KUMARAGURU college of technology

NEWSLETTER

Department of Electrical and Electronics Engineering

Electrowaves

Issue 23 August – November 2018

Editorial Message

The Department of Electrical and Electronics has recorded consistent improvement in its academic, research and placement performance. It offers a range of innovatively designed programs whose curricula are constantly updated to meet the changing requirements of the industry and to meet the needs of major stakeholders.

When sketching out a plan for Electrowaves the only thing we had in mind was that the Newsletter should reflect the outlook of the department. Hereby, we the editors take the responsibility of ensuring the continuity of the issue in the years to come with improvements and richness every time. We are pretty sure that you will get lot of useful information reading it. However, our work does not end here. We consider that our endeavors will be successful only when after reading these articles you get motivated to contribute more such articles in future issues.

"The world is yours, Aspire big"

Dr. K MALARVIZHI
Head of the Department

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Highlights of the Issue

MATLAB - certification course training program to train our students in area of Power Electronics, Power system organized by Dr.D.Rajalakshmi, Mr.M.Mohanasundaram, Ms.P.Maithili on 1.09.2018.

Industry Connect Workshop (ICW) on IoT for the faculties to get a hands-on training experience in IoT and its applications sessions handled by Mr. Ranjith Kumar & Mr. Sathishkumar, THICK INDIA, Coimbatore on 18.09-2018 and 20-09-2018.

Awareness program about Solar Energy to School students with Namadhu Pangu of KCTon 20.11.2018.

Guest Lecture on Entrepreneurship Development to our students charied by R.Sruthi, MARS Solar Aqua Ltd, Coimbatore.

Department student association inaugurated by Mr.Ponram, Chairman of Unicon Engineers private limited, Coimbatore.

Guest lecture on Electrical Drives and Automation lectured by Dr. L. Ashok kumar, Professor and Head, EEE, PSG College of Technology on 2.11.2018.

Guest Lecture on Power Quality and Energy Management, session handled by Prof. E. Chandrasekaran, Professor, EEE, Coimbatore Institute of technology on 09-11-2018,

Vision

To be a Centre of Excellence in Globalizing Education and Research in the field of Electrical and Electronics Engineering

Mission

- **E**mpower the students with state-of-art knowledge to excel as eminent electrical engineers with multi-disciplinary skills.
- **E**mphasize social values and leadership qualities to meet the industrial needs, societal problems and global challenges.
- **E**nable the technocrats to accomplish impactful research and innovations

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

- Pursue a diverse range of careers in engineering, consultancy, and entrepreneurship.
- Contribute to continuous professional development through higher studies and life-long learning.
- Demonstrate their technical proficiency with ethical values and social responsibility.
- Innovate and provide solutions for ever-changing global environments with familiarity in computational platforms in

Programme Outcomes (POs)

- **ENGINEERING KNOWLEDGE**
  Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PROBLEM ANALYSIS**
  Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences
- **DESIGN/DEVELOPMENT OF SOLUTIONS**
  Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS**
  Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **MODERN TOOL USAGE**
  Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

Programme Outcomes (POs)

- **THE ENGINEER AND SOCIETY**
  Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice

- **ENVIRONMENT AND SUSTAINABILITY**
  Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

- **ETHICS**
  Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

- **INDIVIDUAL AND TEAM WORK**
  Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

- **COMMUNICATION**
  Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

Programme Outcomes (POs)

- **PROJECT MANAGEMENT AND FINANCE**
  Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

- **LIFE-LONG LEARNING**
  Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Programme Specific Outcomes (PSOs)

Apply the knowledge acquired in Electrical and Electronics Engineering to technological advancements.

Identify suitable solutions for design and control of electrical and electronic systems

Department Association Inauguration

The department association of this academic year is going to have their new office barriers to add a feather to the cap. The inaguration function involved a majority of audience from the department. The welcome address was given by our respected Dr.K.Malarvizhi Head of the Department. The distinguished speaker of the day was Mr.Ponram, Chairman of Unicon Engineers private limited, Coimbatore. He addressed the gathering and started with his presentation on digital transformation. His presentation was really an eye-opener for our budding engineers.

The office barriers were honoured with the badges and our department President Mr. M .Prakadeesh of final year EEE addressed the gathering and gave the explanation for the year plan for this academic year 2018 to 2019. New and innovative ideas those were!. The gathering was given vote of thanks by Mr.Dinesh Kumar.S of final year EEE, treasurer of Department Association.

Research Publications

Significant publications and conference- Faculty

Mr. R. Sureshkumar, "SFFB Converter for Automatic Solar Tracking system", International Conference on Renewable Energy utilization(ICREU – 2018), Coimbatore Institute of Technology, 8th – 10th August 2018.

T.Shanthi, "Design of SOFC Cells Using Microcontroller and Voltage Divider Circuit", International Journal of Renewable Energy Research (IJRER).(Indexed in SCOPUS, EBSCO AND WEB OF SCIENCE).

Consultancy

Dr.M.Nirmala, Assistant Professor proposed and analysed the IoT enabled pump health monitoring system for CRI pumps, Coimbatore.

Social Impact

A Social Awareness Program and Demonstration of Generation of the Electricity from the solar panel was conducted for the students and faculty of Government Higher School, chinnavedampadi with Namadhu Pangu of KCT Session was handled by Dr.M.Babu prasad, Assistant Professor, Mr.R. Sureshkumar, Assistant Professor.

