# NEWS LETTER

Volume-23, Number-1, January-April 2021

In memory of those we've lost to COVID-19

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IETE HQs, New Delhi



# **News from IETE Headquarters**

In uncontrolled Covid-19 wave anywhere poses a threat to human life everywhere. The current scenario serves as a stark reminder of how intertwined our fates are. We are all facing a common enemy that has thrown people and institutions across the world into turmoil and chaos, and we are powerless to stop it. The pandemic has claimed an untold number of lives all over the world, and India's situation continues to remain grim. Our regular COVID events, which are at an all-time high, are pushing us to retrieve and grieve. However, we can all play a part in making the world a better place by volunteering, staying informed, or adhering to the guidelines in the fight against Coronavirus.

Amid the Covid gloom, our members/Centres are really stepping up to support each other. Commendably, our Centres largely remained fully operational while implementing remote working practices and virtual meetings. To combat the crisis, some of our core Centres, started preparing for long-tem virtual teaching and learning. Even though we are at various stages of digital transformation, each of our units is attempting to determine where digital learning fits into the educational ecosystem and how to use that information to transform their teaching and learning in response to the Coronavirus.

Although we call for solidarity, cooperation, and collaboration, the majority of our Centres have been engaged in a number of activities during these challenging times. During the first quarter of the year, the following activities took place.

# **IETE Zonal Seminar and ISF Congress**

Under the aegis of **IETE Zonal Seminar & ISF Congress**, the **IETE Noida Centre** hosted an online IETE North Zone Seminar on "**Digital India: Progress, Empowering Technologies, Challenges, and Impact on India's Socio-Economic Fabric**" on the 19<sup>th</sup> and 20<sup>th</sup> of December 2020.

The Chairman of the Centre, Col Ashok Bhanot (Retd), delivered the welcome address. The dignitaries present on the occasion were —Prof J W Bakal, President IETE, the Chief Guest; Lt Gen (Dr) AKS Chandele, PVSM, AVSM (Retd), Immediate Past President and seminar patron; Lt Gen (Dr) Rajesh Pant, PVSM, AVSM, VSM (Retd), National Cyber Security Coordinator, PMO, Governing Council Member and seminar patron; Shri R K Vyas, Zonal Mentor (North); Prof M N Hoda, Chairman Technical Programmes & Publicity Committee; and Prof (Wg Cdr)

**P Prabhakar (Retd)**, Vice President IETE. The speakers emphasised the rapid proliferation of emerging technologies and the potential benefit they could bring to the country if the government and private sector collaborated to build new digital ecosystems.

Col (Dr) Bipin C Pandey, the Centre's Honorary Secretary, spoke briefly about the seminar's perspective. The distinguished panel of experts comprised of Shri Arvind Mehrotra, Strategy and Risk Advisory; Dr Anjana Dube, DDG GoI; Col KPM Das, National Cyber Security and Trust Officer CISCO; Ms Richa Rana, Serial Entrepreneur; Shri M Alok Sharma, International Quality Consultant; Prof Sunil Patil, Former Director Bell Labs and Former Director SITM; Prof Prashant Nair, Author and Mentor Atal Innovation Mission; Col Mahesh Khera,

AVG Technologies; **Prof Tanya Singh**, Amity University; **Dr Ajay Agarwal**, Chairman IETE Pilani and Senior Principal Scientist CSIR; **Col T S Guriraj**, Former India CEO South Korean Telecom Company; **Lt Gen Rajesh Pant, PVSM, AVSM, VSM (Retd)**, National Cyber Security Coordinator, PMO. The topics taken up by these experts were both insightful and useful to the listeners. The panellists addressed how India's digital transformation was progressing, about the new opportunities and challenges that ICTs present for emerging economies. They discussed how ICT adoption, digitalization, and automation offer tremendous new opportunities in terms of improved

efficiency and productivity, the development of new services and occupations, and connectivity. They viewed that extent to which emerging economies will reap these potential benefits, however, will be determined by a number of other social, economic, and institutional factors. They emphasised that as technology progresses, grows, and expands, people will need to constantly learn and relearn their skills throughout their lives.

The EC Members of IETE Noida Centre and IETE HQs worked together to ensure that the two-day programme ran smoothly. The programme was well received by attendees earning positive reviews.

# Report on 52<sup>nd</sup> Mid Term Symposium of the Institution

IETE used the virtual platform on zoom to host its main event 52nd Mid Term Symposium on the topic "Emerging Trends in ICT and Electronics" on April 30, 2021. The event was hosted by the IETE Mumbai Centre. The MTS was split into eight sessions: the inauguration, six technical sessions and the valedictory session. Shri Parag Walinjkar, Chairman of the IETE Mumbai Centre, opened the inaugural session by his welcome address. Giving an outline, he said that the programme includes a keynote address by an international speaker, as well as three invited lectures by eminent speakers from industry, research, and academia. He also stated that in the technical sessions, 40 engineers would present their research work. The Chief Guest for the function Shri Sitaram Kunte, Honourable Chief Secretary of Maharashtra State, inaugurated the event. He congratulated IETE for arranging a technological event during the pandemic situation in his inaugural address. He aptly described how current ICT and electronic technology aided the government in meticulously handling COVID-19-related emergencies. He gave an example of how using the new ICT technology to track the movement of oxygen-carrying tankers helped his team manage emergencies and prevent many deaths in Mumbai. Dr Nilesh Kasat, Mentor West Zone, spoke about IETE's efforts in organising the event in such a pandemic situation, as well as the arrangements that went into it. Dr M N Hoda, Chairman of the TPPC, provided an overview of the MTS, including how it is IETE's flagship event, the motivation behind its creation, and so on. He expressed his gratitude to the host Centre's team for their efforts. In his presidential address, Dr J W Bakal, President of IETE, discussed the history, intent of the symposium, and preliminary plans for keeping the MTS in hybrid mode. He also stated that they were looking for a keynote expert speaker to talk about the

new IPv6 technology. **Dr Gambhir** defined the technical team's and Shri N K Karnani's (editor of the e-proceedings) efforts to complete the task within the time frame. The IETE President released the e-proceedings of the 52nd MTS online. **Dr Navanathan**, an international keynote speaker from Malaysia, gave an excellent presentation on security features in IPv6 technology. **Shri Pankaj Kumar Sharma**, Secretary-General of IETE, proposed a vote of thanks. **Prof (Ms) Bhise**, Hony Secretary of the IETE Mumbai Centre, conducted the sessions.

Three of the six technical sessions in parallel mode were on ICT before lunch, and the other three were on electronics after lunch. During these six sessions, forty engineers presented their work, and invited speakers **Dr B** Satyanarayana, **Dr** Ajay Agarwal, and Shri Mukund Sathe gave talks on the sessions' subject, which was quite appropriate. Prof Poonam Chakroborty, Dr Uttara Gogate, Prof Smita Lonkar, Prof Shaista Khanam, Dr Madhuri Rodge, and Dr Savita Sangam, IETE Mumbai Centre's EC members, coordinated all six sessions, and the presentations were judged by the respective session chairs for the best paper award.

**Prof P Prabhakar**, **Dr M H Kori**, **Dr KTV Reddy**, as well as session moderators, paper presenters, and participants, provided input on the 52<sup>nd</sup> MTS programme during the valedictory session. **Dr J W Bakal**, President of IETE, declared two Best Paper Awards and congratulated the IETE Mumbai Centre for effectively hosting the 52nd MTS of IETE in his closing remarks. **Prof Smita Lonkar**, who conducted the valedictory session, emphasised that the entire MTS programme was meticulously planned by the executive members of the IETE Mumbai Centre. She also expressed gratitude to all who assisted, whether directly or indirectly.

# The Institution of Electronics and Telecommunication Announces Election of New Distinguished Fellows (2021-22)



Smriti Dagur has been elected as a new Distinguished Fellow by the Institution of Electronics and Telecommunications. She has a rewarding career as an academician and entrepreneur in the US, West Africa and India

(Gujarat) for more than 40 years. She earned a bachelor's degree in electronics from BITS Pilani and a master's degree in computer science from Rutgers University in New Jersey. She was awarded "Best Entrepreneur" by the Gujarat Chamber of Commerce and Industries (GCCI). She has contributed to a number of well-known newspapers, magazines, and websites.

Since 1989, Smriti Dagur has been an involved IETE Fellow. As chairman, of the top ten IETE centres, she has represented Ahmedabad in the Governing Council. She has been a member of the Governing Council for three terms. She was instrumental in asset development as the West Zone Mentor, establishing new self owned IETE Centres in Rajkot, Vadodara, Amravati, Nagpur, and Mumbai. She has always promoted close collaboration between industry and IETE, which has been extremely beneficial to the institution. She hosted highly competitive industry exhibitions and a Technical Convention with Shri Narendra Modi, Gujarat's then-CM, as the Chief Guest. She is the first and only woman to be elected President of the IETE (2014-16).



**Prof C Murali** is an academician and educationist and the other newly elected Distinguished Fellow of the Institution of Electronics and Telecommunications. He has more than four decades of academic

experience. He has served various engineering institutions / universities. He has worked as an expert for UPSC, NBA-AICTE and Proficience at IISc. His areas of interest are microwave engineering, computer networks and wireless mobile networks. He has authored books on CCN and Data Communications & Computer Networks.

Prof Murali is an IETE fellow, as well as an ISTE and IMAPS life member (I). He has served on the Executive Committee, Vice-Chairman, and Chairman of the IETE Bangalore Centre, as well as the Governing Council (three terms), Academic Committee Chairman, and Vice President of IETE New Delhi. Prof Murali has given invited talks, technical papers, key-note addresses, conferences, and seminars at the IETE, university, state, and national levels. He has provided consultancy in the development of microwave trainer kits as well as the fabrication of teaching and training aids. In August 2017, he received the Dewang Mehta National Educational Award for best professor in Electronics and Communication Engineering. In 2018, he won the IETE B R Batra Memorial Award.

Congratulations to both on being elected as the Distinguished Fellows of the Institution of Electronics and Telecommunication Engineers (IETE). Both the senior members are dedicated professionals in their fields. It is a true privilege and honour to have them on the IETE DF roster.

# 25th Sir C V Raman Memorial Lecture 2021

25<sup>th</sup> Sir C V Raman Memorial Lecture and National Science Day were celebrated together by IETE Bengaluru Centre on 28<sup>th</sup> Feb 2021. The Chief Guest on the occasion, Dr Radhakant Padhi, Professor, Aerospace Engineering, IISc, Bangalore, spoke on the topic 'Artificial Pancreas Development for Blood Glucose Control of Type-1 Diabetic Patients in India', which received good reaction from the people. Earlier, Dr Shivaprasad Yadav, Centre Hony Secretary, delivered the welcome remarks. Shri C Satyanandan, Centre Chairman, articulated about the Science Day celebrations, and said that it was being

religiously observed by the Centre since 2003. The introduction of the Chief Guest was presented by **Shri C P Dwivedi**, Centre Vice Chairman. On the occasion the 9<sup>th</sup> edition of the quarterly '*IETE Bengaluru Magazine*' was released. **Prof C Murali**, Former Vice President IETE, expressed his views on the quarterly magazine. **Dr C V Ravishankar**, Centre Vice Chairman, read out the list of participants and winners of various competitions held earlier at different ISF colleges on the occasion of IETE Students' Day on 1<sup>st</sup> Feb 2021. The vote of thanks was given by Shri Ranjeet Kumar, Hony Treasurer.



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भारत सरकार विज्ञान और प्रौद्योगिकी मंत्रालय वैद्यानिक और औसोरिक अनुसंधान विद्या टेवनोलॉजी धवन, नवा महरोली मार्च, नई दिल्ली - 110016

GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY sent of Scientific and Industrial Resea knology Bhavan, New Mehrauli Road, New Delhi - 110016

Date: 31st March 2021

The Secretary General The Institution of Electronics and Telecommunication Engineers, 2, Institutional Area, Lodhi Road, New Delhi - 110 003

Renewal of Recognition of Scientific and Industrial Research Organisations (SIROs).

Dear Sir.

This has reference to your application for renewal of recognition of The Institution of Electronics and Telecommunication Engineers, New Delhi as a Scientific and Industrial Research Organisation (SIRO) by the Department of Scientific and Industrial Research under the Scheme on Recognition of Scientific and Industrial Research Organisations (SIROs), 1988.

- This is to inform you that it has been decided to accord renewal of recognition to The Institution of Electronics and Telecommunication Engineers, New Delhi from 01.04.2021 to 31.03.2024. The recognition is subject to terms and conditions mentioned overleaf
- Receipt of this letter may kindly be acknowledged.

Yours faithfully, (Dr. P.K. Dutta) Scientist - 7

Renewal of Recognition of SIRO to IETE from 1st April 2021 to 30th March 2024

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I, Lt Col Dipankar Sen (Retd) hereby declare that the particulars given above are true to the best of my knowledge and belief.

Sd/-

Lt Col Dipankar Sen (Retd) Signature of Publisher

# News from Centres/Sub-Centres

#### **AHMEDABAD**

- IETE Ahmedabad Centre & IEEE AP/MTT Joint Chapter, Gujarat Section, together organized a monthly online lecture series on "Machine Learning and its Applications", delivered by **Prof Privank Thakkar**, Nirma University and on "Smart IoT Applications and Environments-Key Antenna Considerations" by Prof (Dr) Jagdish M Rathod, BVM Engg College, VV Nagar, Gujarat, on 10<sup>th</sup> Jan 2021.
- **IETE Students' Day** was celebrated on 7<sup>th</sup> Feb 2021. graced by Shri A R Dasgupta, Former Dy Director, SATCOM and IT Applications Area, SAC/ISRO, as the Chief Guest and he was introduced by Shri Sanjeev
- Kulshrestha, Hony Secy. Shri R M Makwana, Centre Chairman, delivered the welcome address. An online elocution and presentation competition on "Role of ICT in Pandemic & Role of Electronics Technology in Pandemic" was arranged for the students. Dr Kishor G Maradia, Centre Past Chairman & HoD/EC, Govt Engg College, Gandhinagar and **Dr D J Shah**, Director, Technical Courses, Sankalchand Patel University (SPU), Visnagar, Gujarat, adjudged the events. Vote of thanks was given by Shri Urvil Suthar, Centre Hony Treasurer.
- The awareness webinar series was organized jointly with the Indian Space Industry Exhibitors (ISIE) Ahmedabad, and IE(I), Delhi State Centre on "Satellite Navigation and

NavIC Applications for the Common Man" during 6<sup>th</sup>-9<sup>th</sup> Feb 2021. It was co-sponsored by IEEE Gujarat Section and supported by the professional bodies. Shri Nilesh Desai, Distinguished Scientist and Director, Space Application Center ISRO, Ahmedabad, the Chief Guest, delivered his keynote address on "India's Space Programme and Challenges in Development of NavIC".

- The National Science Day 2021 on "Future of STI: Impacts on Education, Skills and Work" was celebrated by the Centre on 28th Feb 2021. The keynote address was delivered by Dr Axaykumar Mehta, Assoc Dean (R&D), Institute of Infrastructure Technology Research and Management, Ahmedabad (IITRAM). The Chief Guest, the honourable President IETE, Prof (Dr) J W Bakal, and the Guest of Honour, Prof (Dr) Nilesh N Kasat, the Zonal Mentor (West), graced the event. Shri R M Makwana, Centre Chairman, motivated the students with his address. An enlightening and informative talk on "Looking through Prism of Life: The Raman Events" was delivered by Shri Chintan Bhatt, Former Scientist Engineer, SAC/ISRO and Centre Past Chairman. Earlier Shri Urvil Suthar, Centre Hony Treasurer and Shri Vinaykumar, Centre EC Member, introduced the expert speaker & the theme of the day, respectively. Dr Mihir V Shah, Former Hony Secretary and HoD/EC, LDCE & Dr D J Shah, Director Technical Courses-SPU, Visnagar, introduced the Guest of Honour & Chief Guest, respectively. About 40 corporate members including invited guests participated in the event. Vote of thanks was proposed by **Shri Sanjeev Kulshrestha**, Centre Hony Secretary. Prof Sima Gonsai anchored the programme.
- International Women's Day was observed on 13<sup>th</sup> Mar 2021 on the campaign theme "Covid 19– Update and Present Scenario". Smt Smriti Dagur, Past President IETE, graced the day as Chief Guest. Dr Neha Sharma, Medical Officer- ISRO Clinic, Owner of Cardiodiagnostics, Bopal and Dr Jolly Dhar, Head, Microwave Sensors Receiver Division, MRSA, SAC/ISRO and FIETE; the speakers; Prof J V Dave and Shri Chintan Bhatt, Centre Past Chairmen, Prof (Dr) Nilesh N Kasat, Zonal Mentor (West) and Prof Harjinder Bhatia, Immdt Past Chairman, IETE Bengaluru Centre, all joined the program. Dr Neha Sharma shared her views on the theme topic, while Dr Jolly Dhar orated on "My Journey from Ground to Space" under the theme "Choose to Challenge". More than 60 corporate

members including invited guests participated in the event. Lady members of IETE & IEEE helped in the successful conduct of this event.

