



# ELECTROWRITE



A Newsletter From Dept. of Electrical Engineering, S.I.T

VOL 3 ISSUE 2

## Vision & Mission

### Vision

To emerge as a leading Department of Electrical Engineering that caters to the latest needs of power sector, electrical & allied industry in the region.

### Mission

To evolve as an innovative & globally competent Electrical Engineering department that contributes to the socio - economic growth of region by utilizing the advancement in Electrical Engineering by providing conducive learning and interactive environment to students and faculty.

## ...In The News

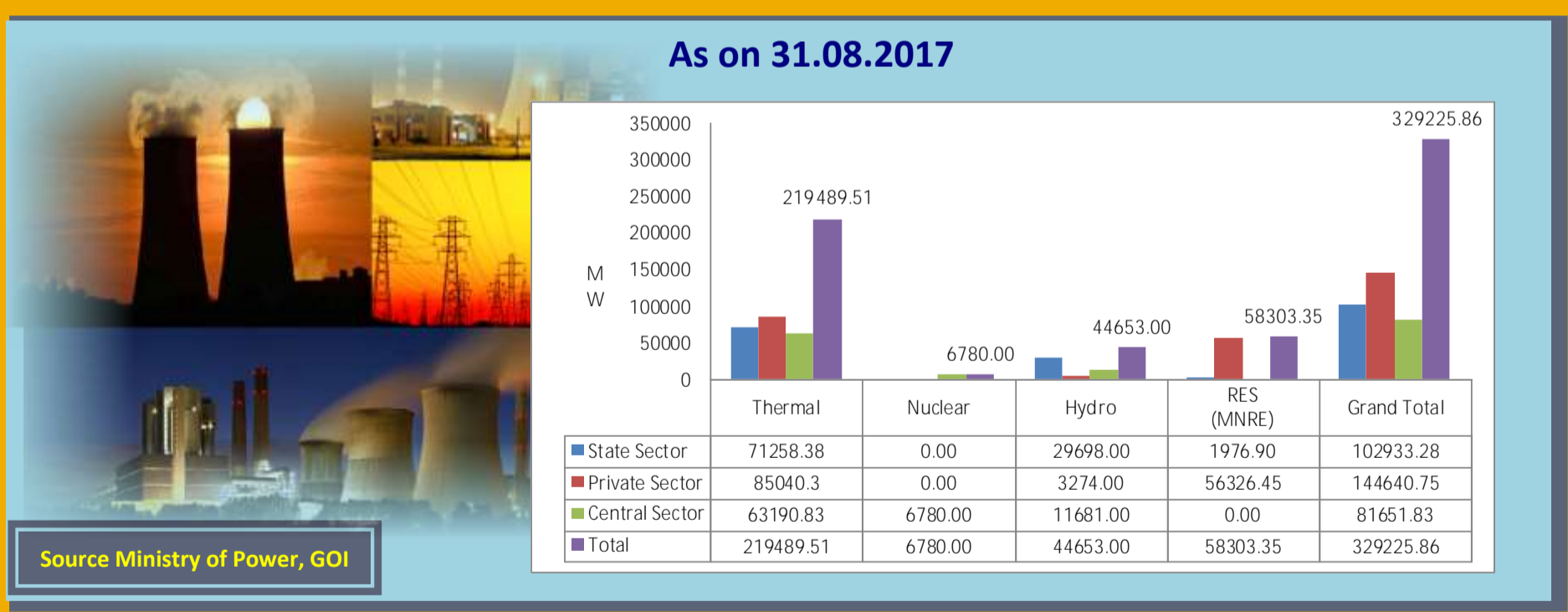
### Tata Motors launched the future of mass public transportation

Tata Motors launched the future of mass public transportation at its Pune facility and took another step in the direction of green technology and mobility solutions. The company launched the Starbus Electric 9m, Starbus Electric 12m and the Starbus Hybrid 12m range of buses which are designed, developed, powered by alternate fuels and made in India. The company says will be a good for smart cities.

The Hydrogen Powered Starbus Fuel Cell bus is a zero-emission mass transport solution, for inter-city commute and has been developed in partnership with ISRO (Indian Space Research Organisation). Combining hydrogen gas and oxygen, the fuel cell produces electricity to power the electric motor, with water and heat as a by product. This is the first time an Indian manufacturer has ventured in this direction.



