From President's Desk

Dear Members,

As we prepare to shift our momentum to 2020 a New Year, I convey my best wishes and sincere thanks to one and all for their unwavering support. Beginning of a year is a time both to look back with pride on great achievements, and at the same time look forward, with ambition, to new goals and perspectives. Though the year ended and begun with heavy unrest at the national level, but at IETE we deliberated and discussed on many educational and development issues. Therefore, we have reasons to be proud of our accomplishments and look forward with enthusiasm to next year at IETE.

Dear members, for decades IETE has stood for excellence and quality, representing the interests of professionals and working with experts to strengthen services for its members. I too intend to build on the successes of the past several years through an honest and sincere work, encompassing the principles and practices of inclusion and convergence. Dear friends, I firmly believe that if we join and act more closely together, if we intensify engagements with our members, if we support the cause of IETE more resolutely, then we can definitely strengthen our institution. Of- course the challenges that we face today are different from the past but together it can be overcome.

In 2019 IETE turned 66 years and assumed more responsibilities. I am pleased to mention that in the past months, IETE and its centres collaborated with various institutions/ organizations and deliberated on significant issues. The events that witnessed focused talks were: IETE Foundation Day celebrations at Hqs and its various Centres/ Sub-Centres on the theme "Role of Artificial Intelligence and Machine Learning in the Development of Society"; IETE East Zonal Seminar & ISF Congress together with 5th International Conference on "Microelectronics Computing & Communication System (MCCS-2019)" at Ranchi; a Conference on "IoT for Real World Applications" at IETE Hyderabad Centre and 25th Sir J C Bose Memorial Lecture at Kolkata. The detailed report of these activities are published in the issue along with other regional reports.

We have couple of events lying ahead in coming months. I urge the Centres and its Executive Committee members to give objective and careful consideration to such activities and to the other publicity agendas on our working programmes. I am sure that in the spirit of open discussions and willing cooperation, we can solve mutual problems in IETE's interest. Centre chairpersons should ensure that all regions in its aegis and professional units participate in identifying key priorities.

IETE graduates who seek admission in MTech courses in IETE's domain areas, offered by the Instutations/ colleges as prescribed, are advised to visit our official website for terms & guidelines for receiving IETE stipend. Likewise, researchers and IETE members may like to checkout for IETE Research Fellowship Scheme for obtaining support in conduct of their specialized research studies. One may also contact IETE HQs for more details.

It is with profound sadness that I inform about the sudden passing away of inspiring stalwarts of IETE, Prof B S Sonde, DFIETE; Dr P B Parikh, DFIETE; Vice Admiral SP Govil, AVSM, PVSM, OBE; Dr R S Khandpur; Gp Capt M Mukutmoni (Retd) and Prof T Krishnan. They will always be remembered by IETE fraternity for their dynamic role in promoting the cause of our Institution. IETE conveys heartfelt condolences to the bereaved families.

I take this opportunity to invite you to IETE's 51st Mid Term Symposium-2020, our flagship event, to be held on the theme "Digital Forensics in Information Security" on 17th April 2020 at National Institute of Technology, Imphal, Manipur. We will have keynote addresses and technical paper presentations. I invite all IETE members and non-members to attend, participate, discuss and exchange information.

Friends, we still have a long way to go, and only through a joint effort we will be able to reach our fundamental goals. Together we can transform IETE into a more inclusive and participatory organisation. Strengthen IETE with us!
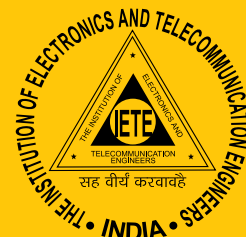
Happy New Year!!

