



**From Principal's Desk . . .**

*Vidya education system integrates the culture of quality education with moral and ethical values. We are recognised today as a quality oriented, socially committed institution because of the committed contributions from all its stakeholders. The department of ECE has been at the forefront in undertaking various activities to nurture the students of the department as well as to effectively contribute to the emerging needs of the society, time to time. Such contributions happen because of the good value systems followed in the department. It is a matter of great pride and satisfaction to see that the department is bringing out another edition of the Newsletter "EnCircle". Of course, the Newsletter is also a reflection of the achievements by the department.*

*I extend my hearty appreciation to HoD-ECE and the team of staff members and Students for exhibiting the spirit of cooperation and togetherness in carrying out all constructive activities taken up by the department.*

*With Best Wishes*

**Dr. Saji C B**  
Principal- VAST



**From Head's Desk . . .**

*In the current global pandemic, technology tools are considered to be the vital gadget for effectively monitoring and controlling outbreaks. Even sometimes eventuality shows the way to explore new technology. Hence technology thrust always gives an academicians to expand their wings on learning. It's a matter of happiness that the department continued to release the seventh series of newsletter "EnCircle-7"; for the year 2019-2020. The newsletter is considered as the spectrum of the department that articulates the information on achievements as well as innovation befalling in the department to the readers. The commendable effort has been put by the entire team of the department in planning the activities and accomplishing for the contents of the Newsletter.*

*I applaud both students and staff members of the ECE department for their contribution, as well as coordinator for publishing the newsletter. Further, on behalf of the department, I expressed my gratitude to the principal and management for their constant source of support for enrichment.*

*With Best Wishes*

**Dr. S. Swapna Kumar**  
HoD- ECE, VAST

### ECE Dept organises two-day workshop for Diploma students

The ECE Dept. of Vidya organized a two-day fully hands-on workshop on “Embedded Programming” on 9- 10 December, 2019 for the final year students of Polytechnic Colleges. The objective of the workshop was to provide an introduction to and to create awareness about embedded programming based hardware and software tools through hands-on training on embedded systems design using ATMEGA238P micro controller. The workshop received a good response with more than 60 registrations from various Polytechnic Colleges.



### Invited talk on aerogels

The ECE Dept. of the College organised a presentation on Material Development for Electronics by Dr. N. C. Pramanik (Scientist, C-MET, Thrissur) for the final year B.Tech (ECE) students. Dr. Pramanik gave an interesting presentation on aerogels. The focus of presentation by Dr.Pramanik was the possibilities and development of aerogels in the field of materials used in electronics equipment and devices.



### Vidya Skill Centre develops UV sterilizer and other products

The hidden talent of Vidya is making some significant contributions in the overall efforts in fighting the COVID – 19 pandemic. The personnel behind the Vidya Skill Centre, in association with the NSS Technical Cell of Vidya, have developed a few products immensely useful for the healthcare workers.



One of the most important contributions is the development of an UV Sterilizer. This is a device which uses ultra-violet rays to kill bacteria and thereby sterilize materials. The UV Sterilizer was developed by a team consisting of Mr Anil M (Coordinator, Vidya Skill Centre), Mr Anil P Sreenivasan (TI, ECE Dept) and students Mijo Jose, Abhishek M V, Adithya Kallingal, Binto Joseph and Joshni Joju. Besides the UV Sterilizer, the Skill Centre has also developed Overhead Face Masks and cloth masks.



### ECE faculty serves as resource person for webinar on “Fundamentals of Robotics”

Mr. Ramesh C.R. (AP, ECE Dept.) served as a resource person for a webinar on “Fundamentals of Robotics” hosted by IEEE Student Chapter of SJ CET, Palai jointly with IEEE RA S (Robotics & Automation Society) Chapter. The webinar was held on 20 April 2020 and was attended by 133 participants from various parts of the world.



