



# SAPTHAGIRI COLLEGE OF ENGINEERING

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

August -2019

Vol-III 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:

PEO 1: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:Ajay S Pai

Dhasharath R

Bindushree S

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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. H Ramakrishna**

It gives me immense pleasure to note that, SCE has been publishing bi-annual newsletter and I am sure this will provide an opportunity for the faculty and students to share their knowledge and beacon the information about various issues and activities that are being taking place in the department. I look forward for more activities and achievements for the department to march towards excellence in the future. I would like to thank all teaching, supporting staff and our beloved students for their active participation in publishing this magazine. My special compliments and congratulation to the editorial team of the department for their consistent effort in publishing this newsletter.





## HOD'S MESSAGE- Dr.K.N.Ravi

SAPTHAGIRI COLLEGE OF ENGINEERING is releasing its department News Letter "EEE MAGAZINE". I would like to express my sincere appreciation to Faculty and Editor for their efforts and dedication into a modern and accessible mode of communication with the students' community. It is always a proud moment in the life of the SCE that its departments celebrate such occasions. Apart from providing the quality education, we craving to provide our students a holistic learning experience for life. Academic excellence along with Co-curricular and extra co-curricular activities complete the process of education.



It gives me great satisfaction that SCE is making progress in all its endeavors towards the overall development of the students. As I look ahead, I can visualize that the college will grow in pursuit of higher standards of teaching, research, and may lead to shape my dreams. It will continue to serve a significant role in higher education and in the service of the country. My blessings and good wishes will always be with the EEE Department. May God give strength to see this department and college flourishing!

### INDUSTRIAL VISIT:

Department of Electrical and Electronics Engineering has arranged an Industrial visit on 03/04/2018 and 04/03/2018 for the students of 6th sem to 400/220kV SRS Peenya substation. Various equipment used in the transmission system where explained by the engineers of KPTCL in detail. He also explained the intricacies of the design of Substation in Rural areas. The details of insulators, transformers, circuit breakers, isolators , and various equipment used in transmission system were explained. All the 60students of 6th sem 'B' section(30 students in each batch) and 2 faculty members attended the industrial visit.

The engineer who was explaining about the substation was also informed that the complexity of transmission line passing on to urban area can be reduced by having underground cables to secure environment. The students attained the knowledge about environment sustainability of the equipment present in the substation.

Environmental sustainability is defined as responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long-term environmental quality. The practice of environmental sustainability helps to ensure that the needs of today's population are met without jeopardizing the ability of future generations to meet their needs.

Firstly, the design of the substation and the equipment it accommodates should allow economic efficiency and technical effectiveness over its service life. Secondly, the substation is built in an environmentally friendly manner.

The substation design aspect, covering noise mitigation, natural ventilation, natural lighting, thermal insulation, blending with environment and their harmony support to efficient operation and maintenance of the substation equipment were explained. For the construction phase, a number of control measures are depicted including waste-wise control, non-recycle materials avoidance, noise control and the choice of environmental friendly materials.



Industrial visit to SRS substation



## **GUEST LECTURE ON ENGINEERING ETHICS**

Guest lectures provide a fresh perspective for the class. Guest speakers are like a blessing for the students, when addressed by the industry leaders. Having guest speakers, enhances the educational experience of the students. It is a great way for the students to get industry exposure as guest speakers to talk about their real-life experiences and not merely bookish knowledge.

A guest lecture was organized by the operations & supply chain management & digital marketing and transformation departments on the 23/03/2019. A generic topic on “Engineering Ethics” was decided to instill a real-world perspective in the minds of the students. The resource person was Dr. S Seetharamu, RTd. Director, CPRI, Bangalore. In his interactive session he asked many relevant questions and encouraged students to give answers to the questions. In his guest lecture he explained the importance of engineering ethics and stated that “Ethical behavior is doing what is morally right”. Besides, with examples he explained the key influences of Engineering Ethics. He stressed on certain key areas such as Morals, Ethics and engineering ethics, ethical problems and dilemmas, importance of ethics, corporate examples of ethical codes in brief and informative session. The program was concluded with the vote of thanks by Dr. K. N. Ravi HOD EEE department.

