



ROHINI

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE and Affiliated to Anna University, (An ISO Certified Institution)

DEPT OF EEE



FEEDERS 2019



MAGAZINE
EDITION






Contact us

hodeee@rcet.org.in

Volume:4

ISSUE:4

Follow us on   

VISION

To create technically competent technocrats to meet the demand of Electrical and Electronics industry and societal need for the well being of human kinds.

MISSION

- M1. To provide knowledge and skills necessary for professional Development in Electrical and Electronics Engineering.
- M2. To promote research and creativity in the area of Electrical and Electronics Engineering.
- M3. To promote team work and professional conduct in sociological activities.

PROGRAM EDUCATIONAL OBJECTIVES

- PEO 1: Graduates of the programme will possess career in technical and allied fields.
- PEO 2: Graduates will have the ability to adapt to the growing technological requirement of the society through lifelong learning and team work.
- PEO 3: Graduates of the programme will possess knowledge to pursue higher studies.

Shri.K.NEELA MARTHANDAN

CHAIRMAN

Rohini College of Engineering and Technology

MESSAGE

As A Chairman of Rohini College of Engineering and Technology. I feel proud that the students of Electrical and Electronics Engineering Department are releasing a magazine RCET is a dream project for me and I am happy that RCET is taking a proper shape with the co-operation of all concerned. Students are the real assets of RCET and when they realize their responsibilities, RCET will always remain above all other similar Institutions. I take this opportunity to wish all the students a bright future.

Dr.R.Rajesh,M.E,.Ph.D.

Principal

Rohini College of Engineering And Technology

MESSAGE

It is a great pleasure for me that our Electrical and Electronics Engineering department is releasing a magazine.

The magazine is presenting a glimpse of the growth of the institution on many fronts. Our students and faculties have performed exceedingly well and competent enough in all the fields. Beyond academics, the research activities are being conducted.

The college also motivates and encourages staff and students to undertake research and enterprising skills. The faculty members plays major role in the overall development of department and institute.

I extend my greetings and best wishes to the faculties and students of the department and wish their endeavors my very best.

Dr.N.NEELA VISHNU
MANAGING DIRECTOR
Rohini College of Engineering And Technology

MESSAGE

I understand that the students of Electrical and Electronics Engineering Department are coming out with a Magazine. As the Managing Director of Rohini College of Engineering and Technology, I feel proud about it. We have taken an oath that we will develop RCET to world class standard and provide an overall development to all the students. We march towards that goal. We are happy that the students of RCET are properly shaping up, facilitating us to meet our goal. I wish all success to the EEE students.

Prof.A.Nabisha

HOD / EEE

Rohini College of Engineering and Technology

MESSAGE

On behalf of our students and faculty, it is my privilege to welcome all. We takes pride in our faculty, a team of highly capable and dedicated professionals, most of whom have academic and industrial experience and degrees from leading universities of the India. We provide ample opportunities to our faculty and students, through in -house trainings, workshops and trainings outside the college campus for further growth and development.

We at EEE Department are committed with the following objectives:

The Department has taken up the task of developing competent Electrical engineers of high quality, capable of facing various challenges of the power situation in the country

To produce graduates who are able to apply the technical skills which they have learnt in the department in order to serve the State and National Industries .

To produce graduates with the necessary background and scientific skills to work professionally in several fields in particular with IT Industries and Power sectors.

To train and encourage the graduates for personal and professional success with awareness and commitment to their ethical and social responsibilities, both as individuals and in team environments.

Prepare and train the graduates who are proficient of maintaining and improving their technical competence through enduring learning, including entering and succeeding in an advanced degree program in a field of Science & Technology.

LEARN.....LEARNING NEVER ENDS!

Editorial Message

It is an occasion of immense pleasure for the Department of Electrical and Electrical & Electronics Engineering to publish the E- magazine “FEEDERS”.

The Editorial board of department of EEE wants to thanks all the faculty members and students who have made this issue a success by providing an article .

This magazine focuses on the recent trends evolved in the field of electrical engineering & wants to provide advanced knowledge and awareness among the students about the same.