Prof (Dr) J W Bakal

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IETE HQs, New Delhi

IETE Zonal Seminars and ISFs Congress

❖ **Zonal Seminar (South) & ISF Congress**: IETE Chennai Centre organized Zonal Seminar (South) & ISF Congress on **Smart Engineering for Sustainable Development** during 20th - 21st Sep 2019, hosted by Sri Sairam Engg College, West Tambaram, Chennai. The programme was inaugurated by honorable Chief Guest **Dr DC Pande**, Co-Chairman BoRIS; and was also graced with the benign presence of **Shri S Ramaswamy**, Chairman BoESA; **Shri RK Vyas**, Co-Chairman TPPC; **Dr A Rajendra Prasad**, Principal, Sri Sairam Engg College; **Shri Tata Sudhakar**, Chairman Chennai Centre; Dr M Selvi, Hony Secretary; Dr J Raja, HoD/ECE; Dr S Sumathi, ISF Coordinator; Shri Shridharan, Hony Treasurer and EC Members. Representatives from Palakkad, Bangalore, Erode, Kochi, Hyderabad and Coimbatore, were the attendees of the seminar along with ten ISF Coordinators from various colleges.

Shri Tata Sudhakar welcoming the gathering, briefed about the Zonal Seminar programme followed by addresses of Shri S Ramaswamy, Dr A Rajendra Prasad and Shri RK Vyas. The Chief Guest **Dr DC Pande** released the Souvenir and handed over its first copy to Dr A Rajendra Prasad, Principal Sri Sairam Engg College. Keynote address was delivered by the Chief Guest on **"Radar and its Importance".**

Paper presentation & Project competitions were conducted. Working prototypes were exhibited by the students, which were evaluated by a panel of judges including- **Dr Jose Anand,** Prof/ KCG College of Engg, Chennai; **Shri S Ramaswamy** and **Shri RK Vyas.** Vote of thanks was proposed by Dr S Sumathi.

Based on the rules and criteria, students' work selected from various colleges for the cash prizes were: For **Project Demonstration –** 1st Prize was bagged by Sri Venkateswara College of Engineering; 2nd Prize went to Loyola ICAM College of Engg & Tech and 3rd

Prize was taken away by Sri Sairam Engineering College. The colleges winning **Paper Presentations** were: SRM University (1st Prize); Sri Venkateswara College of Engg (2nd Prize); Sri Sairam Engg College (3rd & 4th Prizes). The function ended with valedictory & prize distribution sessions. Vote of thanks was proposed by Dr S Sumathi.

ISF Congress

Meet started with the welcome remarks by **Shri Tata Sudhakar,** Chairman, IETE Chennai Centre. This was followed by the Presidential address from **Prof (Dr) KTV Reddy,** meant for the students**.** Later a **s**pecial address on initiatives under Skill Development Training Programme was delivered by **Brig (Dr) VK Panday (Retd)**, Chairman, SD&ICC; while **Shri Vinay Kakkar**, Co-Chairman Publications Committee, gave a presentation on value added courses being offered by Jetking. **Dr Swarna Ravindra Babu**, CEO, CAISER, Chennai, delivered a technical talk on IOT and **Shri J Santhan Krishnan**, former Principal, Telecom Training Institute, BSNL, Chennai, expounded on 5G Technologies.

Awards declared on the occasion were as follows. For **Best ISF,** 1st position was secured by **Sri Sairam Engineering College (**Dr S Sumathi – ISF Coordinator); 2nd position was conferred to **B S Abdur Rahman Crescent Institute of Science and Technology (**Prof S Anusooya – ISF Coordinator) and 3rd position taken away by **Vel Tech Multi Tech Dr RR Dr SR Engg College**, (Prof K Saravanan – ISF Coordinator). In **Most Active ISF Award** category**,** the 1st Prize was presented to **Valliammai Engineering College**(Dr Komala James – ISF Coordinator); 2nd Prize to **Easwari Engineering College**, (Dr D Jessintha - ISF Coordinator) and 3rd Prize to **Jeppiaar Maamallan Engineering College**,(Prof K H Shakthi Murugan – ISF Coordinator). Concluding the programme, vote of thanks was proposed by Dr M Selvi, Hony Secretary.

IETE Students' Forum Activities

● **ISF** at **PSG College of Technology (PSGCT), Coimbatore,** conducted two quality events RABG (Race Automation Battle Grounds) and NEOLOGIC as a part of KRIYA 2K19 on **Feb 23, 2019**. The inter college technical symposium, RABG– one of the gold events of Kriya '19, was a line follower bot event that tested the design skills of the participants in two innovative rounds. With a healthy turnout, the event was a great success as the contestants competed with each other as they made their bots tackle the track with ease. Another event NEOLOGIC, was held next day tested the general and technical knowledge of the competitors.