## **GUEST LECTURE ON STATE OF ART OF INSULATORS FOR HIGH VOLTAGE APPLICATION**

As a part of empowering the students' knowledge EEE department organized a Guest Lecture on “State of art of Insulators for High Voltage Application” by Dr. N Vasudev, Joint Director, High Voltage Division, CPRI, Bangalore. The program was inaugurated by Principal, SCE on 06/04/2019. In the inaugural speech Principal appreciated the students for attending technical events. Dr. Vasudev spoke about the development on the insulators starting from porcelain, glass up to by the usage of polymeric insulator. He also mentioned that the surface creepage length is very important from the point of design of external insulation. The design of insulator depends on performance under lighting, performance under switching impulse and performance under polluted condition. He also explained the advantage of polymeric insulator over other ceramics insulators. He expressed that polymeric insulator will replace ceramic insulator in near future. The Guest lecture was really helpful for the students. Dr. Vasudev gave the idea of doing projects on the specific area. He also appreciated the enthusiasm of the students for listening the event.

# STUDENTS' PAPER PUBLICATIONS

USN	NAME	TITLE OF THE PAPER	JOURNAL/CONFERENCE	YEAR
ISG15EE047 ISG15EE026 ISG15EE034 ISG15EE049	Manish Manjunath, D Manish Naicker Gururaja D Manohara S	“Design of insulator for various pollution levels using MATLAB”	IJSRR (BEST PAPER AWARD)	2018-19
ISG15EE036 ISG15EE024 ISG15EE029 ISG16EE411	Harshitha V Charitha M C G Tejashree Geetha S	“ Study on the Source Characteristics of HVDC set for Pollution Test”,	IJSRR	2018-19
ISG15EE061 ISG15EE083 ISG15EE097 ISG15EE076	Pawan Kumar D Sharath C Vishal S Pujari Ravi Prakash H	Cross-Border Infiltration Detection and Protection System	IEEE CONFERENCE	2018-19
ISG15EE082 ISG15EE072 ISG15EE059 ISG15EE096	Shanu Ragi Jaya Nethra R Vinutha D	“Hand Gesture Recognition”	IJSRR	2018-19
ISG15EE031 ISG15EE042 ISG15EE021 ISG15EE005	Ganesh Rao S S Lohith P Chandan Gowda Annapurna Singh	“Fault Analysis Of Induction Motor”	IEEE CONFERENCE	2018-19
1SG15EE068 1SG15EE069	Abhishek R Rachana M	“Electromagnetic radio receiver a design for Jupiter radiation”	IEEE CONFERENCE	2018-19
ISG15EE019 ISG15EE039 ISG15EE013 ISG15EE046	Chaithra S Lave13nya K Aruna B P Manasa H	“Control of water pump for irrigation using neural network”	IJSRR	2018-19
1SG15EE037 1SG15EE025 1SG15EE012 1SG15EE010	Irene Jacob Chaya K Arpitha Srinivas Murthy Apporva K G	“Gesture controlled robotic arm”	IJSRR	2018-19

# STUDENTS' PLACEMENT

Name of student placed	Enrollment number	Name of the employer	Appointment letter reference No. with date.
NETHRA R	1SG15EE059	FAME TECHNOLOGIES	28/03/2019
MANASA H	1SG15EE046	FAME TECHNOLOGIES	28/03/2019
CHANDANA B	1SG15EE023	NTT DATA	05/02/2019
NAVYA SR	1SG15EE058	SLK SOFTWARE PVT LTD	23/04/2019
D MANISH NAICKER	1SG15EE026	SLK SOFTWARE PVT LTD	SLK SOFTWARE PVT LTD 23/04/2019
SWATHI BC	1SG15EE091	WIPRO TECHNOLOGIES	24/05/2019
SOUNDARYA M	1SG15EE085	TOPPER TECHNOLOGIES PRIVATE LIMITED	29/07/2019
MANISH MANJUNATH	1SG15EE047	PRDCRef: PRDC/2019-20/7050	15/07/2019
NAGARAJ	1SG15EE057	HEXTRI ELECTRON LABS PVT. LTD	15/03/2019
MANOJ B N	1SG15EE050	HEXTRI ELECTRON LABS PVT. LTD	15/03/2019
LAKSHMANA H R	1SG16EE423	PRIME	11/02/2019
JAYANTH M V	1SG16EE415	PRIME	11/02/2019