# **BANGALORE**

- Examinations for AMIETE & DIPIETE students were conducted during 1<sup>st</sup>-8<sup>th</sup> Oct 2020. Prof C Murali, Former Vice President, IETE, administered the examinations as the Superintendent of Examination (SoE).
- A **webinar** on "Digital Pedagogy and Holistic Online Education" was arranged on 3<sup>rd</sup> Oct 2020 in association with Visvesvaraya Technological University (VTU), Bangalore. Technical aspects and logistics were carried out by M/S Taurus Hard Soft Solutions Pvt Ltd, Bangalore.
- The Centre participated in virtual seminar on "Smart Manufacturing Summit" on 15<sup>th</sup> Oct 2020. **Shri C Satyanandan**, Centre Chairman represented IETE in the summit.
- The Mahanavami pooja was performed on 24th Oct 2020 by **Wg Cdr H R Parthasarathi (Retd)**, Past GC Member.
- A tableau course was started by **Dr Suresh Kumar**, Dir, CTO, Bangalore, on 26<sup>th</sup> Oct 2020.
- **Dr S G Shivaprasad Yadav**, Hony Secy conducted a course on MATLAB/SIMULINK on 1st Nov 2020.
- The Centre celebrated the 67th IETE Foundation Day virtually on 2<sup>nd</sup> Nov 2020. Dr S G Shivaprasad Yadav, Hony Secy, conveyed the welcome remarks. **Dr E Kavitha**, Jt Secretary read out the message of the President IETE, given for the day. The Chief Guest, Shri P Radhakrishna, Dir, LRDE/DRDO, Bangalore, was introduced by Dr C V Ravishankar, Vice-Chairman of the Centre. The IETE-IRSI (83) - 2020 Main Awardee, Shri G Viswam, Sc 'G', LRDE/DRDO, Bangalore and the IETE-IRSI (83)-2020 Young Scientist Awardees-namely, Shri Rahul Agarwal, LRDE/DRDO, Bangalore & Dr Raghavendra Kumar Choudhary, IIT Kharagpur, were conferred with the awards & citations. Shri M V Rajasekhar, R&D Director, Bharat Electronics Ltd., (BEL), Bangalore, was the Guest of Honour. IETE-N V Gadadhar Memorial Award-2020 was conferred jointly on Dr DG Rao, LRDE/ DRDO, Bangalore and Dr Bharat S Chaudhary, Pune, for their excellent research work. Shri C Satyanandan, Centre Chairman, in his address, congratulated the awardees. The IETE's Senior Fellow members, felicitated on the occasion

were: Shri R Lakshminarayana Rao (F016128L) and Shri R A Rahgavan (F120072L) were felicitated. The programme ended with the vote of thanks by Shri Ranjeet Kumar, Hony Treasurer.

- EMI/EMC online course was conducted for the executives of the Bharat Electronics Limited (BEL), Bangalore, during 19<sup>th</sup>-21<sup>st</sup> Nov 2020. **Dr D C Pande**, Zonal Mentor (South) & GC member was the Course Director.
- The Centre conducted Chartered Accountant (CA) examinations during 21<sup>st</sup> Nov-14<sup>th</sup> Dec 2020. **Shri C Satyanandan**, Centre Chairman and **Prof C Murali**, Former Vice President, IETE, administered the exams as Superintendents of Examination (SoE) while **Dr S G Shivaprasad Yadav**, Hony Secretary and **Shri Ranjeet Kumar**, Hony Treasurer, were the chief invigilators.
- An online **Microstrip Antenna course** was conducted for Bharat Electronics Limited (BEL), Bangalore executives during 25th-28th Nov 2020. **Dr S G Shivaprasad Yadav**, Hony Secy was the course director and it was also attended by DRDO, educational institutional and industries personnel.
- **Webinar** on "IoT, its applications and Smart Cities" was held on 27<sup>th</sup> Nov 2020 in association with Dept of CSE, Sambhram Institute of Technology, Bengaluru, with the resourse person **Prof Prakasha G**, Sri Venkateshwara College of Engineering (SVCE), Bengaluru. **Dr T John Peter**, HoD/CS&E, SaIT, Bengaluru, present, addressed the gathering.
- The course on "Advance Jamming Techniques" was conducted with the help of Cisco Webex tool for the executives of Bharat Electronics Limited, during 12<sup>th</sup>-14<sup>th</sup> Dec 2020. **Dr A K Singh**, Former Director, DLRL, Hyderabad, was the Course Director.
- The webinars were conducted at Dr T Thimaiah Institute of Technology (DrTTIT), Kolar Gold Fields, Karnataka on "Idea Pitching" for final year students & "CNC Machine and Control Systems" on 19<sup>th</sup> Dec 2020. Shri A Nehru Babu, Gen Manager, BEML Ltd, Bangalore, was the keynote speaker. Prof A Jenitha, Asstt Prof/ DrTTIT, coordinated while the programme was organized by Prof M Vijaya Bharathi, HoD/DrTTI.
- Prof C Murali, Former Vice President IETE, delivered an online talk on "Emerging Trends in Electronics & Communication for a better Tomorrow & Awareness"

- at Dept of ECE, Dayananda Sagar Academy of Technology and Management (DSATM), Bangalore, on 21st Dec 2020.
- **Shri V V Bhat**, IAS, Former Secretary, Govt of India, the Guest of Honour on the **Republic Day**, hoisted the National Flag at Centre premises on 26<sup>th</sup> Jan 2021. It was followed by recital of the National Anthem.
- IETE Students' Day on 1st Feb 2021 was celebrated online. Dr S G Shivaprasad Yadav, Hony Secy, welcomed the participants while Dr E Kavitha, Jt Hony Secy, read out the IETE President' message. The Centre Chairman introduced the Guest of Honour, Shri MK Krishna, an expert in banking sector, a social worker, a broadcaster and a motivational speaker. The speaker exhorted the students to cultivate the habit of social responsibility. The ISFs participated in conduct of student activities included: Dept of E&TE, Sir M Visvesvaraya Institute of Technology (Sir MVIT), Bangalore, by conducting a Quiz competition on "Emerging Trends in Technology; Dept of CSE, Sri Venkateshwara College of Engineering (SVCE), Bangalore organized an online "Technical Quiz"; Sambhram Institute of Technology (SIT), Bangalore conducted an essay writing competition on "Role of Technology in Covid-19 Situation" in English and Kannada; Dept of ECE, Dr T Thimmaiah Institute of Technology (DrTTIT), Kolar Gold Field, Karnataka, conducted three competitions namely - Singing, Mehandi and Pencil Sketching as cultural activities on 27th Jan 2021 as a part of IETE Students' Day celebrations. Prof Vijaya Bharathi, HoD/ECE, Shri Jesudas J and IETE team coordinated for various activities. Vote of thanks was proposed by Shri Ranjeet Kumar, Hony Treasurer.
- The Centre observed the International Women's Day on 9th Mar 2021. Dr YVS Lakshmi, C-DoT Bangalore, was the Chief Guest on the occasion while Ms Apurva Varma, Regional Manager, Arm University, the Guest of Honour. A motivational talk was presented by Ms Mridula, Sr Project Manager, Infosys, on the occasion. Dr Lakshmi gave a presentation on 'Current Trends in Wireless Technologies and Products'. She exhorted young women to excel in whatever they were doing. Ms Apurva spoke about her professional journey in the education management field, about her experience of teaching differently abled children and her work at Arm. She advised students to embrace challenges and try converting them into opportunities. Ms Mridula talked about her ups and downs in her

professional and personal life during her stay at USA and back in India. She advised young women to live in present and be connected to nature. **Shri Satyanandan C**, Centre Chairman, in his address, thanked all the women speakers at leadership position and appealed more women members to join IETE. He talked about the institution's endeavours of bringing awareness about technology especially amongst the disadvantaged women. A cultural program was conducted at the end of the event.

# **CHANDIGARH**

• IETE Students' Day was celebrated online in association with the Chandigarh Group of Colleges (CGC) Landran, Mohali, on 1st Feb 2021 on the theme "Understanding Engineering through Project Based Learning". Dr Ruchi Singla, Dean Research, CGC, Landran and EC member, welcomed the participants. Prof (Wg Cdr) P Prabhakar (Retd), Vice President IETE was the Chief Guest and Shri S C Jain, Centre Chairman, the Guest of Honour. Shri Ramandeep S Sidhu, Director Operations, and Shri Sandeep Sharma, Head Technology from AeroSphere Technologies, addressed the participants by sharing their wisdom. Vote of thanks was given by Shri D S Chhabra, Centre Hony Treasurer.

# **CHENNAI**

The Centre and ISF at Sri Venkateswara College of Engineering (SVCE), Chennai, jointly celebrated **IETE Foundation Day** on 2<sup>nd</sup> Nov 2020. **Dr S Ganesh Vaidyanathan**, Prof/Principal, SVCE, graced the occasion as the Chief Guest. **Shri Shubham Saraff**, TEDx, keynote speaker, held forth the history of pandemic and the transformation of the world post-pandemic.

# **DEHRADUN**

- The Centre organized an online talk on "Overview of Indian 5G Testbed" on 20<sup>th</sup> Nov 2020 at Dr Nagchaudhary Conference Hall (CERS), DEAL, Dehradun, by **Prof Radha Krishna Ganti**, IIT Madras, Chennai.
- Another online talk was on "An Introduction to Quantum Computing" from **Prof Sugata Gangopadhyay**, IIT Roorkee, UP, on 24<sup>th</sup> Feb 2021.

# **HYDERABAD**

• A number of **webinars** organized earlier under the Knowledge Sharing Sessions (KSSs) received overwhelming responses. The subsequent in series KSS-15 was on "Recent Research Trends in Data Science" held on 3<sup>rd</sup> Jan 2020 by the keynote speaker **Dr A V Krishna** Prasad, Assoc Prof/CSE, MVSR Engineering College, Hyderabad. The next KSS-16 was conducted on "Drones: Technology, Applications and Issues", by Ms Lakshmi, Scientist-F, DLRL, Chandrayangutta, Hyderabad, on 10th Jan 2021. Under KSS-17 the topic covered was "Usage of Technology for Social Challenges" on 14th Feb 2021 through online platform, by Ms Tuti Sandhya, Mahatma Gandhi National Council of Rural Education (MGNCRE). About 100 participants attended including Er K Gnaneshwar Rao, Centre Chairman, Er Nuli Namassivaya, Centre Hony Secretary, the EC members, the Governing Council members and the co-opted/special invitees. KSS-18 was conducted online on 21st Feb 2021 on "Introduction to R Programming" by Dr R Madana Mohana, Assoc Prof, Dept of CSE, Bharat Institute of Engineering and Technology, Ibrahimpatnam, Hyderabad (Telangana), in association with Navtej Technologies, Hyderabad. It saw good participation. The webinar under KSS-20 was on "Communication Technologies for IoT" on 21st Mar 2020. Dr Shatrughna Prasad Yadav, HoD/ECE, Guru Nanak Institutions Technical Campus, Hyderabad was the resource expert speaker. About 56 participants attended. The next KSS was on "Deep Learning Using Python" arranged on 4th Apr 2021 in online mode with the expert Shri GNSV Prasad, Sr Software Engineer, Voidmain Technologies, Hyderabad. The Centre Chairman, Hony Secretary, EC members, Co-opted, Special Invitees also attended. The latest KSS organized on 11 April 2021 was on "Artificial Intelligence and 5G" by Brig V D Abraham, SM (Retd), Past Governing Council Member, IETE. Er K Gnaneshwar Rao, Er Nuli Namassivaya, Centre Hony Secretary, Dr K Satha Ram Babu, Centre Vice-Chairman, and other members attended.

• The Short Term Training & Internship Program held online during 16<sup>th</sup>-31<sup>st</sup> Jan 2021 was on "Fundamentals of LabVIEW, MultiSim and Tinker CAD- Tools" with the resource persons Shri Panjala Rohith Goud, Sr Application Engr, Certified LabVIEW, Assoc Developer and Shri Sreeram Tharun, Appl Engr, Certified LabVIEW Assoc Developer. Er K Gnaneshwar Rao, Centre Chairman and Er Nuli Namassivaya, Hony Secy, graced the occasion.

- IETE Students' Day was celebrated with events of "Hardware Project Expo & Technical Cross Word Puzzle CAD" on 7<sup>th</sup> Feb 2021. Dr A Ashok, IAS, Former Commissioner, Former Collector, Director General MCR HRD, Telangana, was the Chief Guest and keynote speaker for the occasion.
- On 28th Feb 2021, National Science Day was celebrated wherein the Padma Shri Awardee Prof B L Deekshatulu, Distinguished Fellow IETE, was felicitated. An essay competition was arranged on the topic 'Future of STI: Impact on Education, Skills and Work'. Dr Dasarath Ram, Director, DRDL was the invited Chief Guest. The welcome address was given by Er K Gnaneshwar Rao, Centre Chairman. Er Nuli Namassivaya, Hony Secy, in his address talked about different phases of evolution of the Centre and expressed Centre's gratitude to Prof Deeksatulu for shaping up its growth all time along. Delivering the keynote address on 'Different Perspectives of Artificial Intelligence', Dr Bayva Yagnanarayana, INSA Senior Scientist, IIIT Hyderabad, highlighted various aspects of Artificial Intelligence (AI) and Machine Learning (ML), which the speaker said were in vogue even sixty years before. The connotations have been changed though, he added. Vote of thanks was by Dr K Seetha Ram Babu, Convenor and Vice-Chairman of the Centre.
- The Centre conducted online **webinar** session on 7<sup>th</sup> Mar 2021, wherein **Dr Frances Vaidhya**, President, Inner Wheel Club of Bombay Film City, spoke on "**Abla** to **Sabla**" on the eve of **women's day celebration**. **Er K Gnaneshwar Rao**, Centre Chairman, in his address mentioned about the importance of role of women in science, engineering and technology. **Er Nuli Namassivaya**, Hony Secy highlighted the activities of IETE Hyderabad Centre, in his talk. Vote of thanks was proposed by **Dr K Seetha Ram Babu**, Centre Vice-Chairman.
- A three-day **Boot Camp workshop** was conducted on "Internet of Things (IoT)" **during** 9<sup>th</sup>-11<sup>th</sup> Mar 2021. With the guest speakers **Ms Divya Nemuri**, Sr IoT engineer and **Shri Durga Prasad**, IoT & Robotics engineer. **Er Nuli Namassivaya**, Centre Hony Secretary, in his address highlighted about IETE and benefits of its membership. The theoretical sessions and hands-on training on IoT was arranged for about 17 participants.
- A two-day online workshop on "Data Science Using R" was conducted by Dr AV Krishna Prasad, Assoc Prof,

- CSE Dept, Maturi Venkata Subba Rao Engineering College (MVSREC), during 13<sup>th</sup>-14<sup>th</sup> Mar 2021. **Er K Gnaneshwar Rao**, Centre Chairman, **Er Nuli Namassivaya**, Centre Hony Secretary, EC, GC, Co-opted, Special invitees, and other members attended.
- Smt Geeta Varadan, Former Director, ADRIN & Programme Director, ISRO Hgrs, Bangalore, graced the event "International Women's Day" as the Chief Guest, organized by the Centre on 14th March 2021. Delivering her address, she underlined the importance of education in one's empowerment. She was of the view that women have come a long way in the field of engineering, which is traditionally meant for men. She advised those in profession to always keep a balance between career and family lives as it was essential for fulfilment and success. She shared her career experiences at ISRO and that of Dr A P J Abdul Kalam. The keynote speaker, Dr Sandhya V Kode, Chief Mentor & Founder Director, Enhance Edu, IIIT Hyderabad, spoke on "Empowering Yourself and Transforming Your Life+". Later an essay writing on "Women in Leadership: Achieving an equal future in a COVID-19 World" was arranged for the engg students. Sharing her life experiences with the participants, Dr Sandhya V Kode advised students to imbibe most of the practical knowledge for applying it later in real life, for one's empowerment. She advised to practice yoga and meditation for overcoming stress in life. She also emphasized on the concepts of learning, unlearning and re-learning for meaningful journey in life. Earlier Er K Gnaneshwar Rao, Centre Chairman and Er Nuli Namassivava, Centre Hony Secretary, also addressed the audience. Vote of thanks was proposed by Smt T Sandhya, Chairman, Women Empowerment Sub-Committee. The support extended by Shri A Sarveswar Rao, Co-opted Sub-Committee Member for co-sponsoring the event, was much appreciated. IETE Corporate members and students from various colleges attended.
- 19<sup>th</sup> Shri U V WARLU Memorial Lecture was organized online on 28<sup>th</sup> Mar 2021. Dr UPPU Ramachandraiah, Prof & Head, CENSE Research Centre, School of Electrical Sciences, Hindustan Institute of Technology and Science (HITS), Deemed University, Chennai, the keynote speaker, chose to speak on the topic, "Adaptive Control System for Wall Climbing ROBOTS". The lecture was attended by many IETE members.