The Editorial board also wants to thanks the Management of the Institute and Head of the department for inspiring us to go forward in publishing this magazine.

Editorial Board

Prof. G.K.Jabash Samuel (Editor in Chief)

Prof. V.Ponselvan (AssociateEditor)

Mr.T.Anand (Assistant Editor)

SELFIE

“A mental disorder”

Obscura is another name of camera in Latin .It's the way to change even craggy face to chiselled one using SLR and DSLR. It may be the common fact to make youngsters to deal with their gadgets for photo clips.

Mostly our front cams will be in ON state at every get together parties to make click

by ourselves .It is named as SELFIE. American psychiatric association (app) in Chicago makes it official selfie a mental disorder .APA named such disorder as selfitis. Youngsters will publish their selfie in social media to fill the intimacy. There will be a persons who urge to take photos even under bottle neck condition .These kind of person will publish their photos more than six per day such person are affected by a “chronic selfitis”. You may heard about the person who takes photo clips in accident places publish it in social media such disorder is named as ‘acute selfitis’.Yup, it's not a hoax

You may see that everyone deals with selfie from even from Negroid to handsome guys. It's dominated our technical mind. It's hard to know that oxford dictionary will going to publish new word selfitis in its new edition. Selfie sticks are banished from Walt Disney world due to the public unminded activities.

“Apple team” says that they are more concerned about health of customers, more than their profits which they generate from their gadgets .so they will try to make gadgets without front cams in futures .To get aware of this selfitis need to be in control to see our glossy look by ourselves .The name consists ‘itis’ it means inflammation which is more than addiction .we should be broad minded person in future and try to create ‘selfie gadgets’ free environment.

NANITHINI /FINAL EEE

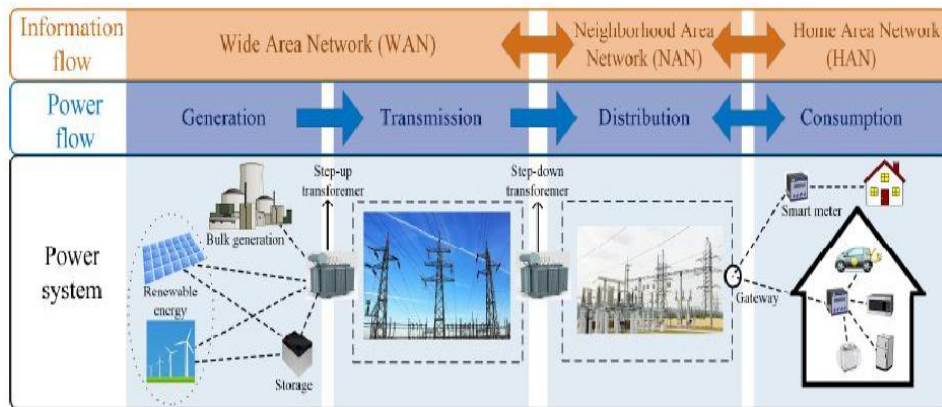
Internet of Things-Aided Smart Grid

A traditional power grid consists of a large number of loosely interconnected synchronous Alternate Current (AC) grids. It performs three main functions: generation, transmission and distribution of electrical energy in which electric power flows only in one direction, i.e., from a service provider to the consumers. Firstly in power generation, a number of large power plants generate electrical energy, mostly from burning carbon and uranium based fuels. Secondly in power transmission, the electricity is transmitted from power plants to remote load centers through high voltage transmission lines. Thirdly in power distribution, the electrical distribution systems distribute electrical energy to the end consumers at reduced voltage. Each grid is centrally controlled and monitored to ensure that the power plants generate electrical energy in accordance with the needs of the consumers within the constraints of power systems. Nearly, all the generation, transmission and distribution of electrical energy is owned by the utility companies who provide electrical energy to consumers and bill them accordingly to recover their costs and earn profit. The traditional power grid worked very well from its inception in 1870 until 1970. Even though the consumers' demand for energy grew exponentially, it was still rather predictable. However, there has been a dramatic change in the nature of electrical energy consumption since 1970, as the load of electronic devices has become the fastest growing element of the total electricity demand and new sources of high electricity consumption have been developed, such as electric vehicles (EVs). The power grids endure a significant wastage of energy due to a number of factors, such as consumers' inefficient appliances and lack of smart technology, inefficient routing and dispensation of electrical energy, unreliable communication and monitoring, and most importantly, lack of a mechanism to store the generated electrical energy. Furthermore, power grids face some other challenges as well, including growing energy demand, reliability, security, emerging