● **ISF** at **Sambhram Institute of Technology (SIT), Bangalore,** organized an international conference on "Latest Advancements & Future Trends in Engineering, Science & Management" on **May 4-5, 2019** in association with IETE Bengaluru Centre. Prof H S Bhatia, Chairman, IETE Bengaluru, was the Guest of Honour and Dr C V Ravishankar, HoD/E&C, coordinated the programme.

● A workshop on "Applications of Arduino" by Shri Dhananjay Mahajan, Shri Anand Kulkarni & Prof N I. Bhopale, was organized at **ISF** at **Sanjivani College of Engineering (SCE), Kopargaon, Maharashtra,** in association with IETE Nashik Sub-Centre on **Jul 6, 2019**. Another workshop was held on "Fundamentals of C Programming", by Prof Nitin Bhopale and Prof Shailesh Kulkarni on **Aug 23-24, 2019**. **ISF** also organized an expert lecture by Capt Abhilash Kulkarni, Infantry, Indian Army on "Career and Opportunities for Engineers in Defense" on **Sep 16, 2019**.

● **ISF** at Dept of ECE, **Dhanalakshmi Srinivasan Engineering College (DSEC), Chennai,** held events like component display, mini project, technical quiz, connection and group discussions on **Jul 13, 2019**. About 150 members attended.

● **ISF** at Dept of ECE, **SRM Valliammai Engineering College (SRMVEC), Chennai,** organized a seminar on "Higher Studies and Opportunities after Graduation" in association with ISTE on **Jul 18, 2019,** wherein Shri Anbarasan A, AP/ECE, welcomed the gathering and introduced the Chief Guest Shri Satheesh Kumar, Business Head, IMS, Chennai. The guest was felicitated by Dr S Ramesh, Assoc Prof/ECE. Another workshop on "Networking Tools" was conducted by E&CE Dept on **Aug 6, 2019**, by Shri S Aaja Alavudeen, Sr Project Engineer, Nest Lives Pvt Ltd. On **Aug 18, 2019** once again the same lecture, *i.e.* "Higher Studies and Opportunities after Graduation" was organized by Shri Satheesh Kumar, Business Head, IMS, Chennai for another set of 75 members. Next, the **ISF** conducted a lecture on 'Internet Privacy and Cyber Security Concerns' by the chief guest & alumnus, Shri Karthik Raghupathy, System Engineer, Prothious Engg Services on **Aug 27, 2019**. Mrs Indu Nikhil, AP, Alumni Coordinator, welcomed the gathering and introduced the speaker. Vote of thanks was proposed by Ms K Sobana, AP.

● Dept of IT of **Dharmsinh Desai University (DDU), Nadiad**, having an **ISF**, organized a one-day workshop on "NodeJS and Introduction to MongoDB" on **Jul 20, 2019**, which was conducted by Shri Kirtan Dudhatra, DDU Alumni and Shri Parth Shah, Sem-VII, IT student. About 59 students of IT Dept attended and gained practical knowledge on the utility of NodeJS and MongoDB. Topics earmarked for the workshop were: Introduction to NodeJS; Hands on using NodeJS; Chat Application; Rest API and Web Scraping. Another two-day workshop was organized on "Salesforce" on **Sep 21-22, 2019** with experts Shri Nimit Shah and Shri Swagat Talsania from Incapsulate, Ahmedabad.

● **ISF** at **JSPM's Bhivrabai Sawant Polytechnic (BSP), Wagholi, Pune,** conducted a seminar on PLC on **Jul 22, 2019**. Shri Suhas Gadekar was the resource person. JSPM's BSP expressed sincere thanks to the guest for the valuable technical session.

