best application oriented paper	**Design and Validation of Fractional-Order Control Scheme for DC Servomotor via Internal Model Control Approach** by Sahaj Saxena & Yogesh V. Hote published in **IETE Technical Review Jan-Feb 2019 issue**
IETE KS Krishnan Memorial Award- The best system oriented paper	**Detection of Islanding and Fault Disturbances in Microgrid using Wavelet Packet Transform** by Prakash K. Ray, Basanta K. Panigrahi, Pravat K. Rout, Asit Mohanty, Foo Y. S. Eddy & Hoay published in **Nov-Dec 2019** issue of **IETE Journal of Research**
IETE CDIL Award for Industry- The best paper contributed by authors working in Industry	**Implementing and Characterizing Real-Time Broadband RFI Excision System for the GMRT Wideband Backend by Kaushal D Buch, Kishor Naik, Swapnil Nalawade, Shruti Bhatporia, Yashwant Gupta and Ajithkumar B published in May-June 2019 issue of IETE Technical Review**
IETE Gowri Memorial Award- The best paper on topic of general Interest	**Order Reduction Techniques via Routh Approximation: A Critical Survey by Amit Kumar Choudhary & Shyam Krishna Nagar published in May-June 2019 issue of IETE Journal of Research**
TWO Students' Journal Award- Two best papers from IETE Journal of Education	1. **From Design to Tape-out in SCL 180 nm CMOS Integrated Circuit Fabrication Technology by Joydeep Basu published in IETE Journal of Education Jul-Dec 2019 issue**
	2. **60 GHz Source for WLAN Applications Based on IEEE 802.11ad Protocol Standards by** Prajukta Mukherjee and Aritra Acharyya **published in IETE Journal of Education Jul-Dec 2019**

IETE Academic Awardees-2020

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

The categories that had winners this year were:

➢ **AMIETE Subramanian Thyagaraja Award** for securing the highest percentage with 6.5 GPA and above marks and completing Part 1 of Section A in one attempt without exemptions.

JUNE 2019

AMIETE (ET) - Atashi Baran Mohanty - (SG-237312) GPA – 7.3

DECEMBER 2019

AMIETE (ET) - Gulshan - (SG-205803) GPA – 6.5

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

JUNE 2019

AMIETE (ET) - Shivam Kumar - (SG-238529) GPA – 8.2

➢ **AMIETE Council Award-II** for securing the highest percentage with 6.5 GPA and above marks and completing Part 1 of Section B in one attempt without exemptions.

JUNE 2019

AMIETE (ET) - Annem Gopal Reddy - (SG-230714) GPA – 7.4

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

JUNE 2019

AMIETE (ET) - Sanam Nageswara Rao - (SG-238083) GPA – 7.2

AMIETE (CS) - Kodimela Divya Rani - (SG-238071) GPA – 6.8

DECEMBER 2019

AMIETE (ET) - Santosh Kumar - (SG-201249) GPA – 7.2

➢ **Smt Radhabai Kapre Gold Medal Award** for securing the highest percentage with 6.5 CGPA and above marks and completing AMIETE in 4 years without exemptions.

JUNE 2019

AMIETE (ET) - Sanam Nageswara Rao - (SG-238083) CGPA – 6.8

AMIETE (CS) - Kodimela Divya Rani - (SG-238071) CGPA – 7.13

➢ **AMIETE – Gopal M Dandekar Memorial Award** to a girl student securing the highest percentage with 6.5 CGPA and above marks and completing AMIETE (considering ET, CS & IT streams of current Jun and pervious Dec exams together) in four years without any exemptions.

JUNE 2019

AMIETE (CS) - Kodimela Divya Rani - (SG-238071) CGPA – 7.13

➢ **DIPIETE Council Prize-I** for securing the highest percentage with 6.5 GPA and above marks and completing Part 1 of Section A in one attempt without any exemptions.

JUNE 2019

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

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

JUNE 2019

DIPIETE (ET) - Santosh Kumar Samanta - (SD-238509) GPA– 7

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

JUNE 2019

DIPIETE (CS) - Purnachandra Panda - (SD-238216) GPA – 7

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

JUNE 2019

DIPIETE (ET)-Prasad Sagarpratap Prabhatkumar-(SD-232330) GPA–7

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

JUNE 2019

DIPIETE (ET) - Ram Bansh Pal - (SD-238281) CGPA – 6.91

DIPIETE (CS) - Helan Priya A - (SD-238331) CGPA – 7.04

➢ **DIPIETE – Gopal M Dandekar Memorial Award** to a girl student for securing the highest percentage with 6.5 CGPA and above marks and completing DIPIETE (considering ET & CS streams of current June and previous Dec exams together) in three years without any exemptions.

JUNE 2019

DIPIETE (CS) - Helan Priya A - (SD-238331) CGPA – 7.04

The categories that had no Recipients this year in either of the semesters (June/Dec 2019) exams or in any streams except for the above mentioned, are as follows:-

ALCCS: No recipients

AMIETE: No recipients in the following category :

AMIETE Hari Mohan Memorial Award.

IETE Best Centre Awards 2020:
1st Prize - IETE Bangalore Centre
and
2nd Prize- IETE Chandigarh Centre

News from Centres

AHMEDABAD

• The Centre, in collaboration with TLab Global, initiated an activity for school children of 5th to 9th stds on "Learn with Fun – Technology for Young Ones" on 10th Nov 2019, wherein the students learned basic concepts of science, maths and soft skills through prominent persons. The session was opened up by **Shri Dipak Darji**, TV artist. He talked about communication skills, storytelling and public speaking. Moving forward, **Shri Madhukant Patel**, Centre Past Chairman, explained the students about electric motors, oscilloscope frequency, amplitude. He taught how electrical energy was measured and how to use multimeters to measure current, voltage, resistance *etc*. **Dr Malkesh Patel**, South Korea, took session on Optonics, explaining property of visible light as well as other wavelengths. **Dr Vishal Joshi** demonstrated the concept of aircraft by making a paper airplane, controlling its flight angle, trajectory *etc*. Eminent persons present were: **Shri Chintan Bhatt**, Ex-SAC/ ISRO; **Smt Smriti Dagur**, Past President IETE; **Shri Brijesh Kamani**, Teksun Group; **Dr Mitesh**, TLab; **Shri R M Makwana**, Centre Hony Secretary & Jr Scientists from Teksun, **Ms Priyanka Bhatnagar** & **Ms Shristi Bist.**

• The तकनीकी चौपाल meetings at the Centre are held to discuss the latest developments in science and technology; contribution that have been made or can be made by individual members for the betterment of IETE. In this context the 6th Meeting was held on 1st Dec 2019 with members, namely - **Smt Smriti Dagur**

Past President IETE; **Sh Sudhir Agarwal**, Centre Chairman; **Sh Chintan Bhatt**, **Sh Madhukant Patel**, **Sh R M Makwana, Sh D S Kushwah, Sh Lalit Bhalotia** & **Sh Samir Dave,** who discussed current issues relevant to the interest of IETE and talked about chess tournament/ classes. The views on the topics that could be selected for Zonal Seminar by the members were exchanged. The **7th तकनीकी चौपाल** on 5th Jan 2020 was focused on "Learn with Fun" activity for the school children. It was thought to arrange an expert lecture and a visit to BISAG & MCBS. The next **8th तकनीकी चौपाल** was held on 2nd Feb 2020, centering around the activities for IETE/ISF student; discussions on training for AI/IOT/Embedded with the company Teksun Lab Pvt Ltd; displaying of LED board with advertisement and ways and means of enrollment of new ISF students from different colleges. A total of 13 members attended. The Centre conducted **9th तकनीकी चौपाल** on 1st Mar 2020 that witnessed discussions on the pilot project proposal from PI Lab for RP training. Members present were-Sh Sudhir Agarwal, Sh R M Makwana, Sh Madhukant Patel, Sh Narendra Patel from Nexus Hike and Ms Charmi Jagani from Teksun Lab. On 3rd May the **10th तकनीकी चौपाल** was organized digitally with **Prof (Dr) Nilesh N Kasat**, West Zone Mentor, **Shri Sudhir Agarwal**, Centre Chairman, **Shri V K Jain**, Immdt Past Chairman, **Shri K K Mehta**, Hony Treasurer, Smt Preeti D Agarwal, Prof (Dr) Pankaj Parajapati, Shri Rashesh Dave. In the meeting, Shri V K Jain requested that the list of Universities/Institutions recognizing IETE degree courses to be provided. It was proposed that region-wise representation for the recognition issue of IETE be taken up after GC's approval. Organizations such as ISRO, DRDO, BARC, and NIC, should be approached from IETE HQ under the membership drive. The **11th तकनीकी चौपाल** was arranged on 7th Jun 2020 followed by next **12th तकनीकी चौपाल** on 5th Jul 2020 through video conferencing. Sh Sudhir Agarwal, Sh V K Jain, Sh K K Mehta, Sh D K Agrawal, Smt Preeti Agrawal, Sh Vipin Ghai and Sh Rashesh Dave discussed the scope of improvement in IETE Election process and on the views being published for combating corona virus using synchronous frequencies, emerging technologies *etc*. Such meetings and discussions were considered fruitful and informative by the members.

• The theme for the **Students' Day 2020** celebrations was **5G Technology** and was observed by the IETE students & ISF community together on 2nd Feb 2020. The dignitaries present on the occasion were: **Smt Smriti Dagur**, Past President

IETE, **Shri Sudhir Agarwal**, Centre Chairman and **Shri R M Makwana**, Centre Hony Secretary. After the welcome remarks, Shri S Agarwal read out the message from President IETE, issued for the day. Elocution competition arranged on "5G Technology" for IETE & ISF students was handled by Prof (Dr) Milind Shah & Prof (Dr) Pankaj Prajapati. Some important tips were shared with participants by **Shri Dipak Darji**, TV Artist, during the programme.

• The **WT&ISD** 2020 on the theme '**Connect 2030-ICTs for Sustainable Developmental Goals**' was organized jointly with BES, via e-conferencing on 17th May 2020. During deliberations, **Shri Sudhir Agarwal** emphasized on the need for improving infrastructure status of ICT sector similar to the railways, highways and airports for its growth acceleration. He said that ICT could effectively be used for intelligent transport system to tackle prevailing Covid-19 situation. **Dr Prateek Kanchan**, Dir, BK School of Business Management, Ahmedabad, highlighted the World's Agenda 2030 that required all nations' interventions to eradicate poverty and shift towards sustainable development, in his address. **Dr Bhavin Sedani**, Prof LDCE, Ahmedabad, talked at length on on **5G Technologies**. More than 100 members participated across the nation and international students also joined the event. Vote of thanks was by **Shri R M Makwana**, Centre Hony Secy.

• The Centre & IETE Noida Centre jointly hosted **6th International Yoga Day** celebration on 21st Jun 2020 through Google Meet. The Chief Guest, **Prof (Dr) J W Bakal,** President, IETE inaugurated the event. IETEians across states, participated through e-platform.

• The Centre in association with ISF-LD College of Engineering, Ahmedabad, organized a webinar on 12th Jul 2020, wherein **Shri Sudhir Agarwal**, Centre Chairman, delivered the welcome address. The speakers were introduced by **Prof (Dr) Pankaj Prajapati**, LDCE. **Shri Viral Gupta**, from Communication Artificial Intelligence, LinkedIn, USA, delivered an interesting talk on "Online Tuning of Large-Scale Recommendation System" by covering some of the basics and recent advances in the field and deliberated on the ways to formulate a real-world recommender system problem that can be solved via Bayesian Optimization. **Shri RajkiranVeluri**, Sr Manager, Data Scientist, IBM (India), expounded on "Natural Language Processing: Techniques, Current Trends & Applications in Industry", giving insight on usage of NLP tech in industry and highlighted some recent research trends and challenges in the NLP field. **Prof (Dr) Bhavin Sedani**, ISF Coordinator, proposed vote of thanks. More than 190 participants attended the webinar and e-certificates were forwarded to the registered participants, later on.

• The Centre and Technopreneur Network of India (TNI) organized a webinar on **"Success Stories in IoT Applications"** on 2nd Aug 2020 in association with TEKSUN, OM Technical Solutions, Reve Automation & Streamer Electric AG. **Prof (Dr)**

JW Bakal, President IETE was the Chief Guest for the event. Welcome remarks were from **Mr Mubarak Khan**, while Shri Aman Pandey introduced the Chief Guest. Mr Rushi Shroff, a passionate technopreneur & enthusiast, gave a brief introduction about TNI. The keynote speaker was **Dr Madhukant Patel**, Former Scientist ISRO, MD – Reve Automation, CTO – TEKSUN. The webinar was informative and useful for the professionals. Vote of thanks proposed by **Dr Ajay Thakare,** ChairmanTPPC, IETE.

ALIGARH

The topic chosen for deliberation by the Centre for the organized webinar was **Effective Online Teaching and Learning** on 28th Jun 2020. It was inaugurated by **Prof Perwez Mustajab**, Dean, Faculty of Engg & Technology, AMU. **Prof Z A Abbasi**, Centre Chairman delivered the welcome address in the webinar. **Dr A Samad**, Hony Secretary presented the brief overview of the Centre activities. **Ms Savita Gautam**, Webinar coordinator and Asstt Prof/ Computer Engg/Women's Polytechnic, AMU, delivered the opening remarks. The topics deliberated in the session along with speakers were: **Creating Online Resources** by **Ms Savita Gautam; Learning Management Platform** by **Mr M Shoaib**, AP/Computer Engg., AMU; and **Creating E-Portfolio** by **Mr Ranjit Kumar**, Fashion Designer, New Delhi. The programme concluded with **Dr A Samad's** vote of thanks.

BANGALORE

•   **Dr P V Ananda Mohan**, Editor-in-Chief, *IETE Journal of Education* was invited as the Chief Guest, on the Republic Day celebration. He hoisted the national flag in presence of other members, the Centre Chairman, EC members and invited guests. Greetings were exchanged and interaction took place.

•   A short-term course on **Advanced FPGA Design** was conducted on 2nd Feb 2020 by **Shri Anil Kumar T S**, FIETE. Shri C P Dwivedi, Centre Hony Secretary was the course director and participants were from LRDE, DARE of DRDO.

•   **IoT Internship Valedictory** was organized between 13th Jan- 7th Feb 2020 for engineering students in association with C-DAC, Lekha Wireless and Rane t4u Pvt Ltd. The Chief Guest & Guest of Honour for the event were: **Dr Balasubramanya Murthy**, Chairman, BITES, and **Dr Sathya Rao**, respectively, who encouraged and motivated students through their addresses. Shri G L Gangaprasad, Vice-Chairman acted as the Course-Director. Industry visits were arranged as part of the course. The participants were distributed the certificates. Vote of thanks was proposed by **Shri C Satyanandan**, Centre Hony Secretary.

•   The Centre organized weekend course on **IoT** and **Augmented Reality (AR)** on 2nd Feb & 8th Mar 2020 by **Shri G Avinash**, Lead Architect, PTC Inc. Giving an overview, the speaker informed about the need of IoT, IoT connectivity, data modeling and augmented reality. The good content delivery resulted in repeat request for another 2- day practical oriented course on

Advanced IoT. Participation certificates were distributed on course completion by **Shri C P Dwivedi**, Centre Vice Chairman and **Shri C Satyanandan**, Centre Hony Secretary.

•   **IETE Students' Day** was organized on 15th Feb 2020 by arranging a technical quiz. After the 1st round, participants selected for the technical talk on "Digital Technology", competed with each other by showing off their speaking skills and knowledge on the topic, followed by "Turn for the fun" round. **Prof GK Venkatesh**, EC member moderated the valedictory

session. **Shri C Satyanandan**, Centre Hony Secretary read out the message of President IETE for the day. Coordinators: Dr Ravishankar and Dr GK Venkatesh also addressed the gathering. **Prof HS Bhatia**, Centre Chairman and Shri Satyanandan distributed the certificates and cash prizes to the participants and winners.

•   The Centre conducted practical oriented course on **MATLAB/SIMULINK** on 16th Feb 2020 by **Dr Shivaprasad Yadav**, MSRIT, Bangalore, with about 17 participants from BEL and ISRO. Same course was arranged next on 8th Mar 2020 for the BEL Executives. **Shri C P Dwivedi**, Centre Vice-Chairman was the course director for both the batches.

•   The webinar for **WT&ISD** was held on 17th May 2020 with **Shri Sachin Arora**, Head of Analytics, AI and Big Data at KPMG & Ex-Amazon, McKinsey, Yahoo, as the Chief Guest. **Dr C V Ravishankar**, EC Member, welcomed the participants during the occasion. The message from the ITU Secretary General was read out by **Shri G L Gangaprasad**, Centre Vice Chairman. **Dr Shrishail Angadi**, EC Member, read out the IETE President message. The Chief Guest advised in his address, asserting the fact that since conventional business models are under attack, the companies and professionals should constantly keep re-inventing their processes and methods with the use of the latest ICT technologies. **Prof H S Bhatia**, Centre Chairman, emphasized the importance of online platforms, through his address. **Shri B N Jagannatha Rao**, Hony Treasurer, proposed the vote of thanks.

•   **Prof N S Nagaraja Memorial Lecture** was arranged by the Centre on 28th Jun 2020 on the occasion of AGM 2020. The lecture was delivered by **Prof Ram M Narayanan,** Dir, Centre for Radar Engineering, Science & Technology (CREST) and Dir, State College Area Radio Frequency Consortium (SCARF) at the Pennsylvania State University USA, on the topic **"Information

Elasticity and Overload in Sensor Systems". The speaker based his talk on an Air Force Research Project that he worked on. He touched upon its objectives, approach, key findings and benefits to the wider academic/defense community. He informed what amount the sensor data was needed for developing an optimum decision strategy which can be learned by experience and prior knowledge. He talked about the principle of Data = Information, *i.e.* more the data, more the information. He deliberated on extent of information that is optimal for achieving the objective under a set of circumstances. Prof Narayanan demonstrated it by an Inverted U curve, with Information Load on the X- axis and Decision Accuracy on the Y-axis, and said that all information beyond a tipping point was information overload. He even described an analysis of placing a Corner Reflector on different types of clutter to maximize the Signal to Clutter Ratio. He talked about the Model constraints based on constraining statements. He concluded by saying that more data does not always mean more information. DATA ≠ INFORMATION.

• A five-day **Faculty Development Program (FDP)** on "Contemporary Research Trends in Electronics & Communication and Computer Science" was organized for postgraduate students during 6th-10th Jul 2020 by the Centre in association with Visvesvaraya Technological University Belagavi, Karnataka.

BHOPAL

• The Centre in association with IEEE MP sub-section, IETE Gwalior Sub-Centre and IE(I) Gwalior Chapter, organised a webinar on **Image Enhancement using Neural Network** on 19th Jul 2020. **Dr Jyoti Singhai**, Professor, Maulana Azad National Institute of Technology, Bhopal, was the resource person for the webinar, attended by about 200 members. **Prof (Dr) Nilesh N Kasat**, Zonal Mentor (West) & IETE GC Member, also attended the program.

• The Centre in association with IEEE MP Sub-section, IETE Gwalior Sub-Centre and IE (I) Gwalior Chapter, organised another webinar on **Stress Management in the post Covid-19 Era** on 26th Jul 2020 with **Er Sandeep Pradhan**, Preceptor, Heartfulness Institute, as the resource person. It was attended by professionals and students along with their family members.