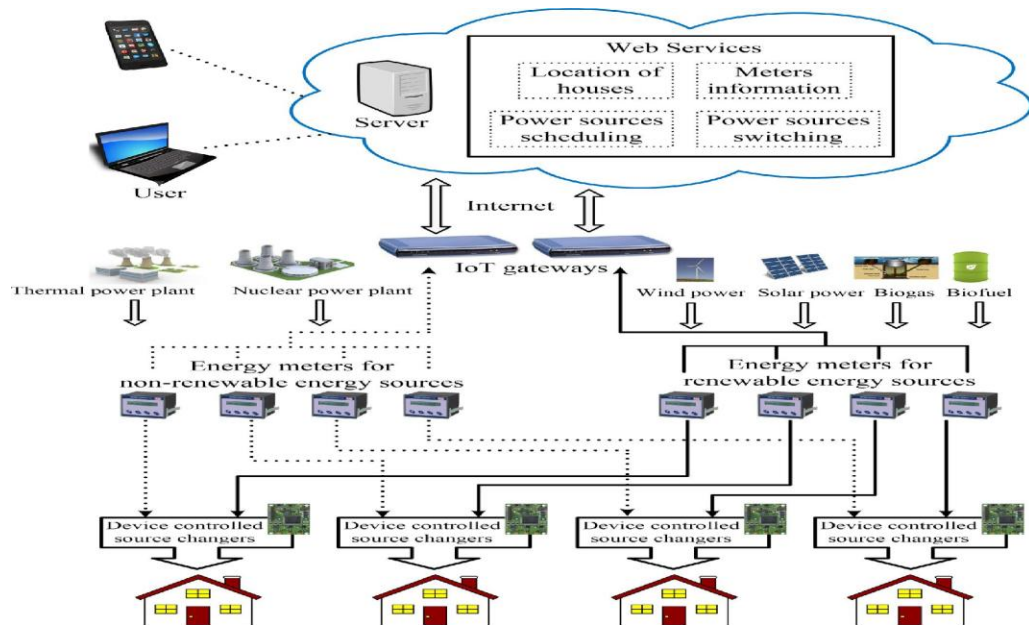
renewable energy sources and aging infrastructure problems to name a few. In order to solve these challenges, the Smart Grid (SG) paradigm has appeared as a promising solution with a variety of information and communication technologies. Such technologies can improve the effectiveness, efficiency, reliability, security, sustainability, stability and scalability of the traditional power grid. SG solves the problem of electrical energy wastage by generating electrical energy which closely matches the demand. SG helps to make important decisions according to the demand of energy, such as real time pricing, self healing, power consumption scheduling and optimized electrical energy usage. Such decisions can significantly improve the power quality as well as the efficiency of the grid by maintaining a balance between power generation and its usage. SG differs from traditional power grids in many aspects. For instance, SG offers a bi-directional communication flow between service providers and consumers, while a traditional power grid only offers only uni-directional communication from the service provider to the consumer. SG provides supervisory control and data acquisition (SCADA), advanced metering infrastructure (AMI), smart meters, fault tolerance, unauthorized usage detection, and load balancing , as well as self-healing, i.e., detection and recovery from faults.

SG deploys various types of devices for monitoring, analyzing and controlling the grid. Such monitoring devices are deployed at power plants, transmission lines, transmission towers and distribution centers and consumers premises. The numbers of such devices is large. One of the main concerns for SG is the connectivity, automation and tracking of such large number of devices, which requires distributed monitoring, analysis and control through high speed, ubiquitous and two-way digital communications. It requires distributed automation of SG for such devices or “things”.