# **KANPUR**

- The Centre jointly with IE (I) Regional Centre & IEEE, UP Section, celebrated the **Energy Conservation Day** on 15<sup>th</sup> Dec 2020 in online mode. The programme started with the welcome note from **Prof J Ram Kumar**, Chairman, IE (I) Kanpur Centre and Hony Treasurer, IETE Kanpur Centre. **Prof Narendra Kohli**, Chairman, IETE Kanpur Centre, introduced the theme speaker and the Chief Guest, **Er Ankit Yadav**, Dept of EE, IIT Kanpur, who expounded on the theme "**Dimensions of Energy Efficiency**". The other member present was **Er Prashant Kumar**, Hony Secy.
- The Centre with IE(I) Kanpur Regional Centre, IEEE, UP Section, MedTech, IIT Kanpur and Incubation Hub, HBTU, Kanpur, together celebrated IETE Students' Day on 7th Feb 2021. The speakers addressed the participants included: Prof Narendra Kohli, Centre Chairman, Prof J Ramkumar, Hony Treasurer. Dr Manoj Kumar, Dir, System Research and Applications ST Microelectronics, India, the Chief Guest & the keynote speaker, spoke on "Internet of Things (IoT) and Healthcare". Vote of thanks was proposed by Er Prashant Kumar, Hony Secy.

# **KOCHI**

IETE Students' Day was celebrated by IETE Kochi Centre on 5th Feb 2021 in association with KMEA Engineering College (KMEAEC), Edathala, Kerala, via online. Dr M V Rajesh, Vice Chairman, IETE Kochi Centre, delivered the welcome remarks for the programme, which was inaugurated by Shri C Krishna Kumar, Centre Chairman. The 'Best ISF Student Member Award' for the period 2020-21 was bagged by Shri Ajmal CR, IES College of Engineering (IESCE), Chittilapilly. Shri M N Narayanan, Centre Vice Chairman, presented the awards to the winners. Afterwards, the competitions viz., Solo song, Quiz and Extempore were held. The winners declared were Jesna K J, KMEAEC (1st Prize) and Jubairia, KMEAEC(2nd Prize), for Solo Song; Aadhil Thanzeer, KMEAEC(1st Prize), Dhana Murali, IESEC(2<sup>nd</sup> Prize) for Quiz and M J Devikrishna, IESCE(1st Prize), K N Nadha Nazreen, KMEAEC (2nd Prize) for Extempore. The results were announced by Ms Smitha K M, ISF Co-ordinator, KMEAEC and Centre EC Member. Vote of thanks was proposed by Ms Jumana V I, ISF Secretary, KMEAEC.

# **KOLHAPUR**

**IETE Students' Day** celebration on 2<sup>nd</sup> Feb 2021 started with a welcome address by **Mrs Supriya P Kurlekar**, Vice-Principal, Sharad Institute of Technology College of Engineering (SITCE), Kohlapur. The overview of the programme was given by **Dr Sharad T Jadhav**, HoD/E&TC, SITCE. **Shri Khandare V V**, ISF Co-ordinator, read out the message from President IETE for the day. **Ms Tanzeela Patel**, the resource person for the first day of a two-day workshop organized for the students, deliberated on "**Advanced Microcontroller Using MSP430**". Next day the session was handled by **Shri Onkar Deshpande**. **Ms Pooja Patil** moderated for the workshop. **Shri Khandare VV**, IETE Coordinator, proposed vote of thanks on completion of the training programme.

## **KOZHIKODE**

- An online workshop on Fundamentals of Engineering Mathematics was organized by Regional Science Centre & Planetarium, Calicut, in collaboration with the IETE Kozhikode Sub Centre, during 18th-23rd Jan 2021. It was inaugurated by Prof Pratap G Nair, Sub-Centre Immdt Past Chairman. Addressing the gathering, he stressed the importance of mathematics as the basic and fundamental framework needed for all engineering disciplines. He recommended that before pursuing engineering courses, students should have a solid mathematical foundation. Dr Sabiq P V, Sub-Centre Chairman presided over the function. Shri Hemand E P, Sub-Centre Vice Chairman, was also present. The resource persons included: Shri Jayant Ganguly, Sr Technical Officer, Regional Science Centre & Planetarium, Kozhikode; Mrs Jayashree A, Asstt Prof, KMCT College of Engg for Women, Kozhikode and Dr Mini Tom, Professor, SCMS School of Engineering and Technology, Kochi.
- The Sub-Centre celebrated **IETE Students' Day** at KMCT College of Engineering on 1st Feb 2021 and the event was inaugurated by **Prof (Dr) Ranjith C**, Principal, KMCT College of Engineering. The welcome address was delivered by **Shri Hemand E P**, Vice-Chairman. The President IETE message given for the day was read out by **Dr Sabiq P V**, Sub-Centre Chairman on the occasion. A quiz competition was arranged for the students. Ms Anju C R, Asst Prof, KMCT College of Engineering, Kozhikode, gave the vote of thanks at the end.

- A webinar on "Technology Trends in 2021" was arranged by the Sub-Centre on 26<sup>th</sup> Feb 2021. **Prof Pratap G Nair**, Immdt Past Chairman, Sub-Centre graced the webinar as the Chief Guest. **Dr Sabiq P V**, Sub-Centre Chairman, extended the welcome address. **Shri Hemand E P**, Sub-Centre Vice-Chairman moderated the programme. The notables present were **-Shri C K Haridas**, Former Governing Council member and **Shri Swaradh P**, Sub-Centre, Hony Treasurer.
- A webinar on "Solar Photovoltaic System" was organized by IETE Kozhikode Sub-Centre on 30<sup>th</sup> Mar 2021. It was conducted by **Prof (Dr) P Janardhanan**, Prof & Head, Department of Electrical Engineering, KMCT College of Engineering. The speaker took on to explain different types/ sources of energy, photovoltaic system, solar cells, solar modules, arrays and panels and types of solar electric systems. A simplified diagram of PV systems and a typical solar PV system were explained along with applications of PV system. Shri Swaradh P moderated the event. Dr Sabiq P V, Chairman IETE Kozhikode Subsection, earlier delivered the welcome address.

# **MHOW**

• The Sub-Centre organized an online lecture on the occasion of **National Science Day** on the topic "**Antenna and RF Challenges in 5G"** on 2<sup>nd</sup> Mar 2021. It was delivered by **Prof (Dr) Patnam Hanumantha Rao**, Scientist and Program Director MMwave Centre and Head Communication and Antenna Division, SAMEER - Centre of Electromagnetics, Chennai at MCTE, Mhow.

# **MUMBAI**

• 67th IETE Foundation Day was celebrated on 6th Nov 2020 by the Centre, wherein the Chief Guest, Dr Vinit Kotak, Vice-Principal, Shah Anchor College of Engineering, Chembur, spoke on "Emerging Technologies for Effective Management in the Pandemic". The notables present on the occasion were: Prof (Dr) J W Bakal, President IETE; Shri S R Aggarwal, Past Secretary General IETE; Ms Poonam Chakraborty; Dr Dhananjay Dakhane; Mr Awab Fakih; Dr Uttara Gogate; Shri Ranjan Bala Jain; Shri VK Jain; Shri N S Kaintura; Shri Sham Kamble; Prof (Dr) Nilesh N Kasat, Zonal Mentor (West) & GC member; Ms Shaista Khanam; Shri Akash Kotak; Shri Vinit Kotak; Prof (Dr) Ashwini Kunte, GC member; Ms Smita Lonkar, Centre Hony Treasurer; Shri Sivaram Reddy

- Neeli; Shri Kartik Parikh; Dr Bhavesh Patel; Shri Mukesh Patil; Shri Sanjay Ambadas Patil; Dr Baban U Rindhe; Ms Madhuri Rodge; Dr Rajeshree Rokade; Shri Sadasivam S; Dr Mansi Subhedar; Vinutha TP; Shri Parag Walinjkar, Centre Chairman & Ms Suvarna Bhise, Hony Secy.
- **Prof (Dr) J W Bakal**, President, IETE was the Chief Guest for the 10th Dr PB Parikh's Endowment Lecture held at the Centre on 29th Jan 2021. Shri Parag Walinjkar, Centre Chairman welcomed the guests that included: Dr S Pal, Past President IETE; Prof (Dr) K T V Reddy, Immdt Past President IETE; Lt Gen (Dr) A K S Chandele, PVSM, AVSM (Retd), Immdt Past President IETE; Prof (Wg Cdr) P Prabhakar (Retd), Vice President IETE; Dr Vimal Wakhlu; Dr V D Abraham, Former GC Member; Shri S R Agarwal, Former Secy General; Dr Ramesh G, GC member IETE; Dr Kishore Kumar; Prof (Dr) Ashwini Kunte, GC member; Dr V K Jain and Shri G S Tuteja. Delivering his address, Shri Kartik Parikh, son of Dr P B Parikh, emphasized on the need for having synergy & cooperation between the institutes and industries. Ms Smita Lonkar introduced the key note speaker, Dr M H Kori, Consultant, Telecommunications Standards Development Society (TSDSI). In his address the speaker covered various facets on enhanced Mobile Broadband (eMBB), massive Machine Type Communication (mMTC) & ultra-Reliable & Low Latency Communications (uRLLC). Shri Sham **Kamble**, coordinated for the online program. Vote of thanks was by Ms Suvarna Bhise, Hony Secretary.
- On 25<sup>th</sup> Feb 2021 the Centre organized an educative online webinar on "Cyber Security Landscape - Tools, Technologies and Frameworks to defend against Threats" for IETE Students' Day. It was in association with the Dept of E&T, ISF of Velalar College of Engineering and Technology (VCET), Mumbai. Shri Anirudh Iyer, Cyber Security Solutions Architect of CISCO, Canada, the keynote speaker, gave impressive insights on the subject. He spoke on challenges being faced by industries in today's world and shared simple solutions. He also recommended some futuristic approaches for cyber security and career opportunities in the domain for the young undergrads. The notables present during inaugural session were: Shri Parag Walinjkar, Centre Chairman; Ms Smita Lonkar, Hony Treasure, IETE Mumbai Centre and Prof (Dr) Vikas Gupta, HoD/EXTC, VCET. The message from President IETE

was read out by Ms Smita Lonkar. Prof (Dr) Gupta gave a brief on VCET/ISF activities and explained its importance to students. Shri Walinjkar also spoke on the benefits of becoming an IETE member. The webinar concluded with a long Q&A session and vote of thanks given by Ms Shaista Khanam, VCET-ISF-in- charge.

- On 8th Mar 2021 the Centre celebrated International Women's Day (IWD)-2021, under women empowerment program and organized a webinar on "Use of Radioisotopes in Health Care". As always said that women's health is of utmost importance for the family, thus to highlight the crucial theme and to understand current techniques used in diagnosis and treatment in the medicinal fields, like nuclear medicine to fight severe diseases such as cancer, the webinar was arranged. Dignitaries gracing the occasion were: Prof (Dr) J W Bakal, President IETE, Chief Guest; Dr Vrinda PC, BRIT-DAE, keynote speaker; Prof (Dr) KTV Reddy, Immdt Past President, IETE, Guest of Honour; Dr Ashwini Kunte, Chairperson WEEC, IETE; Prof (Wg Cdr) P Prabhakar (Retd), Vice-President IETE, Prof (Dr) Nilesh N Kasat, Zonal Mentor (W) and the Governing Council members, namely -Shri G Ramesh, Gp Capt R C Goyal, VSM (Retd), Shri Kartik Parikh and Shri Parag Walinjkar, Chairman, IETE Mumbai Centre, were also present online. The welcome remarks were delivered by Ms Poonam Chakraborty, followed by the addresses of Shri Parag Walinjkar, Dr Ashwini Kunte; Prof (Dr) K T V Reddy and Prof (Dr) J W Bakal. Dr Vrinda giving an overview of the theme and explained the nuclear medicines, the techniques used for disease detection, various modalities and advantage, management of various diseases and in particular types of cancer. She highlighted the importance of early detections in case of cancer, which she said was possible only by regular health checkups. She informed about nuclear medicines available in India from BRIT/DAE that were much cheaper than imported ones. The webinar concluded with a Q&A session. Shri Sham Kamble, Mr Atul Wad and Shri N K Karnani also spoke on the women's empowerments /achievements. Shri Kartik Parikh extended his technical support by giving zoom credentials for the meeting. The programme concluded with a vote of thanks.
- ISF at Thadomal Shahani Engineering College (TSEC), Mumbai, conducted a programme by the name Oscillation during Mar 6–7, 2021 via online mode.

Shri Laksh Jethani, ISF Chairperson, TSEC, welcomed all participants and guests. Dr Tanuja Sarode, Branch Counsellor/TSEC commended the committee for their continuous efforts and spoke on IETE's activities. Dr G T Thampi, Principal/TSEC, congratulating the committee and wishing good luck to all the participants, declared the fest open. Others dignitaries present were: Dr Maniroja M Edinburgh, Dean of Student Affairs of TSEC and Ms Monica Tolani, the Trainings and Placement Officer. The 1st day began with an introductory seminar on the topic "Head start to Competitive Coding" arranged in collaboration with Codechef. It was followed by a workshop session on "UI/ UX using Figma Software". The participants were told about its basic tools and then asked to make their own front end in a competition. The 2<sup>nd</sup> day had more in store for the participants. It started with a "Python workshop", which was also in collaboration with Codechef. In succession another workshop was conducted on "Spark AR"- a technology released by Facebook. The event was organized on a large scale and saw participants from colleges across Mumbai and students of I/II/III year from various branches of engineering. About 800 participants attended the event from across the country.

# **NAGPUR**

- The Centre organized online **Gate Mock Test Series** for engineering and polytechnic students during 26<sup>th</sup>-31<sup>st</sup> Oct 2020.
- Shri Angad Kulkarni, Founder & Director Viprush Technologies Pvt Ltd, Nagpur, was the Chief Guest for 67th IETE Foundation Day, celebrated on the theme, "Emerging Technologies for Effective Management of the Pandemic" on 2<sup>nd</sup> Nov 2020. **Ms Devarthi Mahajan**, III year student/ Ramdeobaba College of Engineering and Management, gave a presentation on "Artificial Intelligence" and Shri Ankit Kriti, Palloti College of Engineering, made presentation on the subjects of IoT and ML. Dr Sanjay Badjate, Centre Chairman, presided over the programme. Smt Suraksha Gorowara Memorial Essay competition was arranged on this occasion, coordinated by Prof Madhuri Bawane. Dr Suresh Rangankar, Centre Hony Secy; Prof Kharpate, Centre Hony Treasurer; Dr B P Joshi, Immdt Centre Past Chairman; Dr P D Khandait; Dr Salim Chavan; Dr Vijay Mankar were the eminent members present during the event. Vote of thanks was proposed by Shri A R Sawatkar, Past Chairman.

- A seminar on "Awareness of Professional Certified Examination & its importance in Career" was organized on 5th Dec 2020 in association with Softsense Technoserve India Pvt Ltd, Nagpur. It was addressed by Shri Harshad Sangle, Regional Director, Certiport Examinations, Pune. Earlier, Dr Vishal Lichade, MD, Softsense Technoserve India Pvt Ltd, delivered the welcome address. The overview of the programme was given by Dr Sanjay Badjate, Centre Chairman. Vote of thanks was by Dr Suresh Rangankar, Hony Secy and the online support by Prof Harshwardhan Kharpate, Centre Hony Treasurer.
- IETE Students' Day was celebrated on 6th Feb 2021 by arranging a national level Project Idea Presentation Competition on "Atma Nirbhar Bharat". About 20 plus ideas (entries) were received from all over India with participation of around 35 students. Shri Juber Sheikh, Brose India Pvt. Ltd. Pune, judged the entries. Two talks were delivered on the occasion by the experts namely- Ms Avanti Bhandarkar, Graduate Research Assistant, University of Florida, USA and Shri Aditya Kaskhedikar, Sr Program Manager, Microsoft, Bangalore. Dr M M Khanapurkar; Dr Atul R Deshmukh and Prof Kamlesh A Kalbande, Dept of E& TE, G H Raisoni College of Engineering, Nagpur, assisted in coordinating the programme. Other notables present were: Dr Sanjay Badjate, Centre Chairman, Dr Rangankar, Hony Secy and Dr Salim Chauhan, EC member. The vote of thanks was proposed by Prof Milind Khanapurkar, Coordinator and Centre EC member.
- On the occasion of **International Women's Day**, IETE Nagpur Centre organized a webinar on "Cyber Security for Women" in association with the ISF of Priyadarshini Institute of Engineering & Technology (PIET), Nagpur, on 8th Mar 2021. Dr Ashok Bagul, Sr Inspector, Cyber Police Station, Nagpur City, the guest speaker, was introduced to the audience by Prof Sunita Parihar, ISF Coordinator. Dr Sanjay Badjate, Centre Chairman, delivering the introductory speech, explained the significance of the topic in the digital era wherein most of the crimes were happening by improper handling of social media, online transactions etc. He said that the women become first victims of cyber crime in majority of cases and then accentuated the role of police personnel in protecting the human rights. He gave practical examples for cyber crime and the role played by cyber cells for one's protection and safety. He focused on topics like

phishing attack, credit card hacking, ransomware attack, smartphone hacking and provided some protective tips. The program was coordinated by **Dr S Chaturvedi**, HoD/ E&C Engg, PIET Nagpur. **Dr Salim Chavan**, Vice-Chairman IETE Nagpur and **Er Ajay Sawatkar**, Past President IETE Nagpur, worked together towards organizing the event. More than 100 students and faculty members from various institutions participated. Vote of thanks was proposed by Dr Soni Chaturvedi, the program coordinator.