• A one-day online seminar on **Next Generation Antennas** was organized in association with IEEE MP Section, IETE Gwalior Sub-Centre and IE(I) Gwalior Chapter on 2nd Aug. 2020. The speaker **Prof Binod Kumar Kanaujia**, School of Computational and Integrative Science, JNU, New Delhi, explained the techniques of RF harvesting and applications of the antenna in medical applications, in his address. **Prof P L Zade**, Principal, Datta Meghe Institute of Engineering Technology & Research, Wardha, focused his talk on "Smart Antenna for Mobile Communications". **Dr Sarthak Singhal**, Dept of EC, Malaviya National Institute of Technology, Jaipur, deliberated on the super wideband and terahertz frequency technology. **Dr Manoj Singh Parihar**, Indian Institute of Information Technology, Design

& Manufacturing, Jabalpur, gave his presentation on the latest trends in antenna designs. **Dr Taimoor Khan**, National Institute of Technology, Silchar, exemplified the latest trends in ultra-wideband antenna while **Dr Ravi Pratap Singh K**, Principal Manager-Projects, Ace Antenna India Pvt Ltd. Hyderabad, illuminated on "Base station antenna". **Prof (Dr) Nilesh N Kasat**, Zonal Mentor (West) inaugurated the seminar. About 134 research scholars and faculty members participated from different part of the country and the USA. Vote of thanks was proposed by Shri Deep Kishore. **Dr P K Singhal**, Centre Chairman, Dr Manish Dixit and Er R K Khetan organized the programme.

• An online program on "**Women Empowerment**" was organized in association with IEEE MP Chapter, IE(I) Gwalior Chapter, IETE Gwalior Sub-Centre and ISF MITS on 9th Aug. 2020. **Shri S Ramaswamy**, Chairman IETE Women Empowerment Engg Committee, was the invited Chief Guest and **Prof (Dr) Nilesh N Kasat**, GC member, was the Guest of Honour for the programme. The welcome remarks were by **Dr Pramod Singhal**, Centre Chairman. **Sh R K Khetan**, from IE(I) Gwalior Chapter, moderated the program. **Dr Kusuma Singhal**, Sr Gynaecologist from Gwalior, gave a presentation on women's status and rights. **Mrs Shafali Kapur Tandon**, Scientist, Indian Space Research Center, Hyderabad, shared her working experience with men. **Mrs Renu Bansal**, Scientist, Indian Space Research Centre, Trivandrum, talked about status of women in education and service. "Gender Equality" was the topic for **Dr Karuna Markam** address. The programme was coordinated by **Dr Vandana Vikas Thakare**, Faculty advisor/ISF. Around 150 participants attended. Technical support was provided by **Sh Deep Kishore** and **Dr Manish Dixit.** Vote of thanks was proposed by Ms Pooja Sahu.

• A webinar on "**Issues related to COVID-19**" was conducted on 16th Aug 2020 in association with IEEE MP Sub section, IETE Gwalior Sub-Centre and IE(I) Gwalior Chapter. **Dr Bindu Singhal**, CMO and COVID-19 Nodal Office, Gwalior, graced the webinar as the Chief Guest. In her address the speaker explained about precautionary measures that are required to be taken by students during the pandemic. She also attended the queries by the participants.

BHUBANESWAR

Celebrations for **IETE Students' Day** with its ISF members were arranged by the Centre on 8th Feb 2020 at Gandhi Institute

for Education and Technology (GIET), Bhubaneswar. A project competition was arranged wherein five groups from different engg colleges participated with their projects. The Vice-Chairman, GIET, expressed his appreciation for the efforts made and encouraged students utilizing their skills and knowledge towards building a new digital India. The event was organized and managed by **Mrs Madhilita Mohapatra**, Coordinator, ISF, GIET. A group of judges evaluated the project models and the best three projects were awarded.

CHANDIGARH

• The Centre celebrated **the IETE Students' Day** and a one-day **Radio Day Electro Expo** in association with Chandigarh Group of Colleges (CGC), Mohali, on 13th Feb 2020. Talks by experts, paper presentations, exhibition of working models and brain storming session on the prospective 'Start up Ideas' for the students were the main attractions on the occasion. **Dr Rajneesh Talwar**, Principal, CGC, delivered the welcome address during the event and thanked the Centre for conducting meaningful

event. It was inaugurated by **Shri S C Jain**, Centre Hony Secretary, who underlined the importance of such functions in his address. In addition, he encouraged students to acquire additional skills and read out the message from President IETE given for the day. **Shri Anup Singh**, Director, Ocean Technologies, the key speaker, dwelled on "Advance Wireless Communication-5G and its implementation". **Shri Ramandeep Singh**, Asst Director, Dept of Industries and Commerce, Govt of Punjab was the Guest of Honour, who along with the Chief Guest, visited all stalls and lauded the efforts put in by the participants. Ms Megha, Radio Jockey for FM 92.7 interacted with students and enlightened them on the importance of Radio as broadcast media for communication. Winners were given the trophies, certificates and cash prizes. Vote of thanks proposed by **Dr Sajjan Singh**, Head/ECE, CGC Technical Campus.

• On 7th Mar 2020, a Technical Event- '**Zeealions**' was organized in association with Dept of CSE, ISF at Chandigarh Group of Colleges (CGC), COE, Mohali (Punjab). On the occasion **Dr Anuj Kumar Gupta**, Director-Principal, CGC, COE, Landran, presented the welcoming address. **Shri Satnam Singh Sandhu**, Chairman, CGC and **Shri Rashpal Singh Dhaliwal**, President, CGC, graced the function, as main guests.

Dr (Prof) Sushil K Kaura, Chairman, IETE Chandigarh Centre, inaugurated the event. **Shri S C Jain**, Centre Hony Secretary, Guest of Honour, spoke on "Role of Fiber Optics in Present Day Telecommunication". The faculty coordinators **Shri Pankaj Palta & Shri Dishant Khosla**, presented a brief on various technical events, *viz.*, project display, technical quiz, jam session, idea presentation, logo quiz, online gaming and online coding. Events were adjudged by the panel comprising of Dr (Prof) Sushil K Kaura, Shri SC Jain, Dr Tanvi Arora and Shri Manvinder Sharma.

• A two-hour webinar on **"Patentability Search: Analyze Your Invention Effectively"** was organized on 13th Aug 2020 in association with Dept of Research, Innovations, Sponsored Projects & Entrepreneurship (RISE), Chandigarh and Group of Colleges (CGC), Landran (Punjab). It was inaugurated by **Shri S C Jain**, Centre Chairman. This session for the Patentability Search guided how to analyze the invention effectively for patent drafting, filing, prosecution and research. The aim was to train the participants towards scaling up from idea generation to commercialization. **Shri Karan Puri**, Assoc Vice-President, Ennoble IP, conducted this 2-hour webinar, and was organized by **Dr Ruchi Singla**, Dean, Research, CGC. A number of IETE Corporate members, faculty and students attended.

• The **74th Independence Day** was celebrated enthusiastically on 15th Aug 2020 at the premises, with **Shri S C Jain**, Centre Chairman, who hoisted the Tricolour amidst other members. Some staff members came with their families. A tree plantation drive was also carried out by the Chairman & Hony Secy on the day.

CHENNAI

• The Centre and the ECE Dept of MATLAB Club jointly organized hands-on training on **MATLAB and its Applications** by **Mr Syed Zaheer Uddin** and **Shri B Narsimha**, AP/ECE, Kakatiya Institute of Technology & Science, Warangal, on 19th Sep 2019 at Jeppiaar Institute of Technology (JIT) Chennai. Another hands-on training programme on "Image Processing using MATLAB and Simulink" was conducted by **Mrs S Mary Cynthia** and **Mrs R Rubala**, AP/ECE, JIT, Chennai on 12th Mar 2020 at JIT, Chennai.

• Ayudha Pooja Festival was celebrated at the premises with EC members on 8th Oct 2019.

• The students of Sri Venkateswara College of Engineering, Sriperumbudur, represented IETE-Chennai Centre by participating in the **IETE Innovation Meet 2019** held at Shah & Anchor Kutchhi Engineering College, Deonar, Mumbai, on 22nd October 2019, organized by **IETE Mumbai Centre**. The team (S Prem Raj & S Lokesh) won the 1st first prize for Project Competition on "**Drones as First Response Vehicles".** Their mentor was ISF Coordinator/Assistant Professor ECE Department, **Ms TJ Jeyaprabha** from the College.

• **IETE Students' Day** & **National Science Day** were together organized on 25th Feb 2020 at SRM Institute of Science and Technology, Vadapalani Campus, Chennai. Dr C Gomathy, HoD/ECE delivered the welcome address; **Dr Tata Sudhakar**, Centre Chairman, highlighted the Centre's activities, followed by the special address from **Shri S Ramaswamy**, Governing Council Member. Other speakers were: **Dr Shiv Kumar**, Co-Chair SD&ICC, who talked about skill development & industrial training programs of IETE. Inaugural address was by President IETE, **Prof (Dr) J W Bakal**, encouraging the students to participate actively in ISF activities. The Chief Guest **Dr V Natarajan**, Director, DRDO Research and Innovation Centre, IIT-Madras, delivered a technical talk as part of National Science Day. **Dr P Balasubramanian**, Scientist-F, DRDO Research and Innovation Centre, IIT-Madras was felicitated, who was the recipient of the **IETE–Shri Devi Singh Tyagi Memorial Award-2019**. Over 15 engineering colleges participated in Project

Display/Demonstration and Circuit Debugging competitions. The students winning positions were: 1st prize- Veltech Multi Tech Dr SRR Engineering College; 2nd Prize: IFET College of Engineering, Villupuram; 3rd Prize: SRM Institute of Science and Technology. For the Circuit Debugging Competition, 1st Prize was bagged by Sri Venkateswara College of Engineering; 2nd Prize by Vels University and 3rd Prize by Sri Venkateswara College of Engineering. Dr M Selvi, Centre Hony Secretary, proposed vote of thanks.

• The Centre organized a number of **webinars** in association with SVCE–ISF with resourse persons, namely: **Shri G L Ganga Prasad**, Sr Director, C-DAC, Bengaluru, who chose to speak on "Basics of IoT and its Applications of IoT" on 4th Jul 2020 ; **Dr K M Sivakholundu**, Interim Vice Chancellor, IMU (Central University under the Ministry of Shipping) conversed on "GPS" with details on Space segment, Navigation message, GPS Ranging, Position computation-A simple Model, Future of Satellite Positioning, IRNSS constellation on 11th Jul 2020; **Shri Ashok Govindarajan,** Head of Wireless Networks, Zilogic Technologies, spoke on "Predominance of WLAN access points" commonly called as Wi-Fi on 25th Jul 2020; **Shri K V Nagesh**, Founder and MD, Data Care Systems, discussed the "Engine cooling, engine speed control, engine preheat control and engine brake control" with

the help of a pictorial presentation of the ECU on 14th Aug 2020; **Dr Markkandan**, AP, Anand Institute of Higher Technology, Chennai, exchanged his views on "MATLAB fundamentals and applications, syntaxes and functions used in programming" on 22nd Aug 2020; **Shri Sivasubramanian B**, Business Intelligence Analyst, Data Science Enthusiast & a Business Data Analyst, threw light on "Data Science" on 23rd Aug 2020; **Shri Tata Sudhakar**, Former Centre Chairman, spoke on "Role of Ocean Technology for Society, Coastal Protection measures and LTD Technology for Coastal Power Plants, significance of Human Occupied Vehicles and Ambient Noise Measurement System" on 29th Aug 2020. The Centre organized another **Webinar-14** on 8th Aug 2020 in association with Jeppiaar Institute of Technology-ISF with **Shri A Sadagopan**, DoT as the keynote speaker on Recent Trends in Optical Communication. Each webinar witnessed overwhelming response from participants.

COIMBATORE

• The Centre organized a two-day workshop on **Advanced Image Processing Techniques and Neural Networks** during 6th-7th Feb 2020. It was intended to provide an experiential learning by giving hands-on exposure in computing and programming techniques for advanced image processing, using Python and Microsoft Excel, to undergraduate engg students and participants, who were more than 40 in number. It was organized by **Dr M Jayakumar**, Centre Vice-Chairman. Shri B Sabarish Narayanan & Dr R Ramanathan, EC members, also addressed the workshop. Shri N Mohan Kumar, Centre EC member, coordinated the event.

• A three-day International Conference on **Statistical Applications in Data Analytics and Data Science** was held during 20th–22nd Feb 2020. The distinguished speakers participated were: **Dr Gerardo Rubino**, Sr Researcher, INRIA, France; **Dr Muralidharan Kunnummal**, Professor, M S Univ of Baroda; **Dr Anbanandam Ramesh**, Assoc Prof, Dept of Management Studies, IIT, Roorkee; **Dr Gijo EV**, Head, SQC & OR Unit, ISI,

Bangalore; **Dr Lipika Dey**, Chief Scientist, TCS Research and Innovation; **Dr T Ravindra Babu**, Vice-President, Data Science, Myntra; **Dr Vasily Sachnev**, Catholic Univ of Korea; **Dr Mrinal Kanti Das**, AP, IIT, Palakkad and **Dr Ashok Kumar**, AP, IIT Palakkad. It was attended by 70 participants and 40 research papers were presented during the event.

ERODE

• The Centre organized a three-day District Level CRE programme on **Role of Play in Early Childhood: Development Disabilities** during 18th-20th Oct 2019. About 20 members attended.

• A workshop was conducted on **Testing and Servicing of Mobile Phones** during 20th-21st Dec 2019.

• The Centre celebrated **IETE Students' Day** on 8th Feb 2020 at Kongu Engineering College, Erode. The Centre Chairman, **Dr C N Marimuthu** welcomed the gathering. **Dr G Murugesan**, Immdt Centre Past Chairman, presided over the function.

Dr (Mrs) D Malathi, Centre Hony Secretary, conveyed the President's message given out for the day. **Dr R Rajesh**, Assoc Prof & HoD/CS, College of Technology, Central University of Kerala, delivered the special lecture on the topic "Computational Intelligence". Vote of thanks was proposed by Shri K Kavin Kumar, Centre EC Member.

GULBARGA

The Sub-Centre and VTU's Centre for PG Studies, Kalaburagi, organised a five-day **Faculty Development Programme (FDP)** during 6th-10th Jul 2020. **Prof Baswaraj Gadgay**, Regional Director, VTU's Regional Office, Kalaburagi, **Prof Shubhangi D C**, Programme Coordinator (ECE) and their team successfully

hosted the programme. About 1067 participants from 18 states all over the India and 4 from abroad attended the programme. It was a successful and informative event, appreciated by all.

HYDERABAD

The conference on **IoT for Real World Applications** was held at G Narayanamma Institute of Technology and Science (GNITS)

for Women, Hyderabad, in association with Stanley College of Engineering & Technology (SCETW) for Women on 20th Dec 2019. **Shri P Subba Reddy**, Chairman GNITS, graced the event as Chief Guest. **Prof (Dr) J W Bakal**, President IETE and addressed on the concept of IoTs, giving real life examples for networked and connected solutions. He explained how the IoT brings the physical and digital worlds together and why there is a need to bring the physical and digital realms into close harmony. Dignitaries present included: **Dr K Ramesh Reddy**, Principal GNITS, **Prof (Dr) V Gunasekhar Reddy**, Governing Council Member, **Prof A Ravi Kumar**, Centre Chairman, **Prof (Dr) A P Thakare**, Chairman, TPPC, HQ, **Dr K N Sahu**, TPPC Chairman Hyderabad Centre, and **Dr B Venkateshulu**. The speakers invited were: **Shri Raj Neravati Garu**, CEO, Hugs innovation Pvt Ltd, USA & India; **Prof M V Ramana Murthy**, Former Professor in Computer Science, Faculty of Computing and Information Technology, King Abdul Aziz University, Rabigh Campus, Jeddah and **Shri D S Rao Garu**, Consultant, RailTel India Pvt Ltd, Secunderabad.

JAIPUR

• The Centre organized a webinar on "**Journey from Campus to Corporate: Life Changes**" on 8th Jul 2020 in association with IEEE Rajasthan Sub-section and ISF at Dept of ECE, Jaipur Engineering College & Research Center (JECRC), Jaipur. The programme, held digitally, was coordinated by **Dr Sandeep Vyas**, HoD/ECE and moderated by **Shri Jaivardhan**, AP/ECE, JECRC. **Mr Anwar Imam**, Regional Manager, SOCOMEC India, was the keynote speaker. About 130 participants attended.

• Another webinar was organized on "**Eradicating Apprehensions about Career amid COVID-19 Crisis**" on 29th Jul 2020 in association with IEEE Rajasthan Sub-section and ISF at Dept of ECE, Jaipur Engineering College & Research Center (JECRC), Jaipur. **Shri A P Singh**, Jt Director, Made Easy Group, was the keynote speaker. About 140 participants attended, and the registrants were given e-certificates.

KANPUR

• An expert lecture on **Image Processing & Signal Processing** by MATLAB was organized on 19th Jan 2020. The keynote speaker, **Er Nihal Ahmad**, Iqra Software Technologies Ltd., Kanpur, on this occasion articulated on the topic "Digital Image Processing using algorithm and its advantages over analog

image processing". The speaker was introduced by **Dr Pragya Agarwal**, Centre Hony Secretary and felicitated by **Er US Yadav**, Centre Past Chairman. The welcome remarks were given by **Er CP Varma**, Centre Chairman at the beginning. Around 50 IETE members, ISF students and staff of AITH Kanpur, attended.

• A lecture on "Radar: Basics, Principal, Types and Advantages & Applications" by **Er Amit Sharma** from Maharana Pratap Engineering College, Kanpur, was arranged by the Centre to commemorate **IETE Students' Day** on 1st Mar 2020. On the occasion, **Er C P Varma**, Centre Chairman, delivered the welcome note and **Er A K Jain**, Centre Hony Treasurer, read out the President's message. Members and ISF students of Dr Ambedkar Institute of Technology for Handicapped (AITH), Kanpur attended. **Dr Pragya Agarwal**, Hony Secy, proposed vote of thanks.

KOCHI

• The UGC-sponsored International Conference on **Electronics and Advanced Signal Processing (ICESP 2020)** was held during 13th-14th Feb 2020 at BPC College, Piravom, Kerala and graced by **Prof (Dr) P G Sankaran**, Pro-Vice Chancellor, CUSAT, as the Chief Guest. The other dignitaries included: **Prof Joby Joseph**, Dept of Physics, IIT Delhi; **Shri Chandra Prakash**, Vice-President, Sales International Business Div, Genus Power

Infrastructures Ltd, Singapore; **Dr M V Rajesh**, Vice Chairman, IETE Kochi & Assoc Prof, Dept of EE, Model Engineering College, Thrikkakara, Ernakulam; **Dr Thomas Lee**, Staff Engineer in Radisys Corporation, Bangalore; **Dr Jyotsana Ravi**, Cloud Solution Architect – Artficial Intelligence Div of Microsoft Inc and **Prof Jibukumar M G**, Dept of Electronics, School of Engineering, CUSAT. **Dr Manju Abraham**, HoD/Electronics, welcomed the dignitaries. Dr M V Rajesh, Vice Chairman, IETE Kochi Centre, released the Conference Proceedings and was

invited for a talk on "Signal Processing Approaches for Non-linear System Modeling".

