



Vol 4

ECE News & Events

November 2017



From Principal's Desk . . .

Any Science fair or school exhibition is enriched and made hugely attractive by projects or devices based on students' engagement with electronics. Every life supporting and enhancing systems depend on electronics. Each piece of entertainment and infotainment employs electronics. At this point of time we cannot imagine any human existence or interaction without electronics. It appears as though any measure of happiness index if is taken, not only will we need electronics to conduct and evaluate the survey but also electronics may prove to be a major trigger in the happiness in the life of many. Yet, the admission figures show a different picture. This has to be tackled since a tomorrow without electronics cannot happen.

I hope magazines or newsletters like this will slowly usher in the magic of learning and possessing a repertoire of the theme of electronics. I also wish that students who learn Electronics and Communication engineering understand the power they possess once the theory is imbibed and practicals are practiced and that it will always be used to heal the society, empower it. I place on record my appreciation of the department endeavours in bringing out the publication and much more beyond this success.

Dr. Sudha Balagopalan
Principal



From HoD's Desk . . .

"Self-examination is the first step to personal greatness". This is the important connotation through which this universe works for betterment. I believed with this ideology every member of ECE department collectively contribute for the development. The department always had been crafting a new resolution during the commencement of every new academic period. With this it always positively succeeds in the pre-planned endeavor as every staff and students mind and action go in a coherent way.

During the last 2016-17 academic period, many new outstanding achievements, whether in small or big ways contributed in the areas such as projects, placements, admissions etc. in the department. The students have shown a rise in professionalism and staff contributed in the academic developments of the department. As usual with new dimension the department released its newsletter "Encircle" of volume IV, which is embedded with remarkable achievements and mixed ingredients of news from all contributors.

Finally, I express my sincere gratitude to the management for their constant source of inspiration and continuous support to go ahead.

Dr. S. Swapna Kumar
Head- ECE



Department Activities

3 Day FDP on “Python programming in Image processing and Machine Learning”



Dept of Electronics and Communication Engineering organized a three Day Faculty Development Programme on “Python programming in Image processing and Machine Learning” in association with Institution of Electronics and Telecommunication Engineers (IETE), Indian Society for Technical Education (ISTE) and Institution of Engineers (India) from 02.03.2017 - 04.03.2017. 54 participants were registered for the FDP. Dr. V.N. Krishnachandran, Vice Principal, VAST, inaugurated the function.

3 Day Workshop on “ETHICAL HACKING”

The Department of ECE, VAST in association with Institution of Electronics and Telecommunication Engineers (IETE) and Institution of Engineers (India) organized a 3 Days hands on training Programme on ETHICAL HACKING on 18.01.2017, 19.01.2017 & 01.02.2017. The sessions were handled by Ms. Sarika KT, Ms. Amritha Babu & Ms. Vandana M, Asst. Professors, ECED, VAST.

Hands on Training workshop on “Arduino & IoT applications” conducted for Students of Nedupuzha Polytechnic

A two days Hands on Training workshop was conducted for students of Nedupuzha Polytechnic on

11.02.2017 & 12.02.2017 by Department of ECE, VAST. The sessions were handled by Mr. Rakesh V S & Mr. Ramesh C R, Asst. Professors, ECED, VAST.

Talk on “MATLAB, SIMULINK & HDL”

The Department of Electronics and Communications Engineering organised a talk on “MATLAB, SIMULINK & HDL” by Mr. Tabrez Khan, Senior Application Manager, Mathworks, on 05.07.2017.

Talk on “Electronic Design and Opportunities in the field of Design”

Mr. Zaher V Abdul Rahaman, a senior hardware engineer from Bosch, Coimbatore, interacted with the final year B. Tech. (ECE) students of the College on 07.10.2017. He gave a detailed description of the concepts underlying electronic design and talked at length about the opportunities in the field of design.