# **PALAKKAD**

- An online workshop on "Basics of Embedded System through Arduino" was organized on the IETE Students' Day, jointly by IETE Palakkad Centre and the ISF at Jyothy Engg College, Cheruthurithy, Palakkad, during 29<sup>th</sup> Jan-1<sup>st</sup> Feb 2021. Dr V Devi, Centre Chairperson, inaugurated the workshop. The resource person was Shri P Suresh, Hony Treasurer, of the Centre. Shri Beji K Mathew, Hony Secy, presented the welcome address. Shri C K Haridas, DFIETE, and the past GC Member, read out the message from President IETE, given for the day. Prof C Pradip and Ms Bindhu K Rajan, ISF Coordinator, delivered the felicitation speeches. Vote of thanks was by Ms Ponmani Raj, AP/ECE.
- Online Faculty Development Program on "Internet of Things", sponsored under AICTE Training and Learning, was held during 11<sup>th</sup>-15<sup>th</sup> Jan 2021 in association with Dept of CS/School of Physical Sciences, Central University of Kerala. Shri P Suresh, Centre Hony Treasurer & Centre Manager was the resource person. Prof H Venkateshwarlu, Vice-Chancellor, Central Univ of Kerala, Shri Hari Babu, Assoc Director, C-DAC, Bangaluru and Dr R Rajesh, HoD/CS, Central Univ of Kerala, Kerala, graced the online programme with his presence.
- Smt T Indira, Former Principal District Judge, was the Chief Guest for the webinar organized on "Women Empowerment Program" by the Centre on the International Women's Day on 8<sup>th</sup> Mar 2021. Shri Beji K Mathew, Centre Hony Secretary, delivered the welcome remarks. Dr V Devi, Centre Chairperson & Principal, Royal College of Engineering & Technology, Thrissur, presided over the programme. Shri C K Haridas, Distinguished Fellow & Founder Chairman of the Centre, in his address said that the occasion was also being utilized to felicitate the women achievers. He congratulated Prof N Leena, NSS

College of Engineering, Palakkad & Centre EC member for her successfully obtaining the Doctorate degree. He also applauded Dr V Devi for her leadership capacity and efforts in obtaining the national accreditation for Royal College of Engineering & Technology, Palakkad, along with her colleagues. **Dr K Geetha**, Immdt Past Chairperson and Principal of Al - Ameen Engineering College, Palakkad, **Dr C Pradip**, Assoc Prof, NSSCE, were also present. **Smt T Indira** addressed the participants and highlighted the laws and enactments that were available for women safety. **Shri P Suresh**, Hony Treasurer hosted the program and proposed vote of the thanks at the end.

#### **PUNE**

- ISF at Dept of E&TC, Bharati Vidyapeeth's College of Engineering for Women (BVCOEW), Pune, celebrated the International Women's Day online on 8th Mar 2021 in association with IETE Pune Centre. The guest speaker invited was Dr Haider Yasmeen, Professor, Management Studies at BSA Crescent Institute of Science and Technology, Chennai; Founding Director, Centre for Leadership and Former HoD. The welcome address was delivered by Prof K D Mahajan on the occasion. Students later recited the saraswati vandana and performed some dance sequences. Prof (Dr) S S Chorage, EC member & ISF, Pune; Dr S R Patil, Principal, BVCOEW, Pune and Dr R D Kharadkar, Chairman IETE Pune Centre, addressed the students. The address by the guest speaker was on "Woman and her position in Professional and Personal Life". Dr P B Mane, Hony Treasurer IETE Pune and Dr V V Shete, Hony Secretary, IETE Pune Centre were also present. Vote of thanks was by Dr S L Kore, ISF coordinator, BVCOEW, Pune.
- The Centre and Marathi Vigyan Parishad, Amateur Radio License Holders, Muktangan Science Exploratory Centre, together organized "World Radio Day" on 13<sup>th</sup> Feb 2021. On this occasion the vintage radio display was arranged by Shri Shripad Kulkarni. Technical lectures and a quiz competition on the radio were also arranged on this day. Dr Chitrarekha Kulkarni, Dy Director, All India Radio, the Chief Guest gave the presentation on AIR's New Broadcasting Technology "DRM". The other speakers/topics on the occasion were: Shri HAM Vilas Rabde, Pune; Shri Vishwas Kale, who spoke on "Radio: Yesterday, Today and Tomorrow"; Dr Vishwad Udipkar, spoke on "Design and Development of SDR Radio" and

**Shri Rajendra Kumar Saraf**, President, Marathi Vigyan Parishad, talked on "My Hobby".

• IETE Pune Centre and Pune Hams together celebrated the "Science Day" by participating in ARAI Hill Topping & National Field Day on 27th and 28th February, 2021 on Vetal Tekadi. The Vetal Hill is 2600 feet above the sea level and the highest point in the rocky region of Pune. The Hams and SWLs did few experiments with all kinds of radio communication modes using G5RV and End Fed Antennas for HF and Diamond X30 for VHF & UHF. The contest started at 9:00 am. on Saturday, February 27th, 2021, and continued uninterrupted for 33 hours, ending on Sunday evening by 6:00 pm. There were 48 such teams operating from different regions of the country. The importance of Ham Radio communication whenever emergency arises, was underlined. It was informed that Hams always practiced on such occasions and kept their skills intact. In an informal meeting on Saturday 27th February 2021, Shri Umesh Zhirpe of Giripremi, Everest winner, Shri Ekbote of Fire Brigade and Ms Sujata Kodag of NGO ELF Pune, shared their experiences on the importance of Radio Communication in their respective fields. Being a full moon day more than 50 participants including children watched the craters of the Moon through the VU3OUM's6" telescope (Newtonian Star Tracker) and gained some interesting insights about the night sky in the Star Party. Pune Hams made a good score on HF as 40 Meter band conditions were favourable. During night FT8 mode made a lot of DX contacts on Icom IC7300.

# **RAJKOT**

- **Dr Siddharth Joshi**, AP/Dept of EE, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, was the keynote speaker at the **IETE Students' Day** programme organized on 2<sup>nd</sup> Feb 2021. His talk was centered around the introduction and sensitization session on "Climate Change and Renewable Energy Technologies". In the beginning, **Prof (Dr) Atul M Gonsai**, Centre Chairman welcomed all. **Er Mohit Parbat**, EC Member, readout the President IETE message given for the day. Vote of thanks was proposed by **Dr Divyesh Keraliya**, Hony Treasurer.
- A workshop-cum-expert talk series was organized on the occasion of International Women's Day, observed on 8<sup>th</sup> March 2021. The topics covered in various sessions were: Making Life Healthy, Naturopathy, and Advantages of Panchkarma, Making of different homemade Ayurvedic

medicines, useful in current pandemic (COVID-19) & Choose to Challenge. Dr Manishben Pandya, MD Naturopathy Suzok and a yoga teacher, the Chief Guest on the occasion, talked about the usefulness of Naturopathy for women's day to day life. Other four expert speakers with their themes on the occasion included: Dr Ashwini Joshi, Centre EC member, on "Choose to Challenge" and later recited her own poem that was composed for the day; Prof (Dr) Umesh Pandya, MD/Head of Rasashastra, R K University, Rajkot, on "How to make healthy your Life Period"; Dr Shivkumar Pandya (BHMS), spoke on "Advantages of Panchkarma" and Ms Urmi Pandya, demonstrated the concoction of some ayurvedic medicine (Trifala, Ayurvedic Seasonal Chavanprash etc) useful for COVID-19 pandemic and in day to day lives. Natural Ayurvedic healthy tonic/drink was served to participants and members. The audience had open discussion on topics that made the session very useful and interesting. Earlier, Prof (Dr) Atul M Gonsai, Centre Chairman, delivered the welcome address. 32 women participated in this workshop. Vote of thanks proposed by Dr Divyesh Keraliya, Centre Hony Treasurer.

# **SIVAKASI**

- The Centre organized a lecture-cum-group discussion on Computing Facilities, at Dept of ECE, MepcoSchlenk Engineering College (MSEC), Sivakasi under 2<sup>nd</sup> Techno Blaze (2020-21) on 12<sup>th</sup> Oct 2020. Dr S Syed Ameer Abbas, Centre Chairman, presided over the programme. Dr W Sylvia Lilly Jebarani, Centre Hony Secretary introduced the speaker Mrs V Sathananthavathi, AP/ECE, MSEC, Sivakasi, who spoke on 'Retinal Image Processing as a Diagnostic Tool'. Dr R ShanthaSelva Kumari, Centre Past Chairperson, interacted with the resource person, Dr S Selva Nithyanandhan. Mrs V Sathananthavathi, was felicitated by Dr S Syed Ameer Abbas. Session was concluded with vote of thanks by Dr R Ahila Priyadharshini, Hony Treasurer.
- **Dr K Gopalakrishnan,** AP/ECE, MSEC, Sivakasi, was keynote speaker at the **4**<sup>th</sup> **Techno Blaze** held on 12<sup>th</sup> Jan 2021. The speaker elaborated his talk on '**Texture Image Classification by Multi-resolution Transform**' and later was felicitated by the Centre Chairman.
- **Dr Neethu Anna Sabu,** AP, Dept of ECE, MSEC, Sivakasi, was the keynote speaker at **5**<sup>th</sup> **Techno Blaze** held

on 8<sup>th</sup> Feb 2021. The topic for his talk was 'Low Power VLSI Design for Digital CMOS Circuits'. Dr Sabu was felicitated by Dr S Syed Ameer Abbas.

# **VADODARA**

- IETE Students' Day 2020 celebrations at the Centre witnessed Shri Hiren Jethwa, Founder of Embesys Systems, Vadodara, as its Chief Guest on 1st Feb 2021. Shri Jethwa chose to speak on the topic "Interfacing of Smart Sensors". Earlier, Dr Sorum Kotia, Centre Hony Secy, delivered the welcome remarks. Shri Yahspal Goyal, Centre Vice Chairman, read out the message given from President IETE for the day. Dr Dharmishtha Vishwakarma, supported by coordinating the programme. ISF Coordinators Shri Himanshu Patel, Charusat University and Dr Sonal Rane, ITM Vocational University, also joined in. Vote of thanks was by Dr Dharmishtha Vishwakarma.
- The Centre started a webinar series- "Let's Know Our Institutions. So far, 'The Corps of Electronics and Mechanical Engineers' (EME), 'Indian Space Research Organization' (ISRO) and National Informatics Centre (NIC) had been covered under the series. During the 4th session of the webinar series arranged on 20th Feb 2021, Shri Yashpal Goyal, Centre Vice Chairman welcomed the keynote speaker, Shri G S Gupta, Director, Directorate of Personnel, DRDO, Delhi, gave a brief introduction of the organization "Defence Research and Development Organization (DRDO)". Shri Gupta talked about the structure, hierarchy and personnel aspects of DRDO at length. Prof (Dr) JW Bakal, President IETE and Prof (Dr) Nilesh N Kasat, Mentor (West Zone) were also present during the function. Vote of thanks was by Dr Sorum Kotia, Hony Secretary.

# **YAVATMAL**

- An online workshop on "Industrial Automation-PLC & SCADA" was arranged during 7th-8th Nov 2020. Shri Sarang Thakare and Shri Pranav Mehar of M/S Prolific Systems & Technologies Pvt. Ltd, Nagpur, were the resource person for the workshop.
- The Sub-Centre and IETE Amravati Centre jointly celebrated **IETE Foundation Day** on 29<sup>th</sup> Nov 2020. **Shri G R Kulkarni**, Director, Samsung R&D, Bangalore, the Chief Guest, spoke on 'Emerging Technology for Effective Management of the Pandemic'.

# **IETE Organizational Member Activities**

The IETE Organizational Member at Dept of EE, VVP Engineering College (VVPEC), Rajkot (G00374), organized an online Faculty Development Program (FDP) on the topic "Renewable Sources based Distributed Power Generation, Applications and Control including Energy Storage Devices" for enhancement of knowledge of faculty members for their contribution towards development of society during Dec 7th-12th, 2020. Renowned persons and academicians from foreign Universities and premier institutes like IITs, NITs, IETE, Gujarat Technological

University (GTU) affiliated institutes and industrial experts, joined the programme as resource persons. It was sponsored jointly by AICTE-GTU.

The **Dept of CSE**, **VVP Engineering College (VVPEC)**, **Rajkot**, organized another online national level short term training program for faculty members and students on "**Cyber Security and Block Chain Technologies**" during 14<sup>th</sup>-19<sup>th</sup> Dec 2020. It was sponsored by Gujarat Council on Science and Technology (GUJCOST).

# **IETE Students' Forum Activities**

- ISF at Sanjivani College of Engineering (SCOE), Kopargaon, Maharashtra, conducted a seminar on "Future scope of Electronics and Telecommunications with practical approach" on Jan 18, 2020 in association with IETE Pune & Nashik Centre. Shri Rahul Gaikwad, MD, Electron Gyratron R&D India Pvt Ltd, Nashik was the Chief Guest. In his eloquent address to the students and faculty, he covered a wide range of topics, which included importance of higher studies at abroad; different types of industries TCS, HCL, Honeywell and changing technologies, skill development and so on. He shared examples of innovations in the field of communication, technologies etc. by sharing some of the product development flow details, IC design flow, R&D organisation and path towards it. The speaker shared his work experience towards the betterment of future of students; importance of electronics and telecommunications in every sector of life. While interacting he shared his ideas and solution related to career objectives and goal setting with the students and the requisite skills by the industry in the field of hardware or software industries. Others present were: Shri Avinash Gawali, Co-Founder Earth solution, Pune; Shri Manas Naik, Founder & Director, Earth Solutions, Pune, Dr D N Kyatanawar, Director, SCOE and Dr B S Agarkar, HoD, E&T/SCOE.
- ISF at Srinivasa Institute of Engineering & Technology (SIET), EG Dist (AP), organized a national level students' technical symposium "Aavishkar" during Mar 6-7, 2020, with the aim to provide a common platform to the student researchers and scholars for sharing views, knowledge and achievements in the field of engineering. SIET strives to impart quality engineering education to young aspirants and bringing benefits of the technological innovations through research to the people especially in rural areas. Other events conducted on the occasion were Technical paper presentation, Poster

- making, Project Expo, Innovative ideas, JAM, Technical Quiz, Short Film Making, Theme Art, Circuit Designing, Treasure Hunt *etc*.
- ISF at Dept of ECE, Nandha Engineering College (NEC), Erode, (TN), organized an International webinar on May 29, 2020, wherein Dr S Kavitha, Prof and Dean/ECE, NEC welcomed the gathering. Prof S Brindha, ASP/ECE organized the webinar. Shri Om Ganesan, Dir, Architecture Company, American Express, Phoenix, Arizona, USA, delivered a talk on "Insight into different modes of software". Prof R Murugasami, ASP/ECE & ISF Coordinator, staff and students of ECE, attended the programme. The ISF in association with IETE Erode Centre organized a motivational seminar on Jul 5, 2020 with the assistance of Prof R Thiruneelagandan, HoD/ Physics and Prof G Rathnasabapathy, AP/ECE. Shri Ponkashmir John, Technical Consultant, PWC-US, the resource person, delivered a session on "Future Forward". An academic webinar was organized on Jul 11, 2020 by the ISF. Shri Maruthamuthu, Technical Head (e-Learning), PANTECH Solutions, Coimbatore, delivered an address on "Explore what's next in deep learning". Others present on the occasion were: Dr S Kavitha, Prof and Dean/ECE, NEC; Prof (Dr) J Sharmilee, Prof P Premkumar, AP/ECE, Prof R Murugasami, ASP/ECE & ISF Coordinator, staff and students of ECE. Another International webinar was by Shri Thirumalraj, Founder of QIIT, Trichy, on "Advanced Programming in Python" organized during Jul 19-26, 2020, attended by many. The webinar organized witnessed the opening welcome address by Dr S Kavitha, Prof and Dean/ECE, NEC. Prof G Rathnasabapathy, AP/ECE and Prof D Arulanandham, AP/ ECE, organized this webinar. Dr Gururaj, Assoc Prof/CSE, Vinayaga College of Engineering, Mysuru, spoke on "Privacy and Security Issues in IOT Environment". A motivational session was organized by the ISF exclusively for girl's students on Oct 14, 2020. Mrs

Prasannna Moses, Transformation Coach, Evannovations, Bengaluru, the keynote speaker selected the topic "Reasons or emotions – Who make the decision for you", to speak. During the inaugural function of eZEALOTS 2021, organized in association with IETE Erode Centre, for 2020-2021 on Feb 5, 2021, Dr S Natarajan, Prof, Veltech Rangarajan Dr Saguntala R&D Institute of Science, Chennai, the invited guest, delivered a keynote address on "Electronic Product Design". Prof T Jayachandran, AP/ECE, organized the event. Others attendees were: Prof R Murugasami, ASP/ECE & ISF Coordinator, staff members and students of ECE. In an industrial seminar, held on Mar 3, 2021, Shri V Sasikumar, MD, MIKROSUN Technology, and Shri V Arunkumar, Manager, MIKROSUN Technology, Salem, conducted the session on "Embedded Systems in Industrial Automation". Shri T Jayachandran, AP/ECE, Shri G Rathnasabapathy, AP/ECE and Shri D Arulanandham AP/ECE organized the seminar. The ISF co-ordinator along with III year/ECE students attended the session.