## INDIA'S POWER



### EVEN SEMESTER 2017 TOP PERFORMERS IN UNIVERSITY EXAMINATION

**SAYANTANI DEY**  
1ST YEAR

**SATARUPA MUKHERJEE**  
3RD YEAR

**SNIGHDHA DAS**  
2ND YEAR

**NEELU KUMARI**  
4TH YEAR



## SOCIAL MEDIA OR CONVENTIONAL MEDIA

**SATARUPA MUKHERJEE ,  
4TH YEAR, EE, SIT**

“Necessity is the mother of Invention” this quote aptly describes a situation where people expect for a change, ‘Media’ is one such change in the field of Technology which has grown over the years by leaps and bounds.

A question might haunt the mind of my readers that why the word “Media” holds importance in the present context. The reason being it has the power to change, to communicate and it provides a platform of variance. “Media” in itself has come as a boon for the entire world provided it is used in a proper way.

The world is shrinking, its boundaries are slowly being invisible and the people are better connected than ever. The reason being “Social Media” which provides a platform for interaction, pooling in ideas, pouring news from all over the world, updating one’s intelligent quotient and increasing interactivity and globalism within the touch of a button. Social Media has a great impact on human life. It is a platform that gives one immense freedom without any set of rules and regulations. The use of Social Media is on its hike nowadays, it has driven the world through a new surge of applications that helps in communicating and leads to growing connectivity starting from Facebook , Youtube , DailyMotion , Twitter, Tumble etc.

### **PROS OF SOCIAL MEDIA:**

1) **World wide connectivity:** Sites like twitter, facebook, pinterest, linkedIn, Skype are some of the famous sites that are popping out over and over again to increase interactivity over the web with multiplying effects like

Seeking new jobs.

Locating Assistance.

Accessing news in real time.

Receiving support from likeminded people.

In many ways these connectivity helps us in building innate relationships with the world as a whole just like we develop our relations with our family members.

2) **Commonality of Interest:** Social Media is a media which does not force an individual to go beyond the interests of an individual for example if one is a book lover, a chess aficionado or a game lover one can interact with those who share the same interests.

3) **Real Time Information Sharing:** Nowadays we find that each and every individual prefers to navigate through the web pages for fulfilling one’s own demands. These may include teachers-students studying online through various sites then patients searching for some of the best doctors worldwide and so on.

4) **Promotes Electronic Commerce:** In modern times people seem to be least interested to go to the markets for shopping when sites like “Flipkart”, “Amazon”, “Shopclues” and “SnapDeal” can serve their purpose within the click of the button. Thus people are giving a shift from the conventional media that includes pamphlets, brochures or posters to various advertising sites to increase their business.

5) **Increased news cycle speed:** Recent reports states that “Twitter” is one of the main sites for breaking news. This statement makes it evident that we no need to wait for one long day to know what is happening globally as we have electronic papers coming up that has led a shift from the normal black and white papers. This has also led to the development of an instantaneous news cycle as everything from terrorist attacks to local area news are available on the social media creating awareness amidst the masses.

### **CONS OF SOCIAL MEDIA:**

1) **Backlash:** This happens when we are not aware of our usage of freedom of speech which includes posting of some highly offensive views in the social media that might hurt the religious sentiments of a religion creating a long term impact on the minds of an individual. So an individual must keep an eye on his or her speech because words once spoken cannot be taken back.

2) **Diminishing privacy:** Certain networking sites require constant upgradation in their security settings which makes it difficult for the users to enable their settings for appropriate privacy.

3) **Cybercrimes or Bullying:** One of the major disadvantage of social media. Providing relevant details of an individual can pose a major threat to an individual like hacking an account, creating false identity which might harm an individual.

4) **Isolation:** Social media creates complete isolation from ones surroundings even though it provides a platform for global communication.

Seeing the pros and cons of social media, it depends on us where we drive the technology. But yes Social Media definitely has an upper hand over conventional media and our drive for “Digital India” will be successful if we have Social Media in our pockets and not the Conventional Media.



