



SAPTHAGIRI COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

August-2018

Vol-II Issue-2

EEE MAGAZINE

Power is Knowledge...Knowledge is Power.

VISION

➤ To make electrical and electronics engineering from SCE to leave their footprints as best engineer globally and to be the leaders in their chosen field of work

MISSION

➤ To impart knowledge to the students of electrical and electronics engineering with abilities to excel in their profession and contribute to the growth of nation and service to the society

Statement Of PEO's

Graduate Engineers will be able to:

PEO1: Apply scientific, Mathematics and Engineering fundamentals gained to comprehend, analyse, design and create products and solutions for real life problems

PEO2: Contribute to industrial services and government organisations by applying their skills gained through formal education.

PEO3: Work on emerging technologies with professional communities, higher education ever developing careers to strengthen human values and social responsibilities to contribute towards society.

PEO4: Adopt professional and ethical attitude for effectively resolving societal problems through multidisciplinary approach

Editorial Team:

Associate Professor: Prof. Rekha SN

Prof. Nagaraj H P

Assistant Professors: Prof. A Dhamodaran

Prof. Preetha NP

Prof. MahaVishnu KBP

Student Coordinator: Neha Thomar

Ganavi

Praveen J

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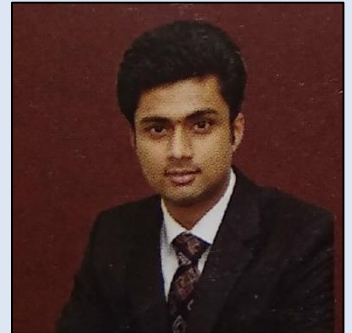
Chairman: Sri G. Dayanand

The "EEE MAGAZINE" is providing great space for the faculty and students to pen down their innovative ideas, imagination and perceptions to show case their creativity. So, I take the opportunity to congratulate the department of EEE and its editorial team to successful release of this issue. I am sure that students and faculty will find the content of this edition very interesting and educating.



Executive Director: Sri G. D Manoj

I am indeed happy to know that the department of EEE has taken initiative in realizing its "EEE MAGAZINE" and urge faculties and students to make use of the platform to share and educate among themselves in publishing article pertaining to the emerging domain and articles of interesting. I congratulate the team of editorial community and department of EEE



Principal's Message: Dr. Shivabasappa

It is indeed very happy to bring "EEE MAGAZINE" by the department of EEE. It is a platform provided by the department for their students and faculty members where they can share their knowledge, experience and talents in terms of written articles and I would like to compliment and congratulate the department and its editorial team for the contribution in bringing out the "EEE MAGAZINE".



Administrative officer's Desk

It give me immense pleasure to note that EEE department bringing out "EEE MAGAZINE". I am sure this "EEE MAGAZINE" provides an opportunity to the students and faculty of the department to project their talents through articles, reports of various academic and extracurricular programmes. I congratulate the editorial committee for their effort



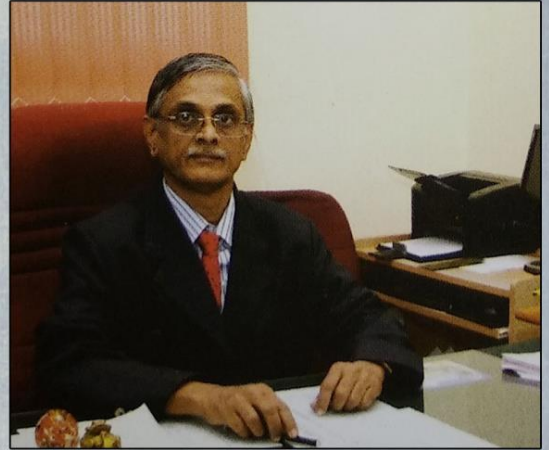
MESSAGE

HOD's Desk

At the outset let us thank the Management, Principal and Administrative officer for giving us permission to bring out the departmental news letter "CURRENT NEWS". We hereby convey our heartfelt thanks to them.

In this CURRENT NEWS it is intended to showcase the Technical talents of the students and faculty of EEE department.

This will contain Technical article, painting, reports of the activities and other relevant articles.



It is the intent of the department to make it as a news letter CURRENT NEWS to keep in touch with the departmental activities, achievements of faculty and students and to keep abreast with outer world electrically. This is an opportunity for the students and faculty to involve themselves pertaining to their field of study or profession so as to gather the articles. I am pretty sure that reading of this news letter would be a pleasant one as it would serve as a verdant landscape of scientific, technical and article outpourings that support student and faculty for widening their research and knowledge for their expansion.

Editorial Team



INVITED LECTURE

Dr. K.N Ravi, Prof. & HOD, dept. of EEE has delivered at a technical talk on “**HVDC power transmission**” on 7thFeb 2018 at SSIT , Tumkur

Dr. K.N Ravi, Prof. & HOD, dept. of EEE has delivered at a technical talk on “**Insulation Cordination**” on 6thApril 2018 at CPRI , Bangalore.