Talk on “Operating Systems & Overview on programming”

ECE Department has organized an invited talk on “Operating Systems & Overview on programming” by Mr. Deepak Ravi, [doing PhD at IIT Delhi, MTech IISc Bangalore, Experience: Intel 4 Years] on 13.10.2017 for S1 & S3 M.Tech Students and ECE faculty.

Adjunct Faculty Talk

- ✪ A lecture on “Python in embedded systems” was delivered by adjunct faculty Mr. Sreekanth M. G. to M Tech (Embedded Systems) students on 21.08.2017.
- ✪ A talk on “Embedded system projects” was delivered by adjunct faculty Ms. Abitha Babu M on 12.07.2017.
- ✪ A talk on “Supercapacitor Fabrication” was delivered by adjunct faculty Mr. Balan K to M Tech (Embedded Systems) students & ECE faculties on 24.03.2017.

Industrial Interaction

On 28th February 2017, the department of Electronics and Communication Engineering had organized an industrial visit for twenty three students of the 1st semester M.Tech (Embedded Systems) students and three students of the 1st semester M.Tech (Embedded Systems) students and three students of the 1st semester M.Tech (Power Electronics) who were accompanied by Dr. S. Swapna Kumar (Head of ECE) and few faculty from both ECE and EEE department as part of National Science Day celebrations. The visit was to the Centre for materials for electronics technology (C-MET), situated in Athani, Thrissur. The adjunct faculty of ECE department Shri K. Balan (Tech Advisor and former MD, Keltron Electroceramics Ltd.) has guided the team throughout the visit.

GRADUATION CEREMONY 2017

Vidya Academy of Science and Technology conducted "Graduation Ceremony 2017" of 2013-17 Batch on 26th August 2017 in the College Auditorium. Dr.P.B Sunilkumar, Director, IIT Palakkad was the guest of honour on the occasion. The ceremony commenced with a ritualistic academic procession. Dr. Sudha Balagopalan (Principal) welcomed the participants. Mr. Sudhakaran Polassery, presided over the function.

GATE

Gate coaching classes are being conducted for third and final year ECE students throughout the academic year.

KTU ORIENTATION PROGRAMME

A three day orientation programme for first year students of ECE Dept. was conducted during 26-29 July, 2017.

STAFF PARTICIPATION

- ✦ Mr.Varun Kesav M N, Mr.Santumn S D and Mr.Suraj Rajappan attended a FDP on "Essential Mathematics for Engineers" conducted by APJAKTU in association with ICTA Kerala and Vidya Academy of Science and Technology from 29-11-2016 to 3-12-2016 at VAST.
- ✦ Ms.Sruthi M, Ms. Amritha Babu, Ms. Sarika K. T attended a two day workshop on "Simulations using NS-3" organized by Dept.of ECE (In Association with ISTE) at Jyothi Engineering College, Cheruthuruthy on 15.12.2016 to 16.12.2016.
- ✦ Ms.Fetsy Francis and Ms.Honey Mol participated in 1 day awareness programme on "Technological advance in transforming women's life" organized by Women cell, VAST on 5/01/17.
- ✦ Ms.Vandana.M, Ms. Amritha Babu, Ms. Aswathy Surendran & Ms.Jemy Jose Kakkassery participated in the two days workshop on "Project Development using 'ARDUINO'" organized by EEE Dept, VAST on 10.01.2017 & 11.01.2017
- ✦ Ms.Fetsy K.Francis, Ms.Honey Mol P.K, Ms.Amritha Babu, Ms. Sarika P.C participated in the STTP on Research Methodolgy organized by Department of Electrical and Electronics Engineering at Jyothi Engineering college, Thrissur during 11.01.2017-15.01.2017.
- ✦ Ms.Vandana.M, Ms. Fetsy.K.Francis & Mr.Varun M.N attended One Day Workshop on 'ABCD Approach in interactive Learning' organized by Sameeksha, VAST on 21.01.2017.
- ✦ Dr. S. Swapna Kumar, HoD ECE attended the Scilab awareness program at CETAA Hall, College of Engg., Trivandrum on 04.02.2017.
- ✦ Ms.Resmi K.Rajan attended a two day workshop on "Web Development" organized by the

Department of Computer Science and Engineering, VAST in association with IEI & CSI on 24.03.2017 & 25.03.2017.