IOT AS A PART OF SMART GRID:-



WEB ENABLED SMART GRID ARCHITECTURE:-



BIG DATA AND CLOUD FOR IOT-AIDED SG SYSTEMS

The integration of IoT technology with SG comes with a cost of managing huge volumes of data, with frequent processing and storage. Such data includes consumers load demand, energy consumption, network components status, power lines faults, advanced metering records, outage management records and forecast conditions. This means that the utility companies must have hardware and software capabilities to store, manage and process the collected data from IoT devices efficiently and effectively.

Big data is defined as data with huge volume, variety and velocity (three V's). The high frequency of data collection by IoT devices in SG makes the data size very large. The variety is represented by the different sensors that produce different data. The data velocity represents the required speed for the data collection and processing. Hence, IoT-aided SG systems can apply the techniques of big data management and processing (such as hardware, software and algorithms).

CONCLUSION

Smart Grid (SG) is the future grid which solves the problems of uni-directional information flow, energy wastage, growing energy demand, reliability and security in the traditional power grid. The Internet of Things (IoT) technology provides connectivity anywhere and anytime. It helps SG by providing smart devices or IoT devices (such as sensors, actuators, and smart meters) for the monitoring, analysis and controlling the grid, as well as connectivity, automation and tracking of such devices. This realizes the IoT-aided SG system which supports and improves various network functions at the power generation, transmission, distribution, and utilization.

Prof G.K.Jabash Samuel,

Associate Professor, Department of EEE

POET'S CORNER

Mother's hug gives us PLEASURE; FATHER'S love removes pressure; GRANDPA stories sweep loneliness; GRANDMA lullaby brings us HAPPINESS; Life is not A VELVET floor;
CAN'T TRAVEL without CARE;
Nagging doubts MAKE you worried;
Everything should be buried;
Don't believe ANYthing without proof; CAN't build A house without roof;
Be beyond by HEARING NATure; Do something for your future; Night SAYS us to sleep;
Light SAYS us to WAKEup; Birds TEACH us how to sing;
Ants TEACH us how to live in groups; Crows shows how to SHARE;
Trees shows us how to BEAR;
River flow from mounTAIN to oceAN
Flow of tide never forget the sequence; They show us how to flow;
And encourages us to grow; We CAN't live Alone;
Friends ARE our bone;
Just reLAX; go with the flow;
Trust the truth! Burst the chEAT!

M.V.SORNA SALINI/Final EEE

SEMINARS/WORKSHOPS ATTENDED BY FACULTY

No	Name of the Faculty	FDP/SSTP Topic	Duration	College Name
1.	Dr.D. SAM HARISON	FDTP on IC8457 Control System	14 days	Kongunadu College of Engineering and Technology, Trichy
2.	Dr.R.JEEVAJOTHY	FDTP on EE6703 Special Electrical Machines	7 days	St.Xaviers Catholic College of Engineering, Chunkankadaai
3.	DR.NABISHA A	FDTP on IC8457 Control System	14 days	Kongunadu College of Engineering and Technology, Trichy
4.	Mr.G.K.JABASH SAMUEL	FDTP on IC8457 Control System	14 days	Kongunadu College of Engineering and Technology, Trichy
5.	Mr.GOPAKUMAR. S	FDTP on EC8691 Microprocessor and Microcontroller	7 days	St.Xaviers Catholic College of Engineering, Chunkankadaai
6.	Mr.MURUGAN. G	FDTP on IC8457 Control System	14 days	Kongunadu College of Engineering and Technology, Trichy
7.	Mrs.THANGASAKTHI.T	FDTP on Renewable Energy Systems	7 days	St.Xaviers Catholic College of Engineering, Chunkankadaai
8.	Mr.SANJU S	FDTP on Renewable Energy Systems	7 days	St.Xaviers Catholic College of Engineering, Chunkankadaai

INDUSTRIAL VISITS:

The department is associated with various government, quasi-government and private industries in the field of Electrical Engineering.

Our students visit these companies to get a practical exposure to current work practices.