PAPER PUBLISHED IN CONFERENCE

Mr. Nagaraj H P, Asst. Prof. has presented a journal paper titled “**Brittle fracture of GRP Rod used in polymeric insulators: an experimental study**” in IASET (International Academy of Science, Engineering and Technology) published on 6th march 2018.

The following students of department of EEE has attended workshop at APS College of Engineering, Bangalore on 2nd-03rd April 2018.

a. Madhushree b. Jyothi c. Mounesh Kambar d. Kirankumar

TECHNICAL TALK on “State of Art of Insulator”

A technical talk has arranged by EEE department on 14th April 2018 on “State of art of lightning arresters”. The main speaker was Sri U R Sheshari Rao, joint director CPRI. The program was inaugurated by Dr.K.N.Ravi EEE HOD. Sri U R Sheshari Rao explained in detail how lightning arrester involved in protecting the substation equipment's from lightning incidences. He dealt the evolution of arrester elements starting from spark gap to Metal oxide surge arresters. He also explained the technical advantages of metal oxide surge arrester in comparison with silicon carbide elements. Further he explained the salient points regarding the testing of arresters in accordance with the standards.

The students found the lecture extremely informative. The program was concluded with the vote of thanks by Mr.Dhamodaran A. Assistant Professor ,EEE Department..

STUDENTS' PLACEMENT

| Name of student placed | Enrollmen t number | Name of the employer | Appointment letter reference No. with date. |
|------------------------|--------------------|-----------------------------|---|
| PRASHANTH GAURAV | 1SG13EE040 | RAAS INFO SOLUTIONS PVT LTD | 10/05/2018 |
| AMRITHA KAUR | 1SG13EE008 | ATTRA INFOTECH PVT. LTD | 18/03/2018 |

| | | | |
|------------------------|------------|------------------------------|--------------|
| SRINIVAS J | 1SG14EE074 | PIN CLICK | 29 / 05/2018 |
| RAKSHITH S | 1SG14EE061 | PIN CLICK | 29 /05 /2018 |
| ABHISHEK B REVANKAR | 1SG14EE002 | SEG AUTOMOTIVE | 09 /07/2018 |
| DIVYA M | 1SG14EE026 | QUALITAS TECHNOLOGIES | 02/04/2018 |
| ANKIT JHA | 1SG14EE010 | QUALITAS TECHNOLOGIES | 02/04/2018 |
| ARAVIND B R | 1SG14EE018 | ADVENT POWER TECHNOLOGIES | 05/03/2018 |

PROJECT EXHIBITION FOR FINAL YEAR STUDENTS

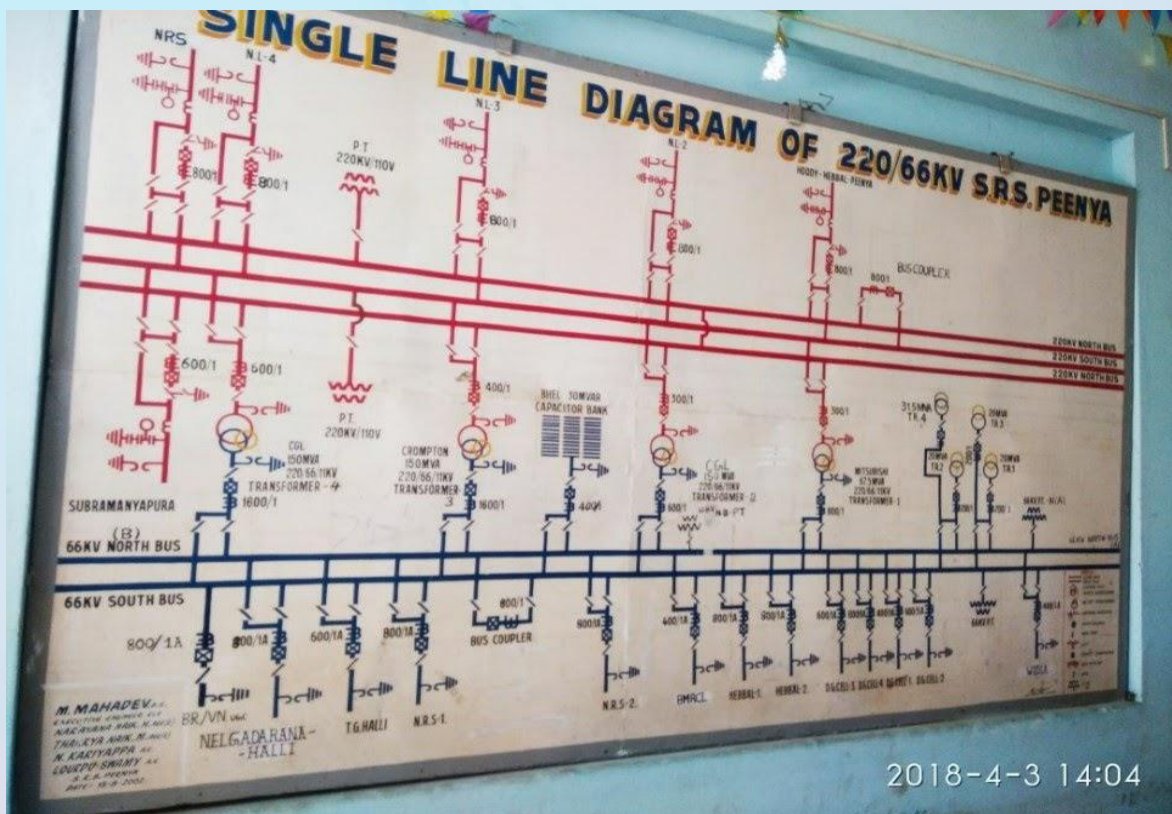
The department of Electrical and Electronics engineering has organized project exhibition for the final year EEE students on 26/05/2018 . In this activity 8th semester students have been carried out project as co-curriculum activity. The projects were exhibited on 26-05-2018. Dr. N Vasudev, Joint Director, High voltage Division, CPRI, Bangalore was the judge for evaluating the project.