ISF at Dept of ECE, Adamas University, Kolkata (AU), West Bengal, conducted an online webinar on "Industry Evolution, Fundamentals of Container/Kubernetes & Associated Security" on Jun 3, 2020 through zoom. Shri Mandeep Singh, Tech Consultant, Digital Native Vertical, Palo Alto Networks, spoke on the software development cycle, virtual server, cloud, docker, security of dockers and container/ kubernetes etc. About 88 participants attended from various academic institutes and industries. The outcome of the seminar provided the students' members with a novel learning experience. Another webinar on "What role will you play in the 5G enabled future world?" was arranged on Jun 9, 2020, delivered by Shri Indrajit Sanyal, Head of Service Delivery Unit Cloud & NFV Infrastructure, Business Unit Digital Services, Ericsson. In his address he covered the topics like - 5G and its implementation throughout the globe, the spectrum for 5G, massive MIMO, enabling technologies for 5G and a few real-life applications of the 5G technology. The ISF students had an opportunity to gain from the industry speaker. The interactions provided them an opportunity to understand the needs of the industries and understanding the need for R&D in the domain of 5G. The ISF organized a webinar on "Mental Health and its connection to excessive usage of Smartphone/Laptops" by Dr Gautam Saha on Dec 2, 2020 over digital platform. The webinar was attended by professors from India and abroad as well as students and research scholars from various institutes across India. The feedback received from the audience was rated high with huge appreciation to the organization from the student community. The ISF organized a webinar on "Stability Analysis of a 2-DOF Helicopter Model" by Dr Manasi Das, Jadavpur University on Jan 22, 2021. This webinar was

dedicated to the mathematical modelling of a 2 degree of freedom (only considering freedom in pitch and yaw direction, no roll motion), helicopter model and its stability analysis using PD and State feedback controller. The webinar was attended by a good number of registered participants. The IETE Students' Day 2021 was organized by the ISF on Feb 8, 2021 through online mode, which included a lecture on the life of the great freedom fighter, Netaji Subhas Chandra Bose, on his 125th Birth anniversary. More than 62 students actively participated in the event and enjoyed the deliverables. A webinar on "Antenna Design for Smartphones -An industry prospective" on Feb 11, 2021 was delivered by Dr Maruti Tamrakar, Antenna Engineer, Intel Corporation for students, scientists, faculty members and research scholars from premier institutions like DRDO, ISRO, IIT Kanpur, NIT Goa, MNIT Jaipur, IIT Kharagpur, NIT Durgapur etc. Dr Maruti started with a brief introduction on 5G, millimeter wave technology and MIMO technology and explained in detail the industry requirement of antenna design for smartphones and laptops. The session ended with interesting Q&A session. The audience consisted of stalwarts like Dr V Mahadevan, Former Group Dir, Communication System Group, ISRO Satellite Center, Bangalore and Prof S Raghvan, NIT Trichy, who highlighted the usefulness of the webinar for all attendees during interactive sessions. The ISF organized yet another online seminar on "Current and Near Future Trends in Semiconductor Industry" on Mar 14, 2021, which was taken up by Shri Priyanko Mitra, Engineering Manager in the Mixed Signal Solutions Div. of Sankalp Semiconductor, HCL Technologies, as the keynote speaker. He talked about the Semiconductors as a major part of the global trillion dollar electronics industry, Integrated Circuits in different forms that have invaded almost every aspect of our lives. This talk giving an overview of the analog & mixed signal semiconductor industry, covered the basic flow in chip design, and associated challenges. A few key statistics, the current trends as well as drivers for future growth and innovation were also discussed. About 82 participants registered from various parts of India and it was attended by 43 active participants.

• ISF at Dept of ECE, K Ramkrishnan College of Technology (KRCT), Trichy, organized a five-day Faculty Development Programme (FDP) on "Antennas & Microwave Engineering" during Jun 8-13, 2020 with 132 participants through online mode. Another virtual FDP on "Instruments & Design Techniques for RF Devices for 5G Communications" in collaboration with Entuple Technologies, was held during Oct 12-16, 2020 for knowledge sharing with 81 participants. Yet another virtual seminar on "How to become an IoT Engineer" was conducted on Feb 18, 2021 by Dr K V Shriram, Dean, KRCT. About 80 student members attended.

- ISF at Dept of E&TE, All India Shri Shivaji Memorial Society's (AISSMS) IOIT, Pune, organized a webinar on "Women Empowerment" in association with IETE Pune Centre, on Sep 10, 2020 in which a talk was delivered by (Mrs) Zoya Waseem Shaikh, International Trainer Specialist for Leadership Development Sales & Negotiation Team Building behavioural training. Mrs Geeta Salunke, Co-Coordinator, introduced the speaker, who in her address talked of various definitions of women empowerment. According to the speaker, whether it was about accepting/ allowing people into the decision making process, or raising one's status through education, literacy, or training or equipping and allowing one to make lifedetermining decisions in different situations of life, it is all women empowerment. Further, she talked about some principles to establish high-level corporate leadership for gender equality like-treating all women and men fairly at work; respecting and supporting human rights and non-discrimination; ensuring health, safety and well-being of all women and men workers; promoting education, training and professional development for women and implement enterprise development, supply chain and marketing practices that could empower women, including promoting equality through community initiatives and advocacy. Coordinator Yash Gawade & Aditi Khaire took on the question-answer session. Dr P B Mane, Principal AISSMS IOIT, addressed the audience and informed about IETE. Vote of thanks was proposed by Dr M P Sarday, Coordinator, HoD/E&TC Dept, AISSMS.
- ISF at Jawaharlal Darda Institute of Engineering and Technology (JDIET), Yavatmal, organized a two-day online workshop on 'Python' during Sep 18-19, 2020 by Shri Dhiraj P Bhasme, Sr Network Engineer, Compucom Systems, Pune, for about 30 corporate & student members.
- ISF at Modern Education Society's College of Engineering (MESCE), Pune, organized a guest lecture by Shri Saurabh Sharma, Application Development Assoc Mgr, Accenture, on the topic "BE Project Orientation, Importance of UG Project in Industry and UG Project Execution" on Sep 26, 2020. Final year E&TC Engg students attended the talk. Another free webinar conducted by ISF was on "National Education Policy (NEP) 2020 A Bird's Eye View" by Dr P B Mane, Principal, AISSMS College of Engineering, Pune, on Oct 26, 2020. One more expert lecture was conducted by the ISF on "Digital Communication- Spread Spectrum Modulation" on Dec 7, 2020, delivered by Dr G R Patil, HoD (E&TC)/Army Institute of Technology (AIT), Pune. He spoke on digital communication and spread spectrum techniques, DSSS and FHSS techniques, block diagram discussion, advantages, disadvantages, applications and waveform with examples.

- ISF unit at Dept ECE, Ramco Institute of Technology (RIT), Rajapalayam (TN), organized an event "Mindscapes" for II & III year/ECE students through Google meet on Oct 1, 2020. 20 students participated in the event conducted in 3 rounds, viz., Quiz, Connections and Brain Teaser. It was organized by Ms K Aarthi & N Harsheetha, III year/ECE students and coordinated by Shri P Venkatesh, AP/ECE. The ISF organized another online event on "Technical Fest" on Oct 17, 2020 for II, III & IV year/ECE students. Technical questions were presented using power point presentations. It was organized by R Dhitchanaa, III year/ECE and Ms S Mirra, III year/ECE and co-ordinated by Mrs R Chitra, AP/ECE and Shri B Kannan, AP/ ECE. About 17 students participated in this technical event. Another event "Ice Breaker" was organized on Oct 24, 2020 for II & III year ECE students conducted by Shri K Jaya Madhan, III/ECE and Ms A Monisha, III/ECE and co-ordinated by Shri P Gunasekaran, AP/ECE. 10 students participated in this technical event. "RIT Electronica" a webinar was arranged on "Positive Attitude towards Winning" on Dec 7, 2020 for I year/ECE students. Shri K S P J Babu, Dir/Programmes, M S Chellamuthu Trust & Research Foundation, Madurai, was the resource person. The webinar was organized by Shri P Madhay, III year/ECE & Shri A Vijayalaxmanasen, II Year ECE and coordinated by Mrs Ramalakshmi, AP/ECE & Shri G Sivakumar AP/ECE.
- ISF at ECE Dept, Hindustan Institute of Technology and Science (HITS), Chennai, organized an online talk on "IoT Demystified and VLSI Design Basics and Opportunities in VLSI" on Oct 5-7, 2020, delivered by Shri S Rengaraja, Technology, Lead at S K, Hynix, South Korea & Ms Srirenganayagi, Design Engg at MAXVY Technology Pvt Ltd, Bangalore. The participants were welcomed by Dr A L Vallikannu, HoD/ECE; Dr N Venkateswaran, Chairman, IETE Chennai Centre, gracing the session also addressed the participants. Shri Ramesh, Validation Lead at Intel Corporation, Penang, Malaysia, in the session spoke on the topic "IOT Demystified". He explained about IOT, real-time challenges and the road to achieve its solutions. He highlighted Industry 4.0 with Industry IOT (IIOT), AI IOT (AIOT), and other the needs and requirements of industry. The session was interactive. Shri S Rengaraja, on the second day of the webinar series expounded on "Introduction to RTL design for sequential and combinational circuits and ASIC flow". He talked about the designing of the ICs and processes involved before rolling it out to the market, basic components of VLSI and various languages used in VLSI industry. The available opportunities for the young engineers in the industry were informed and the companies that were working in the semiconductor domain were also told. The session on the final day of the webinar series was handled by Ms Srirenganayaki, Design Engineer at MAXVY Technologies, Bangalore. She chose to speak

on "VLSI Design Basics and Opportunities in VLSI". Emphasizing on the applications where VLSI finds its place, she shared a road map with the students for making a career in VLSI industry as a fresher. The series was informative for the final year students and was attended by 75 plus students.

- ISF at ECE Dept, SRM Institute of Science and Technology (SRMIST), Kattankulathur, Chennai, organized a six-day Faculty Development Programme (FDP) on "Recent Advancements in Semiconductor Technologies RASET" during Oct 9-14, 2020 with about 75 members attending the programme.
- ISF at ECE Dept, SSN College of Engineering (SSNCE), Chennai, organized a webinar for about 110 participants on the topic "Interplanetary Mission-An Overview" by Shri Devadatta Mishra, Indian Space Research Organization (ISRO), Bangalore. About 110 members attended the programme on Oct 10, 2020.
- ISF at Sri Venkateswara College of Engineering (SVCE), Chennai, organized a national level 24 hours Hackathon "Ease the Error 1.0" during Oct 10-11, 2020 in association with IETE Chennai Centre and the ISFs namely- SRM Institute of Science and Technology, Vadapalani Campus; Panimalar Institute of Technology; Easwari Engineering College; Jeppiaar Institute of Technology and Vel Tech Multi Tech Dr SR Dr RR Engineering College. About 85 members attended. On Oct 17, 2020, ISF at Sri Venkateswara College of Engineering (SVCE), Sriperumbudur, Chennai, arranged for an online technical talk delivered by Shri Mallik Mahalingam, CEO, Springpath (CISCO). It was attended by about 75 members. During the inaugural session of "Forum of Data Science Engineering-FODSE" Club, a talk on the 'Importance of Data Science' was delivered by Shri B Sivasubramanian, Business Intelligence Analyst, Real World Analytics and a TEDx speaker, on Dec 6, 2020, attended by about 75 members.
- ISF at ECE Dept, SRM Institute of Science and Technology (SRMIST), Vadapalani Campus, organized a webinar on "Professional Resume Writing" on Oct 17, 2020 in association with six ISFs namely-Panimalar Institute of Technology (PIT); Easwari Engineering College (EEC); Jeppiaar Institute of Technology (JIT); Sri Venkateswara College of Engineering (SVCE); Vel Tech Multi Tech Dr SR Dr RR Engineering College (VTMT DSR DRR EC) and Saveetha Engineering College (SEC), Chennai. The keynote speaker on the occasion was Shri M Vigneshwaran, Softskill Trainer, and it was attended by about 70 members. Another webinar on "A perspective on 5G Communications" on Nov 12, 2020 was arranged jointly with same ISFs, as mentioned above. The main speaker in it was Dr S Krithiga, AP ECE, SRMIST, Kattankulathur, who spoke

- on the topic to about 80 members. The webinar on "Application of Artificial Intelligence in Ocean Exploration" was organized on **Dec 21, 2020** jointly with five ISFs PIT, EEC, JIT, SVCE and VTMT DSR DRR EC and addressed by Shri Nitesh Verma, Project Scientist-I, National Institute of Ocean Technology, Chennai, Tamil Nadu. This seminar was attended by about 115 members. One more online seminar on "Wearable Technology in Healthcare" was organized on **Dec 30, 2020** in association with five ISFs- PIT, EEC, JIT, SVCE and VTMT DSR DRR EC. The online session was delivered by Dr D Vijendra Babu, Vice Principal & Professor, Aarupadai Veedu Institute of Technology, Vinayaka Mission Research Foundation. This was attended by about 80 members.
- ISF unit at Dept of ECE, Dr T Thimmaih Institute of Technology (DTTIT), Bangalore, organized a guest lecture of Dr R Sagayaraj, Prof/EE, Muthayammal Engineering College, Namakkal Dist (TN), in association with IETE Bangalore on Oct 22, 2020. The resource person spoke on "Impact of Industrial Electronics in Renewable Energy Sources". Vote of thank proposed by Dr S Palaniswamy, Dept of ECE/Dr T Thimmaiah Institute of Technology, Bangalore.
- A lecture was arranged by the ISF of Pimpri Chinchwad College of Engineering and Research, Ravet, Pune, on "Leading Technology of Artificial Intelligence in the Industry" by Shri Bhushan Garware, Sr Data Scientist, Persistent Systems, Pune, with a special focus on Digital Healthcare, on Oct 22, 2020. The speaker shared his knowledge on artificial intelligence in industries and its different algorithms. BE (E&TC) and TE (E&TC) students attended the talk. Another guest lecture arranged was on "Positive Attitude and Time Management" on Nov 27, 2020, delivered by Prof S O Dahad, Assoc Prof/Electronics and Dean- Academics, Govt College of Engineering (GCOE), Jalgaon, Maharashtra for SE (E&TC) and TE (E&TC) students.
- ISF at Thakur College of Engineering and Technology (TCET), Kandivali East, Mumbai, organized a Mini Project Exhibition for the students of SE & TE, ELEX on Nov 7, 2020. In view of prevailing pandemic, students were guided to put forth their research work via a poster instead of presenting the working model for their projects. To conduct this activity, a common Zoom meeting was arranged divided into 6 breakout rooms, each of these rooms consisted of 2 panelists, 1 or 2 student co-coordinators and 5 to 6 project groups. Panelists in each room listened to the group presentations and inspected their posters and graded them on the overall execution. The event was successfully conducted with the cooperation of all the professors, coordinators IETE branch counsellor and internal faculty in-charge and students. The ISF in association with IETE

Mumbai Centre conducted its yearly event called Oscillations-21 for all engineering graduates and diploma pass-out across India on **Mar 20, 2021**. It included an event called Electro-Brains, which was a virtual game for quiz competition. A total of 60 students registered for this online event from various fields of engg and diploma. It was performed in two rounds with 20 questions in 30 minutes. Round 1 was based on technology and conducted through a word maze quiz. Participants had to read the clues given in the Google form and find answers from the maze. Round 2 was based on core electronics and conducted through a crossword quiz, the participants had to fit their answers in the crossword based on the clues given. The evaluation was done by IETE Core Committee members together in a separate zoom meeting. After that the winners name were declared.

