

NEWS LETTER

ELUXTRA

Department of Electrical and Electronics Engineering
Rajagiri School of Engineering and Technology, Kochi

Month: July-December Year: 2016

Issue: 1 Volume: 1



HOD's message

Ms. B. Santhi , H.O.D, EEE

Newsletter is an amalgamation of all the events held in the department and it plays an instrumental role in providing a greater exposure of the achievements accomplished by the students and the faculty. I congratulate the editorial team for their immense efforts in launching this News Letter. The odd semester 2016 was full of various activities by the students and faculty in academic, co-curricular, extra-curricular as well as research & developments. I wish all the very best in your future accomplishments and endeavors.

1. FACULTY CORNER

1.2 INTERNATIONAL WORKSHOP ON GREEN AND RENEWABLE ENERGY APPLICATIONS

The Departments of Electrical and Electronics Engineering and Mechanical Engineering is jointly organizing a one day International workshop on "Green and Renewable Energy Applications" on 2nd November 2016.

Session started with a technical talk on "Challenges in Renewable Energy Project Implementation" by Mr.Ajith Gopi, Programme Officer (Solar Photovoltaic Projects) ANERT ,

department of Power, Govt. of Kerala. Followed by Introductory Talk by Prof. Frank Spate,

Ostbayerische Technische Hochschule (OTH), Amberg-Weiden University, Germany. Following speakers / students from Germany gave talk on following topics.

Topic: Wind Energy by Ms. Tepe & Mr. Kühne

Topic: Water Treatment by Ms. Schwab & Mr. Stierstorfer

Topic: Heat Recovery by Ms. Weber & Mr. Schuller

Topic: Energy Efficiency in the IT-branch by Mr. Lachs

Topic: Low Cost Current Measurements in Inverters by Mr. Antony Dominic, (Semester 4 IDAC student)

Topic: Automation of Sensor Data Network by Mr. Tito Joseph Francis (Semester 4 IDAC student)

Topic: A possible way of waste management in India by Mr. Hermann and Mr. Eder



1.2 Hands on training on C 2000 Microcontroller

The department of EEE conducted a training session on “Texas Instruments C2000 microcontroller board interfacing with Matlab/Simulink” on 18/11/2016.



1.3 Faculty development programme – dsPIC with Power Electronics



The department of EEE in association with Pantech ProED Pvt Ltd. organised a faculty development program (FDP) on *dsPIC with Power Electronics* from 25.11.2016 to 26.11.2016. Nearly 60 faculty participated in the FDP. The objective of the program was to provide the faculties belonging to various engineering colleges with an incisive insight into the programming of dsPic/MATLAB based simulation techniques for motor control using open / closed loop. Resource persons were from Pantech ProED Pvt. Ltd.

The agenda of the program were,

- dsPIC controller Introduction
- Analysis of power converters
- Hardware explanation using dcPIC
- MATLAB introduction
- Induction motor control with MATLAB
- Open loop and closed loop hardware demo (dsPIC)

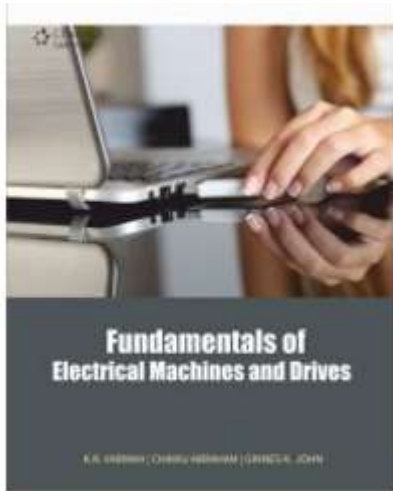
1.3 Short Term Courses, Works shops, Faculty Development Programs and Publications by the faculty of EEE Department

Following faculty members, namely, Mr.Ginnes K John, Ms. Anna Mathew, Ms. Caroline Ann Sam from EEE department had participated in a 5 day short term course on Pulse width Modulation Techniques for Voltage Source Inverters conducted during the period 21-25 November 2016 at Indian Institute of Science, Bengalure

All faculty members of EEE department have attended a number of workshops, Short Term

Courses and FDP's all parts of the state. Almost all faculty have published a number of research papers during this newsletter period.

Mr. Ginnes K John co-authored a book on *Fundamentals of Electrical Machines and Drives* which is published by Cengage Learning in the year 2016.



2. STUDENT CORNER

2.1 ELUXTRA – Student association of EEE Department

The office bearers of ELUXTRA was elected by the students for the Academic Year 2016-2017.

- President : Vysakh M (S7EEE)
- Vice President: Kiran Maria Abraham (S7EEE)
- Secretary : Joseph Paul (S5EEE)
- Treasurer : Anupama Anilkumar (S5 EEE)
- Members : Vibin Abraham Roy (S3 EEE)
Lakshmi R Menon (S3 EEE)

The inauguration of Electrical & Electronics Engineering Association-ELUXTRA for the academic year 2016-17 was done on Thursday 1st September 2016 by Mr. Sunil Paul (Director, Techjeeva Technologies Pvt. Ltd. & HOD, Innovation and Design Lab, Choice School). Later he delivered a talk on “Role of Robotics in Engineering Education”.

2.2 IEEE-IAS Student Branch at RSET

A new IEEE-IAS Student Branch was started at RSET and it was formally inaugurated on 1st September 2016. Ms. Arbite John, S7EEE was selected as chairperson of the IEEE-IAS Student branch RSET. Mr Jebin Francis, Assistant Professor, EEE Department is the IAS chapter advisor.

Website of IEEE IAS - RSET Student Chapter was launched by Dr. A Unnikrishnan, Principal, RSET.