- ✦ Ms. Priyanka Vijayakumar & Ms. Shilpa. T.M attended Two day Workshop on 'Arduino Programming' organised by IE(I) Students Chapter and IEDC, VAST on 28.07.2017 & 29.07.2017.
- ✦ Mr. Santumon S D, attended a FDP, "Workshop on R" conducted by AS Dept. VAST on 22 & 23 Sept 2017.
- ✦ Ms. Swapana E. V. M., attended a Short Term Training Program (STTP) on "ARM, Raspberry-Pi and LabVIEW based IoT for Real Time Applications" held at Dept. of Electronics and Instrumentation Engineering of Bannari Amman Institute of Technology, Erode during 17 – 23 May 2017.
- ✦ Ms. Sruthi M and Ms. Aswathy Surendran P attended 2 day FDP on "Principles of DSP and its Implementations" at Sahrdaya College of Engineering, Kodakara, 25th and 26th July 2017.
- ✦ Ms. Sandhya V.G., attended a short term training program in "Digital Signal Processing and its applications" at GEC, Thrissur from 05.12.2016 - 09.12.2017.
- ✦ Mr. Suraj Rajappan and Ms. Swapana E V M attended the NASCCOM-ICTAK-Top 5 Teachers Industrial Visit on 29.08.2017.

ACHIEVEMENTS OF STAFF

- ✦ Mr. Anil M (Assistant Professor of ECE) received the Best Programme Officer Award for 2016-2017 in the two-day "State Annual Meet and Award Distribution Ceremony" of the NSS Technical Cell, which was held in VAST during 07 – 08 July 2017.



- ✦ Mr. Ramesh C R (Assistant Professor of ECE) successfully completed a MOOC (Massive Online Open Course) on "Making Powerful Presentations" offered by University of Kerala with Dr. Achuthsankar S Nair as the Course Instructor. This is the first course being offered on-line in MOOC format by University of Kerala.

DETAILS OF BOOK PUBLISHED

- ✦ A textbook 'Design and Engineering' for BE 102 authored by Ms. Swapana E. V. M. (Asst. Professor, ECE) and Ms. Jasna S. B. (Asst. Professor, EEE), Published by Sri Krishna HiTech Publishing company. ISBN: 978-93-85-364-96-9 Pages: 160

PAPERS PRESENTED

- ✦ Ms. Mini P. R (M.Tech) and Dr. S. Swapna Kumar, HoD ECE presented a paper entitled "Classification of Melanoma and skin lesion" at KETCON 2017 organized by KSCSTE held at Mar Athanasius college of Engineering, Kothamangalam on 13-14th January 2017.
- ✦ Ms. Surya S (M.tech), Ramesh C R, Dr. S. Swapna Kumar HoD ECE presented paper titled on "Neurological rehabilitation of TMD via assisted motion of jaw" at the Kerala Technological Congress (KETCON 2017) jointly organized by APJ Abdul Kalam Technological University and Kerala State Council for Science, Technology and Environment (KSCSTE) held at Mar Athanasius College of Engineering, Kothamangalam on 13-14th January 2017.