● **ISF** at **University of Engg and Mgmt (UEM), Jaipur,** organized a workshop on "Application of Machine Learning in Image and Video Processing" during **Jul 22-26, 2019**. Prof (Dr) Pratik Chattopadhyay, Dept of CS&E, IIT-BHU, was the mentor for the workshop. It was inaugurated on 22nd July 2019 in presence of Prof (Dr) Biswajoy Chatterjee, Vice-Chancellor/UEM; Prof (Dr) Aniruddh Mukherjee, Dean-Academics/UEM; Prof Sandip Das, HoD/E&CE/UEM; Prof Sayak Pramanik, HoD/Center of Advanced Studies/UEM and Prof Chiradeep Mukherjee, AP & ISF Co-ordinator. Prof (Dr) Manish Tiwari, Chairman; Prof (Dr) Ghanshyam Singh, Immdt Past Chairman, and Prof (Dr) Dinesh Yadav, Hony Secretary, from IETE Jaipur Centre, motivated the students for more such participations.

● **ISF** at Dept of ECE, **Gayatri Vidya Parishad College for Degree & PG Courses (A), Rushikonda, Visakhapatnam,** conducted activities, namely: a guest lecture by Shri M Bhagavan Prasad, Sub-Divisional Engineer, BSNL Visakhapatnam, on the Fundamentals and importance of Optical Fiber Communication and Wireless Communications on **Jul 23, 2019** and a two-day workshop on "IoT using Arduino" at Dept of ECE on **Aug 30-31 2019** with the help of Shri K Bapuji, CEO, Appleton Innovation, as the resource person.

● A new session of **ISF** was inaugurated at Dept of ECE, **Sri Venkateswara College of Engineering (SVCE), Sriperumbudur,** by Dr S Muthukumar, HoD/EC**,** SVCE on **Jul 24, 2019.** On this occasion a guest lecture on "Recent Application of Machine Learning" was arranged under the banner of IETE Chennai Centre, by Dr V Sathiesh Kumar, AP/ECE, MIT Chennai. About 66 members attended. The **ISF** organized another technical talk on "Wireless Communication – A Glimpse on its hyper growth in Telecom Industry" under IETE Chennai Centre on **Jul 26, 2019**, and the speaker was Shri A Sadagopan, FIETE, Ex-AGM, BSNL Chennai. About 150 members attended this talk. Another event "24 hours Make-A-Thon" was inaugurated by Dr S Muthukumar, HoD/ECE, SVCE on **Aug 9-10, 2019**, wherein the welcome address was made by Ms T J Jeyaprabha, AP/ECE, SVCE. Faculty coordinators- Ms D Menaka, Ms R Kousalya & Ms B Sarala, gave the overview of the hardware-based design event. Dr S Ganesh Vaidyanathan, Principal, SVCE & Dr S Muthukumar appreciated the efforts made. About 60 members attended. **ISF** organized another seminar on "How to present a technical paper" by Dr N Kumaratharan for the students of IETE and Robotics and Artificial Intelligence Club (RAIC) on **Aug 30, 2019.** Ms T J Jeyaprabha and Ms D Menaka, SVCE-ISF incharges, organized many other events for SVCE students to explore their technical talents. A technical symposium on UPAGRAHA'19 was organized on **Sep 26 2019** under the co-ordination of Ms T J Jeyaprabha, Shri G Loganathan and Ms D Menaka. The dignitaries in the event included: Cdr L Ganesh, India Navy, Visakhapatnam and Shri BKS Gokul, Technical Lead, IT. Another technical talk on "SONAR theory and its applications" was given by Cdr L Ganesh and the programme also comprised activities like- Mini Project, Paper Presentation, Circuitrix, Code2Duo, Tech Jam, Arduino Quiz, Line Follower and Project Expo. In valedictory session, Shri BKS Gokul, delivered his lecture on "Network Telemetry and its Applications". Students of the SVCE represented IETE-Chennai Centre and participated in the IETE Innovation Meet 2019 and Advances in

Radio Frequency Measurements at Shah & Anchor Kutchhi Engineering College, Mumbai on **Oct 22, 2019**. Students who won 1st prize in Project Competition were: Shri S Prem Raj and Shri S Lokesh, for their project on "Drones as First Response Vehicles" with Shri T J Jeyaprabha, ISF Coordinator, AP/ECE/SVCE, as mentor. Dept of CS organized a one-day awareness program on AI & ML for social benefits on **Nov 19, 2019,** wherein Dr M H Kori, Former Tech Dir, Alcatel Lucent Technologies and Past Chairman Bangalore Centre, addressed the gathering.