The school children are exposed to the importance of Solar energy and its utilisation. They also got the awareness about the non polluted energy sources in the near future generation.

Children are encouraged and motivated to do projects in mini levels in Solar power generation with small working modules.

Interaction with Alumni

Alumni Talk

Guest Lecture On Entrepreneuship Development to our students charied by R.Sruthi, MARS Solar Aqua Ltd, Coimbatore.

This program has given knowledge about the developing the culture of entrepreneurship. Students has shared their ideas and the guest interacted with the students about their future plans. The session was involved in developing a concept for an start up company.

Faculty Recharge Program

A three days hands-on training cum workshop titled, "Industry Connect Workshop (ICW) on IoT", has been organized for our Faculty from 18th to 20th of September, 2018 at Embedded System Laboratory.

The event started with a welcome address by Dr. K. Malarvizhi, Head of Department. Dr. C. Udhayashankar, Associate Professor highlighted the importance of the workshop combined with hands-on training and introduced the trainers.

The Trainers gave an insight into IoT, Android App Creation, Fire Base and Cloud Linking. These were realized by doing simple projects like LED Control, Temperature Monitoring, Slider Control.

Alumni of Issue - Ms. G Poonguzhali, IPS (KCT EEE Alumni), Assistant superintendents of police – Palakkad & Additional Charge of Commandant, India Reserve Battalion.

MATLAB Certification Course

A one day Certification Course on, "MATLAB", has been organized for III Year EEE Students on 31st August 2018, at B Block Simulation Lab, with a sum of 30 participants.

The course mainly focused on providing hands-on training experience in MATLAB programming. Basic syntax and its features are discussed and students are trained to execute simple programs on their own.

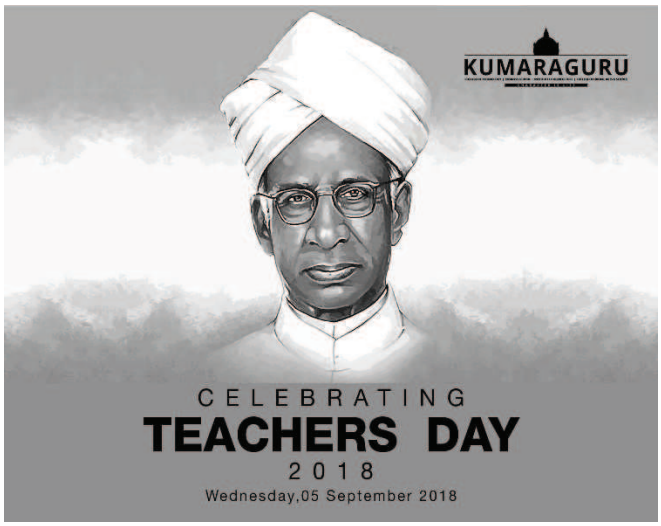
Training Program @ Hardware Lab

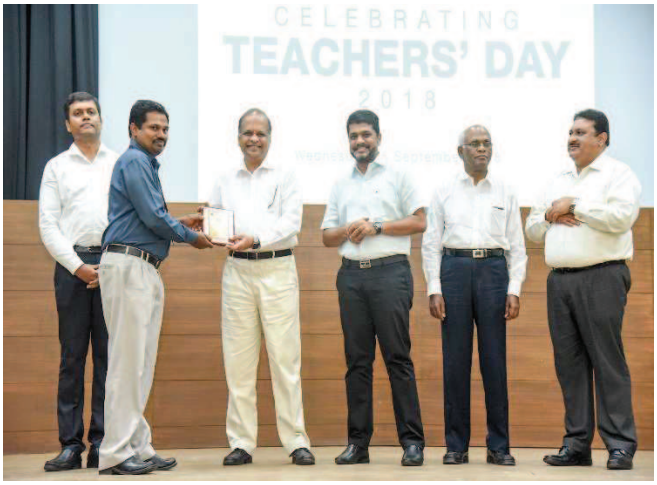
Mr.Kingsley, Software Engineer, Robert Bosch, Coimbatore, KCT Alumni 2017 Batch training given to the group of students of second year of Electrical and Electronics Engineering, hands on experience on Arduino based project design was given 29/07/2017. The outcome of this training are,

- Students have knowledge on Arduino software and programming basics
- Students gained idea about using Ultrasonic sensor, Arduino board, adapter etc., which makes them to design a simple project in real time control applications

Glimpses of the Events

Teachers Day Celebration





Independence Day Celebration

Student Leadership Council

Students Project Demonstration

KUMARAGURU college of technology

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

PRESENTS

PROJECT LAB –

HARDWARE FACILITIES & MENTORING

FOR YOUR VALUABLE PROJECTS

The department of Electrical and Electronics Engineering provides hardware facilities for all kind of projects in the stream of EEE. The Students with project ideas in the stream of EEE can do their own projects using the hardware components available at project lab. They are also provided with guidance from leading Industrialist and alumni to clarify their projects doubts during development phase of his/her idea. This hardware lab can be used by UG & PG students to do their project which evokes their research skill in the field of EEE.

OBJECTIVE

To make the students to improve his/her project design and development skills for implementing their own ideas in real time.

PREREQUISITES

Basics of EEE, project idea with circuit diagram & knowledge of component specifications

ALL THE WORKING DAYS 4.30 PM TO 8 PM THROUGHOUT THE YEAR

FOR MORE DETAILS CONTACT

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