- ISF at ECE Dept, Vel Tech Multi Tech Dr SR Dr RR Engineering College (VTMT DSR DRR EC), Chennai, organized a one-day online Faculty Development Programme (FDP) on "Current Trends in 5G-Communication and Networks" on Nov 18, 2020. The speakers included Dr N Venkateswaran, Professor, Dept of ECE, SSN College of Engg and Chairman IETE Chennai, who spoke on the topic, "Overview of 5G Communication" and Dr Jayaram K P, Postdoctoral Fellow, Microwave lab, Dept of Engineering Design, IIT Madras, Chennai, dwelled on "Antennas for 5G Communications". About 75 members attended. Another five-day online FDP was organized by the ISF on "Lab View on Communication Systems and Signal Processing" during Dec 1-5, 2020 with about 65 participants.
- ISF at Kamaraj College of Engineering and Technology (KCET), Virudhunagar, Dist-Madurai, conducted an online guest lecture on "Creative thinking and logical reasoning" for Ist year BE/ECE students on Nov 24, 2020 by Dr V Jeyalakshmi, AP/ECE. Another guest lecture was conducted on Nov 28, 2020 on "Market and marketing in Medical Electronics equipments" for III year ECE students, delivered by Er R Somnath Babu, Director, Shree Mediks, Sivakasi through online mode. A one-day Project Display Competition was organized on Feb 26, 2021 in association with IETE Sivakasi Centre and adjudged by Dr A Geetha, Assoc Prof/ ECE/KCET and Dr N M Mary Sindhuja, AP/ECE/KCET, the Chief Guests. They gave valuable suggestions for the improvement of the displayed projects. Dr R Suresh Babu, Prof & Head/ECE/KCET, was present on the occasion. About 38 students from III<sup>rd</sup> year/ECE displayed their projects and first 3 teams were awarded cash prizes and others were presented certificates. It was organized by Dr V Jeyalakshmi, AP/ECE and ISF coordinator.
- A short time training programme on "Digital Skill Development for Professionals" was arranged by the ISF of JSPM's, Bhivarabai Sawant Institute of Technology & Research (JSPM-BSITR),

- **Wagholi, Pune**, on **Nov 28, 2020.** The training was conducted by Ms Akanksha Deshpande, (recipient of the best performer award in Siemens Energy), Team lead in Quality Dept Handling USA, Germany and Norway sites and it was attended by about 100 members.
- ISF at Sri Venkateshwara College of Engineering (SVCE), Bengaluru, organized a technical webinar on "Impact of Wireless Sensor Networks towards Agriculture yield Productivity (Coffee Plantations)" on Dec 5, 2020 in association with IETE Bangalore Centre. It was arranged for the benefit of students and faculty members so as to identify new challenges in agriculture yield productivity and to provide innovative solutions to overcome such issues. Dr Roshan Zameer Ahmed, Asst Prof/ECE, M S Ramaiah Institute of Technology, Bengaluru, Dr Suresha, Principal, SVCE, Bengaluru, delivered the key remarks. Dr S C Lingareddy, Prof & Head/CSE also addressed the participants. More than 100 participants from various institutions and organizations attended the programme.
- ISF at G H Raisoni Institute of Engineering and Technology (GHRIET), Wagholi, Pune, conducted a faculty orientation workshop on "Electrical Vehicle Simulation using Ansys" on Dec 14, 2020 in association with CADFEM Ansys Pune and IETE Pune Centre. Dr R D Kharadkar, Chairman IETE Pune Centre, the Chief Guest, highlighted the need for EV, upcoming technologies in it, role of institutes and industry to promote EV, training the manpower required for EV, etc. Demonstration was given to design and simulate the EV subblocks like - battery, battery management system (BMS), power electronics, AC/DC Drives using Ansys. The experts handling the session included: Shri Ishan, Shri Bhushan and Shri Sagar from CADFEM, Pune. The session was interactive and about 56 faculty attended bothways offline and in online mode. Other dignitaries present were: Dr N B Hulle, Dr N U Korde, Dr S K Mitthal, Dr Nilesh Deotale, Dr A M Thakare. Vote of thanks was proposed by Prof A D Bhoi, HoD/E&TCE, GHRIET. The ISF conducted an expert session on "Ventilators for Life Support" on Dec 21, 2020 through Capt Rustom K Bharucha (Retd), Indian Army, and the invited guest. Explaining the anatomy of human heart, its functioning and stages of breathing, he described the functions of ventilator and precautions to be taken while designing and operating the ventilators. He showed various designs of ventilators and self designed low cost ventilator. Other dignitaries present were: Dr R D Kharadkar, Chairman IETE Pune Centre, Dr V V Shete, Hony Secretary IETE Pune Centre, Dr P B Mane, Hony Treasurer, IETE Pune Centre, Shri Kishore Shende, Immdt Past Chairman and all EC members.
- ISF at Dept of ECE, Sri Venkateswara College of Technology (SVCT), Oragadam, Chennai, invited Shri Aravindhan Anbazhan,

Educator / Engineer / TEDx, to speak on "10 Soft Skills for every Engineer—An Overview" on **Dec 30, 2020** for the participants, which were 75 in number.

- ISF at Anand International College of Engineering (AICE), Jaipur, organized a seminar on "Engineers' Role in Energy Conservation, Energy Efficiency, Use of Renewable Energy, Environment & Climate Change" under the Petroleum Conservation Research Association (PCRA), Jaipur, on Jan 6, 2021. Sharing his views, Er K K Mahajan, Ex Sr Executive of Tata Chemicals Ltd, Gujarat & DCW Limited, emphasized on the significance & shortfalls of the theme topic. Ms Monika Mittal, Vice-Chairperson/AICE, Prof Vijay Kumar Sharma, Principal/AICE and Prof Praveen Agarwal, Vice-Principal, shared their views on the topic and made the participants aware. E-certificates were distributed to the 256 registered participants. The program was conducted under the guidance of Shri Vivek Bhojak, HoD/ECE & ISF Faculty Coordinator.
- ISF at Nalla Malla Reddy Engg College (NMREC), Hyderabad (Telangana), organized a drive on "IETE Membership Benefits" on Jan 16, 2021, with the dignitaries: Shri Nuli Namassivaya, Hony Secretary IETE Hyderabad Centre and Ms Sandhya, Chairperson, Women Empowerment Cell, IETE Hyderabad Centre. Their addresses were on the ISFs and its benefits for the students. Ms Rajini, HoD/ECE, also emphasized on the importance of ISF students' membership; Shri Shiva Prasad, ECE/NMREC and ISF coordinator, shared his experience with IETE and emphasized each becoming its member. Shri C Pranay, Chairman/ISF, presented ISF objectives and activities held under the banner, while Shri Umesh, III year (Secy) and Shri A Pavan Kalyan (Treasurer) coordinated for the programme. A webinar on "Applications on control systems, signal processing and embedded systems to missile technology" was organized on Feb 6, 2021. Dr Subir Kumar Chaudhuri, FNAE, Former Director, RCI, DRDO, Visiting Professor IIT Bombay, the Chief Guest, shared detailed information on the topic. He explained about the embedded systems in missile technologies, highlighted error recognition element, signal processing unit from earth station and space station, control systems, its applications, and running of missiles with proper guidance from earth stations through different control signalling techniques. Dr Kalyan Kasturi, Prof/ECE, NMREC and Shri K Shiva Prasad, AP/ECE, NMREC & ISF coordinator, encouraged students vide their addresses. On Feb 20, 2021 the ISF organized another webinar on "Memristor Circuits for Neuromorphic Applications" with Dr Ram Kaji Budhathoki, Assoc Prof/EEE, School of Engineering, Kathmandu University, Dhulikhel, Kavre, Nepal, as Chief Guest. The topics covered in talks were: Memristor and its history, fingerprints, differences from typical resistor, inductor and

- capacitor, applications in Neuromorphic circuits; Back Propagation (BP) algorithm and Random Weight Change (RWC) algorithm in neural networks, the updates of synaptic weights in BP and RWC algorithm. Dr Vetriveeran Rajamani, AP/ECE; Shri K Shiva Prasad, AP/ECE, NMREC & ISF coordinator were present. Vote of thanks proposed by Shri K Shiva Prasad. **ISF** unit at Dept of ECE, Nalla Malla Reddy Engineering College (NMREC), Hyderabad, arranged a session on career guidance on **Feb 17**, **2021** in association with IETE Hyderabad Centre. Shri Naveen Dandothkar, ECE Alumni, Technossus, Hyderabad, was the keynote speaker for it.
- ISF at Dept of ECE, Vaagdevi Engineering College (VEC), Bollikunta, Warangal, organized a webinar on the topic "Lockdown Emotional Outburst (LEO)" on Jan 18, 2021 in association with IETE Hyderabad Centre. Dr Jaya Lakshmi Coppisetty, Psychologist & Certified International Skill Manager was the Chief Guest. Interacting with the students on random topics mostly on real life experiences during lockdown period, he emphasized on the importance of positive thinking. E-certificates were distributed at the end. Dr P Prasad Rao, Principal/VEC, was also present during this webinar. The ISF organized another webinar on "Project Management & Career Opportunities in Core Industry" on Jan 24, 2021 with Shri Devanshu Pandey, National Key Accounts Mgr & Project Lead Schindler, India, as the keynote speaker. Giving an overview, the speaker explained the career opportunities present in core industries & recommended choosing the right path carefully. The session was interactive. E-certificates were given out to the participants. Dr P Prasad Rao, Principal/VEC, was also present on this occasion. An Online quiz was organized by the **ISF** on the topic: Aptitude & Reasoning" on Jan 31, 2021 in association with IETE Hyderabad Centre. It was useful for students to test their knowledge. About 120 members/students attended. E- Certificates were provided to top 3 participants. An online mock test was organized on Feb 8, **2021** for ECE students appearing for GATE-2021 entrance. About 71 students/members appeared for the test and were given e-certificates. Appreciation certificates were given to the top 2 participants.
- ISF at Dept of E&TC, K K Wagh Institute of Engineering Education & Research (KKWIER), Nashik, organized a webinar on "Education Opportunities Abroad" on Jan 22, 2021 in association with IETE Nashik Sub-Centre. The keynote addresses were delivered by Shri Amit Gore, Founder Director, Akshay Study Abroad Consultants; Shri Hiren Panjwani, Trg Manager, Study Abroad Consultants and Shri Dhiraj Matlani, Indiana University, Purdue University Indianapolis (UPUI). The ISF celebrated IETE Students' Day by organizing an online awareness campaign on "Safety: The Way of Life" on Feb 3, 2021 in collaboration with IETE Nashik

Sub-centre. It was conducted by Er Anant Krishna Waghchoure, Manager - Sales, Megger India Pvt Ltd, Mumbai. A guidance session on "Distributed Control System" was organized on **Feb 6, 2021** by Er Pooja Hiremath, Project Engg, Emerson, in association with IETE Nashik Sub-Centre through online mode.

- ISF at Dept of ECE, Vidya Jyothi Institute of Technology (VJIT), Hyderabad, conducted a session on 'Career Opportunities after Graduation' jointly with IETE Hyderabad Centre on Jan 29, 2021. The resource person for this session was Shri S Manimohan Trinath Gate/ESE Trainer, from the VJIT Institute.
- ISF at SKN Sinhgad Institute of Technology and Science (SKNSITS), Lonavala, Pune, organized an online speech competition on "Covid-19 Pandemic Situation" on the occasion of IETE Student's Day on Feb 2, 2021. Five topics chosen for the competition were: Effect of social ostracism in pandemic; Society after pandemic situation; Impact of pandemic on education system; Effect of COVID-19 pandemic on mental health and Effect of pandemic on Indian economy and globalization. The function was graced by Dr M S Rohokale, Principal, SKNSITS, Prof Rajeshwari M Thadi, HoD/E&TC, SKNSITS, and Dr Manisha Badgujar, SIBSCA, Lonavala. Esteemed judges were also felicitated by Dr M S Rohokale. Dr Manisha Badgujar highlighted the impact of pandemic in general vide her address and appreciated the selection of topics by the ISF for deliberation during the event. Earlier, the welcome address was delivered by Prof Rajeshwari M Thadi. The rules for the competition were outlined by Mrs Seema M Borawake, ISF Coordinator, SKNSITS, who afterwards assigned the topics to the contestants.
- The ISF at Dept of E&T, Karmaveer ADV Baburao Ganpatrao Thakare College of Engineering (KBTCOE), Nashik, in collaboration with IETE Nashik Sub-Centre organized a webinar on "Embedded System; Industry Future Trends and Skill Requirements" on Feb 6, 2021 with the domain expert- Ms Priyanka Ahire, Functional Safety and Cyber Security Lead, Jaguar Land Rover, UK. The ISF in collaboration with IETE Nashik Sub-Centre organized another webinar on "Opportunities and Prospectus in Aerospace Technology for E&TC Engineers" on Feb 10, 2021, which was conducted by Ms Apurva Jakhadi, Vice Chairman-IETE Nashik Sub-Centre, NASA- Honeywell Space Educator, Member-UN-Space Generation Advisory Council, Austria. Yet another collaborated webinar was organized on "Embedded System Design using MSP 430 Processor" on Mar 13 2021. The keynote speaker in it was Shri Ravikant Khamitkar, NBNSCOE, Solapur. Earlier, Prof N B Desale, Vice Principal /KBTCOE, welcomed the speaker & addressed the students. Dr V M Birari, HoD/KBTCOE, introduced the keynote speaker.

- ISF at Bharat Institute of Engg and Tech (BIET), Hyderabad, conducted a three-day International Conference on Information and Communication Engineering during Feb 11-13, 2021. Dr J R Joshi, Director, Kusha Project, DRDL, graced the programme as the Chief Guest, while Col B Venkat, Director AICTE, as the Guest of Honour. Dr Sundararajan Former Prof NTU, Singapore and Shri Mrityunjay Vishwakarma, IBM India, were the other renowned guests present in the conference. The conference was technically sponsored by IBM India, IETE and IFERP. The Day-1 saw a technical workshop carried out by Shri Karan Chaturvedi, Developer IBM. On Day- 2, keynote sessions were held, initially by Dr Dhananjay Singh, Assoc Prof, Dept of ECE, University of Foreign Studies, South Korea and then the next session by Dr Sundararajan Former Prof EE, Nanyang Technological University, Singapore. On Day-3 keynote talks were delivered by Prof Nuli Namassivaya, Hony Secretary, IETE Hyderabad and Dr Dhananjay Kumar Prof and HOD, MIT Campus Chennai. The conference was successfully organized under the guidance of respected Chairman, Ch Venugopal Reddy.
- ISF at Dept of E&TC, Sinhgad Institute of Technology (SIT), Lonavala, Pune, organized four events, viz., a mini project exhibition titled "IoT Innovation" on Feb 12, 2021 with 10 judges and 120 students; a seminar on "IPR: Patenting in India" on Feb 15, 2021, by Mrs Dipali K Shende, AP/E&TC, SIT; an expert talk on "Data Science" on Mar 1, 2021 by Shri Manikant Roy (Technology Evangelist) for students from about 80 colleges and a one-week state level STTP on "Components and Applications of IOT" during Mar 22-26, 2021 with 150 registrations from all over Maharashtra. Shri Rahul Shimpi GRSRHCOE, Nashik and Mrs Dipali Shende, AP/E&TC, SIT, were the experts for the STTP. ISF-in-Charge, Mrs Dipali Shende along with the ISF team members coordinated for the events with the prior permission of IETE Pune Centre, under guidance of Dr M S Gaikwad, Director & Principal, SIT Lonavala & Dr D D Chaudhary, Vice Principal & HOD/E&TC. Mansi & Aishwarya (President & Vice-President ISF Chapter 2021), Sarang, Lochan, Divesh, Harsh, ISF team members all came together for the events.
- ISF at Dept of ECE, Institute of Technology (IT), Nirma University, Ahmedabad, organized a national conference for UG, PG students on "Advancement in Communication, Electronics, Computers, and Automation Technology" during Feb 12–13, 2021, in association with IETE Ahmedabad Centre and IEEE AP/MTT, Joint Chapter, Gujarat Section. It was sponsored by the GUJCOST, DST, Govt of Gujarat, and inaugurated by Shri Rajeev Jyoti, Dy Director, MRSA, SAC, ISRO, Ahmedabad, as the Chief Guest. Dr R N Patel, Dir, Institute of Technology, Nirma University, presided over the function. 36 papers were selected from total entries received

across the country. Total presentations were shared online, wherein sessions were divided into four technical sessions spread over two days. Cash prizes were given to the winners as declared for each technical session by panel judges. About 54 authors presented their papers and 236 students registered as participants for the conference. Shri Ramji Makwana, Chairman, IETE Ahmedabad Centre, was the Guest of Honour in the valedictory session held on Feb 13, 2021. He encouraged students to be innovative in their lives and to participate in all such activities in the future. He also gave a brief talk on the IETE and the activities carried out by IETE Ahmedabad Centre.

