From the Editorial Desk

Seeking the blessings of His Holiness, Jagadguru Sri Sri Shivarathri Deshikendra Mahaswamigalavaru, I am extremely happy to present the second issue of Volume two of our Department’s newsletter—"SANGATHI".

This newsletter comprises of the various academic and co-curricular activities of our Department. We endeavor to be at the leading edge of research, to edify our students in core fundamentals, and to engage students with evolving technologies and their applications. Electronics & Instrumentation Engineering is a persistently progressing and flaring branch of the engineering profession. We the staff of the Dept. of E&IE, acknowledge the editorial members, faculty and students and wish good luck for their future accomplishments.

Dr. D Mahesh Kumar
Assoc. Prof. & Head

VISION

To become globally competent in the field of Electronics and Instrumentation Engineering through Education, Research & Personality development

MISSION

- Provide quality education by enriching students with technical knowledge and skills through holistic learning environment and state-of-the-art facility.
- Encourage students to pursue higher studies and engage them in research and development.
- Instill professionalism and ethics among students who can strive to fulfill the needs of industry and society.
Technical Seminars

Introduction to TI's ASLK Pro Kits

This Seminar was organized on 23rd August 2017. Mr. M MD Asif Hussain, and Mr. Naveen kumar D.B, Application Engineer, Edgate, Bengaluru, were the guest lectures of this seminar. The objective of this seminar was to introduce students to the applications of various analog circuits. The speaker discussed about various components used in the analog designs and how an oscillator, amplifiers are designed and what is the need for these fundamental electronic components in the devices in the larger real-time devices. Stabilizer was taken as one of the example to discuss about the power control and how it helps in controlling the breakdown of devices. Live demos of various implementations of the ASLK Pro kits from Texas Instruments were demonstrated to the students.

DSP and its Real Time Applications

This Seminar was organized on 6th September, 2017. Mr. Rohit Prajapati, Application Manager, Edgate Technologies Pvt. Ltd., Bengaluru was the guest lecture of this seminar. The objective of this seminar was to introduce students to the recent trends in DSP and its real time applications using different processors of Texas Instruments. The speaker discussed the need for digital signal processing and advantages of digital processing over analog processing. He also emphasized the importance of TI's family of processors. He introduced the students to C2000, C5000 and C6000 family of processors highlighting its pros and cons. Various TI platforms available were also discussed. The speaker demonstrated processing an audio signal by interfacing the computer with TI's LCDKC6748. He also demonstrated few real time audio effects.

WITHOUT YOUR INVOLVEMENT YOU CANT SUCCEED
WITH YOUR INVOLVEMENT YOU CANT FAIL
Higher Studies and Research
This Seminar was organized on 20th September, 2017. Mr. Saravanakumaran, Gateforum center head and trainer, Gateforum, Bengaluru was the guest lecture of this seminar. The objective of this seminar was to motivate students to do their higher studies and involve in research activities to solve societal needs. The speaker discussed about present competitive scenario, where there is mushrooming of universities and engineering colleges, the only yardstick to measure and test the caliber of engineering students is the GATE. The misconceptions among students about the GATE exam like, GATE is meant for ME./M.Tech which finally leads to a teaching career.

Emerging Trends in Process Automation
This Seminar was organized on 7th October, 2017. Mr. Vinay Raj, Training Manager, Yokogawa India Ltd, Bengaluru was the guest lecture of this seminar. The objective of this seminar was to introduce students to the recent trends in PCS and its real time applications using distributed control systems and Programmable logic controller. The speaker discussed the overview of process/ plant and controlling of process. Then the latest technologies that are adapted in measurement/communication/control application/Scada tools was handled. This talk gave them an insight about the trends in Process Automation (Ex: in Power Plant Sector). Along with that, Training programmes at Yokogawa, and Entrepreneurial opportunities was also conveyed.
Responsibilities of young Entrepreneur towards Nation building

This Seminar was organized on 13th October, 2017. Mrs. Bella Thomos, Freelance Soft skill trainer cum HR Professional trainer, Freelance Soft Skill Center, Bengaluru, was the guest lecture of this seminar. The objective of this seminar was to motivate young graduates to take up the entrepreneurship as their profession and also inculcate responsibilities in these entrepreneurs so that, they can participate in the process of nation building.

Power Systems using Power Electronic Devices

This Seminar was organized on 07th November, 2017. Dr. H V Manjunath, Professor, Department of E&C, Dayananda Sagar College of Engineering, Bengaluru, was the guest lecturer of this seminar. The objective of this seminar was to throw light upon the power electronic devices which we use in our daily life and know about their working. The speaker spoke about the basic components of power electronics. He spoke about their uses, design, construction and applications.