INDUSTRIAL VISIT:

Department of Electrical and Electronics arranged an Industrial visit for the students of 8th sem to 220/66kV SRS Receiving station, Bangalore.

Various equipment used for stepping down voltages were explained in detail. Insulators used in substation were explained in detail. All the 100 students of 8th sem attended the industrial visit and gave positive feedback. The students requested to arrange more such industrial visits.



Single line diagram of 220/66KV substation, SRS Peenya



Students along with Faculty visited to the 220/66KV Station at SRS Peenya

STUDENTS' ARTICLE:

SUPER COMPUTERS OF THE WORLD



The Blue Gene/P supercomputer at Argonne National Lab runs over 250,000 processors using normal data center air conditioning, grouped in 72 racks/cabinets connected by a high-speed optical network

Chinese super computers: In 2010 China had made a super computer "TIANHE 1A" CLAIMED TO BE THE FASTEST COMPUTER IN THE WORLD. Soon in 2010 Japanese K-computer designed by 'FUJITSU' BECAME FASTEST SUPER COMPUTER (using Sun Microsystems micro chips). Chinese TIANHE 1A WAS MADE BY MICROPROCESSOR CHIPS MADE BY INTEL AND NVIDIA. Internal switching was by Chinese. Now in Oct '11 China has made super computer entirely on its own based on Chinese micro processor chips. Its speed of computation being 1 peta flop / sec. ie 10^{15} computations/sec. Chinese super computer "Sunway Blue Light MPP" is about 74% as fast as the fastest super computer of USA by name "JAGUAR" at Dept. Of Energy, Oak Ridge National Lab. (ORNL). Chinese SC is named one amongst 20 fastest SC in the world. Chinese SC consume less electrical power compared to other SC. TIANHE 1A CONSUMES 4 MW POWER where as JAGUAR consumes 7 MW POWER.

The supercomputer was fully designed and built by the space centre using commercially available hardware and open-source software components. The system uses as many as 400 NVIDIA Tesla 2070 graphic processing units (GPUs) and an equal number of Intel Quad Core Xeon central processing units (CPUs), supplied by WIPRO, with a high-speed interconnect. With each GPU and CPU providing a performance of 500 Giga FLOPS and 50 Giga FLOPS, respectively. The theoretical peak performance of the system amounts to 220 Tera FLOPS.

Name Of The Student: ANKIT JHA

USN : 1SG14EE010

Dept. Of EEE

TOPPERS:

I - Year

| Sl.No. | Name | USN | Percentage |
|--------|-----------------|------------|------------|
| 1 | SWATHI C | 1SG17EE079 | 91.29 |
| 2 | ARCHITHA N BHAT | 1SG17EE010 | 88.57 |
| 3 | NISHITHA R | 1SG17EE052 | 87.21 |

II - Year

| Sl.No. | Name | USN | Percentage |
|--------|---------------|------------|------------|
| 1 | PAVITHRA R | 1SG16EE066 | 80.9 |
| 2 | A R GOUTAM | 1SG16EE001 | 78.8 |
| 3 | KAVYA SHREE R | 1SG16EE043 | 78.7 |

III - Year

| Sl.No. | Name | USN | Percentage |
|--------|------------|------------|------------|
| 1 | VINUTHA D | 1SG15EE096 | 84.9 |
| 2 | MANOHARA S | 1SG15EE049 | 84.5 |
| 3 | SHANU | 1SG15EE082 | 83.2 |

IV - Year

| Sl.No. | Name | USN | Percentage |
|--------|-----------------|------------|------------|
| 1 | PAVAN KUMAR H D | 1SG14EE055 | 78.5 |
| 2 | RANJITHA K | 1SG14EE064 | 78.1 |
| 3 | PRAGATHI S | 1SG14EE059 | 77.8 |