## KSCST SPONSORED PROJECTS

1SG15EE008	ANUSHA	KSCST	KLE SOCIETY'S	2018-19
1SG15EE017	MOHANA	PROJECT	Dr. M S	
1SG15EE038	JEEVITHA	EXHIBITI	SHESHGIRI	
1SG15EE041	KEERTHA NA	ON	COLLEGE OF ENGINEERING AND TECHNOLOGY	

1SG15EE060	NITHYA J	KSCST	KLE SOCIETY'S	2018-19
1SG15EE090	SURABHI S	PROJECT	Dr. M S	
1SG15EE067	PRIYA	EXHIBITI	SHESHGIRI	
1SG15EE422	SHANKAR MEGHANA MS	ON	COLLEGE OF ENGINEERING AND TECHNOLOGY	

## FACULTY PARTICIPATION

- **Mr. Nagaraj H P**, Associate Professor/EEE has completed his Ph.D. Viva Voce in the Title of “**Failure analysis of polymeric insulator for high voltage applications**” under VTU at Sapthagiri College of Engineering on 29 June 2019.
- The following Faculty and students had presented the paper's in IEEE International Conference on Intelligent Technique in Control, Optimization and Signal processing, INCOS'19 from 11 – 13 April 2019 at Kalasalingam Academic of Research & Education, Srivilliputhur.
  1. Prof.Rekha
  2. Abhishek R
  3. Rachana
  4. Ganesh Rao
  5. PavanKumar.
  6. Raviprakash
  7. Sharath S
  8. Vishal S Pujar

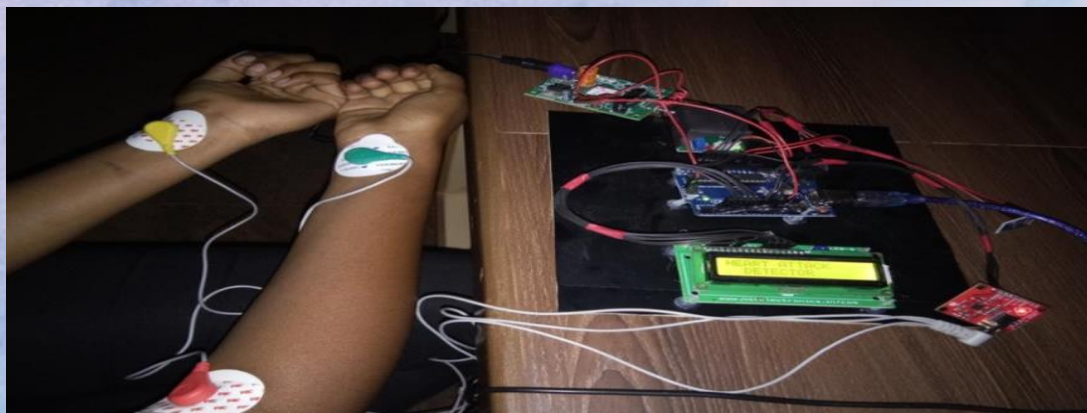


Faculty Name	Publication Title	Title of Conference/ Journal	Month & Year	Vol/Issue	ISSN/ISBN
Dr G Raghavendra	A Penalty based Self Adaptive Harmony Search Algorithm for Optimal Load Shedding	IJEAT	June 2019	Volume-8 Issue-5	ISSN: 2249-8958,
Rekha S N	Relevance vector machine-based fault classification in wind energy conversion system	International Journal of Electrical and Computer Engineering (IJECE)	June 2019	Vol. 9, No. 3,	ISSN: 2088-8708, DOI: 10.11591
Ramya M	Study on the Source Characteristics of HVDC set for Pollution Test	International Journal of Scientific Research and Review,	May 2019	volume 8 issue 5	,ISSN No.2279-543X.