• An **industrial visit** to **Kerala Electrical and Allied Engg Co Ltd (KEL), Mamala, Ernakulam**, was arranged for the students of MGM College of Engineering & Technology, Pampakuda, Kerala,on 3rd Feb 2020.

• A technical talk on **Underwater Communication** was organized on 4th Feb 2020 by the Centre in association with Association of Electronics and Communication Engineering (AECE) at MGM College of Engineering & Technology, Pampakuda. **Shri Nebu Pulickal** and **Shri Basim Basheer**, Reasearch Scholars, KUFOS, were the resource persons.

KOLKATA

The Centre organized an expert talk on **Zero Trust: A Model for more Effective Security to Stop Data Breaches in Wireless Self-Organizing Networks** on 9th Jan 2020, delivered by **Dr Subir Kumar Sarkar**, Professor & Former Head. More than 30 participants including corporate members, faculty members of different Universities and Institutes were present during the occasion.

KOZHIKODE

• The Sub-Centre celebrated **IETE Students' Day** at KMCT College of Engineering on 1st Feb 2020. **Prof Ranjith C**, Principal, KMCT College of Engineering, inaugurated the celebration. **Shri Hemand EP**, Sub-Centre Hony Secretary, welcomed the gathering and informed about Sub-Centre's activities. **Dr Sabiq PV**, Sub-Centre Vice Chairman, read out the message by President IETE. A technical quiz for the students was organized. **Dr P Janardhanan**, Sub-Centre Past Chairman, gave away the prizes to the winners. Vote of thanks was proposed by **Shri Swaradh P,** Member Sub-Centre. About 55 members attended.

• A lecture on **Nanoelectronics** by **Prof Ranjith C**, Principal/ KMCT College of Engineering, was organized on 13th Feb 2020. **Dr Sabiq P V**, Centre Vice-Chairman delivered the welcome remarks. The programme was co-ordinated by **Dr P Janardhanan**, Past Centre Chairman. The resource person, **Dr B Premlet**,

Former HoD, TKM College of Engineering, Kollam, Kerala, shared the complete genesis of Nanoelectronics with the gathering through his talk. **Shri Keshavan Namboothiri** proposed vote of thanks. About 40 members attended.

MHOW

• The students and faculty members of Shri G S Institute of Technology & Science (SGSITS), Indore, visited Military College of Telecommunication Engineering (MCTE), Mhow Sub-Centre on 7th Dec 2019. The team was received by **Lt Col Mandeep Malik,** Sub-Centre Hony Secretary at Sarabhai Block. The students were extended a warm welcome and taken around the campus and introduced to vatrious Labs namely: Convergence Switching Technology Lab; Digital Communication & Digital

Signal Processing Lab; OFC Lab; Mobile Communication Lab; Satellite Lab and Thin Film Lab. The laboratory experiences were aimed to enhance student understanding of specific scientific facts and concepts and of the way in which these facts and concepts are organized in the scientific disciplines. The visit was intended to promote a student's ability to identify questions and concepts that guide scientific disciplines.

• The Sub-Centre organized a lecture on **Customized LTE Advance-based network in a Box Solution for Comn** on 21st Jan 2020, by **Col (Dr) Sidharth Shukla**, MCTE, Mhow. Another lecture on **Extension of Broadband using TV White Space** wasdelivered by **Lt Col Karthik P**, MCTE, Mhow, on 15th Feb 2020. Both the lectures were well received and highly appreciated by the students of ISF & faculty members.

MUMBAI

• The Centre organized the **9th Dr P B Parikh's Endowment Lecture** at Rajiv Gandhi Institute of Technology, Mumbai, on 24th Jan 2020. The event started with lighting of the lamp and observing 2 minutes silence in the memory of late Dr P B Parikh. **Prof S D Patil** Convenor welcomed the guests sitting on the dais,

which included: **Prof (Dr) J W Bakal,** President IETE, the Chief Guest; **Shri Kartik Parikh**, the Guest of Honour; **Dr S S Thakur**, Centre Chairman; **Dr S D Deshmukh,** Vice-Principal/RGITl and invited speaker **Shri P D Vaswani,** Addl Chief Engineer, NPCIL.

The Guest of Honour**, Shri Karthik Parikh,** recalled fond memories of father Dr P B Parikh, and his own association with the IETE, greatly appreciated by all. Dr J W Bakal in his address informed all about the inspiring works done by Dr P B Parikh and his contribution towards IETE Mumbai Centre. He ended by wishing good health to **Mrs Sulochana Parikh (W/o Dr P B Parikh)** and best wishes to Parikh family at large. On this occasion two EC members of the Centre, namely- **Dr H S Gambhir** and **Dr S D Deshmukh** who received PhD degrees in 2019 were felicitated by Dr S S Thakur. The key speaker, **Shri P D Vaswani** delivered the **9th Dr P B Parikh's Endowment Lecture** on the topic, "**State Space Techniques in Control Systems - Current Trends**", which was well received by the participants. Vote of thanks was proposed by **Shri Parag Walinjkar**. More than 50 members attended.

• The Centre inaugurated ISF at Atharva College of Engineering, Mumbai, on 6th Mar 2020**.** Dignitaries included: Chief Guest, **Dr S S Thakur**, Centre Chairman; **Shri Parag Walinjkar**, Hony Secy; **Dr Vikas Gupta**, Hony Treasurer; **Prof Jyoti Kolap**, ISF coordinator; **Prof Jyoti Mali**, HoD/ExTc and **Prof R Sreedharan**, Vice Principal. Dr Thakur delivered the key-note address on "Enable the Green World through Sensible Design". Vote of thanks was by Prof Jyoti Kolap.

• The Centre organised two free webinar series during May 2020. 1st was on **Pantech E-Bytes webinar series** and 2nd was on **Future of AI webinar series**. Each series consists of three lectures each of 45 minutes duration followed by questions answer session. The topics covered during the 1st series were **Machine Learning Using Python** (1st May 2020); **IoT-Design, Applications and Future Impacts session** (4th May 2020**)** and **Open CV based Image Processing Applications session** (8th May 2020**).**

The lectures for the 2nd series were on **Future of Artificial Intelligence** (20th May 2020); **Development of Deep Learning Architecture domain** (25th May 2020) and **Conversational BOT Design** (30th May 2020). These six knowledge-sharing live webinars, delivered by industry experts on latest and trending skills and technologies, were highly appreciated. The sessions provided participants an insight into the latest industrial standards and applications on the desired domain. About 600 of students, faculty members and industry persons participated. Participation certificates were issued to the participants on behalf of IETE Mumbai Centre and Pantech.

• The Centre conducted **Report on Online Training programs** in the month of June 2020 for engineering and ISF students. These programs were categorized differently for beginners, intermediates, seniors and experts based on prior

knowledge requirements. The training programs included from PCB design techniques to programming languages like Python, Matlab, Scilab, C, C++ etc to artificial intelligence and machine learning techniques. In first two weeks of June about 100 students completed the training. In 3rd and 4th week about 300 students completed the training. Maximum participations were for AI and ML training programs. The training was provided in on-line mode using virtual classroom concept. It was associated with Pantech E-learning.

MYSORE

The Centre organized a number of technical events on the occasion of **International Women's Day** *viz*., a Technical Quiz, Pick and Speak event, a Poster Presentation and a Short Movie Contest. **Dr Farhath Khanum**, Scientist 'G' DFRL, Mysore, was the Chief

Guest on the occasion. **Prof M J Sampath Kumar**, Centre Chairman, **Dr S R Bhagyashree**, Centre Hony Secretary, **Shri S M Manjunath,** Centre Hony Treasurer, **Ms Anita K**, AP/Event Cordinator, **Ms Roopashree**, AP/MYCEM and office bearers were also present. **Dr Khanum** elucidated on "Women Empowerment through Science and Technology".

NAGPUR

• IETE Centre conducted a one-week **online foundation course** on **Quantitative Aptitude** during 29th Jul-5th Aug 2020 for ISF student members and non members. It was inaugurated by the Chief Guest **Dr Murlidhar Chandekar**, Vice Chancellor; RTM Nagpur University and SGB, Amravati University. In his inaugural speech, he appreciated the initiative taken by IETE, as a professional body, to organize such a useful programme for students and mentioned that he wishes to include aptitude courses in University curriculum and desires the university and industry or professional bodies to collaborate together for education system. **Dr Sanjay Badjate**, Centre Chairman, delivered the opening remarks. Presidential address was given by **Prof (Dr) J W Bakal. Prof (Dr) Nilesh N Kasat**, Zonal Mentor (West) was the Guest of Honour. **Dr Surendra Gole**, Principal, St Vincent Pallotti College of Engineering and Technology, Nagpur, was the resource person. **Dr Suresh Rangankar**, Centre Hony Secretary initiated & coordinated the program. Online Quiz competition was organized on "Artificial Intelligence in Healthcare" on 29th Aug 2020 for all branches of engineering and polytechnics students. To provide an exposure on Artificial intelligence and its scopes in health care, an online webinar was conducted on 23rd Aug 2020 by **Shri Arpit**

Yadav, Research Scientist, Tensor-brew, Hyderabad. More than 250 ISF/ non ISF students participated from Maharashtra and nearby states.

The valedictory programme was graced by **Prof S K Khedkar**, Vice President IETE, as the Chief Guest; and **Dr Nilesh N Kasat**, IETE Zonal Mentor (West) as Guest of Honour. **Dr Sanjay Badjate**, Centre Chairman, outlined the importance of the event to the engineering and polytechnic students including various activities of the Centre. **Dr Suresh Rangankar**, Centre Hony Secretary, cleared the guidelines for the conduct of the quiz competition. The winners declared in the quiz competition were: **Shri Ayush Agrawal (1st)**; **Shri Sanket Meshram (2nd)** and **Ms Hanoor Puniyani (3rd)** – all from the Ramdeobaba College of Engg and Mgmt, Nagpur. From the Polytechnic, 1st prize went to **Shri Manish Chalak**, GP Nagpur; 2nd prize to **Ms Aantrika Sur**, SDMP, Nagpur and 3rd prize was bagged by **Ms Akshita Sharma**, GP Nagpur. The topper awards and consolation prizes were also announced. Dr Bhushan Joshi, Immdt Centre Past Chairman, presented the report activities of past year the Centre. Notables present were: Past Chairman Shri Ajay Sawatkar; Vice- Chairmen- Dr Salim Chavan and Dr Vijay Mankar, invited member- Dr PR Deshmukh; EC member- Dr R D Thakare; Dr Milind Khanapurkar, Dr Sujata Bele of IETE Nagpur; Dr SM Gulhane, Principal, Pravara Engineering College and Dr Jyoti Singhai, MNIT, Bhopal. Prof Harshwardhan Kharpate, Centre Hony Treasurer, proposed the vote of thanks.

NASHIK

• A session on **Mission Space** by **Er Apurva Jakhadi**, NASA Space Educator and the Special Invitee, was organized at Aircraft Manufacturing Division (AMD) HAL, Nashik Division for all the executive staff members, HAL on 24th Oct 2019.

• The Sub-Centre in association with the Dept E&TC, K K Wagh Institute of Engineering Education & Research (KKWIEER), Astro Club, organized a talk on **Chandrayaan-2** and **India's Future Space Missions** by **Er Apurva Jakhadi**, Space Educator, the keynote speaker, on the occasion of **IETE Foundation Day** on 2nd Nov 2019. It was attended by around 200 E&TC students. Notables present included: **Dr D M Chadwadkar**, Centre Chairman and HoD/E&TC, KKWIEER, **Prof S S Morade**, Centre Hony Secretary & **Prof S P Ugale**, EC Member, Sub-Centre.

• Under the Computer Forum of CS Dept, K K Wagh Senior College, Nashik, a technical fest **e-Merge 2020** was organized during 8th-9th Jan 2020. It was inaugurated by **Ms Minal Patil**, College alumnus, Founder of Corwin Minds, Ahamadnagar and **Dr JD Bapat,** as the Guest of Honour. Addressing the gathering, Ms Meenal Patil outlined the concepts of new technologies and opportunities available in IT fields. After her talk, she even offered internships & job opportunities to the students in her firm. Dr JD Bapat talked about happiness and mentioned the different types of enemies that act against happiness in human beings. He gave real life examples to be happy in day to day life, in his

address. **Prof A H Bendale**, HoD, presented a brief on activities held under the Dept forum. **Dr A P Rajput,** Principal, delivered the welcome address. **Dr Mahadev D Kokate**, Principal, SNJB College, Chandwad and Past Sub-Centre Chairman and **Dr Sunil S Morade,** Sub-Centre Hony Secretary, were also present. The event included competitions like: Selfie Mania Competition; Blind Coding; Technical Elocution; Programming; Technical Treasure Hunt; Web Site design using HTML, CSS & JS; Power Point Presentation and Counter strike etc. Winners adjudged, were rewarded. **Shri Vaibhav Mahajan**, CEO, Aabra-Ca-Dabra Software Solutions, Nashik and **Er Aporva Jakhadi**, Space Educator, NASA were the invited dignitaries for the valedictory session during the prize distribution ceremony. Prof A H Bendale gave a presentation on e-Merge 2019-20. Shri Vaibhav Mahajan sharing his views, guided the students on recent trends in IT development and gaming.

• A session on **Space Science & Technology** was organized on 10th Jan 2020 at Dept of E&TE & ME, Sanjivani College of Engineering, Kopargaon (Ahmadnagar) with a view to increase student awareness. Around 186 students attended and participated actively during the interactive session.

• The Sub-Centre enthusiastically celebrated **IETE Students' Day** on 4th Feb 2020 at Dept of E&TE, K K Wagh Institute of Engineering Education and Research (KKWIEER), Nashik. **ISF** arranged an expert talk on **Current Trends and Opportunities in Mobile App Development**, by **Shri Vaibhav Mahajan**, Product Design and Planning Manager, founder of Abra-ca-Dabra software solutions, Nashik. Dignitaries present were: **Dr D M Chandwadkar**, Centre Chairman & HoD/E&T and **Dr S S Morade**, Centre past Hony Secretary. **Ms R V Chothe**, Member IETE, coordinated for the event.

PALAKKAD

• The Centre celebrated the **WT&ISD** jointly with the IE (I) Palghat Chapter by organizing an online quiz on the theme "**Connect 2030: ICTS for the Sustainable Development Goals**" on 17th May 2020. Students participated in the quiz through the Moodle cloud platform. **Shri Beji K Mathew**, Hony Secy and **Shri P Suresh**, EC Member, hosted the program under the supervision of **Shri C K Haridas**, Founder Chairman and **Dr V Devi**, Centre Chairperson. Message for the Day from President IETE was displayed on the home screen of the Quiz platform.

• The Centre conducted a **webinar** on **Women Empowerment Program-2020** on the topic **Intelligent Survival: Need of the Hour** on 30th May 2020. The key speakers were: **Dr T Sudha**, Principal NSS College of Engineering; **Prof (Dr) V Devi**, Centre Chairperson; **Ms Sumathi M Nair** and **Col M K Pande**, Chairman, IETE Noida Centre, speaking on the following topics: Technological Survival; Habitual Changes; Health & Safety Practices; and Yoga–Ultimate way of life for Health, respectively. The opening remarks were given by **Prof (Dr) J W Bakal**, President IETE. **Dr AP Thakare**, Chairman TPPC and **Shri S Ramaswami**, Chairman WEEC, also addressed the participants. Other dignitaries present were: **Lt Gen (Dr) A K S Chandele PVSM, AVSM (Retd)**, DFIETE & Past President, IETE; **Dr M H Kori**, DFIETE, former GC Member and Chairman, IMAPS India Chapter; and GC members - **Prof (Dr) S Vijay Bhaskar Rao**, **Prof (Dr) V Gunasekar Reddy**, **Shri G Ramesh, Prof A Ravikumar**, Chairman, Hyderabad Centre, **Prof Pratap G Nair**, Chairman, Kozhikode Sub-Centre and **Dr K C Raveendranathan**, EC member, IETE Thiruvananthapuram Centre. Shri P Suresh, EC Member assisted technically while guidance was given by **Shri C K Haridas** & **Prof C Pradip,** for the programme.

• A **webinar** on **Career Option-Scope of Engineering** for engineering aspirants was organized on 28th Jul 2020 by **Prof C Pradip**, NSS College of Engineering, Palakkad. Highlighting the profiles and achievements of the great scientists from engineering fields, subjects from conventional engineering studies to latest streams emerging in the engineering field, the speaker tried to motivate the participants through his address. **Dr V Devi**, **Shri C K Haridas** and **Shri Beji K Mathew** were also present.

PILANI

The Centre conducted a one-day **6th Science Model Competition** on 29th Feb 2020 at CEERI Vidya Mandir, Pilani. Gracing the occasion as chief guest, **Prof Chandra Shekhar**, Ex-Dir CEERI & Emeritus Professor BITS Pilani, appreciated the innovative models and demonstrations given by the students and encouraged them to take the demos to the level of practical applications. He praised the organizers for conducting such type of events. The other notables present during the event were: **Mrs Bhoompag Rachel**, Principal, CVM School; **Dr Rahul Prajesh**, Sr Scientist CEERI; **Shri Anand Abhishek**, Scientist CEERI; **Shri Manoj Pandey**, AP/BKBIET as judges for the competition; **Dr Ajay Agarwal**,

Senior Principal Scientist, CEERI & Centre Hony Secretary; **Dr Nikhil Suri**, Sr Scientist CEERI & Centre Hony Treasurer; **Dr Neeraj Kumar** and **Dr Sumitra Singh & Sh Pramod Tanwar**, Centre EC Members. Various schools from Pilani and surrounding localities participated and demonstrated their scientific models. Total 10 models were demonstrated by schools on the following topics: Grey Water Recycling System; Smart Agriculture System; Ground Water Recharging System; Cyclonic Air Purifier; Blind Curve road Accident prevention; Smart Communicative System; Farm-o-Hunt; Smart Safety; OKPI and the Mobile Controlled Vehicle. The best selected models were: **Blind curve road accident prevention** from **CEERI Vidya Mandir's** (1st position); the model from **Birla Balika Vidyapeeth, Pilani (**2nd position), while model from the **Birla Shishu Vihar, Pilani,** was adjudged for the 3rd position.

PUNE

The Centre celebrated **IETE Students' Day** on the **World Radio Day** on 13th Feb 2020. **Shri Kishor Shende**, Centre Chairman welcomed the gathering. **Prof S K Khedkar**, Vice-President IETE, **Shri G K Dawara**, Immdt Centre Past Chairman, **Prof M J Khurjekar**, EC and other corporate members were present during the programme. Shri Kishor Shende read out the message

of President IETE, sent for the day. Lecture delivered by **Shri Dattaji Deshka**, was on "Water Management". The speaker is also known as 'The Waterman' of Pune. **Shri Vikas Kale** walked the audience through the basics of Signaling to Radio Communication through a technical presentation; **Ms Sujata Kodag**, Ecological Architect, presented her topic on Ecology and Disaster Management and **Shri Vikas Bapat** elaborated on HAM Radio and development in HAM. In the remembrance of UN Radio, which was established in 1946, **World Radio Day** is celebrated by UNESCO on this day. Quiz contest was also conducted on the occasion. Shri Kishor Shende proposed the vote of thanks, concluding the programme.