- ISF at Dept of ECE, Mepco Schlenk Engineering College (MSEC), Sivakasi, celebrated IETE Students' Day on Feb 25, 2021, which was inaugurated by Dr R Shantha Selvakumari, Sr Prof & Head, ECE/MSEC. The welcome address was by Ms B Sonia, ISF Member. Shri O Sriram, ISF Chairman, read out the message from the President IETE for the day. Dr A Kamaraj, ASP/ECE and Mrs V Gnanalakshmi, AP/ECE, coordinated for the programme. Events organized on the day were: Technical paper presentation, Circuitron, ProDigi, Jeopardy and Best Manager. About 16 technical papers were shortlisted from various trending domains of E&T and its applications. The presentations of the students were adjudged by Shri J Dani Regan Vivek, AP/ECE. The winners included: Ms S Claribel Mahima and Ms A Rajasree for the Jeopardy and paper presentations. During the valedictory function, Dr R Shantha Selvakumari, Dr A Kamaraj, and Mrs V Gnanalakshmi, distributed the certificates. About 60 ISF members participated in the events. Vote of thanks was proposed by Ms S Nivedha, ISF member. The ISF arranged a guest lecture on "IOT Based Data Analytics" on Mar 6, 2021 by Dr R Shantha Selvakumari, Sr Prof & Head/ECE. Ms P S Sruthi, Sr Software Engineer, Sopra Steria Pvt Ltd, Chennai, was invited as the Chief Guest for the event. Dr A Kamaraj, ASP/ECE and Mrs V Gnanalakshmi, AP/ECE coordinated. Dr Selvakumari provided the conceptual details on IOT, cloud based computing and its need in the present industrial scenario. She explained topics like the usage of Chat Bot in automatic online communication in addition to its security based issues; architectural view of IOT and cloud based data collection, data monitoring, data analytics and decision making and finally on the recent developments in data analytics.
- A new **ISF** was inaugurated on **Mar 10, 2021** at Dept of ECE, **Rohini College of Engineering & Technology (RCET), Palkulam, K K Dist, (TN)** and the inauguration session included the delivery of 13<sup>th</sup> Dr V P Kulkarni Memorial Lecture by Dr K C Raveendranathan, Chairman IETE Trivandrum Centre, Guest of Honour. He also outlined the overall objectives of IETE and the opportunities available in the

- field of ECE. The other dignitaries gracing the occasion were Shri K Neela Marthandan, Chairman, Rohini Groups, Dr N Neela Vishnu, MD, RCET and Dr V M Blessy Geo, Chief Financial Officer, RCET. Dr S Mohanalakshmi, Prof and HoD & ISF Co-ordinator, delivered the welcome address. Dr R Rajesh, Principal, felicitated the Guest of Honour, Dr S Arumuga Perumal, PAC-Chairman, Nagercoil. The Principal appreciated the HoD, ECE, for the initiatives taken to organized the event, empowering the students. The Chief Guest address was given by Dr D C Pande, Zonal Mentor (South), Chairman BoRIS in a virtual manner. Shri Ajay Kumar, Zonal Mentor (East), Co-Chairman MC, also addressed the participants. The IETE co-coordinator Shri C K Morarji, AP/RCET, introduced the office bearers of the IETE ISF (2020-2021). Vote of thanks proposed by the ISF student member, Ms S V Nivethitha followed by the national anthem.
- ISF at Dept of ECE, Velalar College of Engineering and Technology (VCET), Erode, conducted a one- week value added practical course on "Arduino using Tinkercard" during Mar 15-21, 2021. The inaugural address was delivered by Prof D Jayachandar, Dean. Shri Satheesh Subramanyam, MD, Sriram Electronics, Erode, lighted up the lamp to initiate the event. Dr Nisha Angeline, Prof & HoD/ECE welcomed the gathering. Ms P Nandhini AP/ECE, gave an introduction to the value added course, followed by the presidential address from Dr M Jayaraman, Principal/VCET. The resource persons for the practical course were: Shri Satheesh Subramanyam, MD and Shri S Manikandan, Programming Developer, Sriram Electronics, Erode and Dr V Gowrishankar, Assoc Prof/ECE, VCET. Dr K Senthil Prakash, Prof, Shri P Senthil Kumar, AP, Ms P Nandhini, AP and Shri S Poornachandran, AP/ECE, VCET, were also present and coordinated for the programme.
- ISF at Dept of ECE, Sri Ramakrishna Institute of Technology (SRIT), Coimbatore (TN), organised a "Project Expo" on Mar 25, 2021 with Dr A N Jayanthi, SRIT, the ISF Coordinator. Dr A N Jayanthi and Dr D Binu, AP/ECE, SRIT were selected to act as judges. The Dept of ECE organized a webinar titled "Automation Testing Strategies" on Apr 12, 2021. Ms R Prabha, Automatic QA Engineer, Hippo Videos, Guindy, Chennai, the resource person, in her address pointed out the importance of testing strategies and highlighted various concepts on automation and various challenges that come in manual testing. The final year ECE students were benefitted by this session.
- A new **ISF** at **V V P Engineering College, Rajkot,** was inaugurated on **Mar 26, 2021.** Dr Rahul D Mehta, Hony Secy IETE Rajkot Centre, informed about its opening to IETE HQs.

- ISF unit at Dept of CS, Karmaveer Kakasaheb Wagh Arts, Commerce, Science & Computer Science College, Nashik, organized e-Merge 2021 on Mar 29-30, 2021, in collaboration with IETE Nashik Sub-Centre. It was inaugurated online at the hands of Alumni, Ms Snehal Khankari Founder & CEO Snehavi Wealth, Nashik. The ECE Dept of the ISF organized another webinar specifically for electronics engineering students / professionals on Apr 17, 2021.
- ISF at A P Shah Institute of Technology (APSIT), Mumbai, organized a programme "Techjuvenate" on Mar 31, 2021 through online mode, which was inaugurated by Dr Uttam Kolekar, Principal/

APSIT and Prof A M Deshpande, Vice-Principal, Dean Academics & HoD of EXTC/APSIT. Faculty members - Prof Manisha Samant, Prof Sonia Aneesh, Prof Tejashri Kolhe, Prof Veena Gawade, Prof Jay Mehta, Prof Adesh Hardas, Prof Selvin Furtado, Prof Mahesh Pawaskar, Prof Prashant Ahire, Prof Vaibhav Yawalkar, and Prof Afreenzera Sayyad worked together for its success. Shri Mihir Vichare, TE/EXTC and Shri Aayush Matkar, TE/EXTC won the 1st prize, while the 2nd prize went to Ms Disha Sharma, BE/EXTC & Ms Pooja Sawale, BE/EXTC. Shri Dhruv Bhosle, TE/EXTC, Ms Priyanka More, TE/EXTC, Ms Neha Teli, SE/EXTC and Shri Saarth Nikam, SE/EXTC were all present during the occasion.

# **Awards & Achievements**



**Dr P Naveen Kumar (F-166263)**, Associate Professor, Dept of ECE,OU and Chairman, R&D and Industrial Coordination Sub Committee, IETE Hyderabad Section, received the "CHSN-2020: Young

Researcher Award" at JNTU Kakinada, at an International Conference held during 28th-29th Dec 2020. The award was given to him by Prof Hemachandra Reddy, Chairman AP State Council for Higher Education, V C Rayalaseema University; Prof Ananda Rao, VC JNTU Kakinada; Prof Ramalinga Raju and the Former VC JNTUK, Prof Allam Appa Rao. The awardee was felicitated later at IETE Hyderabad Centre by the Former Chairman, Er K Subbi Reddy Garu on 26th January 2021. IETE Hyderabad EC Members applauded the awardee for getting his Project extension on Indian NavIC, with SAC, ISRO, Ahmedabad.



**Dr** C **Pradip** (F-189101), Asst Prof at NSS College of Engineering, Palakkad, Kerala, Past Chairman of IETE Palakkad Centre and presently its EC Member, has been awarded his **Doctorate from Karunya Institute of** 

**Technology and Sciences** (Deemed University) on the thesis: "Energy Management of Grid-Connected Residential Photovoltaic System".



**Dr Leena N (M- 500698)**, the EC Member of IETE Palakkad Centre and Asst Prof at NSS College of Engineering, Palakkad, has been awarded her **Doctorate from Cochin** 

University of Science and Technology (CUSAT) for her thesis titled, "Performance Evaluation of Classifiers and Feature Extraction Techniques for Nutrient Deficiency Detection in Plants".



**Dr Princy Prince (M-221191)** has been awarded the **PhD degree in Electronics and Communication Engineering** by Karunya Institute of Technology and Sciences, Coimbatore, for her work entitled "An

investigation on techniques for test time reduction and fault detection in SRAM". Her area of specialization is in VLSI Design. She was instrumental in opening an ISF at Prime College of Engineering, Palakkad.



Prof Anoop B K (M-235390) obtained his PhD from APJ Abdul Kalam Technological University, Trivandrum. In his study he proposed a Novel CAD System for the Prediction of Proliferative and Non-

Proliferative Diabetic Retinopathy. He was instrumental in opening of a Professional Activity Centre at Vimal Jyothi Engineering college, Kannur under IETE Palakkad.



Sanathanan M S (AM-224962) received his PhD from Nanyang Technological University, Singapore in Micro machined tunable diffraction grating for diverse imaging in integral field spectroscopy

(Specialization: Hyper spectral Imaging with Micro-optics). He is an active member of IETE Palakkad Centre.

# THE LOSS

This time, the obituary column has taken up more room than normal. Since the epidemic began and continues to wreak havoc in India, IETE has been saddened to learn of a number of cases and fatalities among its members. Despite the fact that the front page of this issue is dedicated to all those who have died as a result of Covid, here are a few people we know who have died either naturally or as a result of Covid. We send our deepest condolences to their loved ones. May the souls of the departed find eternal peace in heaven.



Shri T V Srirangan (DF-010663), one of the earliest/founding Members of the Institution of Electronics & Telecommunication Engineers (IETE) passed away on 3<sup>rd</sup> January 2021 at the age of 94 years. He was a natural

leader, an inspiration for all his colleagues. Everyone had very high praise, admiration and regard for him. He was an able administrator, an upright & outstanding officer, and served with great distinction, first with the Indian Telecom Service and then with WPC Wing, Ministry of Communications, as the Wireless Adviser to Govt of India, during 1976-1984. He led the WPC Wing with great technical competence & authority, raising the level of spectrum management work to a higher profile with public as well as many Govt departments/organizations. Shri Srirangan was an exceptionally good writer and a forceful orator & spoke in conferences & meetings. He was instrumental in raising the importance & standing of the Country in the ITU and other international fora. He was Chairman of the World Administrative Radio Conference (WARC) 1978 for Aeronautical Mobile Services, besides being the Chairman of Finance Committee of the ITU Plenipotentiary Conference, Nairobi, 1982 as well as the Indian Councillor to ITU Administrative Council from 1977 to 1984.. The fraternity offers heartfelt condolences to the bereaved family and prays to God to grant 'Moksha' – eternal peace – to the departed noble soul.



**Prof Ashok Chandra (DF-043441)** was the Distinguished Fellow of the Institution of Electronics and Telecommunication Engineers, and an Honorary Fellow of the Broadcast Engineers of India and a Fellow of

a number of national academies and technical societies. It is really unfortunate that we lost him to Covid-19, a few days back in May 2021. He had several feathers in his cap after more than 40 years as a teacher, researcher, educator, educational planner, and administrator. He was the Founder

of many state-level technology organisations, including the National Academy of Engineers and India's Engineering Council. At various times, he was the Chairman of a number of institutions and professional bodies. Chairman of Knowledge Initiative of the Ministry of Communication and Information Technology, GoI; Chairman, Centre for Social Sector Governance, Chairman of Indian Association of Social Science Institutions; National President of Indian Society for Training & Development. Chairman, Board of Governors, Goa Institute of Management. We are very unlucky to lose him to Covid-19.



**Shri P N Chopra** (**DF-019807**) a distinguished Fellow of IETE, died of natural causes on May 16, 2021 in a Noida hospital. He began his professional career with the Punjab Police and later joined the Border

Security Force in 1965. He retired from the organization as the Deputy Inspector General after 39 years of service. For his distinguished and meritorious efforts, he received number of decorations and police medals, as well as a variety of commendation cards, a BSF Gold Medal, and cash awards for his communication support to the police and BSF during the 1965 and 1971 wars. He had vast experience in industry, telecommunications broadcasting and technical publications. He was a widely traveled person. As a radio engineer, he received his technical training at Marconi UK Philips Holland and Budavox Hungary. At a national level, he steered a technical journal by the name "Telematics India" for about a decade; set the pace for technical events management and organized more than a dozen seminars cum exhibitions in the series of INFOTEK. He was the Managing Editor of Bitcom India and the Consultant to some reputed International companies.

His IETE innings started in 1978 from the Delhi Centre, where he served as its Chairman for four terms, acquired a plot of land for the current building and introduced the first advanced level computer course and rationaled tutorial

#### ... The Loss

classes for students. Later he joined the IETE Governing Council initially as an Industry representative and then served for full three terms as an elected Governing Council member during (1998-01, 2003-05 and 2007-09). During his term, he served IETE diligently and tirelessly. He oversaw a range of responsibilities as Vice President, Chairman Tech Programme Committee (TPC) /Zonal Coordinator (2007-09) Chairman Industrial Coordination Committee-ICC (2006); Hony Treasurer(1998-99). He assisted in the organisation of a number of Annual Technical Conventions and Mid-Term Symposias as Chairman of the Tech Program Committee.

The IETE is deeply saddened by his death. His last days were spent on the active list. Sincere condolences to the members of the family. His contribution to IETE will always be remembered.



Shri Peri Viswanatham (F-050266L), Former DDG (E) expired on 24<sup>th</sup> Dec 2020 at his residence in Hyderabad. After graduating in electrical and electronics engineering, he was selected for I(B)ES service and joined

ASE in1967. He worked in various capacities in AIR stations of Shimla, Goa, Parbhani, Aurangabad, Bombay, Vijayawada, Jeypore, Odisha, Hyderabad and retired as Superintending Engineer at AIR, Kadapa in 2006. In long span of his career ranging to almost 4 decades, he contributed by serving the department in various managerial capacities. His technical aptitude, humane attitude and enthusiastic inclination to learn advancements in the technological arena stand exemplary forever. His decorum in official and personal lives will also be remembered for long. He was a Life Member of Broadcast Engineers' Society and was actively involved in the activities of IETE Hyderabad Centre.



**Dr Eshwar Bhagiratha Rao (F-025016L)**, Founder Director of DEAL, Dehradun, Former Director, DLRL and Director & Dean of IAT (now DIAT), Pune, passed away on 22<sup>nd</sup> Mar 2021. He was a dynamic and

dedicated person, always eager to learn, adapt and ready to contribute to the society. He will be deeply missed by the entire IETE family.



**Dr PV Rao (F-227805L),** a member of the Executive Committee of IETE Bangalore Centre, passed away on 24th February 2021. He also served as Returning Officer for the EC elections of the Centre once.



**Dr A Guruva Reddy (F-238091L)** left for his heavenly abode on 14<sup>th</sup> Sep 2020, after he was tested Covid positive. He was under medical observation for 21 days. Dr Reddy was Professor and Vice Principal at PES

Institute of Technology and Management, Shivamogga, with a total of 19 years of teaching experience. His research interests included image processing, evolutionary computing, pattern recognition, multi-agent systems, and wireless communication. He had published more than 30 research articles in peer-reviewed journals and international conferences.

Shri Nuzrat Hussain (F-060139L), the Vice Chairman, IETE Lucknow Centre, died on April 12, 2021, due to coronavirus.



**Prof S C Tyagi (F-094490L)** Executive Director, IDC Foundation, passed away on 27<sup>th</sup> April 2021 due to Corona virus. Earlier, he had served IETE Delhi Centre for number of years.

**Brig S C Anand (F-111049L)** the Past Chairman, IETE Noida Centre, died of Covid-19 on April 27, 2021. He retired as a Brigadier in 2008 after 42 years of service in the Army and Central Government organisations. In 2009, he began his second career in academia as a Professor at Ghaziabad's Inderprastha Engineering College. He had studied Communication Systems and was an expert in the field.

**Dr Sudhakar Alapati, (F-190632L)** of IETE Vijayawada Centre, passed away on 27 April 2021.

**Col Jagjit Singh (F-143409L)** the former Hony Secretary and Exec Committee Member of the IETE Noida Centre, passed away on 4<sup>th</sup> May 2021 after a long illness.

## ... The Loss

Wg Cdr KDS Bali (F- 035911L) On the 4th of May 2021, Wg Cdr KDS Bali, Past Vice Chairman, IETE Chandigarh Centre, died of Corona.

**Dr P V Subbaiah (F-053401L)** Past Chairman of the IETE Vijayawada Centre, died of corona on May 9, 2021.



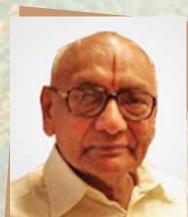
**Shri Rahul Dev,** IETE HQs Staff, succumbed to Covid-19 on April 24, 2021. He began his career at IETE Headquarters on June 1, 2006, and has remained committed to the organisation ever since. He was most

recently with the Accounts Section of IETE HQs as its valued team member. He was always willing to lend a hand and was polite and supportive. He is survived by his wife, two daughters, and a son.