## PROJECT EXHIBITION FOR FINAL YEAR STUDENTS:

The department of Electrical and Electronics engineering has organized project exhibition for the Final year EEE students on 25/05/2019 in the Academic year 2018-19. In this activity 8th semester students have been carried out project as co-curriculum activity. Total no of projects by 8th semester students are 24. The total number of students participated in the above mentioned program was 97. project.The Following Projects are awarded as best project.

1. Agrobot
- 2.Development of energy management system(ems)for solar photovoltaic plants to supply power for cottage industries without using battery bank
- 3.Heart Attack Detector
- 4.Hand Gesture Wheelchair





**Heart attack detector**



**Hand gesture wheelchair**

## **STUDENT ARTICLES:TRENDING TECHNOLOGIES**

### **INTERIOR POSITIONING SYSTEM FOR DYNAMIC ENVIRONMENTS**



There is no positioning technology, such as GPS, for the indoor area. This makes location at shipyards, for instance very difficult. In ship building, the environment changes constantly as a result of the construction process. Moreover, the metallic environment inhibits wireless communication that is required for location. A new research team has developed a new system to locate persons in dynamic environment.



“Location of persons and immediate transmission of safety relevant information are extremely difficult in such a situation.” So far, safety deficiencies and risks, such as lacking handrails, exposed cables, or easily inflammable construction wastes such as dyes and preservatives, have been detected and reported manually.

“The innovation potential will be enormous when the digital technologies are used to control these procedures “.Hartmann developed a location system, by means of which safety risks are eliminated more rapidly and work safety is enhanced. It helps optimize logistics, i.e. anticipatory transport of construction material to the place of installation inside the ship under construction. Together with necessary infrastructure of the construction site, such as power supply, antennas are installed for near –field radio communications. If radio contact to the antennas in crooked steel belly of the ship is too weak, the position is estimated with help of movement and acceleration sensors of a mobile and dead reckoning. “This results in a sufficient positioning accuracy, while installation expenditure remains acceptable”.

NAME OF THE STUDENT:NUTHAN SM

USN No:1SG19EE054

Dept Of EEE

### STUDENT POEM:

That black pearl in your white eyes

Seeing it I have lost my mind:I have become mad, I have become crazy:Always in your thoughts, I have become crazy:The smell of rain mud from the fields:The taste of wind also felt sweet:My soul is uncomfortable as it has started to search for you:I have become mad, I have become crazy:Always in your thoughts, I have become crazy:Can't say, can't talk just keep looking at you all day long:Getting dressed to see you. Just to see you:New strange feeling filling in my heart:The heart wants to meet you and is taking towards you:But the mind is a coward, I have become crazy:Unable to understand which side to take:This beautiful pain is the only one with me for company

Every night, I invite all the stars

To show them the most beautiful eyes they have never seen

In my dream, that keeps me awake

I'm a little bird hopelessly trying to cover whole sky

I'm a nomad, searching for a place in your heart

Let me take a dip in your ocean called eyes

And I swear I'll not leave it

by

Name Of Student: Dhasharath R

4<sup>th</sup> Sem EEE



## **Toppers:**

### **I - Year**

Sl.No.	Name	USN	SGPA
1.	BHARATH J	1SG18EE016	8.70
2.	SINDHU N	1SG18EE077	8.65
3.	DARSHAN P	1SG18EE028	8.60

### **II - Year**

Sl.No.	Name	USN	SGPA
1.	SWATHI C	1SG17EE079	9.50
2.	PREKSHA S	1SG17EE058	9.50
3.	KOUSALAYA D	1SG17EE033	9.32

### **III - Year**

Sl.No.	Name	USN	SGPA
1.	ASHFAQUE AHMED	1SG16EE014	9.15
2.	KAVYA SHREE R	1SG16EE043	9.07
3.	A R GOUTAM	1SG16EE001	8.96

### **IV - Year**

Sl.No.	Name	USN	SGPA
1.	CHAITRA S	1SG15EE019	8.95
2.	APOORVA K G	1SG15EE010	8.9
3.	VINUTHA D	1SG15EE096	8.85