Emerging Trends in Process Automation

This Seminar was organized on 14th October, 2017. Mr. Vinay Raj, Training Manager, Yokogawa India Ltd, Bengaluru was the guest lecture of this seminar. The objective of this seminar was to introduce students to the recent trends in PCS and its real time applications using distributed control systems and Programmable logic controller. The speaker discussed the overview of process/plant and controlling of process. Then the latest technologies that are adapted in measurement/communication/control application/Scada tools was handled. This talk gave them an insight about the trends in Process Automation (Ex: in Power Plant Sector). Along with that, Training programmes at Yokogawa, and Entrepreneurial opportunities was also conveyed.
Industrial Applications of Processors

This Seminar was organized on 10th November 2017. Mr. Arun Kumar V, and Mr. Manoj D, Application Engineer, Venjay Institute of Automation, Bengaluru, were the guest lecturer of this seminar. The objective of this seminar was to introduce students to the availability of various processors in industry and their application to the relevant problems. The speaker discussed about various processors used in industry along with the earlier available processor and there advancement with their industry needs was discussed and the advantages were also explained to the students for better understanding. Live demos of various processors and their implementation were demonstrated to the students.

Industrial Visit

West Coast Paper Mills Ltd., Dandeli

An industrial visit was organized to West Coast Paper Mills Ltd., Dandeli. 45 students of 5th semester along with two faculty members Dr. D. Jayadevappa and Ms. Anu visited the industry on 07-09-2017. Students witnessed the various types of sensors, actuators and process control equipments for manufacturing good quality of papers. They also learnt many applications of process controlling systems.

The path from dreams to success does exist. May you have the vision to find it, the courage to get on to it, and the perseverance to follow it.

Wishing you a great journey.

Kalpana Chawla
Students’ Achievements

S Sri Saraswathi of 5th semester has received the Best student award from ISTE for her excellent performance in academic and extra curricular activities.

Faculty Achievements


- **Dr. D Jayadevappa and** Shankar B. Bandiwaddar have published a paper titled “EMD based Hilbert Energy Spectrum Analysis of Adventitious Lung Wave Signals” in International Journal of Engineering and Technology, 7(15), pp. 122-125, Jan 2018.


- **Dr. D Jayadevappa, Duney D Sam, & Cyril Prasanna Raj** have presented a paper titled “DTCWT-MBOFDM with Reconfigurable Down Converter for Smart Grid Communication” in the 3rd International Conference on Green Computing and Engineering Technologies (ICGCET-17), The Killaloe Hotel, Kincora Harbour, Killaloe, County Clare, Ireland, 8th -10th August 2017.

- **Dr. D Jayadevappa and** Manjula C have presented a paper titled “Command driven scalable & programmable FPGA Based Digital Test Pattern Generator” in the 2017 IEEE International Conference on Electrical, Electronics, Communication, Computer and Optimization Techniques (IEEE-ICECCOT-17), 15-16 Dec. 2017, GSSSIETW, Mysuru.

- **Dr. D Jayadevappa and** Shankar B. Bandiwaddar have presented a paper titled "Ensemble EMD based Time-Frequency Analysis of Continuous Adventitious Signal Processing" in the World Summit on Advances in Science, Engineering and Technology, January 4-6, 2018, University of Cambridge, United Kingdom.
Workshops Attended by Faculty

- Mrs. Harshitha S and Mrs. Sowmya M S have attended a one day workshop on “Big Data Analytics” on 23rd September organized by the Department of Master of Computer Applications at SJCE, JSS Science & Technology University, Mysuru in association with IEEE Communication Society and IEEE Computational Intelligence Society, Bangalore Section.

- Mrs. Harshitha S, Mr. P Praveen, Mrs. Sowmya M S, Mrs. Neela A G & Mrs. Anu H have attended a workshop on “Research Methodologies” from 18th to 19th November, 2017 at SJCE, JSS Science & Technology University, Mysuru.

- Mr. Nagesha, Mrs. K S Bhanumathi, Mr. P Praveen, Mrs. Sowmya M S, Mrs. Neela A G & Mrs. Anu H have attended a three days faculty development programme on “Embedded Controller Lab Using ARM CORTEX M3” from 4th to 6th January, 2018 organized by the Department of Electronics & Communication Engineering, JSSATE, Bengaluru.

Editorial Board

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