● **ISF** at Dept of EEE, **Vel Tech High Tech Dr Rangarajan Dr Sakunthala Engineering College, Chennai**, organized "Alumni Interaction" with Ms Abarna T (Batch: 2015-19), Technical Analyst, TCS, on **Jul 24, 2019**. Ms Abama spoke on "Opportunities and Challenges in Software jobs" and was felicitated by Dr E Kamalanaban, Principal of the College. The dignitaries present during this meet mostly included the faculty members of the EEE Dept & HoD, namely -Shri Pradeep Katta, ISF coordinator; Dr J Prakash, HoD; Shri S Sri Krishna Kumar, Shri R Senthilkumar, Mr Mohammed Ovaiz A and Mrs R Suguna. On **Aug 27, 2019, ISF** organized a guest lecture on "Transforms and Partial Differential Equations" by Prof (Dr) B Krishna Kumar, Dept of Mathematics, College of Engg, Guindy, Anna Univ, Chennai. It was coordinated by Shri S Sri Krishna Kumar, AP/EEE and Shri R Senthilkumar, AP/EEE. Members present on the occasion were: Dr E Kamalanaban, Principal; Dr J Prakash, Head/EEE; Mr Mohammed Ovaiz A, Mrs R Suguna, Shri Pradeep Katta. "Alumni Interaction" with Shri Anand Raj M, Maintenance Engr, Johnson Lifts Pvt Ltd., was arranged on **Sep 10, 2019**. Dr E Kamalanaban and Dr J Prakash, were present with others namely- Shri S Sri Krishna Kumar, Shri R Senthilkumar, Mr Mohammed Ovaiz A and Mrs R Suguna. On **Sept 19, 2019**, **ISF** organized an Industrial Visit to TCP Ltd, Power Plant, Gummidipoondi, Chennai. Shri Pradeep Katta and Mrs R Suguna accompanied the students, and the event was coordinated by Shri R Senthilkumar. Dr E Kamalanaban, Principal and Dr J Prakash, Head/EEE also participated. The ISF took the students to the same power plant the next day with its full team.

● **ISF** at Dept of ET, **Saraswati College of Engineering (SCOE), Khargar, Navi Mumbai,** organized a seminar on **Jul 25, 2019** on "Application of Arduino and IOT", by Shri Santosh Kamble, CEO of Saitronics Ltd. It was coordinated by Prof Nilesh B Patil, ISF Coordinator and guided by Prof Neha Mahajan, HoD and Dr Manjusha Deshmukh, Principal of the College. Vote of thanks was proposed by Krishna Nakkum, SCOE ISF President. On **Sep 20, 2019**, Dept ET, organized 'Ideathon' an event for TE/BE students under IETE. Winners declared were honoured by the Principal Dr Manjusha Deshmukh. On **Sep 25, 2019** Dept of E&T organized 'PCB workshop' for II/III yr BE students, which was coordinated by Prof Pallavi Kharatand while guidance was offered by HoD Prof Neha Mahajan. Siddhesh Sawant and Krishna Nakkum handled the event.

● **ISF** at VT Patel Dept of E&C, **Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat,** organized two events namely – "Tech-intellect" and "Project Presentation" in the academic year 2018-19. A workshop was also organized on "A report preparation using LaTEX" for II, III & IV year students and was conducted by Dr Hiren Mewada, faculty of CHARUSAT. Prof Himanshu Patel, faculty & ISF coordinator was present uring the session.

● A guest lecture was arranged on "Applications of Real Time Embedded Systems" by the **ISF** at **Pandyan Saraswathi Yadav Engineering College (PSYEC), Sivaganaga,** on **Jul 26, 2019** by Shri M Shanmugam, Project Lead, Robert Bosch, Coimbatore and Shri Senthilkumar, Technical Lead, HCL, Madurai. Another guest lecture was on "Design & Analysis of Electronic Circuits", delivered by Dr M

Arivalagan, HoD/EEE, Nadar Saraswathi College of Engineering and Technology, Theni, on **Aug 9, 2019.**

● The Dept of ECE, **of Sahyadri College of Engg & Mgmt (SCEM), Mangaluru,** having IETE Student Forum conducted a one-day workshop on "PCB: Design and Manufacture" on **Jul 26, 2019** by Mrs Megha N, ISF co-ordinator & committee member.