RAJKOT

• Celebrating **IETE Students' Day,** a visit to a 50-year-old industry: ECHJAY Industries Pvt Ltd, that works on ultra modern technologies, was arranged for students, faculty members and members of IETE on 2nd Feb 2020. The ECHJAY is mainly into manufacturing the parts of all automotive industry. Necessary permissions were taken by Shri Brijesh, Centre OA, under the

guidelines of **Dr H N Pandya**, Centre Chairman. **Er Mohit Parbat**, EC member & **Er Brijesh Mehta**, IETE Member accompanied the team. Shri Mohan Bhai and Shri Rasikbhai of ECHJAY, walked the team through various sections of the Industry. Later the message of the President IETE was read out by Shri Brijesh Mehta for the students.

• Workshop-cum-expert talks were arranged on the occasion of **International Women's Day** on the theme **Naturopathy, Ayurved & Yoga** on 8th Mar 2020. **Dr Manishben Pandya**, MD Naturopathy Suzok and a yoga teacher, was the Chief Guest. The key speaker **Prof (Dr) Umesh Pandya**, MD Rasshastra, Nobel

Ayurvedic College, Junagadh, speaking on Ayurveda, threw light on the importance and making of the ayurvedic medicines. **Dr Rahul D Mehta**, Hony Secy; **Er C M Devani**, Centre Founder Chairman also addressed the audience. Mrs Aartiben Mankad was also present. Vote of thanks proposed by Er S M Suchday, EC member.

• The Centre celebrated **52nd World Telecommunication and Information Society Day** in collaboration with the Alumni Association of Government Engineering College, Rajkot, on the theme "Connect 2030: ICTS for the Sustainable Development Goals (SDGs)" on 17th May 2020. **Shri Dharmesh Kavaiya**, IoT Analyst, Infosys Ltd, delivered the keynote address on "Industrial IoT, Industrial Automation and IoT". The technical talk was well received by the audience.

• The Centre and Alumni Association of Govt Engg College (AAGEC), Rajkot, jointly organized a webinar on **Job Opportunities in AI, ML & IOT World** on 18th Jul 2020. An expert talk under quality improvement programme was delivered by **Shri Madhukant Patel**, Former Scientist/Engineer ISRO, CTO Teksum Inc, MD Rave Automation LLP. The talk was interesting and witnessed an active interactive session. About 164 participants including IETE members, industrialists & students joined and enjoyed the digital talk.

RANCHI

• A **Summer School on Digital VLSI Design (SSDVD-2019)** was organized during 26th-30th Jun 2019 at ARTTC BSNL Ranchi, wherein the Chief Guest **Shri K K Thakur**, CGMT BSNL Ranchi, delivered his address on **Nano-electronics & its applications, Digital & Analog VLSI Design & its applications in current market system**. The other eminent persons present

on the occasion were: **Dr V Anandi**, RCE, Bangalore; **Dr B Acharya**, NIT Raipur; **Dr A K Mandal**, NIT Raipur; **Dr Ajay Raghubanshi**, NIT Raipur; **Dr Arpan Deyasi**, RCCIT, Kolkata with other delegates & dignitaries from the local chapters, reputed institutions & industry. The **Winter School on VLSI Design (WSDVD-2019)** was conducted during 26th-30th Dec 2019, once again with **Shri K K Thakur**, CGMT, BSNL Ranchi, as the Chief Guest.

• A meeting related to ongoing work of IETE University was held with the Observer of Govt of Jharkhand, **Prof R K Pandey**, Vice Chancellor, Ranchi Univ on 10th Jan 2020 & subsequently on 15th Feb 2020 at ARTTC BSNL Ranchi & BSNL guest house Ranchi. Issues taken up for discussions were on future planning, campus visit and concerns related to syllabus making *etc.*

SHIMOGA

The Centre organised a technical symposium on **PLASMA 2019** in association with the ISF at Dept of EC, JNN College of Engineering (JNNCE), Shimoga, during 4th-5th Oct 2019. **Shri Prashanth Ramappa**, Principal Data-Scientist AT&T Co, Bangalore, graced the event as the Chief Guest. The Guests of Honour were: **Shri A S Vishwanath**, President, NES, Shimoga and **Shri S N Nagaraja**, Secretary NES, Shimoga. **Dr L K Sripathi**, Vice Principal/JNNCE, **Dr P Manjunath**, HoD/ECE

and **Dr H R Mahavdevaswamy**, Principal/JNNCE, presided over the function. The programme included number of technical competitions like: Selfie Mania Competition; Robo Race, Robo Soccer, Line follower, Hobby project, Test C, Dr Circuit, Paper presentation, Arduino Uno etc. In robotics competitions more than 180 Robotic teams from various parts of India and JNNCE students participated. The Chief Guests for the valedictory session were: **Dr Shekhar T H**, Addl SP, Shivamogga & **Shri Nivedan Nempe**, Areca Tea Founder, Shimoga, while the Guest of Honour was **Shri S N Nagaraja**, NES, Shimoga. The Principal JNNCE, Shimoga presided over the function. Dr L K Sreepathi, Vice-Principal/JNNCE, was also present during the session. Cash prizes were given to the winners of each event by the Chief Guest.

SIVAKASI

• The Centre and National Service Scheme (NSS) jointly organized a **blood donation camp** at MEPCO Schlenk Engineering College (MSEC), Sivakasi, on 11th Jan 2020 in

association with Rajapalayam Govt Hospitals. About 386 students donated their blood in the camp. **Dr N Vijaya Perumal**, Rajapalayam Govt Hospital, **Dr Iyyanar**, Sivakasi Govt Hospital and **Dr Partha Sarathy**, Virudhunagar Govt Hospital, along with a team of nurses supervised the camp. Blood donors were provided the certificates as encouragement. **Dr S Arivazhagan**, Principal/MSEC presided over the blood donation camp. **Shri C Uthranarayan**, NSS Program Officer and **Shri M Sankar**, MSEC organized the camp.

• The Centre organized a lecture-cum-group discussion on the **4th Techno Blaze** (2019-2020) at Mepco Schlenk Engineering College (MSEC), Sivakasi, on the topic **"Recent Trends and Research Issues in Fiber Optic Communication"** by **Dr T Sabapathi** Assoc Prof/ECE, MSEC and had group discussion on it. He strated his presentation with the basic propagation of light through Water jet and gave statistical survey of fiber optic cables laid along roadside and under sea fiber cables etc. He highlighted the data traffic demands being created by the Indian population by means of smart phones, computers etc. He explained the three possible ways of increasing fiber optic communication capacity, giving advantages, disadvantages for each method. He also touched upon the basics of the Non-linear Effects and stimulated Raman Scattering Effect. Around 40 IETE corporate members attended the Techno Blaze and involved enthusiastically in group discussion along with key members from the Centre. The resource person was felicitated by presentinga memento to as a token of gratitude after the discussion.

VADODARA

• The Centre and Indian Society for Training and Development (ISTD), Vadodara, jointly celebrated **IETE Students' Day 2020** on 1st Feb 2020 by organizing a special talk by **Shri Ramkesh Meena**, Executive Engineer, ONGC, on "Digital well-being for Tomorrow-A Cyber Security Awareness". Earlier, **Shri Yashpal Goyal**, Centre Hony Secretary, read out the message from President IETE for the day. **Dr V K Shah**, Centre Chairman, delivered the welcome address. While delivering his key address, Shri Ramkesh Meena elucidated the intricacies involved in day-to-day usage of internet and online transactions. The students were asked questions inbetween and given spot prizes who answered correctly. Participation was good including senior fellows/

tools used in DATA analysis and coding language Python used in DATA. Vote of thanks was proposed by Shri Yashpal Goyal.

YAVATMAL

• The Sub-Centre conducted **Quiz** at Jawaharlal Darda Institute of Engineering and Technology, Yavatmal on 11th Sep 2019 with 74 students in attendance.

• A visit to **Jivan Vikas Mandir**- a residential school for mentally challenged children was arranged on 16th Sep 2019. About 39 students visited the school.

• On occasion of **IETE Students' Day** on 13th Feb 2020, the Sub-Center conducted a **quiz competition** at ISF Jawaharlal Darda Institute of Engineering and Technology, Yavatmal. About 114 students participated.

members of IETE; office bearers of ISTD; Dr Sonal Rane, ISF Coordinator, ITM and students. It was later agreed to have a full day workshop with practical hands on the topic to be well aware of safe use of gadgets for online transactions. Vote of thanks was proposed by Shri Yashpal Goyal.

• Webinar on **Opportunities in Data Science: The European Market** was jointly organized by the Centre and ISTD, Vadodara on 21st Jun 2020. **Dr Sameer Rohadia** from Germany, the Chief Guest was greeted by **Shri D S Desai, Chairman**, ISTD Vadodara. Others present included: Shri Yashpal Goyal, Hony Secy; Shri P V Khubalkar, Past Chairman; Shri Dhaval Shah, EC member; Shri Gorakh Sharma, EC member, and Shri Ramkesh Meena.The keyspeaker, **Dr Sameer Rohadia** in his address briefed about the

News from IETE Professional Activity Centres (PACs)

IETE acknowledges the special role being played by PACs especially in enhancing the visibility of IETE. The following PACs are doing extremely well under their leaders, Shri Atul Garg and Dr S Arumuga Perumal in enhancing the image and stature of this great Institution.

PAC-AUSTRALIA

The **18th IETE Australia Symposium and Annual Day 2020** was organised on 25th Jul 2020 at Robertson Lecture Theatre, Murdoch University, Murdoch, Western Australia. The event was held under full social distancing rules of WA State COVID-19

Roadmap. Dignitaries present during the annual celebrations were: **Councillor Katy Mair**, Mayor of City of Melville and **Mr Kelly Smith**, Pro Vice-Chancellor, Murdoch University. The members and experts who attended the symposium included: **Atul Garg,** Chairperson IETE Australia; Dr Manickam Meenakshi Sundaram;

Colonel Ronnie Mistry; Jatinder Bhangu; Pankaj Patro; John Bose; Dr Prashant Upadhyaya - from India on Webex; Narendra Kumar; Ajit Abhyankar; Himanshu Chetal; Vishal Pachnanda; Ashish Banga; Suman Dewan; Vikram Mody; Siddharth Malani; Justin D'Souza; Vikram Birajdar; Balli Singh; Jagpreet Walia & Mrs Chhavi Walia; Mehraab Patalwala; Colin Quinn; Manpreet Singh –from Melbourne on Webex; Dr Ashok Kumar; Hemanta Kumar and Anuradha Guddenti; Sunil Karwasra; Vikram and Mrs Upasana Sareen; Krishna Sharma; Manish Gupta; Kishore Mhatre; Amit Khullar; Sai Kolachana; Deepali Verma - from Sydney on Webex; Dr Yadu Singh - also from Sydney on Webex; Firoz and Mrs Mahrukh Pestonji; Suntosh Shety; Kaizad Sunavala; Chirag Daruvala; Neeraj Garg; Samuel Srikaran and Sam Zaveri.

Two technical presentations given on the occasion were: **"Use of Hydrogen Energy to Reduce Emissions"** by **Dr Manickam Minakshi Sundaram**, Deputy Head for Research, Senior Lecturer, Murdoch University and **"Use of Drone Technology in Australian Context"** by **Sh Atul Garg**, Chairperson IETE Australia. This presentation highlighted the Drone technology with possibility of replacement of China supplied drones with quality drones manufactured in India.

In his address, the Chairperson PAC, **Mr Atul Garg** mentioned that their endeavour is to be a Centre of Excellence to support entrepreneurs, professionals and students in their practices, research and innovation. IETE Australia, which is not-for-profit Professional Activity Centre (PAC), operates like a High Technology Club open to everyone having interest in learning or supporting the advancements in science and IT. He apprised the members that they hold free symposiums to help members rise up in the value chain. He expressed his special thanks to the **Murdoch University** for providing sponsorship funding to their local support body FIAWA and for providing free venue and facilities for conducting symposium/annual event. He also thanked **Perth Vision** for creating and maintaining their website www.ieteaustralia.org

PAC NAGERCOIL

• A one-day conference on **Emerging Trends in Computer Science** was organized in co-ordination with IE(I) Kanya Kumari Local Centre and Pioneer Kumaraswamy College (PKC), Nagercoil on 7th Jan 2020. The programme was inaugurated by **Dr Umayorubagan**, Secretary/PKC. Members addressing the audience were: **Tmy T Dhanalakshmi**, MS (IT&Ecom), HoD/

PKC, Nagercoil; **Dr Umayorubagan**; **Dr S Durairaj**, Principal and **Dr S Dharmalingam**, Director, Self-Finance, PKC.

Delivering the Inaugural address **Er V Sivathanu Pillai**, Chairman IE (India), Kanyakumari Local Centre, stressed on the need for enhancing technical knowledge of the students apart from conventional knowledge. He encouraged the students to put computer to good use especially for studying recent trends in technologies. The next keynote address was delivered by **Dr S Arumuga Perumal** Immdt Past Chairman, IETE Thiruvananthapuram Centre on **Deciphering Internet of Things.** The final keynote address was on **"IOT in Health Information"** by **Dr Srinivasa Kannan**, Professor, AMCHSS, Trivandrum. Papers were submitted by the participants in the afternoon session and certificates were issued during the valedictory session. The programme ended with vote of thanks by **Mrs M S Kavitha**, AP/PKC followed by the National Anthem.

• A one-day national level **Doctoral Colloquium NDC-2020** was organized on 21st Feb 2020, graced by **Dr S Arumuga Perumal**, Chairman, IETE PAC Nagercoil and **Dr Srinivasa Kannan**, Prof, SCTIMST, Trivandrum, as the Chief Guests. Dr S Arumuga Perumal expounded on the importance of effective research in engineering for nation development. Dr Srinivasa Kannan underlined the conceptualization of the research work. The NDC 2020 commenced with the Tamil Thaai prayer. The welcome remarks were delivered by **Er V Sivathanu Pillai**, Chairman, Kanyakumari local centre. The 1st technical session by **Dr S Arumuga Perumal** was focused on "**How to Kick Start your Research"**. He gave guiding principles to the research scholars. In the 2nd session, **Dr Srinivasa Kannan** spoke on **"Conceptualizing your Research"** with examples. A session was kept for interaction with the experts. Certificates were issued to the participants in the valedictory session. Vote of thanks was proposed by **Er V Muthum Perumal**, Hony Secretary, Kanyakumari Local Centre.

• The **PAC** and **ISF** at **Mount Zion College of Engineering and Technology (MZCET), Pudukkottai (TN)** organized Webinar Series 2020 on "**Technology Integration for Smart Environment"** for celebrating **WT&ISD-2020** on 20th May 2020. The welcome address was delivered by **Dr S Robinson**, Assoc Professor and HoD/ECE, MZCET. The Guest Speaker **Dr S Arumuga Perumal**, Immdt Past Chairman, IETE Trivandrum Center/Assoc Prof & HoD/CS and Research, ST Hindu College, Nagercoil, was introduced by **Shri K Ramachandran**, AP/ECE. The concluding remarks were given by **Shri R Arun Kumar**, AP/ECE. Shri K Ramachandran, AP/ECE and IETE Member supervised the series. The Webinar Series-5 was organized on 5th Aug 2020 in association with IE (I) Kanya Kumari Local Centre (KKLC) and St Xavier's Catholic College of Engg (SXCCE), Nagercoil. The participants were welcomed by **Prof (Dr) M M Beno**, Vice Principal, SXCCE. The series was inaugurated by **Er V Sivathanu Pillai**, Chairman, IE(I) and **Dr S Arumuga Perumal**, Chairman, IETE PAC Nagercoil.

COVID-19 Catalyst for Evolution of Information Society

...by Dr T H Chowdary (DF- 022876)
Past President IETE
Padma Sree Awardee-2017

Even as the pandemic Covid-19 is taking a heavy toll of human lives across the globe, it is acting as a catalyst for intensive and massive use of telecommunications and information technologies in the conduct of human affairs-social, business, legal, research, politics and governance. The single disaster, sinking of the then world's largest passenger ship, **Titanic** due to its collision with a massive ice-berg in the Atlantic Ocean on 15 April 1912 and the consequent deaths by drowning of 1500 persons led to the obligatory fitment of Radio equipment and in course of time EPIRBs (Emergency Position Indicating Radio Beacons) on every sea-going vessel. Every calamity spurs human ingenuity to invent devices to avoid and mitigate the consequences. So is the Pandemic Covid-19 and the consequent **lockdown** inducing and hastening new ways of doing work across all professions. Just consider a few examples:

- In the first 22 days of lockdown, the Supreme Court of India took up 538 urgent cases, delivered 57 judgements, heard 49 special leave petitions, 92 writ and 138 review petitions and 58 pleas for interim relief - all without physical assembling but **totally "on line"-video conferencing**.

- The High Court in Hyderabad had taken up 4316 cases **online** since the lockdown came into force. From filing to hearing and recording affidavits are all online.

- On the 5th May we conducted a statutory quarterly meeting of Board of Directors of Sify Technologies for four and half hours. Two Directors were in California (USA); one each in Delhi and Mumbai, two in Hyderabad, and four in different localities of Chennai -**all on video conference**.

- In Germany, moves are afoot to make "**working from home" a fundamental right**.

- The Prime Minister of India is holding video conferences with Chief Ministers of the States, evolving policies and programs to contain the devastation by Covid-19 pandemic.

- Scientists in Reach Laboratories across the world are exchanging information on the structure, mutation and effects of the Corona virus, to develop a vaccine that gives immunity from the virus.

- Stock Exchanges are functioning without brokers assembling.

- Money transfers are being made by net banking.

- Software wizards are developing "Apps" for every type of transaction.

- The KendriyaVidyalaya has been conducting **classes for school children online.** When I asked whether children in classes V to X are required to have smart phones, the teacher replied that there is no home in India where one of the parents has no smart phone! And added that it could be given to the child student during the "online class" time! Yes, the mobile phone penetration is over 93% of the population.

- Fruit baskets and groceries are ordered **online** and they are delivered in postal vans.

- The largest University in the world is not in a physical location but is **online** with over 4 lakh students from several countries enrolled. It is operating in Phoenix, capital of Arizona State in USA.

- A few years ago, I proposed e-marriage celebrations - marriage performed in home, video-uplinked to a satellite, broadcast on a contracted specific channel, viewed by invitees in their homes, who go into a feast in designated hotels across state /country, thus avoiding travel, consumption of fuel, traffic snarls, pollution, wasted time in travel.

2. The information and knowledge society that visionaries envisaged is bursting forth. In 1960, the Chairman of the then world's largest telephone company, the AT&T of USA foresaw a time when persons born will be given a telephone number and if there is no answer when that number is keyed, it would mean that the person is dead! With more than 600 cr mobiles in the world, all accessing the Internet and having voice mail boxes with answering message recording facility, that prediction is not far off to materialize. Note the rapidity of change during one's life time; in the last 40 years, telegrams, tele-printers, telex, Fax (almost), and dial phones, are no longer in use. Postal mail is giving way to SMS and WhatsApp; the desk-top computers give way to laptops, and laptops are giving way to hand-held smart phones. Language is no

barrier; one can speak in English; it could be heard in Japanese with no person translating or interpreting. One can drive in an unfamiliar city in a GPS (Geographic Positioning System) fitted car. He is guided verbally and visually by devices on the car's dash board.