**Shri Snehashish Basu,** As a result of Covid-19, another IETE HQ employee, left us. Shri Basu and his wife, a government employee, died just a few hours apart from each other on the same day, *i.e.*, 29<sup>th</sup> April

2021. They were both admitted to the hospital after their Corona symptoms became intense. Shri Basu was a loyal employee who had been with the IETE since November 1987. He was most recently with the IETE Publication Section, where he was responsible for the publication of the IETE Newsletter and the IETE Journal of Education. There would always be a big void in the Publication Section without him, where he had been for the past 9 years. We send our heartfelt condolences to the immediate family members who have witnessed such a devastating loss.



# Dr T H Chowdary

# DFIETE

# Padma Sree Awardee

Chairman: Pragna Bharati

**Director:** Center for Telecom management & Studies

Fellow: Tata Consultancy Services

Convenor: Bharatiya Dharma Rakshana Samakhya

Former: IT Advisor, GOAP Founder CMD, VSNL

8, P&T Colony, Karkhana, Secunderabad-500009

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# **#1. Telecoms: IT and Elections**

The Election Commission has ordered that the Chief Minister of Andhra Pradesh shall not have meetings with District officials using audio conference *i.e* (teleconferencing) on the telecom network. Tele-conferencing is far less expensive than if the District officials are called to Hyderabad or any other place. The Election Commission has not banned the Chief Minister holding conferences with District officials by calling them to any place. Is there any

sense in ruling that a conference requiring physical bodies is permissible but not having them on a telecom network? It appears that either the Election Commission is ignorant as to what tele-conferencing is or is prejudiced or is simply appearing some quarters.

Election Commission has also banned advertising on the electronic media - various TV Channels and presumably Radio also by political parties. This is again senseless. The essence of democracy is public information and

debate. Electors must have information so that they can weigh the relevant merits of contending candidates. Going to a meeting, transported in trucks like cattle is far more expensive, inconvenient and is just a thamasha organised by political parties. On the other hand, listeners of Radio and viewers of TV can be in their own places and without any special preparation or any expense, listen to what the politicians and political parties are saying.

# **#2. E- Marriages**

Vulgar and ostentatious spending on marriage celebrations and feasts is on the increase. The amount spent is running into crores of rupees. This induces immorality, greed, envy and hence instability in society. Besides, there is wasteful consumption of petrol for cars and other modes of travel to attend these marriage celebrations and feasts. Information technology can be used to cut down all these and save a lot for the nation.

Along with the invitation, food coupons for 2 or 3 people authorizing as many meals in designated hotels can be sent to be used on the day of the marriage. The invitees can then have the marriage feast in their own towns and cities nearest to their homes. This will save lot on travel and associated expenses and congestion around the marriage sites.

The actual ceremony can be viewed by people in their homes if the marriage ceremony could be web-cast and the website address is printed on the invitation. Some of the TV channels can be asked to uplink also and the channel details maybe printed in the invitation. Alternately or in addition, people can log on to the website and see the marriage as it is performed.

With the above two arrangements, the marriage crowds will be manageable. Only the near and dear relatives can have a meaningful witness of the marriage.

# #3. Accelerating Digital Transformation in Challenging Times

1. The title of this article is the subject, the ITU (International Telecommunications Union, a specialist body of the United Nations) has advised countries' leaders and intellectuals to deliberate upon 17<sup>th</sup> May, the World

Telecom and Information Society Day. The world is facing the challenge of the pandemic, COVID-19, which has already taken more than 3 mln lives worldwide. It is still rising, especially in India; economic distress among middle and lower classes, psychological depression and anxiety among many are discernible. There is however a silver lining, occasioned by forcing people to work and live in a different way. Ubiquitous and affordable telecommunications and internet and smart phones are enabling people to face the challenge of disability, distress and death COVID-19 is occasioning. Let us asses the challenge and change.

- 2. The most impressive change is that over 5 mln Indian IT professionals have been working from home since a year. They save on travel time and expense. India's IT companies have reported 7-10% increase in revenues and profits during the fiscal 2020-'21. 93% professionals have said they like to work this way from home.
- 3. The second impressive response to the challenge is on education and learning. Children aged seven and above are receiving lessons from teachers <u>on-line</u> on the smart phones in their homes. Many homes have turned into work places parents and children at different tables in the same home and at the same time.
  - On-line classes can be alright for post -metric education for children above the age 15 years. But learning by children is to be cultivated by gurus, teachers. Inquisitiveness, exploration, discovery, values, morals, ethics and humanness and spirituality can only be implanted by Guru-Sishya interaction. Children under 15 need guidance. Later, they can themselves cultivate jignasa (inquisitiveness) instilled by the Gurus.
- 4. The cell phone in the hands of over 90% of the 1300 mlns Indians is doing wonders. Most payments, receipts and remittances are done on-line. Even the less "educated" are having money transactions digitally. The average revenue per user (ARPU) per month is under a measly Rs.250, up from Rs. 125 before the pandemic and work from home. The pre-paid subscriptions and re-charging facilities from millions of shops have made transactions almost painless and instantaneous.

5. The conspicuous and deplorable exceptions to ease of work and life is electioneering and balloting which can be easily non-physical that is digital. Voting by shareholders of companies and members of scientific and engineering societies have been migrated to canvassing on social media and electoral voting, but not elections to parliament, state legislatures and local bodies. The current wave of elections in different States in the traditional manner; large public meetings, road shows, door to door visits, lining up before election booths have become super spreaders of COVID-19 striking presidents Chief Ministers, MPs, MLAs, cinema stars and the common folks - just as the death is the leveller, so has COVID-19 become the leveller.

# Death, the Leveller:

The glories of our blood and state
Are shadows, not substantial things
There is no armour against fate
Death lays his icy hands on kings
Sceptre and crown
Must tumble down
And in the dust be equal made
With the poor, crooked scythe and spade...
Only the actions of the just
Smell sweet and blossom in the dust

- James Shirley, the English poet (1596-1666)
- 6. While death cannot be avoided, COVID-19 can be avoided by among others digitalized elections. The process is described in the **note#1**
- It is amazing why the Election Commission of India and tech-savvy BJP have not implemented canvassing on electronic media only and balloting only on-line from homes/work places.
- 8. Marriages in India especially among the affluent are socially and nationally costly and vulgar. These can go digital avoiding physical movement. The suggested migration to e-marriages is at **note** # 2.

- 9. National and international conferences, inaugurations, trials in judicial courts, memorial lectures, are all going over webinars; zoom has been having booming business - saving on travel and hotel expenses, reducing pollution and energy consumption— all welcome developments. War is also going into digital form- enemies' control and command networks, logistics will all be disrupted by injecting viruses. Israel's repeated devastating attacks on Iran's nuclear facilities in Natanz are an example of such wars. Space is getting militarized and software is getting weaponized. Artificial Intelligence and Robotization will profoundly influence every aspect of human activity. Human memory becomes unnecessary; it is getting outsourced to the world wide webs (WWW). All these developments in digitalization can be human friendly if wisely and ethically used.
- 10. ICTs can migrate the way we work and live and learn to new ways with economic and social benefits. *People will communicate for work and commute only for pleasure*. The migration is however, not without some pain. Inadequate bandwidth and falling signal strength; getting glued to inanimate devices, absence of emotionally elevating socializing; rising home electricity and telecommunication and expenses; home losing its "familyness" by becoming a multi-functional work place.
- 11. Men learn to adapt. Evolution involves change. Those who cannot adapt will get distressed and decay. Long ago Poet Laureate Lord Tennyson wrote:

"The old order changeth yielding place to new Lest one good custom should corrupt the entire world".

# As a French lesson says:

"Nous verrons bien d'autres choses Encore! On n'rrete pas le progress"

(We will well see yet other things.

One cannot stop progress.)

Note#1: IT & Elections Ref: See Para:6 Note# 2: E-Marriages Ref: See Para:8

# **Start-up Opportunities in Defence Sector**



# Dr Bharatbhushan Joshi

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Narendra Modi, the Department of Military Affairs (DMA), Ministry of Defence (MoD) has come out with a list of 101 defence equipment that would have an embargo and a list of 108 items to be developed indigenously on the import with an indicative timeline. This is a leapfrog step towards self-reliance in defence sector, which creates umpteen opportunities for the Indian industry to indigenously develop and produce the items from the banned list either by using their own design and development capabilities or by espousing the technologies already developed by Defence Research and Development Organisation (DRDO).

With this latest embargo on import of 101 items, one can expect that contracts worth almost Rs Four lakh crore can be grabbed by the domestic industry in the next five to seven years. There is also a list of 108 product/ equipment that are identified for technology transfer to the industry or to be developed indigenously. From this list there are many products for MSME to explore. The complex systems are manufactured by tier-1 companies and the components, parts and subsystems required to build these High-technology complex systems would be supplied by the tier 2 and tier 3 companies.

The MSME sector having potential for development of innovative technologies for defence equipment is advised to apply for funds under TDF (Technology Development Fund) Scheme. To know read more you may visit to author's full article at

https://www.ehitavada.com/article.php?id=Insightpage 2021-05-09 e0eda2343869bc277a14be2b655a903f

There will be a progressive implementation embargo on imports in a planned manner between 2020 to 2024. The government has gone a step ahead to create a separate budget head with an outlay of nearly Rs 52,000 crores for domestic capital procurement. So, MSME and Startups should gear up themselves for 'Atmanirbhar Bharat' and achieving their own progress in coming next five years.











#### **L4 SERIES TALK**

IEEE MTT-S KERALA SECTION & IEEE APS & MTT-S SEC IIST

"RECENT DEVELOPMENT OF ADVANCED ANTENNA PRODUCTS FOR SPACE & GROUND APPLICATIONS. L4, PAPERS/PATENTS AND REFLECTIONS OF MY CAREER"



#### Dr. SUDHAKAR RAO

IEEE Life Fellow, Fellow IETE, Senior Technical Fellow, Northrop Grumman Space Systems, USA



### ABSTRACT OF THE TALK:

This talk is tailored towards students, young professionals and researchers. Learn From Leaders and Learn from Legends (L4) is a great initiative from IEEE MTT-S Kerala Chapter that started recently to motivate youngsters working in the areas of antennas and microwaves. My views about legends and leaders in antenna community with some examples will be given in the beginning of this talk. A brief presentation on writing successful papers and submitting invention disclosures for patenting a design/concept will be given including some examples. Reflections on my student and professional career will be discussed.

Antennas are "Eyes and Ears" of modern-day satellite communication systems. They form an important part of any communications payloads influencing the coverage, required gain to close the communication link, bandwidth, capacity/data rates and polarization. Antenna engineering is a highly specialized skill in the industry and the role of antenna engineer is to develop appropriate products and qualify. Antenna field is very interesting and exciting to students and has lot of scope for innovation.

Recent developments of antenna designs/products for space, air and ground applications will be described. These include W/V band sate!lite antennas providing large bandwidths for future satellites, antennas for ground applications with emphasis on size and mass, extremely ultra wide band (E-UWB) antennas, multi-band antennas and ring antennas for vehicular applications. At the end of this talk, the attendees will be exposed to various aspects of developing advanced antenna products, writing good technical papers and submitting invention disclosures for

#### SPEAKER'S BIOGRAPHY:

Dr. Sudhakar Rao is currently working as the Senior Technical Fellow at Northrop Crumman Space Systems providing technical leadership for all divisions of Northrop Crumman in the areas of antennas and payload development for various key programs, proposals and IRAD. Dr. Rao received B. Tech from REC Warangal, M. Tech from IIT Kharagpur and Ph. D in from IIT Madras. He worked at ECIL Hyderabad, LRDE Bangalore, was the post-doctoral fellow at the University of Trondhelm. Norway and then worked as a research associate at University of Manitoba, Canada during 1982-1983. Over the past 38 years, he worked at Spar Aerospace Limited, Canada during 1982-1983. Over the past 38 years, he worked at Spar Aerospace Limited, Canada, Boeing Satellite Systems, Lockheed Martin and now at Northrop Crumman and contributed to antenna & payloads for more than 85 different satellites. His work on development of radiation emplates for complex satellite antenna patterns for interference analysis was adopted and recommended by the International Telecommunication Union (ITU)/CCIR in 1992 as the world-wide standard for satellite manufacturers and operators. He authored over 220 technical papers and was awarded with 56 patents (51 US & 5 European) and 5 trade secrets. His fundamental work on the design of multiple beam antennas in 1999 has been used by satellite industry world-wide. He authored and co-edited three text book volumes on "Handbook of Reflector Antennas and Feed Systems" that were published in June 2013 by the Artech House.

Dr. Rao is an IEEE Life Fellow and a Fellow of IETE. He received several awards including the IEEE Benjamin Franklin Key Award in 2006, Delaware Valley Engineer of the Year in 2008, Asian American Engineer of the year award in 2008, IEEE Judith Resnik Technical Field Award in 2009 for ploneering work in aerospace engineering, Boeing's Special Invention awards in 2001 & 2002, Lockheed Martin's President Award in 2005, 2007 & 2008, 2009. IEEE Region 6 Outstanding Engineer Award for 2017 and the 2017 Northrop Crumman's President Award for Innovations and contributions to key programs. He received Distinguished Alumni Professional Achievement Award from his alma mater NIT Warangal in 2016 and IETE's Prof. S.N. Mitra Memorial Award in 2016. Recently, he received the 2020 IETE's Biman Beharl Sen Memorial Award.

Cr. Raoserved as the Distinguished Lecturer for the IEEE APS and as an AdCommember for IEEE APS. He was the founder and Chair for the IEEE APS "Industry Initiatives Committee" during 2015-2017, IEEE APS Fellow Evaluation Committee member during 2015-2017, founder and Editor of the IEEE Antennas & Propagation Magazine's "Antennas & Applications Corner", Associate Editor for the IEEE Transactions on Antennas & Propagation, and Associate Editor of IEEE AWPL. He is the Executive Committee Member for the InCAP series of conferences in India. Dr. Rao delivered invited and keynote talks for more than 50 conferences world-wide. Recently, he was appointed by the IEEE Board of Directors to serve as the IEEE Fellow Committee member for 2020 & 2021 and is a member of the IEEE Fellow Strategic Planning Subcommittee (FSPS) for 2021. He instituted IETE – Dr. Sudhakar Rao Award in 2020 to recognize and honor outstanding antenna engineer.





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#### Call for Nominations for IETE Awards-2021

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- IETE-Lal C Verman Award- (Standardization, Quality Control and Precision Measurements)
- IETE- IRSI (83) Main Award & IETE IRSI (83) Young Scientist Award- (Radar Science & Technologies)
- IETE-Flt Lt Tanmaya Singh Dandass Memorial Award - (Avionics)
- IETE-Prof K Sreenivasan Memorial Award -(Teaching Electronics and Telecommunication Engineering)
- IETE-Prof SVC Aiya Memorial Award (Guidance in Electronics and Telecommunication Research work)
- IETE-Prof S N Mitra Memorial Award (Radio Broadcast Science and Technology)
- IETE-Bapuseetharam Award (Biennial)- (R&D and / or production of Electronic Components)
- IETE- B V Baliga Memorial- (Electronics and Telecommunication with emphasis on R&D and Industrial Development)
- IETE- N V Gadadhar Memorial Award- (Electronics and Telecommunication Engineering with emphasis on Mobile Radio Communication)
- IETE- B R Batra Memorial Award (for selfless service to the cause of the IETE)
- IETE-R S Khandpur Award-(Medical Instrumentation)
- IETE-Brig M L Anand Award- (Applications of Networking and Internet with its usage in everyday life &
- IETE-Biman Behari Sen Memorial Award-(emerging areas of Electronics and Telecommunications with emphasis on R&D and Industrial Development)

- IETE- Life Time Achievement Award-(Electronics, Telecommunication & allied fields)
- **IETE- Smt Manorama Rathore Memorial** Award - (Electronics and / or Communication)
- IETE- Smt Ranjana Pal Memorial Award-(RF Communications, Electromagnetic, Antennas, Microwaves Circuits, Devices etc)
- IETE- Smt Triveni Devi Gupta Memorial Award- (Electronics, Telecommunications, Medical Electronics, Broadcasting, IT, ICT, E-Governance, Computer Technology, RF, e-Education, Electrical Technology).
- IETE- Technomedia Award for Young Women **Engineering**in (Electronics, Telecommunication, Computer Science and Information Technology Engineering)
- IETE-Shri Devi Singh Tyagi Memorial Award- (Avionics and Defence Electronics)
- IETE-Shri P P Malhotra Memorial Award-(Electronics Industry /Academia) only for IETE Organizational Members
- IETE-Dr Sudhakar Rao Award- (Advanced Antenna System for Space, Air or Ground Communications)- -(New Award instituted from this year)

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