Ms. Arbite John talked about the IEEE IAS society and gave an introduction to the students about it on 1st September 2016.



2.3 Result Analysis

In the semester 8 results of MG University May 2016 B.Tech Degree examination, 47 EEE students passed all subjects out of 60 students. Ms. Nimmy Thomas scored highest marks of 6218/8700.

The EEE department of RSET has secured the first position in the semester 6 MG University B.Tech Degree Examination May 2016, under EEE streams of other engineering colleges under the university. Out of 62 students, 53 students passed all subjects with pass percentage of 85.48%. Ms. Ann cheriachen Thopppil scored the highest marks of 1025/1200 (85.42%).

In the semester 4 results of MG University May 2016 examination, 49 students passed all subjects out of 61 students appeared for the examination with pass percentage of 80.30. Mr.Midhun Varghese scored maximum marks in the class.

In the semester 2 M.Tech Degree Examination under APJ Abdul Kalam University, Industrial Drives and Control Branch students secured 100 % pass in the university examination. Mr. SreeRam K secured top position in the class.

2.4 Bharatham 2016

The arts festival Bharatham was held from 18th August 2016 to 20th August 2016. Mr. Kevin Joshy, S7 EEE has bagged *KalaPrathibha* of Bharatham 2016.

3. Department Activity

3.1 New Faculty



Dr. Unnikrishnan P.C. joined EEE department on 1st July 2016. He received his B.Tech. Degree from Calicut University, India, in Electrical Engineering in 1986, M.Tech. Degree from IIT, Bombay in 1992 with Control and Instrumentation specialization and Ph.D. from Karpagam University in 2016. He has served as Assistant Professor and Associate Professor in Rajasthan Technical University from 1986 to 1996. He has also served the Colleges of Technology, Ministry of Manpower, Sultanate of Oman from 1996-2016 as Administrative Coordinator, Registrar, Head of Electrical and Electronics Section and Head of the Engineering Department. He has authored many national and international Journals and Conferences. His areas of interest include Neural Networks, Reinforcement Learning, Control Systems

3.2 Student Council

Mr. Sidharth R S, S7 EEE was elected as University Union Councilor of the year 2016-17.

Mr. Tom Chacko James, S7EEE was elected as Sports Secretary for the year 2016-17

3.3 Deeksharambham

16th Batch of B.Tech and 8th batch of M.Tech students inducted in RSET on 1st August 2016. The initiation ceremony, Deeksharambham, was inaugurated and initiation address was given by Rear Admiral Prem Kumar Nair AVSM (retired), director, Indian maritime university, Kochi.

3.4 Rank Holders

Ms. Aswathy C J, the student of M.Tech in Industrial Drives and Control, secured the 1st Rank with CGPA of 9.21 in the Semester 4 MG university Examination held in September 2016. Ms. Reshmy M of the same class has also secured 3rd position in the MG University for above said examination.



Ms. Aswathy C J



Ms. Reshmy M

3.5 Saavishkaar 2016

A project exhibition for Plus 2 students conducted at RSET on 26 July 2016. Around 1700 plus 2 students from 30 schools participated in the program. The EEE department actively participated in the program along with other departments by exhibiting the EEE student's projects and labs to the Plus 2 students. The highlight of EEE department was the Robotics World where Robotics based projects exhibited.



3.6 Professor's Visit from Aalen University

Prof.Dr.-Ing. Gerhard Seelmann visited the EEE department on 8th December 2016. He is a professor from the department of Electrical Engineering and Computer Science in the Aalen University, Germany.



3.7 M.Tech Student Internships at Reutlingen University, Germany

Mr. Antony Dominic, (Semester 4 - Industrial Drives and Control (IDAC) student) and Mr. Tito Joseph Francis (Semester 4 IDAC student) successfully completed their internship at Reutlingen University, Germany.



Mr. Antony Dominic Mr. Tito Joseph Francis

Mr. Antony Dominic did his project on *Low Cost Current Measurements in Inverters* and Mr. Tito Joseph Francis did his project on *Automation of Sensor Data Network*.

3.8 Industrial Enhancement of Internet of Things (IoT) based B.Tech. Projects.

A MoU was signed by RSET and Nest group for 3.5 lakh worth hardware support for IoT based projects. Seven B.Tech projects from EEE department was selected by the NeST for the same.

3.9 Invited talk

Mr. Ginnes K John, Assistant Professor, Department of EEE delivered a talk on *Review of Microgrid Technology* to the PG students at Vimal Jyothi

Engineering College, Kannur, Kerala on 6th September 2016.



3.10 CERD Funding for a B.Tech project

Following students of Semester 7 EEE got APJ Abdul Kalam Technological University CERD Funding for the project titled "Solar powered smart Irrigation system" under Principal Investigator Ms. Prathibha P.K., Assistant Professor, Dept of EEE.

Mr. Ashish Geo Daniel, Mr. Geoffry Tharakan Parayil, Mr. Jibin George, Mr. Vysakh M

3.11 APJ Abdul Kalam Youth Challenge Programme by KSCSTE

A proposal entitled *Multipurpose portable Capacitive Digital Agro Moisture Meter* was selected to the APJ Abdul Kalam Youth challenge programme of Kerala State Council for Science, Technology and Environment (KSCSTE). The budget for developing the prototype is Rs.5, 10,000.

The proposal was sent to KSCSTE by Mr. Libin Varghese, former M.Tech IDAC student and Ms. Anna Mathew, Assistant Professor, Dept of EEE as the Co-Principal Investigator.

Editorial Board:

Mr. Ginnes K John, Assistant Professor,

Mr. Vibin Abraham Roy, S3 EEE

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