3. A modern automobile has more electronics and software than the space vehicle that landed man on the moon and brought him back to earth. Now our brain and mind are mimicked by Artificial Intelligence (AI) cultivated in and by computers which like Watson are defeating chess masters and prescribing treatment for cancer in hospitals. Some men may not learn anything but machines will learn everything and prompt men to live and work like the learned and wise.

4. All knowledge being created is getting committed to electronic storage, websites. Men need not go to libraries and search for information. Search –engines fetch it and display; you need not type; you speak and it will be recorded and displayed on the screen; stored and e-mailed to any or all persons you wish to send.

5. A teen age girl wrote the novel, Frankenstein in which a machine was imparted information and trained to learn and then it overpowers man. Will artificial intelligence, quantum computing and 5G mobile telecoms (no more merely telephony) lead humans into the information society that pundits envisage and where knowledge can be universal, democratized and not the privilege of a fortunate few.

6. Humanity is on the threshold of a new stage in evolution. We may not be earth-bound for ever; yet it is interesting to go over a few predictions or foresights of leading scientists, businessmen, leaders and tech-giants about the inventions that were making their debut, when the inventions were emerging:

The energy contained in a tea-spoon full of petrol facilitates telephone conversation over a 40 kms for three minutes (1960s) cost 50 paisa; commute over the same distance to converse: 6 litres of petrol, 3 hours travel time; Rs. 100 cost.

- "Computers in the future may weigh no more than 1.5 tonnes" - (Popular Mechanics journal forecasting the relentless march of science, in 1949)

- "I think there is world market for may be five computers"-Thomas Watson, Chairman of IBM in 1943

- "I have travelled the length and breadth of this country (USA) and talked with the best people, and I can assure you that data processing is a fad that won't last out the year" -The Editor –in-Charge of Business Books for Prentice Hall, 1957

- "But what …is it good for?" - Engineer at the Advanced Computing Systems Division of IBM commenting on the microchip in 1968

- "There is no reason anyone would want a computer in their home" - Ken Olson, President, Chairman & Founder of the Digital Equipment Corporation, 1971

- "640K (of memory) ought to be enough for anybody"- Bill Gates 1981

- "The telephone has too many shortcomings to be seriously considered as a means of communications. The device is inherently of no value to us- Internal Memo in 1876 of Western Union, the largest telegraph company in the world

- "The wireless music box has no imaginable commercial a value.Who would pay for a message sent to nobody in particular ?" David Sarnoff, Founder of the Radio Corporation of America in1920

- "Heavier than – air flying machines are impossible" Lord Kelvin, President Royal Society, London 1895

7. So, things can happen despite profound men's insightful predictions. So mankind marches from food-gathering to agriculture; to industry, and now to information society with social, government and management structures that are promotive of progress for better life for all. The theme for this year's observance of World Telecommunications and Information Society Day on 17th May is, **"How ICTs Can Sustain Development"** which I think should be both material and spiritual, for **"man does not live by bread alone"** as the Bible says, and much earlier, as the Kathopanishad proclaimed; **"na vittena tarpaneeyo manushyaha-** man is not satisfied with money alone"

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IETE Students' Forum (ISFs) Activities

• **ISF** at Dept of ECE, **Andhra Loyola Institute of Engineering and Technology (ALIET), Vijayawada,** organized a two-day workshop on "PCB Design" on **Jul 8-9, 2019**. Shri V Govindrao, Sr Design Engineer, Micro Link Technologies, Vijayawada, was the Chief Guest. The aim of the workshop to provide indepth knowledge and hands-on-experience for design and development of PCBs for various applications. The **ISF** organized a one-day guest lecture on "Modern Trends in Broadcasting" on **Jul 20, 2019**. Er P Kalee Prasad, AE, Dooradarshan, Vijayawada and Hony Secretary, IETE Vijayawada Centre, the Chief Guest, illuminated the working of the TV broadcasting & the challenges involved in the work. The role of ECE students in development of new technologies was also highlighted. Another guest lecture was arranged on "IoT- Disruptive Future" on **Sep 14, 2019** wherein Shri P Eswar, Project Manager, Smart Cities, Efftronics Systems Pvt. Ltd, Vijayawada was the Chief Guest. The aim was to introduce the students to IoT and its role in Industry 4.0. Another four-day workshop on "Matlab and its Applications in ECE" was conducted to give awareness on utilizing MATLAB as a tool for engineering applications in ECE during **Sep 18-21, 2019**. Md Baig Mohammad and Shri G Roopa Krishna Chandra, were the Chief Guests. The **ISF** also organized a three-day workshop on "Antenna Design and RF Antennas" on **Nov 28, 2019** in presence of Dr C Subba Rao, Prof, PVP Sidhartha Engg College, Vijayawada, asmain guests. It aimed at providing hands-on practice for implementation of Patch Antennas and the intricacies involved using HFSS tool. A one-day guest lecture on "Sensor Networks- A New Sense of Communication" was held on **Dec 27, 2019** with Dr DVR Sarma, AP/Dept of Physics, Anna Univ, (TN) as the Chief Guest. Through his address he encouraged the students to get involved in the development of wireless networks for communication, better understanding of different protocols and their proper implementation with a focus towards 5G. Another lecture was arranged on "Entrepreneurship Design Innovation Technology and Science" in association with M/s Wissenarie Gurukul Pvt Ltd (Wission talks) & APSSDC Vijayawada, on **Jan 29, 2020**. Speakers present were: Shri Rajkishan G, Founder at way2world. in; Shri Tarun Kumar, CEO, Karanamtech; Shri Rajasekhar Malireddy, Founder & CEO, Meebuddy Pvt Ltd and Shri J Amarnath, CEO, Quanint Techsoft, Co-founder, Buchuk. The objective was to introduce the students to enterpreneur development and possibility of starting startups. Successful business models examples were also given. A two-day workshop was arranged on "Role of Transducers & Programmable Devices in IOT Applications" on **Feb 15-16, 2020**. The Chief guest gracing the occasion was Dr B Lakshmi, Prof NIT, Warangal.

• **ISF** at **Jeppiaar Institute of Technology (JIT), Chennai**, conducted a workshop on "Digital logic circuit design using Micro wind software" on **Jul 21, 2019** with Dr R Uma, Prof/ECE and Shri M Siva, AP/ECE as resource persons. Participants designed half adder, full adder, 4-bit adder and full sub-tractor. The **ISF** conducted the "T-Shirt Design Contest-2019" on **Aug 22, 2019** adjudged by Mrs Nancy W, ECE/JIT and Mrs Parimala, ECE/JIT. Shri Ragul Kannan coordinated. Another event on "Logo Finding" held on **Sep 7, 2019** was graced by Mrs R Ramakala, AP/ECE as the Chief Guest. Shri Annamalai, HoD/IT was present. Event titled "Connections" held on **Sep 12, 2019,** wherein Mrs Nancy W, AP/JIT, delivered the welcome address. Mrs M Benisha, AP/ECE was the Chief Guest. Dr Faritha Banu, HoD/CSE, was present during the event. Project Expo on "GANDIVA 2.O" was held on **Sep 13, 2019**. Participants were addressed by MD, Dr N Marie Wilson; Principal, Dr LM Merlin Livingston and Chief Guest, Shri P Arul Mani, Head-ALE TQBM, Ashok Leyland. Event on "Walk the Talk" on **Sep 26, 2019** had Mrs Nancy W, AP/ECE as the Chief Guest. Mrs Arun, HOD/Dept of Mechanical and Mrs Uma R, AP/ECE, were present. Event on "Brain Stream" on **Jan 7, 2020** had welcome note by Mrs Nancy W, AP/ECE. Mrs Uma R, AP/ECE was invited as the Chief Guest. Dr L M Merlin Livingston, Prinicpal & HoD/ECE; Mr Tonie Raalph, Shri Ragulkannan.R, Shri Harikrishnan D R, Ms Pavithra R and Mrs Ramakala S, AP/ECE were present in the event. The ISF conducted a grand school event on "JIT Utsav" for the school students from 6th to 12th standard on **Jan 10, 2020**, where Dr L M Merlin Livingston was the Chief Guest. Dr N Marie Wilson, Mg Dir/JIT also graced the occasion. Students shared their ideas in events like - Robotic Challenge; Poster Presentation; Project Expo and workshop on Web Development. Event on "Techno Jam" on **Feb 3, 2020** held witnessed Ms A Parimala, AP/ECE,as the Chief Guest. Dr Kannan S, HoD/S&H; Shri Ragul

Kannan R, Organizer and Shri Tonie Raalph C, Coordinator, were present in the event. The **ISF** celebrated IETE Students' Day on **Feb 19, 2020**, where Dr N Marie Wilson, MD, was the Chief Guest. Guests of Honour- Shri RPB Sundaram & Shri Shakthi Murugan K H, with EC members from IETE Chennai Centre were present. The IETE yearly magazine was launched. Certificates for merit were distributed. Shri Ragul Kannan, III year/ECE was selected as Chairman. The 2nd session proceeded with the launch of IETE Day Promo video by IETE student volunteers, and effort made to create awareness amongst the I year students. The talk of benefits of IETE was given by Shri RPB Sundaram. Freshers visited R&D Lab, JIT. The **ISF** with **Sri Venkateswara College of Engg (SVCE), Sriperumbudur** & **Vel Tech Multi Tech Dr SR Dr RR Engineering College** jointly organized a webinar on "Human Submersibles India Story" on **May 9, 2020** by Dr GA Ramadas, Scientist & Head of Deep Sea Technology Group, NIOT. About 228 members attended. The **ISF** with **Sri Venkateswara College of Engg (SVCE), Sriperumbudur** & **Vel Tech Multi Tech Dr SR Dr RR Engineering College** jointly organized another webinar on "Data Encryption Algorithms" on **May 16, 2020** by Shri Bolem Srinivas, Scientist-D, NIOT, and attended by about 252 members. An Online Contest - Contra COVID-19 was organized during **May-22-25, 2020** having sessions on topics like JUCAD, MEME Creation, Slogan Writing, Logo Designing & Online Connections. About 110 members attended. A two-day Online Faculty Development Program on "Cyber Security & Embedded Systems" was held during **May 26-27, 2020** by Shri Vikram Sivaprakasan, Embedded Systems Design and Development, attended by about 110 members.

• **ISF** at Dept of E&C, **SRM Institute of Science and Technology, Ramapuram Campus, Chennai,** organized a seminar on "Agile Methodology" on **Jul 22, 2019**. A talk was arranged by Ms Suganthi Alagumalai, Enterprise Agile Coaching and Training Consultant from USA. Technical Symposium on ELECXA-'20 on **Feb 19, 2020** was inaugurated by Chief Guest Dr Sainarayanan Gopalakrishnan, where dignitaries were: Dr G Selvakumar, Vice-Principal Academics; Dr K N Srinivas, HoD; Dr Phani Kumar Polasi and faculty coordinators Dr D Manoj Kumar, Shri Veera Amudhan and Mrs Annapoorani. The department magazine REBOT was released. ELECXA collaborated with AICRA to conduct a workshop on autonomous robotics. In the valedictory session the dignitaries present were: Shri Rajeswaran, Shri Eniyan, Shri Raghuram, Shri Smruthi Venkat, Shri Shali Nivekas and Shri Renuka Bathula, Dr Phani Kumar Polasi and the faculty coordinators Dr D Manoj Kumar, Shri Veera Amudhan and Mrs Annapoorani. The teaser of the short film was produced by Shri Rajeswaran. Vote of thanks was by the student treasurer of ELECXA'20. The **ISF** with **Panimalar Institute of Technology**, **Easwari Engineering College**, **Jeppiaar Institute of Technology**, **Sri Venkateswara College of Engineering** & **Vel Tech Multi Tech Dr SR Dr RR Engineering College** jointly organized a webinar on "Marine Robotics: Design and Applications" on **Jun 13, 2020** by Shri Madhan R, CSIR – Central Scientific Instruments Organization, Sr Principal Scientist, NIO Goa. About 179 members attended. The **ISF** and aforesaid ISFs, jointly organized another webinar on "Cyber Crime and Law" on **Jun 20, 2020** by Shri V Appakutty, Technocrat and Lawyer, Past GC & Chairman IETE Chennai Centre. About 82 members attended.

• **ISF** at **Jawaharlal Darda Institute of Engineering and Technology (JDIET), Yavatmal**, organized an expert lecture on "Computer Vision and AI" on **Aug 30, 2019** in association with IETE Yavatmal Sub-Centre, delivered by Dr M R Parate, AP/IIIT, Nagpur. It was attended by about 32 students. The **ISF** celebrated the "**Engineers' Day**" on **Sep 16, 2019** in association with IETE Yavatmal Sub-Centre. About 39 students attended. The **ISF** organized an expert lecture on "PLC and Automation" on **Feb 29, 2020** in association with IETE Yavatmal Sub-Centre, which was delivered by Shri Kedar Kolte, Dy Engineering Manager, Zenith Technologies, Pune, and it was attended by about 32 students. The **ISF** organized an expert lecture on the topic "Carrier Opportunities after Graduation" on **Mar 14, 2020** in association with IETE Yavatmal Sub-Centre, delivered by Ms Siddhi Agrawal, Software Developer, Amdocs, Pune, giving benefit to about 21 students in attendance. The **ISF** also organized an online expert lecture by Shri Renjith C V, Electrical Architect/Product Designer at Philips India Ltd, Pune, on the topic "Career Options and Opportunities for BE/ME, Electronics/E&C students" on

Jul 11, 2020 in association with IETE Yavatmal Sub-Centre. About 44 members attended.

• **ISF** at Dept of ECE, **Ramco Institute of Technology (RIT), Rajapalayam (TN)**, organized a technical event on "Circuitrix" on **Sep 10, 2019** for II & III year/ECE students, co-ordinated by Shri G Sivakumar, AP/ECE. Total 9 teams of 18 students participated in the event and finally 3 teams of 6 students were selected as winners. It was organized by Ms Libiya Joseph and Ms J Shaina Davita of III year/ECE. The **ISF** students of II & III year/ECE celebrated "Engineers' Day" by organizing a "Tech Fest" on **Sep 14, 2019**, co-ordinated by Shri R Deiva Nayagam AP/ECE and Mrs R Ramalakshmi AP/ECE. The students participated in events namely - Project Expo, Thinkathon and Technical Quiz to exhibit their talents. The winners were selected after various levels of screening based on their performance. A technical event on "Ex-Quiz Me" was arranged on **Feb 1, 2020** for II & III year/ECE students, co-ordinated by Dr B Deepa Lakshmi, ASCP/ECE. Total 13 teams of 26 students participated and finally 3 teams of 2 students each were placed as winners. Ms M Subhashree and Ms V Sivapriya, III year/ECE, won the I prize. It was organized by Ms S Annapoorani and Ms M Santhiya of III year/ECE. A two-day workshop on "Quad-Copter" was organized during **Feb 12-13, 2020** in association with Harbour Technologies (Techradiance '20). Shri Rajesh and Shri Vignesh, Research Engineers, Harbour Technologies, were the resource persons. It was organized by the faculty coordinators Mrs G Gnana Priya, AP/ECE & Shri S Vijayakumar, AP/ECE and the student co-ordinators: Ms K Mounica, III year/ECE and Shri A Nithish Balaji, II year/ECE. The **ISF** organized a three-day Online Quizon "Semiconductor Physics" for XI, XII standard and Diploma students during **May 14-16, 2020** in association with Institutions Innovation Council (IIC), MHRD's Innovation Cell. The topic included the basics of diodes and transistors. It was coordinated by Dr B Deepa Lakshmi, Assoc Prof/ECE, Shri K Ragavan, AP/ECE; Mrs G Gnana Priya, AP/ECE and Mrs R Chitra, AP/ECE under the guidelines of the convener, Dr S Periyanagayai, Prof & Head/ECE. About 82 students from various institutions participated. On the same day an Online Course on "Internet of Things (IoT)" for school students were conducted covering topics like: Introduction to Arudino, IoT, System Design using Arduino in Tinkercad software, Cayenne software and CISCO IoT software for IoT simulation. It was coordinated by Shri B Kannan, AP/ECE; Shri A Azhagu Jaisudhan Pazhani, AP/ECE and Shri P Gunasekaran, AP/ECE. About 60 students participated. The **ISF** & IIC organized a technical fun on "Life Ahead Covid-19 with blissful Electronics" for school students during **May 20-22, 2020**. 1st day covered some basic electronic semiconductor devices with technical connection games. 2nd day saw discussions about fundamentals of communication, few virtual lab experiments & simulation softwares like MATLAB, Xilinx and Tinkercad tools and on 3rd day technical games (Puzzle, Match it, MCQ) were conducted along with explanation of ECE subjects. It was coordinated by APs/ ECE- Mrs R Ramalakshmi, Mrs S Jeeva, Shri D Gopinath, Shri S Vijayakumar, and Shri P Venkatesh. About 60 students from various schools participated. The **ISF** & IIC organized a webinar on "Introduction to ARM Based System-on-Chip Design" for the students, research scholars and faculty members on **Jun 13, 2020**. Mr M N Jabeer Ahamed, Sr Engr, ARM, Bangalore, was the Guest Speaker. It was coordinated by Shri A Azhagu Jaisudhan Pazhani, AP/ECE, Shri A Rameshbabu, AP/ECE and Shri G Sivakumar, AP/ECE. About 111 participants attended.

• **ISF** at Dept of ECE, **Nandha Engineering College (NEC), Erode,** organized an industrial seminar on **Sep 23, 2019**. Dr S Kavitha, Prof and Head/ECE, NEC, delivered the welcome note. Shri S Karthick, Project Engineer; Shri S Praveen Kumar, Project Engineer, Bannari Amman Institute of Technology, Sathyamangalam, delivered the lecture on Project Design using Electronics Components. Ms V Parameshwari, Ms P Kokila and Ms K K Sangeetha, AP/ECE and Prof R Murugasami, ASP/ECE, organized the seminar. In another seminar held on **Feb 15, 2020**, the key note address was delivered by Dr S Krishnakumar, Sr TO, DRDO, Ministry of Defence, Avadi, Chennai, on "Unmanned Vehicles". Ms V Parameswari, AP/ECE & Prof T Jayachandran, AP/ECE, also attended.