- ✦ Ms. Varuna M.N (M.Tech) and Ms. Amritha Babu published a paper on "A wireless sensor network based habitat monitoring for protection of endangered species" in IJIRSET, Vol.6, June 2017.
- ✦ Ms. Tany Jaison (M.Tech) and Ms. Sarika K T published a paper on "Video Object Steganography for remote authentication using adaptive neuro fuzzy inference system" in IJIRSET, Vol.6, May 2017.
- ✦ Resmi K.Rajan, Asst.Prof. ECE and Ms.Swathy C.K (M.Tech) published a research paper titled "Breast Cancer Detection using Histopathology and Thermography Images" in IJIRSET, Volume 6, Issue 4 April 2017.
- ✦ Ms. Saina Sunny (M.Tech) and, Dr.S. Swapna Kumar, HoD ECE, published a paper titled on "IoT based non-invasive glucometer using optical method", International Journal of Advanced Research in Computer Science and Software Engineering, ISSN: 2277-128X, Vol. 7, Issue 9, September 2017.
- ✦ Ms. Raina Raju K (M.Tech) and Dr.S. Swapna Kumar, HoD ECE, published paper titled on "A Comparative study of various technique used for Melanoma detection", International Journal of Advanced Research in Computer Science and Software Engineering, ISSN: 2277-128X, Vol. 7, Issue 9, September 2017.
- ✦ Arya M.S, Anjali.K, Fathima Anudha .M, Aarya M.Nair and Aswathy K.S of S5 EC participated in the KETCON 2017 Poster presentation competition held at Mar Athanasius college of engineering, Kothamangalam on 13.01.2017
- ✦ Lincy Vincent of (M.Tech) had participated in the paper presentation competition event 'Vibhavana' conducted at Jyothy engineering college on 08.03.2017.
- ✦ Sreemol N.R of S6 EC participated in the paper presentation competition event 'Vibhavana' conducted at Jyothy engineering college on 08.03.2017.
- ✦ Limiya Kurian, Nigin G.Kariatt, Seethal K R, Yadukrishnan of S7 ECE presented a paper named "Automotive Tracking Radar using SDR" at GEC,Thrissur as a part of Yukthi'17 and at Model Engineering College ,Thrikkakkara as a part of Tech fest.
- ✦ Sreelakshmi M N, Surya K S, Suvitha C S, Anandu Manikandan, Varsha K of S7 ECE presented a paper named " Design and Development of 3D Crane" at GEC,Thrissur.
- ✦ Krishnaveni P R, Loyied Paulson, Sandeep S Nair, Sobhika Sathyan K of S7 ECE presented a paper named "IOT named air quality monitoring system in Albertain institute of Science and Technology as a part of GIJUTSU'17.

Achievements of ECE Students



B.Tech ECE students with top positions in the Calicut University (2011-15)



As per the toppers list recently published by Calicut University, in the 2015 passed-out batch of B. Tech. (ECE) students, 16 students of the College are among the 105 toppers of the University. The 16 students include students who are in the 1st, 2nd, 6th and 7th positions.

ECOSYSTEM AWARD 2017



Sarath Sasikumar, Sethu E P of S5 ECE won first prize with cash award of ONE LAKH under the “WATER and ENVIRONMENT Category” for the project ECOLOG- Recycle paper pen and semi automated machinery on Dr. APJ Abdul Kalam Innovation Ecosystem 2017. It is a CSR initiative of Sri Sairam Engineering College and ICT Academy aimed at encouraging and inspiring students across India to show their Engineering knowledge in several fields such as Agriculture, Energy, Water & Environment, Manufacturing & Technology and Infrastructure. Dr. APJ Abdul Kalam Innovation Ecosystem 2017 organized a National Level Project Competition across India at Chennai on 8th and 9th April 2017.

- ✦ Anjali C.B , Angel Francis ,Aiswarya Rajeev and Anjali P of S7 ECE got the first, second and third positions in poster making competition in the AIMA management olympiad held at Sahrdaya college of Engineering on 27.03.2017 & 28.03.2017.
- ✦ Anjali C.B of S7 ECE has selected as the Ms. Young leader in the AIMA management olympiad held at Sahrdaya college of Engineering on 27.03.2017 & 28.03.2017.
- ✦ Ms. Surya S, (M.Tech (Embedded Systems) student), bagged the IEAE Student Award for her PG project titled “Robotic Exoskeleton for Rehabilitation of TMD via Assisted Motion of Jaw”.
- ✦ Samson C. V., Anupama M. S., Amritha V., Archana M. and Ashina Ajith, of S7 ECE A developed a “Library Assistance System” which helps blind students become self-reliant in using a library. The project has been funded by KSCSTE

and guided by Mr.Ramesh C. R., Asst. Professor, ECE Dept., and supervised by Mr. Anil M., Asst.Professor, ECE Dept.