### Volume 6 of “Encircle” released

Volume 6 of “Encircle”, an annual newsletter being published by the ECE Dept of the College, was released on 11<sup>th</sup> November 2019. Dr. S. Swapna Kumar (HoD ECE Dept.) released the news letter by handing over a copy to the Principal Dr. Saji C. B. The annual newsletter highlights all the events and achievements of staff and students in the ECE dept.



### ECE students interact with alumni

The ECE Dept organized an interaction between the final year B Tech (ECE) students and Anjana Muralidharan (B Tech (ECE), 2013 pass out batch) and Mr. Febin Bos (M. Tech, 2017 pass out batch), alumni of the Dept, on 18 January 2020. During the interaction the alumni spoke about the trials and tribulations they had encountered while trying to get a job.

### Vidya faculty members participate in e-Yantra workshop at IIT Bombay

A team of four faculty members of Vidya, Mr. Ramesh C. R. (Team Leader, AP, ECE Dept.), Mr. Rakesh V. S. (AP, ECE Dept.), Ms. Jemy Jose Kakkassery (AP, ECE Dept.) and Mr. Arun Xavier (AP, EEE Dept.) attended a two-day workshop at IIT Bombay on Firebird V Robot Kit using ATMEGA2560. The workshop, organised as part of the e-Yantra initiative of IIT Bombay, was attended by around 30 participants from engineering colleges and

polytechnic colleges across India. They also bagged Class-A awards in e-Yantra task based Training conducted by IIT Bombay with 97.6 % marks.

### Vidya faculty and staff learn Robotic Process Automation

Under the auspices of Vidya Skill Centre, a Trainer Skilling Programme on Robotic Process Automation (RPA) was conducted in the College on 4<sup>th</sup> November 2019. The programme was conducted with the support of UiPath Academy. The session was organized by Mr Ramesh C. R. (AP, ECE Dept.), facilitator for RPA Developer course organized by ASAP. All participants received Diploma Certification on RPA Starter Training and they are now ready to take up RPA Developer Course (level 1 to level 3).

### Internship Training Program organized for ECE Students

Mr. Thomas S, CEO, Digital Core Technologies Pvt. Ltd. Kochi was invited to conduct for the one day "Industry Internship Awareness Program" for S8 ECE students on January 7th (Tuesday) at Vidya Academy.



### STAFF PARTICIPATION

- \* Dr. S. Swapna Kumar, Professor and Head, ECE Dept. and Mr. Nithin K.M. (M.Tech, Embedded Systems) jointly presented a research paper titled “A novel model of active balancing super capacitor using renewable energy harvesting systems” in International Conference on Automation, Signal Processing, Instrumentation and Control (ICASIC-2020) held at Vellore Institute of Technology, Vellore during 27-28 February 2020.

- \* Mr. Rakesh V.S. (AP, ECE Dept.) successfully completed, with an “Elite certificate”, a “NPTEL-Swayam” 12-week online course on “Microwave Engineering” offered by Prof Ratnajit Bhattacharjee of IIT Guwahati.
- \* Dr. S. Swapna Kumar, Professor and Head, ECE Dept., attended five-day online FDP on “Internet of Things (IoT)” during 27 April to 1 May 2020. The FDP was organized by AICTE Training And Learning (ATAL) Academy at University Institute of Engineering and Technology, Kurukshetra University.
- \* Ms. Resmi K. Rajan, Mrs. Jemy Jose Kakkassery, Mrs. Sruthi M., Mrs. Viji Vinodan, Mrs. Sheji Prakash, Mrs. Jeeja K R, Mr. Anil P. Sreenivasan, Mrs. Priyanka Vijayakumar attended a Trainer Skilling Programme on Robotic Process Automation (RPA) on 4<sup>th</sup> November 2019.
- \* Ms. Sruthi M. (AP, ECE Dept.) successfully completed 30 hours of professional development for Oracle Academy course on JAVA Programming on May 8<sup>th</sup> 2020.
- \* Dr. S. Swapna Kumar, Professor and Head, ECE Dept., attended five days online FDP on "Data Science" from 11th May to 15th May 2020. The FDP was organized by AICTE Training And Learning (ATAL) Academy at National Institute of Technology, Nagaland.
- \* Dr. S. Swapna Kumar, Professor and Head, ECE Dept., and Mrs. Sruthi M (AP, ECE Dept.) attended three days online Online FDP on "Machine Learning and Deep Learning" from 18th May to 20th May 2020. The FDP was organized by Tata Consultancy Services, Kochi.