• **ISF** at Dept of ECE, **Geethanjali Institute of Science & Technology, Nellore,** organized a six-day workshop on "Amazon Web Services (AWS)-Amazon Alexa" during **Sep 23-28, 2019** in collaboration with Andhra Pradesh Skill Development Corporation. Prof (Dr) G Subba Rao, Principal/GIST, in his inaugural address mentioned the demand of AWS and informed about the job opportunities in the domain. Shri P Raghava Reddy, HoD/ECE, Dr P Chakrapani,

HoD/IICC, Shri U Penchalaiah & Shri P Madhavi, AP/ECE, took part in the workshop. The **ISF** conducted another five-day workshop on Embedded Systems during **Dec 23-28, 2019** in collaboration with APSSDC. The Principal of GIST, Prof (Dr) G Subba Rao, in the inaugural address mentioned the demand of embedded engineers in the related fields of electronics. Shri P Raghava Reddy, HoD/ECE, Dr P Chakrapani, HoD/IICC, Shri U Penchalaiah, AP & faculty members of ECE participated. "Hands on training in Python programming" course code:16 ECVAC 04 was organized by ECE dept in association with IETE, Tirupati Centre and AMPHISOFT Technologies, Coimbatore, during **Feb 12-18, 2020**. Ms Suganya & Ms P Indhuja from the company were the trainers. Dr S K Mahaboob Basha, HoD/ECE, narrated opportunities in the industry. Ms Suganya was the resource person. Trainers were felicitated by the Principal, Dr G Subba Rao. Vote of thanks was proposed by Mr G Kiran Kumar, VAC, co-ordinator. A guest lecture on "Storage Area Network" by Sh Jyothi Vinay, Techncal Lead Engr, Prodapt Solutions Pvt Ltd, Bangalore, was organized on **Feb 17, 2020**. Topics covered under the topic were very information and well received by the 125 students of II, III ECE department. Students cleared their doubts during the interactive session.

• Medhanvesh-2019 a national level Student Tech Fest was organized by the **ISF** at **BVRIT Hyderabad College of Engineering for Women, Hyderabad** during **Oct 3-4, 2019**. Shri J Naga Vishnu Vardhan, HoD/ECE, was the Chief Guest. Events like Smart-O-thon, Coding Contest, Milieu-A-Thon, Vykuntapali *etc.* were organized. Students from various colleges participated in the event.

• **ISF** at ECE Dept of **Dr MGR Educational and Research Institute, Maduravoyal, Chennai**, organized a technical programme on "Trends in Telecommunication" by Shri J Santhanakrishnan, Former GM & CTO, BSNL, on **Nov 5, 2019**. About 125 members attended.

• **ISF** at Dept of EEE of **Vel Tech High Tech Dr Rangarajan Dr Sakuntala Engineering College, Chennai**, organized a seven-day value added course on "Automation and Industrial IoT (Siemens IIOT)" in association with Technocrat Automation by Shri Praveen, an Application Engineer, Technocrat Automation Solutions Pvt Ltd, Chennai,during **Nov 25 – Dec 2, 2019**. Topics discussed during the course were: PLC-Introduction, H/w & S/w PLC - addressing, programming; SCADA-introduction and hands on training; HMI- Analog concept, Window navigation; Industrial Internet of Things (IIoT); Hands on training on Industrial Internet of Things (IIoT). The industrial site visited later was: Technocrat Automation Process Control Plant, Ambattur, Chennai. During the interactive session, coordinated by Shri R Senthilkumar, AP/EEE, and Shri Pradeep Katta, AP/EEE, doubts were cleared. Dr E Kamalanaban, Principal and Dr J Prakash, Head/EEE; Dr G Saravana Kumar, Dean IQAC, Prof, Head/ECE; Dr S Govindasamy Dean R&D, Professor, Head/Civil Engg, were present in the event including Shri S Sri Krishna Kumar, AP/EEE; Mr Mohammed Ovaiz A; Shri Prabaakaran K, AP/EEE; Mrs R Suguna, AP/EEE; Mrs K S Rani, AP/EEE. About 40 members attended. The **ISF** organized a guest lecture on "Protection and Switch Gear in Power Systems" by Shri VS Sriraja Balaguru, Asstt Executive Engr/Electrical/NCES, TNEB Hqs, on **Jan 10, 2020.** Opportunities and Challenges in Protection and Switch Gear in Power Systems were discussed. During the interactive session, doubts of faculty & students were cleared. This event was coordinated by Shri Pradeep Katta, AP/EEE, Dr E Kamalanaban, Principal and Dr J Prakash, Head/EEE. Others present were Mr Mohammed Ovaiz A, AP/EEE, Mrs R Suguna, Shri R Senthilkumar, AP/EEE and Shri Prabaakaran K, AP/EEE. About 44 members attended. The **ISF** also organized an Industrial visit to Nippo Batteries, Indo National Limited, TADA (AP) on **Jan 11, 2020** for II & III year/EEE students Shri Pradeep Katta, AP/EEE, Mr Mohammed Ovaiz A, AP/EEE and Mrs R Suguna, AP/EEE, accompanied students. It was coordinated by Shri Pradeep Katta, and Shri R Senthilkumar. Dr E Kamalanaban, Principal and Dr J Prakash, Head/EEE were present during starting of the program. About 60 members attended. The **ISF** at organized another guest lecture on "Transmission and distribution" by Dr G Balamurali, Executive Engr, Tantransco, Chennai, on **Jan 25, 2020.**

• **ISF** at Dept of ECE, **Sri Venkateswara College of Engineering (SVCE***), Chennai,* conducted a guest lecture of Shri Aditya Teja, Embedded Engineer, L&T Technological Services, Chennai, on the topic 'Industrial Exposure'on the **Dec 20, 2019**. The speaker shared his work experience in the core industry, and gave tips for getting ready for the industry selection. Shri Aditya Teja also guided students who were interested in pursuing their further studies in post-graduation. The **ISF** organized a technical talk on "Financial Technologies and the Payment

Trends" and "Career choices and common interview questions" under the banner of IETE Chennai Centre on **Jan 10, 2020**. The dignitaries present on the dais were: Dr S Muthukumar, HoD-ECE; Shri Bala Subbusundaram, Product Lead-Lending Club Corporation, San Francisco, California, as the Chief Guest for the day. Shri S R Balasubramanian, AP; Ms TJ Jeyaprabha, AP, ECEA &Alumnus coordinator and Ms D Menaka, AP & Alumni coordinator, were present. Around 120 students of ECE attended and were benefitted. The **ISF** also organized an inter departmental 24 hour Make-a-thon 2.0 on **Feb 7-8, 2020** for III-year students where 24 teams of 90 students participated, they came up with innovative ideas and made a prototype of those ideas within the given time span. The dignitaries present on the dais were:Dr S Muthukumar, HoD/ECE; Prof S Muraleedharan, Chief Placement Officer;Ms T J Jeyaprabha, AP/ECEA, ISF coordinator; Ms D Menaka, AP, ISF coordinator and Shri Manas Reddy, Secretary, ECEA. Ten student mentors from Dept of ECE, CSE & IT, mentored the participants. The event was judged at two levels. Two prizes and three special awards on Best User Interface, Best Module, and Best Feasible Product, were given for outstanding teams and recommended for interns in the companies who came for judgement. The **ISF**, Robotics & Artificial Intelligence Club and Placement Cell jointly organized a five-day workshop & certification course on R-programming during **Feb 11-15, 2020**. The first four sessions were handled by the faculty members of the CSE & IT dept. Final hands-on session on the 15ᵗʰ Feb was conducted by Dr Anand Lakshmanan, Founder and CEO, Sirpi Products and Services Pvt Ltd. The dignitaries present were: Dr S Muthukumar, HoD/ECE;Ms T J Jeyaprabha, AP/ECEA, ISF coordinator and Anand Lakshmanan, Founder and CEO of Sirpi Products and Services Pvt Ltd. The **ISF** also organized a webinar on "Beginners guide to Machine Learning" on **Apr 20, 2020** by Shri Sandeep Kumar Ramani, Research Scholar, University of Wisconsin, Madison. About 200 members attended. Another webinar on "Web Development" was organized on **Apr 24, 2020** by Ms Agela, III Year/ECE student, SVCE. About 200 members attended. The **ISF** also organized a five-day technical event "Quarantbuster!"– Project Design Contest during **May 5-10, 2020**. The event was judged by Shri D Bala Bharathi, Embedded System Design Consultant, Bengaluru. About 62 members attended. The webinar on "Edge Computing" was organized on **Jun 3, 2020** by Mr Abid Ahmed Salem, Senior Solution Architect – Cloud Native & Transformation, Ericsson Global India. About 114 members attended. The **ISF** at ECE Dept organized a webinar on "IOT" on **Jun 4, 2020** by Mr Ezhil Chinnathambi, Dir for Hardware/Firmware Quality & Working, Smart Drive Systems Inc., USA. About 120 members attended. The webinar on "Digital Transformations" was organized on **Jun 5, 2020** by Ms G Ramya Gowrisankaran, Project Manager - Hardware, NEC, Chennai, with about 189 members in attendance. The **ISF** organized a webinar on "Data Networking" on **Jun 6, 2020** by Shri BKS Gokul, Technical Leader, CISCO, Bengaluru. About 189 members attended. The Tech Nxt - Online Paper Presentation Contest" was organized during **Jun 6-7, 2020** and adjudged by Shri D BalaBharathi, Embedded System Consultant, Bengaluru; Dr N Kumaratharan, Prof/ECE, SVCE; Shri S R Balasubramanian, AP/ECE, SVCE and Shri P Arul, AP/ECE, SVCE. About 30 members attended.

• **ISF** at Dept of ECE, **Anil Neerukonda Institute of Technology and Sciences (ANITS), Visakhapatnam,** organized a three-day workshop on Antenna Modeling Using High Frequency Structure Simulator (HFSS) in industrial collaboration with ANSYS during **Dec 26-28, 2019**. It was convened by Prof V Rajaya Lakshmi, HoD/ECE, ANITS and was coordinated by Shri Vijay Kumar Sahu& Shri G V Ravi Teja, Asst Prof/ECE. Hands-on sessions were conducted, led by Shri R Sashi Kumar, Application Engineer, Entuple Technologies Pvt. Ltd, Bangalore. The **ISF** at Dept of ECE also arranged a guest lecture on "Applications of Image Processing and Computer Vision in Industrial Automation & Turbid media Analytics" on **Feb 10, 2020** by Dr Karthik Seemakurthy, Research Scientist, Tata Consultancy Services, Bangalore. He was felicitated by the HoD, Prof V Rajya Lakshmi and Prof G Manmadha Rao.

• **ISF** at Dept of IT, **Dharmsinh Desai University (DDU), Nadiad, Gujarat,** organized an expert seminar on Computer Science Technologies on **Dec 28, 2019**. Experts, Shri Pruthvirajsinh Solanki; Shri Nilesh Madhudia, Shri Jitendra Nath & Shri Tejas Mehta were invited from Master Card, Vadodara. Around 61 students from CE/IT attended and obtained theoretical and practical knowledge about the trending technologies of the IT field. Various seminar topics were covered like - android development, version control using GIT, security in digital world and IT projects and methodologies.

• **ISF** at **VKR VNB & AGK College of Engineering, Gudivada,** organized a two-day workshop on "VLSI Layout Design Using Tanner" on **Dec 28, 2019.**

• **ISF** at Dept of E&TE, **Guru Gobind Singh Polytechnic (GGSP), Nashik,** organized an expert session on Entrepreneurship Development for II & III year on **Jan 3, 2020 by** Dr Gayatri M Phade, HoD/SITRC, Nashik, as resource person. Dr Phade guided the students on need for entrepreneurship. She also informed about incubation center activities. Various faculties from inside and outside institute guided the students about various aspects of entrepreneurship like - product selection, technology selection, funding opportunities, preparation of project report, Govt rules and regulations etc. Students had a fruitful interaction with Dr Gayatri Phade. 48 students attended the seminar. The **ISF** organized a two-day workshop on Internet of Things using Arduino and Raspberry Pi on **Jan 8-9, 2020** for II & III- year students. Prof Dhanajay Pawar, SNJB College of Engineering, was the resource person. Objective of the workshop was to impart hands-on training to II & III-year students to help them learn techniques of IoT Node design and deployment of real time IoT projects. Tools used were - Arduino mega boards & cables and Raspberry Pi. A hand on session was arranged teaching from the scratch to the complex applications development. Students showcased their skills on writing programs in Arduino IDE and made physical connections with LCD displays, Multicolor LEDs, 7–segment displays, IR & Ultrasonic sensors, servo motors, LDR module etc. The workshop was organized by Mrs Sushma Kolhe and 44 students attended.

• **ISF** at Dept of ECE, **Narula Institute of Technology (NIT), Kolkata,** conducted the certificate distribution ceremony on **Jan 6, 2020** in association with IETE Kolkata Centre. The **ISF** organized an online voice over Power-Point Presentation competition on "Covid-19 and its Challenges"on **Apr 12, 2020** through zoom application. 80 participants in 22 teams (each team consisting of 4 members) participated. Vote of thanks was proposed by Dr Saradindu Panda, Head/ECE. Mrs Sangita Roy, Mrs Arnima Das and Mrs Arpita Santra, co-ordinated. The **ISF** organized a webinar on "Security and Authentication through Imperceptible Communication" on **Apr 22, 2020** with the keynote speaker, Prof (Dr) J K Mandal, Kalyani University, WB & Hony Secretary, IETE Kolkata Centre. Dr Saradindu Panda, Head/ECE appreciated the conduct of the webinar in the COVID-19 crisis period. Mrs Sangita Roy and Mrs Arpita Santra, ISF Co-ordinators, NIT, Faculty, ECE were present. Shri Kaushik Sarkar, ECE & webinar coordinator, concluded the session.

• A guest lecture on "MRI in Medical Applications" organized by the **ISF** at Dept of ECE, **Vignans Institute of Engineering for Women, Visakhapatnam** on **Jan 7, 2020** was inaugurated by Prof P Rajesh Kumar, ECE, Andhra University College of Engineering (A) & Hony Secretary, IETE Visakhapatnam Centre. In his address, he highlighted the opportunities of self employment in different sectors for women and guided them on basic knowledge of biomedical engineering. He encouraged the women participants to develop self-confidence by keeping themselves update on latest advancements in medical technologies using different practical software applications. A presentation was given by Dr P Ramesh, Former Professor, Vignan's Educational Institutions enlightening the participants on the use of Magnetic Resonance Imaging (MRI) in practical applications and its role in biomedical systems.

• **ISF** at Dept of ECE, **Goa College of Engineering (GCE), Farmagudi, Goa,** organized a two-week workshop on "Core Java, Advanced Java & MySQL" during **Jan 7-17, 2020** in association with IETE Goa Sub-Centre. Ms Gauri Desai, CEO, Thoughtslate IT Services Pvt Ltd, Pondicherry, Goa, was the resource person for conducting the Internship program. Dr H G Virani, Prof & Head/ETC, GEC & Chairman, IETE Goa Sub-Centre; Prof Sangam Borkar, AP/ETC, GEC; Mr Mehaboob Mujawar and Ms Shruthi Adpaikar, Faculty/ETC-GEC, organized and coordinated the workshop. The participants were given hands on experience for number of programs. The examples were given and students given written test on the topics covered in the program. The participants found the Internship program very useful as it enhanced their software skills. About 20 students participated. The **ISF** also organized a webinar on "Satellite Communications: Trends & Opportunities" on **Aug 31, 2020**. Mr Savio Henriques, BI & Analytics Mgr, INMARSAT, UK, was the keynote speaker. After giving an overview, he spoke on the various Orbits in which satellites are deployed, various hardware equipment, launchers used for deployment and the application domains. He also threw light on various career opportunities in this field. The webinar helped

the participants to get an insight of satellite communication from the industry perspective. About 75 participants from various ISFs including Mumbai and Rajkot attended. E-certificates were issued to all the participants.

• **ISF at Dept of ECE, Crescent Institute of Science & Technology (CIST), Chennai,** organized a guest lecture on "Advanced Digital Signal Processing and SDR" by Prof (Dr) Daniel Leon Salas, Purdue University, on **Jan 8, 2020**. The **ISF** also organized a three-day workshop on "My Robo-Car Race" during **Jan 23-25, 2020** in association with student chapters of IE(I). This workshop aimed to deliver hands on experience and interactive sessions that focused on embedded my Rio, embedded hardware device for developing real time, complex engineering system efficiently using a dual core arm cortex A9 real time processor & customize IO in field of E&C. The participants were BE/BTech students and final year polytechnic students, 21 in number. Certificates were distributed to all the participants. On **Mar 11, 2020** an Industrial visit to TVS Training and Services Ltd (TTC-1), Ambattur Industrial Estate, Chennai, was organized for about 47 students of III-year ECE. The **ISF** organized a webinar on "Recent Advancements in AI, IOT and Data Science" during **Jun 8-12, 2020.** The experts participated were: Dr Madan Kumar Lakshmanan, Sr Scientist (CSIR – CEERI), AP/CSIR, ACSIR; Shri Md Aashik Rahman S, CEO, Project Head, Propeller Technologies (R&D), Chennai; Shri Aashik Bharath Egnya Varahan, Data Scientist, McKesson Corporation, Ireland; Shri V N Imadudeen, Vehicle System Engineer, Wabco, Chennai. About 135 members attended.

• A new **ISF** with 47 members was inaugurated at **Royal College of Engineering and Technology (RCET), Akkikavu, Palakkad,** on **Jan 13, 2020** with the special efforts of Chairperson, Dr V Devi, IQAC Director of the College. She presided over the inaugural function and Dr S P Subramanian, Principal of the College, inaugurated the ISF. Earlier, Ms Thahliya ISF Chairperson, delivered the welcome speech. Others addressing the gathering include: Ms Radhika E R/ISF staff coordinator; Shri Krishnakumar R, HoD/ECE and Ms Amrutha M, HoD/EEE. Shri Nandu Krishna PH proposed formal vote of thanks.

• A new session of the **ISF** was inaugurated at Dept of E&TE, **Pimpri Chinchwad College of Engineering & Research (PCCOER), Pune,** with 62 founder student members on **Jan 17, 2020**. Shri K R Shende, Chairman, IETE Pune Centre was the Chief Guest and other notable members present were: Shri S K Khedkar, Vice-President, IETE and Dr S R Jog, Prof & Head/E&TC at Dr DY Patil Inst of Engg and Technology, Pimpri, Pune. Dr S R Jog spoke on "Radiations & Hazards" and Shri S K Khedkar elaborated on the awards. Prof Dipali N Dhake, AP/PCCOER, coordinated for the event.

• **ISF at Dept of ECE, Coimbatore Institute of Technology (CIT), Coimbatore,** conducted a one-day workshop on "Demystify Machine Learning" by Shri Shahul ES, Kaggle Master, Co-founder and CDSO ALRTAI, on **Jan 24, 2020**. Around 106 students attended. The workshop offered hands on training to build a simple ML Model, through Kaggle online open source tool.

• **ISF at ECE Dept, Meenakshi Sundarajan Engineering College (MSEC), Kodambakkam, Chennai,** organized a technical seminar-Avalanche -2020 on **Jan 25, 2020**, by the Chief Guest Shri R P B Sundaram, Former AGM (BEL) & EC member, IETE Chennai Centre.

• The **ISF at KMEA Engineering College (KMEAEC), Kochi,** organized a workshop on 'Arduino Based Product Design' on **Jan 29-30, Feb 4-5, & 10-11, 2020** in association with the IETE Kochi Centre. Dr Amar Nishad, Principal, KMEA Engg College, was the Chief Guest. Mr Adhil Mohamed Jaffar gave basic introduction of Arduino. Mrs Smitha K M, HoD/EC, KMEA Engg College was present. The World Radio Day was celebrated on **Feb 13, 2020** in association with IETE Kochi Centre. Shri Jithin K J, Technical Staff, ECE Dept, demonstrated the Software Defined Radio (SDR) present at the Incubation Centre. The **ISF** at Dept of EC also conducted a technical talk session on "Talk with Industry Expert" in association with IETE Kochi Centre and GEE on **Feb 20, 2020**. Industry expert, Shri Dino Joseph Mycle, John Deere Company USA, hosted the event.