- ✦ Ms. Surya Surendran, (M.Tech Embedded System), developed a concept design for a robotic exoskeleton for the neurological rehabilitation of Temporo Mandibular Disorder (TMD). This project was guided by Ramesh C. R (AP, ECE), Dr. S. Swapna Kumar (HoD, ECE), Sruthi M. (AP, ECE) and Bhadrans V. K. (Assoc. Director, C-DAC) and it was funded by Center for Engineering Research and Development (CERD).
- ✦ A project proposal titled “Real Time Pothole Detection and Mapping System Using IoT” submitted by a team of final year B. Tech. (ECE) students consisting of Sandeep S Nair, Loyied Paulson, Niranjana Unnikrishnan, Krishnaveni P. R. and Kavya Manoj, got accepted for ICTAK Project Assistance Scheme.
- ✦ Angel Francis ,Aftab Ashraf of S7 ECE got the first prize in project prototype competition “High beam High Intensity Tracking System” TECHATHLON 2016 held at Technopark, Trivandrum 10.11.2016 & 11.11.2016.



Achievements in Extracurricular Activities



Chess Championship

- ✦ College girls team maintained their Runner up position in the Calicut University Chess Championship 2017-18. Ann Babu Treeza of ECE S7 got selected to represent Calicut University Chess team in the South Zone Inter University championship to be held at Saveetha University, Chennai.

Team Members ECE :

Ann Babu Treeza.	ECE S7
Divya Devadas.	ECE S7
Anjali.C B	ECE S7
Vinaya S Aloor.	ECE S7

Ann Babu Treeza is selected as University player

❖ College chess team became winners in the PECSAGA Inter Collegiate chess championship held at Sreepathy Institute of Management And Technology, Vavanoor on 21 April 2017.

Team Members ECE :
Vinaya S Aloor ECE S7

Yoga Championship

Men and women team of college secured third and fourth positions in Calicut University Inter Collegiate Yoga championship held at St.Mary's college, Thrissur on 26.09.2017.

Team Members ECE:
Arjun Krishnaprasad ECE S7
Brahmanand TP ECE S7
Sreelakshmi MN ECE S7

Winners in Dance Competitions

Fharesh Francis ,Hima M Pavithran, Ann Babu Treeza of S7 ECE ,team members of D'Addiction Dance club ,VAST bagged prizes in the following competitions in 2017:

Dyuthi 2017	First prize
NIT Ragam 2017	First prize
SNMIMT 2017	Second prize
Tech Dance 2017	First prize
CONJURA 2017	Second prize
SANSKRITI 2017	Third prize

D-zone Winners

Aishwarya Pradeep & Arjun Krishnaprasad of S7 ECE,team members of Club D'Medley - Music club,VAST bagged second prize for Western Group Song.

Campus Placement

IBS Software Services Ltd	1
TCS Ltd.	13
Think Palm	1
COSC, GEC, Thrissur - TBI (MKT)	9
IDBI Federal Life Insurance Ltd.	5
VVDN Technologies Pvt. Ltd.	1
SLK Software	2
IT Company, UAE	1
VAST	1
Anoralabs Ltd.	1
Poornam Infovision	3
Tiatech Health Technologies Pvt. Ltd.	6
Drizee Softech	1
Pragmatix Ltd.	1
HP Inc.	1
VMAS Technologies, TBI,GEC, Thrissur.	1
Vee Technologies	1
Sutherland Global Services	37
FACE	1
Support Sages Ltd.	4
Total	91

Onam Celebration 2017



Onam Celebration 2017



Vyvidh '17 - Tech fest VAST