### ACHIEVEMENTS OF ECE STUDENTS

- \* Praveena Francis of S3 B. Tech (ECE B) batch participated in a National Level Online Paper and Project Presentation Competition organized by Robotic Training Institute, Bangalore and received a Special Consolation Prize.
- \* Mr. Sajil P. S. (B Tech (ECE) 2014 pass-out batch) has been awarded the degree of Master of Business Administration from IIT-Delhi in the 50th annual convocation of IIT Delhi.

### STUDENT PARTICIPATION

- \* Mr. Sooryadev K. and Ms. Vyshnavi V.S. have secured First position in the event PATHFINDER conducted as part of Dyuthi 2020 at GEC Thrissur.
- \* Ms. Sneha Prakash of S6 ECE B has attended the Professional Students Summit 2K20, held at CUSAT, Kalamassery on 15-02-2020.
- \* During the period of lockdown, 55 students of S2 B Tech (ECE) batch of Vidya successfully completed a certification programme titled “Tutorial on C” offered via SoloLearn. One of the students of the batch, Arjun K, completed four different online certification programmes.
- \* Praveena Franics & Neethu S. (S4 ECE B Batch, 2018 Admn.) participated in the webinar on Women in STEM and Innovation hosted by IEEE Student Branch of College of Engineering, Chengannur on 25 April 2020. The session was handled by Ms Divya Ravindranath, CCO & Founding Member, Wequity for Women & Technology.
- \* The Nithin K. M. (S4 M.Tech in ES), Mahima Mohan, Nibha Sunil, Sooryadev K, Sruthi Rajagopalan N, Jesna Wilson of S6 ECE B and Praveena Franics (S4 ECE B) students participated in the webinar on Fundamentals of Robotics hosted by IEEE Student Branch of St. Joseph's College of Engineering & Technology (SJCET), Palai in association of Robotics & Automation Society Chapter of SJCET.
- \* Sofi Thomas (S4 ECE B - 2018 Admn) has won third prize in the Interzone Kho-Kho tournament.
- \* Mr. Sagar Saajan T. and Ms. Varsha K.K. have participated in the 2<sup>nd</sup> Inter Collegiate Athletic Meet at Kerala University Stadium Trivandrum during February 2020.

### ADVIKA 2020



The Vidya Student Senate for the academic year 2019-2020 organized the arts fest of VAST, Advika 2020 on 6th and 7th March 2020. Shri Sathyan Anthikad, film director, screenwriter, and lyricist best known for his family dramas in Malayalam cinema, officially launched the logo of Advika 2020.

### VYVIDH-2020

The Department of Electronics and Communication in association with Vyvidh 2020 conducted a magnificent and rich Technical Festival on 14<sup>th</sup> & 15<sup>th</sup> February, to uphold the pride of the department and Vidya Academy of Science and Technology.

The department conducted 'Kerala's largest ROBOTIC HACKATHON - LIGA ROBOTRIX-2020, in the field of Robotics. LigaRobotrix was a 14 Day Hackathon challenges in association with IETE and Vyvidh 2K20.

Various events conducted as a part of VYVIDH-2020 were Haulin'Torq (Advancements in Electronics in Automobile Sector), Drone Storm (Auto piloting experience), VR Cader/Pandora (World of Virtual & Augmented Reality), Impresso (3-D Printing Challenge), Circuitrix (Debugging Circuits), Volt-Hunter (Electronic treasure hunt) & Consilio-“PCB Designing.