• **ISF at ECE Dept, Lakireddy Bali Reddy College of Engineering (LBRCE), Mylavaram,** and IETE, Hyderabad jointly organized a workshop on "Industrial Embedded Systems and IOT" on **Jan 30, 2020**. The program was graced by Dr Y Amar Babu, HoD/ECE; Dr K Appa Rao, Principal and Shri B Kishore Kumar, Founder Member, Kernel Masters, Hyderabad. Dr Y Amar Babu

and Dr K Appa Rao in their addresses highlighted the significance of attending the training sessions. The resource person- Shri B Kishore Kumar presented the broadview of the topic and strated with theoretical and lab sessions. The workshop on Embedded Systems, using STM 32, a low-power ARM Cortex M4 32-bit microcontroller family and wireless modules like Bluetooth and Wi-Fi was organized.

• **ISF at Agnel Institute of Technology and Design (AITD), Goa,** conducted a two-day workshop on "Virtual Implementation using LabVIEW" during **Jan 30-31, 2020** in association with IETE Goa Sub-Centre. The **ISF** also organized a six-day webinar series on "Industry Connect- Path ahead for ECE Engineering Students & Graduates" during **Jul 6-11, 2020** in association with IETE Goa Sub-Centre. It aimed at connecting students & graduates of ECE with some of the best industry representatives & experts in this domain. The speakers were: Shri Kamlesh, Sr Project Engr, Pantech E-learning; Shri Karthikeyan Singaram, Asst Mngr, Enthu Tech Technologies; Shri Anil Raikar- Design, Head, Sierra Circuits; Shri Jayanandan T, Founder & CEO, Tesla Minds & Shri Ravi Siddanath Principal Engr, Broadcom Ltd. Their talks shed light on exploring the various trending technologies in electronics such as Deep Learning using Tensor flow & Keras, IoT & LoRaWAN, application of network security using LoRaWAN, electronic product design & trends in electronics, microstrip antennas for 5G applications and semiconductor. Dr J William, HoD/ECE, AITD, was the convener & it was coordinated by Shri Harish Velingkar, AP/AITD & Mrs Chaitali Karekar, AP /AITD. About 500 participants attended from over 40 colleges across the India.

• **ISF at JSPM's Bhivrabai Sawant Polytechnic (JSPM-BSP), Wagholi, Pune,** organized a Technical Paper Presentation on **Jan 31, 2020** for the students from CO, E&TC, EE departments. More than 6-7 groups of students participated in the event. The event guidelines were given by Prof Vaishali Sonone, faculty advisor. Others present were: Director/Principal, Dr Sachin Admane; HoDs of E&TC, EE and CO departments. The Coordinator-Anand Gaikwad, gave the introductory remarks. The presentation covered the topics related to AI systems, automation, 5G technology, solar technology, autonomous vehicle, *etc*. Mrs P M Tamboli and Shri Deshmukh M D adjudged the presentations on various aspects. The winners-Shri Chetan Nair & Shri Anand Agale (1st position) and Shri Ganesh Sawant, Ms Aishwarya Jadhav & Ms Pooja Kadam (2nd position) were awarded with trophies & certificates.

• **ISF at Mepco Schlenk Engineering College (MSEC), Sivakasi,** celebrated IETE Students' Day on **Feb 1, 2020.** The programme was graced by Dr R Shantha Selvakumari, Sr Professor & Head/ECE, MSEC as the main guest. Ms VU Kanniga Parameswari, ISF member, welcomed the gathering while the President's message was read out by Ms S C Mounika, Chairperson-ISF. It was co-ordinated by ISF incharge, Shri A Kamaraj, AP/ECE. Events conducted to commemorate the event were: Technical paper presentation, Circuitron, Pro Digi, Blue book and Best manager. Dr V S Benitha, AP/ECE and Shri R Varun Prakash, AP/ECE, were the judges for the presentations. Shri V Esakki Muthuvel proposed vote of thanks.

• **ISF at BK Birla Institute of Engineering & Technology (BKBIET), Pilani,** celebrated IETE Student's Day on **Feb 1, 2020** by conducting a series of technical and non-technical events *viz.* technical presentation, group discussion and games. Dr Sumitra Singh, Principal Scientist and Head of Flexible Non-Silicon Group CSIR CEERI Pilani, graced the occasion as the Chief Guest and Dr Pramod Kumar Tanwar, Sr Scientist and Business Developer at CSIR CEERI Pilani, as the Guest of Honour. A one-day workshop on "I am Generation Equality: Realizing Women's Rights" was organized by the **ISF** and IETE Pilani Centre together on the occasion of International Women's Day on **Mar 7, 2020.** It was aimed at making the women realize of their gender rights and informing them on topics like mental fitness, gender equality and mobility through body alignment and nutrition, *etc*. Mrs Sangeeta Raj Singh, Chairman, CEERI Ladies Club was the Chief Guest. In her speech, she appreciated the information that was provided during the workshop by different speakers on topics like Mental fitness by Mrs Shikha Joshi, Psychologist, M Power, BITS Pilani; Gender Equality by Dr Sonia Gupta & Mobility through Body Alignment & Nutrition by Mrs Jaya Pathak. She also shared her own experiences with the participants.

• **ISF at ECE Dept, KCG College of Technology (KCGCT), Padur, Chennai,** organized a group discussion contest for the welfare of students to improve the communication skill and to know pros and cons of "Social Media in Today's World" on **Feb 3, 2020**.

• **ISF** at Dept of ECE, **Sambhram Institute of Technology (SAIT), Bengaluru,** conducted a three-day Faculty Development Programme (FDP) on "Microcontroller and Embedded System" during **Feb 3-5, 2020**. Prof Harish V Mekali, Asst Prof, BMSCE, Bengaluru, was the Chief Guest for the occasion, and it was presided over by Dr C V Ravishankar, HoD/ECE. The hands-on-sessions focused on ARM7TDMI/LPC2148 kits, were carried out by Shri Raghavendra, from the Advanced Electronic Systems, Bangalore. Around 50 faculty members attended the programme from different colleges. The FDP was coordinated by Prof Anupama and Prof Trupti. The **ISF** conducted another two-day FDP on "Microcontroller and Embedded System" during **Feb 7-8, 2020** by Shri B N Jagannatha Rao, Hony Treasurer, IETE Bengaluru. It was presided over by Dr C V Ravishankar, HoD/ECE. The hands-on sessions here was focused on how to write research papers and thesis using research database software tools like mendeley, endnote, publish or perish, mathtype, microsoft visio, downloading papers and plagiarism checking etc. It was carried out by Prof Ezhilarasan K and Dr C Rangaswamy. About 45 faculty members and research scholars attended from various colleges. The **ISF** in support of EFY–Bangalore, conducted a guest lecture on **Feb 13, 2020** by Shri Anand Tamboli, a prolific writer based at Australia. About 300 students and 70 faculty members attended this lecture. The **ISF** also arranged an Industry visit to Airforce Electronics Training Institute, Jalahalli East, Airforce, Bangalore, on **Feb 15, 2020** with the help of Dr CV Ravishankar, HoD/ECE. Around 85 students from IETE-SAIT & VI Semester/ECE students with four faculty members visited the site. It was coordinated by Dr Rangaswamy C. The students and faculty were told about the equipment, instruments equipped with the latest technologies.

• **ISF at ITM Vocational University (ITMVU), Vadodara,** celebrated IETE Students' Day by conducting a Circuit Design competition on **Feb 6, 2020** in association with IETE Vadodara Centre. Different circuit models including digital clock, battery indicator, clap switch, water level indicator and automatic light indicator were made and exhibited. Total 7 teams participated.

• **ISF** at Dept of ET, **S B Patil College of Engineering (SBPCOE), Pune,** organized a one-day Industry visit to Sharda Community Radio Station Baramati and Krishi Vigyan Kendra (KVK), Baramati, Pune on **Feb 6, 2020**. It was properly organized by Dr PD Nemade, Principal, SBPCOE and Prof YS Bahendwar, HoD and Prof Togrikar PS. The staff members, Prof P R Taware, Prof M M Zade, Prof (Mrs) A S Zadbuke/E&TC together with students visited the places. This radio station at 90.8 MHz delivers the latest information in agriculture to the farming community, provides a platform to farmers to share their experiences, skill and art, problems and needs with in the communities. The 50W radio station covers 20km around Baramati, reaching out to around 2 lakh people. The 110 acres Krishi Vigyan Kendra cultivates crops and reduces the time lag between the technology transfer from research institutions to the farmers' field for increasing production, productivity and income from the agriculture and allied sectors on a sustained basis. Its automation & fertigation units provide water & fertilizers. This KVK has soil and water testing lab and the Indo-Dutch Center of excellence of vegetables, which includes Poly House and its automation.

• **ISF** at ECE Dept, **Easwari Engineering College, Ramapuram (EEC), Chennai,** organized a national level Technical Festival - Pragyotsav 2020 during **Feb 6-7, 2020**.

• A technical talk, quiz and coding & programming were organized by the **ISF** at **Kamaraj College of Engineering & Technology (KCET), K Vellakulam, Madurai,** on **Feb 8** & **Feb 12, 2020** for II/ III/IV-year ECE students. It was organized to kindle technical knowledge in them and to test their programming knowledge for placements. Mrs A Geetha, AP/ECE, acted as a judge for the technical talk event. Students participated actively. Dr R Suresh Babu, Prof & Head/ECE, distributed the cash prizes and certificates to the winners and participants.

• **ISF** at Dept of ECE, **Kings Engineering College (KEC), Chennai,** organized a guest lecture on Artificial Intelligence-2020 on **Feb 10, 2020** by Dr Krupa Ganapathy of Saveetha School of Engineering, as resource person. It was conducted as a part of learning on latest technology trends and knowledge improvement for the students.

• **ISF** at ECE Dept, **Rajiv Gandhi College of Engineering & Technology (RGCET), Puducherry,** organized a talk on "Application of Modern Electronics

for Global Life Saving" on **Feb 12, 2020** delivered by Dr V Dooslin Mercy Bai, Prof HoD, Dept of Biomedical Engineering, Shri Sakthi Institute of Engineering and Technology, Coimbatore.

• **ISF** at Dept of ECE, **Sona College of Technology (SCT), Salem,** conducted an IETE Techno hunt namely I-Venor on **Feb 12, 2020** comprising Coding debugging Contest; Techno Smart-Quiz Contest; Technical Adzap; Technical Idea Presentation; Technical Connexions; Story Telling; Personality-Just A Minute; Photography-Thirukkural Based; Short Film-Title: Ini Oru Vidhi Seivom and the Treasure Hunt. Dr R S Sabeenian, HoD/ECE & BME, delivered the welcome address. The I-Venor report was presented by Dr R Gayathri, ISF Secretary. Dr Senthil Kumar, Dean/Students/Affairs/SCT, delivered the felicitation address. Prof K Saranya, the ISF coordinator was present on the occasion. Vote of thanks was given by Prof M Senthil Vadivu, UNECS coordinator.

• A new **ISF** at Dept of ECE, **Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad**, was inaugurated on **Feb 14, 2020** in association with IETE Hyderabad Centre by Prof A Ravi Kumar, Chairman, IETE Hyderabad Centre; Prof P Ravinder Reddy, Principal CBIT; Dr I V Subbareddy, Hony Treasurer, IETE Hyderabad Centre; Prof D Krishna Reddy, HoD/ECE; Faculty ISF Coordinators-Sri P Ranjith, AP, Sri T Sridher, AP and Shri Vishwateja T, Chairman ISF, CBIT. The function was graced with the presence of Prof K Jaya Shankar, Principal MGIT & IETE GC Member. The department staffs and students also attended the event. Prof A Ravi Kumar, in his address spoke about the benefits of IETE Membership and importance of technical bodies. Dr I V Subba Reddy emphasized the benefits of student's participation in such events including the activities undertaken by IETE Hyderabad Centre like conferences, workshops, seminars and IETE awards. He encouraged students to participate and take IETE membership. The efforts made by ECE Dept in starting this ISF was appreciated. 47 new students members were distributed ISF membership certificates. Later, a guest lecture on **Industry 4.0 Engineering Trends** was delivered by Prof A Ravi Kumar, Chairman IETE Hyderabad Centre, on the occasion.

• **ISF** at **K J College of Engineering & Management Research (KJCOEMR), Kondhwa, Pune,** conducted a technical symposium "Gravity 2020", including cultural and sports activities, project & posters competition on **Feb 17, 2020**. Ms Harshaada Jadhav, Director/ KJCOEMR; Dr Khot, Principal and other dignitaries of KJCOEMR and from industry graced the occasion.

• A two-day workshop on "Raspberry Pi and Python" was organized on **Feb 17-18, 2020** by the **ISF** at Dept of ECE, **Rajeev Institute of Technology (RIT), Hassan, Karnataka**. Dr AN Ramakrishna, Principal/RIT, Hassan; Dr Dananjaya DA, Vice-Principal & HoD/ME, RIT, Hassan; Prof (Dr) Aravind BN, HoD/ECE, RIT, Hassan & HoDs from various depts attended. Shri Chiranth and team Pincore Technologies India Pvt Ltd, Bangalore, were the resource persons. Session began with an introduction to the basics of Python programming. It then demonstrated the use of Python along with Raspberry Pi3. Interfacing Raspberry Pi with modules like LED, Buzzer, Touch sensor and DHT 11 sensors with Python programming were taken up. An IoT project on identification of soil moisture, updating to the cloud and deciding whether to turn-on/off the valve and water pump, was successfully completed by the students.

• **ISF** at Dept of ECE, **St Joseph's Institute of Technology (SJIT), Chennai**, organized a one-day workshop on "Demystifying EMI/EMC and Troubleshooting Technique" on **Feb 19, 2020**. Dr B Babu Manoharan, Chairman, SJIT; Mrs B Jessie Priya, MD, SJIT and Shri B Sashi Sekar, Director, SJIT attended as the Chief Patrons. Dr Tata Sudhakar, Group Head, Ocean Electronics Group, NIOT and Chairman IETE Chennai Centre, graced the event as the Chief Guest. Students were given a brief presentation on his journey and the opportunities available in IETE. Resource persons were: Kalaiyarasi K, RF Engineer and Abinash S, EMC Testing Engineer from TekiKnow Technologies Pvt Ltd. Testing of different equipment for EMI was visualized in the sessions. About 56 participants of II & III-Year ECE were benefited. The **ISF** and **Sri Sairam Engineering College, Chennai,** jointly organized a webinar on Business Intelligence (BI) on **May 18, 2020** with Dr Mithileysh Sathiyanarayanan, MIT Square, London City, University of London for about 90 members. Another webinar on "The Risk of Artificial Intelligence: A Security Perspective" was organized on **Jun 12, 2020** with Dr Sibi Chakaravarthy, AP/Vellore Institute of Technology, AP, as the keynote speaker. About 85 members participated.

• A new **ISF** batch at Dept of ECE, **IES College of Engineering (IESCE), Chittilapilly, Thrissur** under IETE Kochi Centre, was inducted on **Feb 20, 2020.** The event was graced by Dr C D Suryiakala, Hony Treasurer, IETE Kochi Centre. Lauding the efforts of ECE Dept for starting the forum, she emphasized on the benefits of students' participation in the professional bodies for their own professional & personal development. Other dignitaries and speakers included: Shri Shibili M, Hardware Design Engr, Gadgeon Smart Systems Pvt Ltd; Prof Manju Bhaskar, Vice Principal, MGM College of Engg & Pampakuda; Dr S Brilly Sangeetha, Principal, IES College of Engg, Chittilapilly, Thrissur and Mr Mohamed Ali K P, Director, IES College of Engg, Chittilapilly, Thrissur. The welcome address was delivered by Dr Lince Mathew, HoD/ECE, IESCE. Dr S Brilly Sangeetha addressed the gathering and this was followed by presidential speech from Mr Mohamed Ali K P. The Chief Guest then inaugurated the ISF Unit. Prof Manju Bhaskar described the role of IETE-ISF Units. The talk on "**Embedded Systems and it's Applications"** was delivered by the resource person, Shri Shibili M.

• A new batch at the **ISF, Panimalar Institute of Technology, Chennai**, was inaugurated by Shri Tata Sudhakar, NIOT and Chairman of IETE Chennai, on **Feb 22, 2020**. **ISF** also arranged a webinar on "Electromagnetic Pollution Hazards of Cellphone Base Station on Environment" on **May 13, 2020** by Dr S Brindha, Prof, Dept of ECE, Sri Sairam Engg. College. About 150 members attended. The **ISF** with **Easwari Engineering College; Jeppiaar Institute of Technology; Sri Venkateswara College of Engineering & Vel Tech Multi Tech Dr SR Dr RR Engineering College,** jointly organized a webinar on "Underwater Navigation: Theory and Practice" on **May 23, 2020** by Shri Pramod Kumar Maurya, Scientist at Marine Instrumentation Division, National Institute of Oceanography, Goa. About 161 members attended the webinar. During **May 23-25, 2020,** an online practical workshop on "Machine learning & AI" exclusively in Tamil was conducted by the resource person: Shri Shabarinath Premlal, CEO Respro Labs. About 125 members attended the programme. The **ISF** with **Easwari Engineering College**, **Jeppiaar Institute of Technology, Sri Venkateswara College of Engineering & Vel Tech Multi Tech Dr SR Dr RR Engineering College** jointly arranged a webinar on"Role of Intellectual Property & Innovation Management in Engineering Science under Make in India" on **May 27, 2020**, by Dr B K Sahu, Regional Manager, (IPFC&TISC), NRDC, GOI, Innovative Valley, Vishakapatnam. About 207 members attended. Another joint webinars held were on "Indian Tsunami Warning Systems" on **May 30, 2020** by Dr Tata Sudhakar, NIOT, with 189 members in attendance; and on "Light Applications in Sensing, Medical Diagnosis and Therapeutics" on **Jun 6, 2020** by Dr Rajesh Kanawade, CSIR–CSIO Advanced Materials & Sensors Division (V4), Scientist with participation of about 189 members.

• A new **ISF** at **R M K Engineering College, Gummidipoondi, Chennai**, was inaugurated on **Feb 22, 2020** by Shri Tata Sudhakar, NIOT and Chairman of IETE Chennai.

• **ISF** at **Dr Sudhir Chandra Sur Institute of Technology and Sports Complex, West Bengal**, initiated a campaign on environment & tree plantation on a theme "Save Tree-Save Life**"** through their Green Pearl Nature Club on **Feb 24, 2020**. The ISF also organized a Digital competition of Short story /Poetry/Blog writing, "Shoot-@-Story" on the themes, namely-Amphantic disaster, Covid-O-Curse and Battle-Unlock on **Jun 29, 2020**. A webinar on "Dissection of Digital Single Lens Reflex (DSLR) Imaging System" was arranged on **Jul 9, 2020**.

