



**PANIMALAR INSTITUTE OF TECHNOLOGY**  
CHENNAI-600123

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS  
ENGINEERING**

### Newsletter committee

#### Chief Editor:

Dr.P.S.RamaPraba,  
Professor and Head

#### Staff Member:

Dr.S.Deepa  
Mrs.K.P.Lavanya

#### Student member:

1. AshokKumar.E VII sem
2. Aishwarya.S, V sem

#### Upcoming event:

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

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#### VISION OF THE DEPARTMENT

*“To impart innovative technical education with global standards, thereby nurturing our Electrical and Electronics Engineering students technologically prominent and ethically strong to meet the challenges of serving the society.”*

#### MISSION OF THE DEPARTMENT

*To provide state-of-the art infrastructure to impart quality education in Electrical and Electronics Engineering.*

*To shape the young minds of the students with the fundamental knowledge, inter- disciplinary problem solving skills, analytical skills and confidence required to excel in their profession.*

*To conduct training programs that bridges the gap between the academic and industry to produce competitive electrical engineering professionals.*

*To inculcate a professional attitude, effective communication skills, ethical & moral values in the students, which make them to compete in global scenario.*

*To nurture Research and Development activities leading to the novel technologies and innovations for the betterment of the nation.*

### 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. T.Jayanthi M.E., Ph.D.  
Principal, PIT

### FROM HOD'S 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 internal tests, Assignments, Group discussions, student seminar and model examinations.

Dr.P.S.Ramaprabha  
Professor and Head

### STUDENTS ACHIEVEMENTS:

- Mr.Ashok Kumar E from the final year of our department participated in HASH TAG event held at DMI college of Engineering, Chennai on 3<sup>rd</sup> September, 2015 and attained **first place** in paper presentation.
- Mr.Akash V from the final year of our department participated and presented a paper entitled '**Advanced DC-DC Converters**' in CRANK-X event held at SSN college of Engineering, Chennai on 4<sup>th</sup> September, 2015 and attained **Best Paper** award.
- Ms.Joiada Shelomi Rachel.K from the third year of our department participated and presented a paper entitled '**A review on Inorganic Solid State Nano-Structured Solar Cells**' in CTSE'15 event held at SSN college of Engineering, Chennai on 25<sup>th</sup> September, 2015 and attained **Best Oral Presentation** award.

### STAFF PUBLICATIONS:

- Dr.S.Deepa, “**A Fuzzy GA Based Statcom for power quality Improvement**”, *International Journal of Power Electronics And Drives*, 2015.
- Mrs.K.P.Lavanya, “**Analyzing the WCET by implementing cyclic priority pre-emptive task scheduling algorithm for east**”, *Journal Of Mathematical Sciences (FJMS)*,2015.
- K.P.Nithya, “**Grid connected Photovoltaic System Based On The Switched Coupled Inductor Quasi z source Inverter**”, *International Journal Of Advanced Research In Electrical, Electronics And Instrumentation Engineering*, 2015.
- M. Padmarasan, “**Non Linear Analysis of MPPT for Power Quality Improvement**”, *Research Journal Of Applied Sciences, Engineering And Technology*, 2015.
- C.S.Ajin Sekhar, “**Control of Industrial Drives through Multicell Impedance Source Inverter**”, *Applied Mechanics And Materials*,2015.

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



The technical seminar on “**Advance Trends in Biometric Systems**” was held at AV hall on 26<sup>th</sup> August, 2015 at 9:00AM organized by association of Electrical and Electronics Engineering. In this seminar, **Dr.SenthilKumar, Professor, EEE, Panimalar Engineering College** discussed about system functions, techniques and production process of Biometric Systems .He also focused on skills needed for embedded system industry. This occasion was graced by around 75 students of final year from our department. The speaker was honored by giving memento.

The technical seminar on “**Optimized Speed Regulation of Motors**” was held at AV hall on 7<sup>th</sup> July, 2015 at 9:00AM organized by association of Electrical and Electronics Engineering. In this seminar, **Mr.Karthik.P, Maintenance Engineer, Denetim Automation, Chennai** discussed about advanced techniques presently practiced for speed regulation of motors in industrial applications. He also focused on skills needed for Control system design in industry. This occasion was graced by around 72 students of third year from our department. The speaker was honored by giving memento.



*IN-PLANT TRAINING UNDERWENT*

Students from 5<sup>th</sup> semester EEE by name, A.Nithila, M.Malarvizhi and I.Aasma Bhanu underwent in-plant training at TanTransco, Chennai during 19<sup>th</sup> June, 2015 – 22<sup>nd</sup> June, 2015. The technical staff members in receiving station, taken the students to switchyard and explained the operation of various switching equipments and SCADA operation. This training is very much useful for students.



Students from 5<sup>th</sup> semester EEE by name, Divya Jai Sankar, Gerliyn and S.Mahalakshmi underwent in-plant training at Integral Coach factory, Chennai during 18<sup>th</sup> June, 2015 – 21<sup>st</sup> June, 2015. The technical staff taken the students to manufacturing area and explained the process involved in the manufacturing of railway passenger coaches. This training is very much useful for students.



### 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.

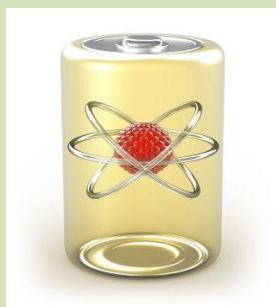
Date: August 28, 2015

Source: Northwestern University

This year's Nobel Laureates Isamu Akasaki, Hiroshi Amano and Shuji Nakamura are rewarded for having invented a new energy-efficient and environment-friendly light source – the blue light-emitting 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, 2015

Source: [nobelprize.org](http://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.

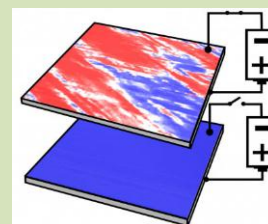
Date: September 16, 2015

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, 2015

Source: University of Pittsburgh



Part Segway, part skateboard, the self-balancing scooter—generally known as a hoverboard, even though it doesn't actually hover—is easily the year's most viral product, drawing fans like Justin Bieber, Jimmy Fallon and Kendall Jenner. Once someone hops on, the device uses a pair of electric gyroscopes (one under each pad) to balance automatically, allowing users to speed forward, backward and around by slightly shifting their body weight. That enables all kinds of fun stunts, ranging from hallway races to motorized dance routines. Maxx Yellin, co-founder of [PhunkeeDuck](#), one of more than 20 companies making versions of the device, sees larger implications. "It could evolve as a new form of transportation for cities and colleges," Yellin says (though British authorities recently caused a stir by outlawing their use on public sidewalks and streets). But convenience comes at a cost: prices range from \$350 to \$1,700, depending on the brand and its features.

*Date: December, 2015*  
*Source: Lisa Eadicicco*