**AISHIKA NANDY  
3RD YEAR EE, SIT**





## EVENTS & ACTIVITIES:

### SAYONARA – 2017—31.05.2017



### SEMINAR ON BANKING SUPPORT FOR THE BUDDING ENTREPRENEURS - 03.05.2017

### TRAINING ON INTERNET OF THINGS AND ITS BASIC APPLICATIONS ( FOR 4<sup>TH</sup> YEAR) - 03.07.2017-15.07.2017

### TRAINING ON INTRODUCTION TO ARDUINO ( FOR 3<sup>RD</sup> YEAR) - 18.07.2017-22.07.2017

### FINISHING SCHOOL PROGRAM ( FOR 4<sup>TH</sup> YEAR) - 19.07.2017-22.07.2017 & 24.07.2017-26.07.2017

### TRAINING ON HTML, JAVASCRIPT, CSS, BOOTSTRAP ( FOR 2<sup>ND</sup> YEAR) - 31.07.2017-04.08.2017

### ONE DAY SEMINAR ON WHO WANTS TO BE AN ENTREPRENEUR - 11.08.2017

### SEMINAR ON STARTING A CAREER IN ROS ROBOTICS AND MACHINE LEARNING - 17.08.2017

### WORKSHOP ON DESIGN & FABRICATION OF CIRCUITS (FOR 3<sup>RD</sup> YEAR) - 23.08.2017-24.08.2017



### FRESHERS INDUCTION PROGRAM – 26.07.2017

### CLENLINESS DRIVE – 10.08.2017

### CELEBRATION OF AKSHAY URJA DIWAS – 19.08.2017

### CELEBRATION OF TEACHERS DAY – 05.09.2017

### PUBLICATION OF WALL MAGAZINE “GEENUS” – 05.09.2017

### FRESHERS WELCOME – 08.09.2017

### PARENT - TEACHER MEET – 15.09.2017

### CELEBRATION OF ENGINEERS DAY – 15.09.2017





## ALUMNI SPEAKS

Myself Priyanka Shaw, I did my master in Bioelectrical physics from one of the prestigious university, Kwangwoon university Seoul, south Korea. Recently I got the chance for the doctoral study in the field of applied engineering at world renowned university of Antwerp, Belgium that is high repertoire of denigratory gestures for me. However, this all possible due to best effort and supervision which I got from the fine learned professors during my Bachelor study.

Therefore, I am so energized to share few words related with ours departments and faculties.

During my bachelor's course in S.I.T, I found that faculty are very much keen knowledge and command his own subjects as well as such a magnificent character that is impressed upon us that we were about to become trustees of our society and that we would graduate not just with opportunity but with responsibility that would stay with us a lifetime. This is the reason, I could not unmemorable my department, faculties and colleagues belongs to S.I.T.

Since, I persuade my master in engineering from abroad after bachelor in engineering from S.I.T India. Comparable, I had been felt even ours departments equips with world class facilities, still there is discrepancy in student practical skill as well as self-representation that's we are lack form the abroad university and IITs.

As per my experience, I would like to propose some of few point to make a more betterment of education & quality of students in S.I.T, especially department of electrical engineering. Such as, all the internals exams should be replaced by small surprise test which would help to maintain the attendance in the class. Every month seminars should be deliver by experts or alumni which belongs to particular related area. Laboratory assistant should attained the industrial training together with the students for advance experimental acquisition, indeed they could aware about latest tool and techniques. Departments or college should motivate the student by giving some reward, not only on the basis of grade or marks, it should be on the basis of overall performance.

Eventually, I would like to say that, I am very satisfied with my professional and personal life and most of the credits goes to S.I.T faculty and their continuous support.

Thank you

Mrs. Priyanka Shaw  
(2010-2014 batch)

Electrical Engineering Department, SIT

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Your questions answered

Q&A

### State the difference between generator and alternator.

Generator and alternator are two devices, which converts mechanical energy into electrical energy. Both have the same principle of electromagnetic induction, the only difference is that their construction. Generator persists stationary magnetic field and rotating conductor which rolls on the armature with slip rings and brushes riding against each other, hence it converts the induced emf into dc current for external load whereas an alternator has a stationary armature and rotating magnetic field for high voltages but for low voltage output rotating armature and stationary magnetic field is used

### Why star delta starter is preferred with induction motor?

Star delta starter is preferred with induction motor due to following reasons:

- ◆ Starting current is reduced 3-4 times of the direct current due to which voltage drops and hence it causes less losses.
- ◆ Star delta starter circuit comes in circuit first during starting of motor, which reduces voltage 3 times, that is why current also reduces up to 3 times and hence less motor burning is caused.
- ◆ In addition, starting torque is increased and it prevents the damage of motor winding.

### Name the types of motors used in vacuum cleaners, phonographic appliances, vending machines, refrigerators, rolling mills, lathes, power factor improvement.

- ◆ Vacuum cleaners- Universal motor.
- ◆ Phonographic appliances – Hysteresis motor.
- ◆ Vending machines – Shaded pole motor.
- ◆ Refrigerators – Capacitor split phase motors.
- ◆ Rolling mills – Cumulative motors.
- ◆ Lathes – DC shunt motors.
- ◆ Power factor improvement – Synchronous motors.

Send your queries to [newsletter.ee.sit@gmail.com](mailto:newsletter.ee.sit@gmail.com)

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