• **ISF** at Dept of ECE, **Sri Ramakrishna Institute of Tech (SRIT), Coimbatore, Tamilnadu**, organized a seminar on Data Warehousing on **Feb 28, 2020**by the subject expert, Shri S Balamurugan, Associate, Cognizant Technology Solutions, Cognizant CHIL SEZ, Coimbatore. The speaker explaining the importance of data warehousing, database & datamarts, highlighted the data warehousing tools and the dataflow processing in the industry to the participants. Shri N Thangavel, Jt Secretary; ISF Coordinator, Dr A N Jayanthi and Ms Celina Grace P, ISF student member also addressed the gathering.

• **ISF** at ECE Dept, **Sri Sairam Engineering College, West Tamabaram, Chennai**, arranged a Mini Project Exhibition -TEXHIBIT 2020 on **Feb 28, 2020**.

• A new **ISF** at **Atharva College of Engineering (ACE), Malad**, **Mumbai**, was inaugurated on **Mar 6, 2020** by the Chief Guest, Dr S S Thakur, Chairman Mumbai Centre. Other dignitaries sitting on dais were: Mr Parag Walinjkar, Hony Secretary; Dr Vikas Gupta, Hony Treasurer; ISF coordinator Prof Jyoti Kolap, HOD ExTc; Prof Jyoti Mali**,** Vice Principal and Prof R Sreedharan. Prof Jyoti Kolap, in his address highlighted the concerted efforts made in opening of the ISF. Dr Vikas Gupta explained the functioning of ISF with its advantages. Shri Walinjkar outlined the activities undertaken by the Mumbai Centre. Dr Thakur spoke on the topic "Enable the Green world through Sensible Design". Speaking on the role & responsibilities of the communications industry, he said it has knowledge, experience and resources to enable a green world. He explained how telecommunication engineers could "energize" R&D and facilitate in deployment of green–enablers. The programme was attended by 65 students, HoD's & faculty members of other engg branches/ACE.

• **ISF** at **Anand International College of Engineering (AICE), Jaipur**, organized a seminar on "Benefits of Technical Bodies for Students" on **Mar 14, 2020,** inaugurated by the Chairman of IE (I) Rajasthan State Circle, Er Sajan Singh Yadav as Chief Guest; Joint Secretary of IE (I) Er Sudesh Roop Rai as Guest of Honour & Hony Treasurer of IETE Jaipur, Shri Rajesh Kumar Chouhan as Distinguished Guest. The Joint Secretary of IE (I) Rajasthan State Circle, Dr Hemant Kumar Garg and Exe Member of IE (I) Shri PC Chhabra also graced the event as special guests and motivated the students vide their addresses. Other notables present were**:** AICE's Vice-Chairperson Ms Monika Mittal; AICE's Principal Prof Vijay Kumar Sharma & Vice-Principal Prof Praveen Agarwal. The programme was conducted by Shri Vivek Bhojak, HoD/ECE with around 55 students & 17 faculties in attendance.

• **ISF** unit at Dept ECE, **St Peter's College of Engineering and Technology, Chennai,** organized a webinar on "Placement Preparation Techniques" on **Apr 22, 2020** by Shri Bharat Bhushan, AP/HMRITM, GGSIP University, New Delhi. Participants were about 100 in number. Another webinar organized was on "Basic of Machine Learning" on **May 5, 2020** by Shri Biplob Manna, Head of Automation at Innostruct. About 75 members attended. The webinar on "Transition with IoT" was arranged on **May 22, 2020** conducted by Dr D Suresh, Vice President, Tech Sys, IOT Labs, Hyderabad with 85 members in attendance.

• **ISF** at **Haldia Institute of Technology (HIT), Haldia, WB,** organized a coding competition namely "ByteFight" on **Apr 25** & **May 1, 2020,** successively.

• **ISF** Dept of ECE, **Sri Venkateswaraa College of Technology (SVCT), Sriperumbudur** organized a webinar on "Apache Spark Fundamentals" on **Apr 30, 2020** by Shri Ethiraj Srinivasan, Data Engineer, Lomotif, Singapore, as the keynote speaker. Information given in the programme was useful and informative. Another webinar on "QOS In Layer 2" was held on **May 1, 2020** by Shri Ananthan Muthiah, Sr Mgr, TEJAS Networks, Bangalore. The expert spoke on the quality service offered and required in Layer 2, which is Data Link Layer in both OSI model and TCP/IP model.

• **ISF** at Dept of ECE, **Aarupadai Veedu Institute of Technology, Chennai,** organized an online presentation on "Opportunities in Marine Field" on **May 15, 2020** given by Shri G Suresh, Marine Engineer, IETE EC member, Chennai Centre. 115 members attended the programme.

• An online expert lecture on "**Cyber Security**" was organized at Dept of ECE of **ISF Acropolis Institute of Technology & Reasearch (AITR), Indore,** on **May 22, 2020.** It was delivered by Shri Nitin Kulkarni, the keynote speaker. Faculty members attending included: Dr UBS Chanrawat, Prof Geeta Santosh, Prof Pushpa Pathak, Prof Prabhat Pandey, Shri Lalit Bandil, Shri Arvind Jaiswal from ECE and MCA deptt. Another online lecture arranged was on "Understanding IoT and its application" delivered by Prof Prabhat Pandey on **May 26, 2020**. Prof P Pandey spoke on some IoT applications used in smart appliances, wearable technology and in medical industry. Faculty attended include: Dr UBS Chandrawat and Prof Minakshi Halder ECE Dept. Another internet presentation held was on "Domain of Electronics & Communication" during **Jul 4-5, 2020.** In its 1st session, the expert speaker Shri Mondikathi Chiranjeevi, AP/Indur Institute of Engg & Tech, Siddipet, Telangana, spoke on "Basic Communication System and Modulation Techniques". He initiated with introduction of basics of communication systems where he explained about elements in communication system, terminologies

used, losses and block diagram of communication system including differences between baseband, broadband and modulated signal. He explained modulation and its various techniques in details. In 2nd session the expert, Dr B C Nagar, AP/ National Institute of Technology, Patna spoke on "Design of Sinusoidal Oscillators using Operational Transresistance Amplifier". He started with various IC's and OPAMP, preparation of the equivalent circuit & its working and then explained OTRA, MOS implementation, IC implementation with properties. He gave basic concepts and types of Oscillators, performance parameters of Oscillators, CMOS implementation of various circuits on Cadence Software. He also took on to explain Sinusoidal Oscillator (SSO) using OTRA and Quadrature Oscillators (QSO) using OTRA. Lectures were well received.

• **ISF** at Dept of ECE, **Loyola ICAM College of Engg & Tech, Chennai,** organized a State Level Online Ideation Challenge for +2 students on **May 29, 2020**. About 75 members attended. It also organized a webinar on "An Introduction to Quantum Cryptology" on **Jun 4, 2020** by Dr Arpita Maitra, AP, TCG–CREST, Kolkata, attended by about 125 members.

• **ISF** of **Adamas University, West Bengal,** organized a webinar on "Industry Evolution, Fundamentals of Container/Kubernetes & Associated Security" on **Jun 3, 2020**. Another interesting internet interaction was on "What role will you play in the 5G enabled future world?" on **Jun 9, 2020**.

• Under 'E-Technofest', the **ISF** at **Thakur College of Engineering and Technology (TCET) Mumbai**, organized 3 online competitions- "PCB Designing", "Quiz on Circuit Theory" and "Artsthetic- A Poster Designing Competition" on **Jun 8-9, 2020**, under the guidance of Dr Sandhya Save. The faculties were- Mrs Archana B – Faculty-In-Charge IETE, Shri Sunil K and Shri Sumit K - faculty IETE TCET. This was first kind of an online technical fest, conducted by IETE-TCET at a national level. Participation was from Rajasthan, Punjab, Tamil Nadu etc.

• A one-day webinar on "Mendeley for Researchers: Bibliography and Networking" was arranged by **ISF** at Dept of ECE, **KPR Institute of Engineering and Technology (KPRIET), Coimbatore (TN)** on **Jun 13, 2020**. Dr Kuldeep Singh, Assoc Prof, Dept of Chemistry, Maharishi Markandeshwar (Deemed University) Mullana, was the Chief Guest. He enlightened the participants about the origin of research. Described clearly about the need of Mendeley for preparing the research article. About 627 participants attended through YouTube live. Faculties from foreign Universities also attended. The **ISF** organized another webinar on "Demystifying 5G New Radio" on **Jul 15, 2020**, wherein the participants were welcomed by Shri T Venkatesh, AP/ECE. The Chief Guest Dr Balaji V, Research Consultant and Founder of Radiance Technology Research Services Pvt Ltd, Coimbatore, delivered an informative and interactive talk that provided enormous knowledge on various aspects of 5G to the participants. About 186 participants attended. Vote of thanks proposed by Shri K Siddharthraju, AP/ ECE. The programme on "Digital Ignitron 2020" was organized during **Jul 22-23, 2020** in association with IETE Coimbatore Centre. The events conducted in the programme were: webinar on General IC design flow; Ideathon; Technical connection and Technical quiz. In the webinar, the 1st session, was graced by Shri J U Nambi, the Chief Guest, who spoke on introduction to integrated circuit design, design flow, design process on modern VLSI technology. About 212 participants attended. The 2nd event "Ideathon" was aimed to provide an experience to the students to address most relevant challenges of their time. Participants worked in a team /individual in order to provide creative and innovative ideas for the proposed problem statements. About 18 participants attended. In Technical Connection, the participants were taught to frame an electronic term by combining the images given in the question. The question in a combination of 2-6 images, where each image describes a specific word. About 100 participants attended. In the Technical Quiz, 20 questions from electronics and communications were raised in the final round. About 262 participants attended.

• **ISF** at Dept of ECE, **Saveetha Engineering College (SEC), Chennai,** conducted a virtual FDP on "EC8791-Embedded and Real Time Systems" during **Jun 15-19, 2020**. The Chief Guest, Shri R Sivaprakash, Dir-Engineering, IELEKTRON Technologies, IIT Research Park, Guindy, spoke at length on the recent advancements of Embedded Systems in Automotive Industry. He gave

ideas about career opportunities in the domain and expectations of industry from the young engineers. Dr R Senthil Kumar, Vice Principal, delivered the welcome remarks. Programme was convened by Dr Srigitha S Nath, HoD and coordinated by Dr M Vanitha, Assoc Prof/ECE; Ms C T Kalaivani, AP/ECE; Shri M Praveen, AP/ECE and Ms T Archana, AP/ECE. Dr C Sheeba Joice, Prof/ECE, started the first day session with an introductory speech. The Chairpersons for other sessions were: Prof N Radhakrishnan, Dept of ECE, Anna University; Shri P Sathyanarayanan, Embedded System Developer, Ashok Leyland, Chennai; Dr S R Malathi, Assoc Prof/SVCE, Chennai; Dr J Rangarajan, Prof/ECE, Muthayammal Engg College; Ms S Sivaranjani, Sr Exec, TVS Training Services, Chennai and Dr M Vanitha Assoc Prof/ECE.The valedictory session was conducted online and chaired by Dr S Dhandapani, Dy Head/ECE, SEC. About 125 members attended. The **ISF** conducted another five-day virtual Faculty Development Programme (FDP) on EC8701- Antennas and Microwave Engineering during **Jun 22-26, 2020** in association with IEEE. This FDP was designed to cover topics as per R2017 Anna University Syllabus. Ms S Chithra, AP/SEC, delivered the welcome remarks. It was convened by Dr Srigitha S Nath, HoD and coordinated by Prof (Dr) S Asha, ECE/SEC; Prof (Dr) Beulah Jackson and Ms C T Kalaivani, AP. The other session chairpersons were: Dr C Mahendran, AP/ECE, Alagappa Chettiar Govt College of Engg and Technology, Karaikudi; Dr A Amsaveni, Prof/ECE, Kumaraguru College of Technology, Coimbatore; Dr M Kavya, Prof & Head, S A Engg College, Chennai; Dr M Selvi, Prof & Dy HoD /ECE, SEC & Hony Secretary, IETE Chennai Centre and Dr A K Shrivastav, Prof/ECE/SEC. A website was created for the FDP. Vote of thanks proposed by Dr Beulah Jackson, Prof/ ECE/SEC. About 250 participants attended the programme both online and offline.

• **ISF** at Dept of ECE, **Kings Engineering College (KEC), Chennai,** organized a webinar on "Article Writing & Journal Publications" on **Jun 17, 2020** by Dr P Prakasam, Prof, School of Electronics Engineering, Vellore Institute of Technology, Vellore. About 135 members attended.

• **ISF** at Dept of ECE, **Meenakshi Sundararajan Engineering College (MSEC), Chennai,** also organized webinars on "Radar Technologies" by Shri J Senthil Rengarajan, Scientist-F DRDO, Bengaluru and "Internet of Things and Trusted Platform Module" by Shri N S Bharath Kumar, Technical Specialist, CARRIER on **Jun 20, 2020**. About 160 members participated.

• **ISF** at Dept of ECE, **BMS College of Engineering (BMSCE), Bangalore,** organized a two-week online Faculty Development Program (FDP) on "Applied Data Science" during **Jul 6-17, 2020** in association with IETE, Bangalore Centre.

• **ISF** at Dept of CSE, **Sri Venkateswara College of Engineering (SVCE), Bangalore,** conducted a two-day webinar on "Ethical Hacking and Practical uses of it" during **Jul-11-12, 2020** jointly with IETE Bangalore Centre.

• **ISF** at Dept of ETE&ECE, **Ramaiah Institute of Technology (RIT), Bangalore,** together with IETE Bangalore Centre, organized a one-week online FDP on "AI and ML Applications in image processing using modern tools" during **Jul 13-18, 2020**. The **ISF** also organized a webinar on "Applications of AI, ML and Blockchain in Cybersecurity" on **Jul 15, 2020** by Dr Manish Kumar, AP/RIT in association with Bright V and IETE Bangalore Centre.

• **ISF** at **Padre Conceicao College of Engineering (PCCE), Goa,** conducted a webinar on "Cryptocurrency: Why it exists, why it matters and how you can join the revolution" on **Aug 7, 2020.** Mr Jason Fernandes, President, India Operation, XREX Inc., the keynote speaker, spoke on how money is really created, problems faced by cryptocurrency users and solutions to keep one's wallet secure. The webinar was coordinated by ISF Council and Ms Avita Lotlikar, PCCE, ISF Faculty coordinator. About 60 students from various ISFs attended. The **ISF** also conducted another webinar on "Automation from a millennial's perspective" on **Aug 18, 2020.** Shri Yadnesh Sanzgiry, Service Project Mgr & Asst Mgr, TQM, Optel Vision Pvt Ltd, was the keynote speaker. He spoke on Automation, its impact on jobs and various pros and cons. After speaking on Industry 4.0, he briefed the students on the skills required for Industry 4.0 and how they should acquire it. The webinar was coordinated by Ms Avita Lotlikar, ISF faculty coordinator and Dr Niyan Marchon, Head, Research Development & Consultancy Centre. About 65 participants attended including faculty and students from different ISFs.

Awards & Achievements

Suresh Rangankar(M-232605), Hony Secretary IETE Nagpur Centre, presently working in the Dept of ETE, St Vincent Pallotti College of Engineering & Technology, Nagpur, received his **PhD degree** in **Electronics Engineering** from Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur, for his thesis on "Design & Performance Analysis of QOS Parameters of 4G - Long Term Evolution (LTE) based Architecture form – Health Application".

Sh Sunil (F-224760), **Additional Director General, Prasar Bharati, Ministry of Information and Broadcasting, Govt of India, New Delhi**, graced the International Webinar held on 11-12 Sept.2020 as Keynote speaker and Chief guest. It was organized by Ch Balluram Godara Government PG College, Sri Ganganagar, on the theme 'Management of life style during Pandemic'. Emphasis was laid on measures adopted by Government of India under initiative of Hon'ble Prime Minister on Women empowerment during pandemic times and the consequent improvement in lifestyle.

Dr Rajeev Shorey (F-198885) took over as the **CEO of the University of Queensland – IIT Delhi Academy of Research (UQIDAR), IIT Delhi** in July 2020. Rajeev also serves as an adjunct faculty in the Computer Science & Engineering department at IIT Delhi. IIT Delhi (IITD) and The University of Queensland (UQ) have partnered on a joint-venture research academy. The UQ-IITD Academy of Research (UQIDAR) aims to train a large number of PhD research students, jointly supervised by professors at both UQ and IITD. Please see uqidar.org for all the details related to the unique partnership between IIT Delhi and the University of Queensland, Australia.

THE INSTITUTION OF ELECTRONICS & TELECOMMUNICATION ENGINEERS

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OBITUARY

Professor Govind Swarup, FRS (HF-0:0031), It is with deep sadness that we share the news of the passing away of an astronomy legend, Prof Govind Swarup. He was a radio astronomer and one of the pioneers of radio astronomy, known not only for his many important research contributions in several areas of astronomy and astrophysics, but also for his outstanding achievements in building ingenious, innovative and powerful observational facilities for front-line research in radio astronomy. He was the key scientist behind concept, design and installation of the Ooty Radio Telescope (India) and the Giant Metrewave Radio Telescope (GMRT) near Pune. Under his leadership, a strong group in radio astrophysics has been built at Tata Institute of Fundamental Research that is comparable to the best in the world.

Prod Swarup was born at Thakurdwara, Uttar Pradesh in 1929.Prof Swarup received his BSc degree in 1948; MSc in Physics in 1950 from the Allahabad University and PhD degree from Stanford University, US in 1961, where his doctoral adviser was Ronald Bracewell. He began his career at the National Physical Laboratory, Delhi, but at the request of Homi Bhabha, switched to the Tata Institute of Fundamental Research, Mumbai, where he mentored many young astrophysicists besides carrying out some of his own research. He was the Former project director of GMRT and former director of the TIFR's National Centre for Radio Astronomy, Pune. Prof Swarup was the brain behind the design and construction of the world's biggest metrewave radio telescope that helped unravel some of the long-standing mysteries of the universe.

Prof Swarup is recipient of Padma Shri in 1973. His raft of other honours and prizes include the prestigious Shanti Swarup Bhatnagar prize (1972) and the Grote Reber Medal (2007). He was a fellow of many distinguished academies, notably as a Fellow of the Royal Society of London, the Royal Astronomical Society, London, and had served as president of the Astronomical Society of India during 1975-77. **He was conferred Honorary Fellowship of IETE in 1995.**

IETE's deepest condolences to the bereaved family members on the demise of Prof Swarup.

Shri Charanjit Singh (F-049336) completed his earthly journey on 24th Apr 2020 in New Delhi. Diagnosed with stage-4 cancer just 5 days before his departure, he was determined to carry alone his burden of pain with dignity. He lived a full life and leaves behind a legacy of deep affection, sensitivity, and care. Until his final breath, he remained a principled man of immense humility and an uncommon integrity with a passion for perfection in every endeavour and a gentleness that touched all who knew him. We extend our deepest condolences and sympathies to his family members. May his soul rest in peace.

Dr Parashuram Thakura (F-234399), Senior Professor & HoD of Electrical and Electronics Engg of BIT Mesra, passed away on 14th Sep 2020 at RIMS, Ranchi due to cardiac arrest. He was an active Fellow member of IETE and presently was serving IETE Ranchi Centre as its ExecCom Member. We extend our deepest condolences and sympathies to his family and friends.

IETE in News...

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Times of India

'Artificial Intelligence to better society'