# EEE NEWS LETTER | January 2015 VOL. 3 NO 1 | Issue

### Newsletter committee

### Chief Editor:

Dr.M.Arunachalam, Professor and Head

### Staff Member:

Prof.S.Krishna Prasath Prof.Avinash.C.M

### Student member:

1. Sangeetha, VII sem.

### **Upcoming event:**

- 1. Introducing mini projects to higher sem students (3<sup>rd</sup>, 5<sup>th</sup> and  $7^{th}$  sem).
- 2. Animation based program on basic electrical elements.

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### RAJARAJESWARI COLLEGE OF ENGINEERING

BANGALORE-560074



### DEPARTMENT OF ELECTRICAL AND ELECTRONICS **ENGINEEING**



### **VISION OF THE DEPARTMENT**

"To be an outstanding Department producing graduates of world class standards in the field of Electrical and Electronics Engineering through promoting excellence, imparting core values and ethics for holistic development of our graduates and be known as top ranking Department in the State of Karnataka by 2018"

### **MISSIONOF THE DEPARTMENT**

"To produce excellent manpower in the field of Electrical & Electronics Engineering by introducing innovative teaching methods and projects within the parameters of values and ethics; constantly interacting with industries to understand current requirements, collaborating with leading institutions to upgrade knowledge and establish Centre of Excellence".

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### FROM PRINCIPAL'S DESK

Electrical and Electronic Engineering is an exciting and dynamic field. Electrical engineers are responsible for the generation, transfer and conversion of electrical power, while electronic engineers are concerned with the transfer of information using radio waves, the design of electronic circuits, the design of computer systems and the development of control systems such as aircraft autopilots. These sought-after engineers can look forward to a rewarding and respected career.

> Dr. M S Bhagyashekar Principal, RRCE

### FROM HODS DESK

The Department of Electrical and Electronics Engineering (EEE) was started in the year 2006 in this college. The Department offers instruction in subjects relating to Electrical and Electronics Engineering. Students are exposed to the practical and industrial aspects of the subjects through Laboratory works, periodic Industrial visits, and seminars by experts, etc. The Students are encouraged to participate and present papers in both State and National level Technical Seminars. The performance of the students is continuously evaluated through monthly tests, Assignments, Group discussions, student seminar and model examinations.

> Dr.M.Arunachalam Professor and Head

### STUDENTS ACHIEVEMENTS:

> Students from our department Mahesh (5<sup>th</sup> sem) and Chinappa.M.D(3<sup>rd</sup> sem) participated in shot put, javelin throw and 110mtr hurdle in athletic meet organized in VTU campus Belgaum from 5th to 8<sup>th</sup> Nov 2014.

### STAFF PUBLICATIONS/ ACHIEVEMENTS:

- M.Arunachalam, etc.,"Dynamic Operation and Control Schemes for Static Synchronous Series Compensators", accepted for publication in International Review of Automatic Control (IREACO), date of communication -3<sup>rd</sup> Dec 2014.
- Raju J.M.Kowsalya, M.Arunachalam, "Dynamic Operation and Control Schemes for Static Synchronous Series Capacitor", International Review of Automatic Control (I.RE.A.CO), VOL.8, N.1, January 2015, pp9-16.
- > Prof. M.Arunachalam participated in INAE selection committee meeting on 21st Aug 2014 and participated in Engineers Conclave 2014 at IISc, Bangalore on Oct 30-31 and Nov 1 2014.
- ▶ Prof. M.Arunachalam participated in ABET accreditation meeting at VIT on 3<sup>rd</sup> Nov 2014 as a member of advisory Board for UG EEE and visiting professor of INAE.

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### SEMINARS/FDP/LECTURES/TRAINING PROGRAMS ORGANISED



The technical seminar on "Embedded system: Concepts and Applications" was held at seminar hall on 11th October 2014 at 9:00AM organized by association of Electrical and Electronics Engineering. In this seminar, Mr.S.Chandravel, General Manager, Rossell Techsys, Bangalore discussed about embedded system functions, I/O techniques and RTOS .He also focused on skills needed for embedded system industry. This occasion was graced by more than 80 students. The speaker was honored by giving memento.

41 students from 5<sup>th</sup> sem EEE along with two faculty members visited 400/220KV receiving station at nelamangala on 15.10.2014. The technical staff members in receiving station, taken the students to switchyard and explained the operation of various switching equipments and SCADA operation. This industrial visit is very much useful for students and staff members.





Five days FDP on "Recent Trends in Laboratories -Electrical & Electronics Engineering" is organized by Department of EEE from 15<sup>th</sup> to 19<sup>th</sup> Dec 2014. This FDP aims to provide opportunities to faculty members to learn advanced software in the relevant field for inculcating learning values in students and guiding and monitoring their progress.

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### RECENT ELECTRICAL SCIENCE INVENTIONS



Stimulating a region in the brain via non-invasive delivery of electrical current using magnetic pulses, called Trans cranial Magnetic Stimulation, improves memory. The discovery opens a new field of possibilities for treating memory impairments caused by conditions such as stroke, early-stage Alzheimer's disease, traumatic brain injury, cardiac arrest and the memory problems that occur in healthy aging.

> Date: August 28, 2014 Source: Northwestern University

This year's Nobel Laureates Isamu Akasaki, Hiroshi Amano and Shuji Nakamura are rewarded for having invented a new energyefficient and environment-friendly light source - the blue lightemitting diode (LED). In the spirit of Alfred Nobel the Prize rewards an invention of greatest benefit to mankind; using blue LEDs, white light can be created in a new way. With the advent of LED lamps we now have more long-lasting and more efficient alternatives to older light sources.

> Date: Oct 7, 2014 Source: nobelprize.org (The official website of the Nobel Prize)



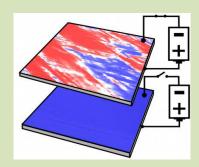


For the first time using a water-based solution, researchers have created a long-lasting and more efficient nuclear battery that could be used for many applications such as a reliable energy source in automobiles and also in complicated applications such as space flight.

> Date: September 16, 2014 Source: University of Missouri-Columbia

Electricity and magnetism rule our digital world. Semiconductors process electrical information, while magnetic materials enable long-term data storage. A research team has now discovered a way to fuse these two distinct properties in a single material, paving the way for new ultrahigh density storage and computing architectures.

> Date: September 25, 2014 Source: University of Pittsburgh



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