● **ISF** at Dept of ECE, **Velalar College of Engg and Tech (VCET), Erode,** organised an inaugural function of Student Association and ISF on **Jul 26, 2019,** which was graced by Shri G Ramesh Kumar, Mgr, Industrial Automation, Siemens Ltd., Coimbatore as the Chief Guest. Ms H Nathiya delivered the welcome address. Prof (Dr) K Venkatachalam, HoD/ECE, introduced the new office bearers and the batches were distributed to the student members by the Principal Dr M Jayaraman and the Chief Guest. The association activities were proposed by ECE Dept Student Secretary Ms S Rajeswari. Presidential address was delivered by the Principal. Dean Academics Prof L Peter Stanley Bebington, delivered the inaugural address. Chief Guest spoke on "Digitalization Industry 4.0". The programme concluded with vote of thanks from Ms V Sharmila Devi. The **ISF** organized IETE sponsored one-day national level research seminar on **Aug 31, 2019,** wherein an MoU between Bahir Dar University, Ethiopia and VCET, was made to organize a seminar on "Wireless and Optical Network System Design" along with IEEE Photonics Society and IEEE EMBS chapter. Prof (Dr) SJ Thiruvengadam, HoD, Thiagarajar College of Engg, Madurai, graced the event as the Chief Guest. Prof **(**Dr) K Venkatachalam, Shri P Senthil Kumar**,** and Principal Dr M Jayaraman addressed the gathering. Others present on the occasion include: Dr P Ravi Kumar, Assoc Prof/BME VCET; Dr S Malathi Head/ Photonic Research Centre & Assoc Prof/ECE; Shri M S Ramaiah, Univ of Applied Sciences, Bengaluru; Dr A Pusharagavan, Faculty ECE/Bahir Dar University, Ethiopia. The inaugural address was delivered by Prof L Peter Stanley Bebington, Dean/Acadamics and Prof D Jayachandar, Dean/ Student affairs. 1st Session saw Dr SJ Thiruvengadam's talk on "5G Millimeter Wave Massive MIMO" In the 2nd Session, Dr P Ravi Kumar delivered a lecture on "Photonic Biosensors". During the 3rd Session, Dr S Malathi delivered a lecture on "Switching Technologies for Elastic Optical Networks", while the final session included a technical talk by Dr A Pushaparagavan on "Optical Network System Design". Vote of thanks was proposed by Ms V Sharmila Devi.

● **ISF** at **Keshav Memorial Institute of Technology, Narayanaguda, Hyderabad**, conducted an in-house poster presentation competition for the BTech students on **Jul 27, 2019**.

● A three-day Faculty Development Program (FDP) on "Cloud based Machine Learning for IoT Applications" was organized by **ISF** at **Kongu College of Engineering (KCE), Erode,** during **Aug 1-3, 2019**. Shri P Suresh from Palakkad Centre conducted the programme.

● A new **ISF** at **New Horizon College of Engineering (NHCE), Bangalore,** was inaugurated by Prof H S Bhatia, Chairman, IETE Bangalore on **Aug 4, 2019**. Prof C Murali, Guest of Honour, delivered a technical talk on "Latest Trends on 5G" on the occasion. Dr Sanjeev Sharma, HoD/NHCE, proposed vote of thanks.

● **ISF** at **LD College of Engineering (LDCE), Ahmedabad,** organized an orientation event for 1st year students on **Aug 5, 2019** along with a fun treasure hunt activity. Students were given prior information about the events being organized by the ISF.

● **ISF** at Dept of ECE, **SRM Institute of Science and Technology (SRMIST), Vadapalani Campus, Chennai,** organized a one-day seminar on "Computer Networks and Cyber Security" on **Aug 5, 2019** by Shri Bolem Srinivas, Scientist/NIOT. About 120 members attended. The