The details of the industrial visits are furnished below

Date of Visit	Name of Industry	Scope of Visit
04-1-2019	110/11KV Substation Aralvoimozhi, TNEB	To study about control and instrumentation in grid system and testing of cables
20-8-2018	110/11KV Substation Palavoor TNEB	To practical study of Testing of Circuit breaker

Participation of students in National and International Conferences:

no	Authors	Title	Conference	Venue	Date
1.	VIJIN J	Dual Axis Solar Tracking System	National conference	Dr.Sivanthi Aditanar College of Engineering Tiruchendur	15.02.2019
2.	VINOBHARAT H P	Dual Axis Solar Tracking System	National conference	Dr.Sivanthi Aditanar College of Engineering Tiruchendur	15.02.2019
3.	M.V.SORNA SALINI	Smart grid	National conference	Dr.Sivanthi Aditanar College of Engineering Tiruchendur	15.02.2019
4.	P.MANISHA	Design of energy harvesting by stick on sensor for smart grid	National conference	VV College of Engineering	21.02.2019
5.	G.GANGA	Robotics in agriculture	National conference	Dr.Sivanthi Aditanar College of Engineering Tiruchendur	15.02.2019
6.	P.ANANTHA SHIJI	Automated irrigation system on sensing soil moisture content	National conference	Dr.Sivanthi Aditanar College of Engineering Tiruchendur	15.02.2019
7.	DAYANA.R	Automate irrigation system on sensing soil mixture content	National conference	Dr.Sivanthi Aditanar College of Engineering Tiruchendur	15.02.2019
8.	T.SUBHASHINI	Smart grid	National conference	Dr.Sivanthi Aditanar College of Engineering Tiruchendur	15.02.2019



Faculty –Journal Publication

S.No.	Name of the Author	Tittle	Name of the Journal	Volume No, Issue No, PP& Year
1.	Dr.A.Nabisha	GSM based Patient monitoring System using Sensors	International Journal of Science Technology and Engineering	Volume:5, Issue:10 April 19
2.	Ms.S.Nithiya	GSM based Patient monitoring System using Sensors	International Journal of Science Technology and Engineering	Volume:5, Issue:10 April 19
3.	Mr.S.GopaKumar	Single stage converter for WECS	International Journal of Research And Analytical Reviews	Volume 6, Jan-March 19 E-ISSN 2348-1269

The students who undergo training/Internships

Muthamil Selva.M	1 Month	SE ELECTRICALS
Sabin Raj.M.B	1 Month	SE ELECTRICALS

PRODUCTS OF THE YEAR

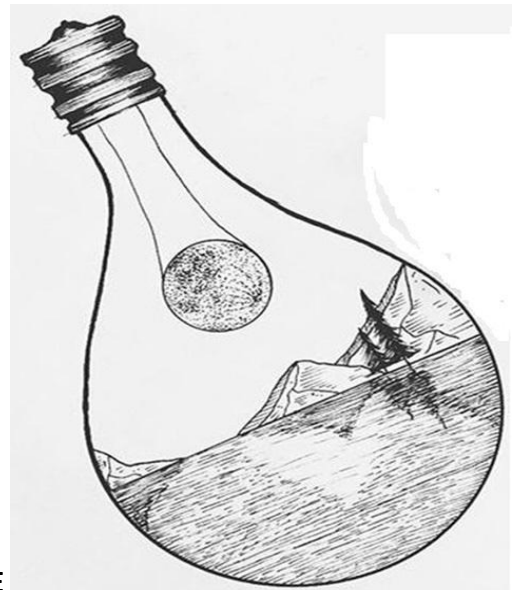
No	Name of the Product	Image of the Product	Description & Application
1.	Conversion of Petrol Bike to Electric Bike		<p>The automobile industry has entered into a new dimension in production of more fuel efficient, low emission vehicles and new technologies. One of the greatest inventions is electric vehicles.</p>
2.	Hybrid solar and wind Turbine		<p>Renewable Energy system is the growing generating area in present century. The characteristic of PV and wind turbine is studied. Study of MPPT algorithm is done.</p>

LIST OF STUDENTS PLACED IN ACADEMIC YEAR

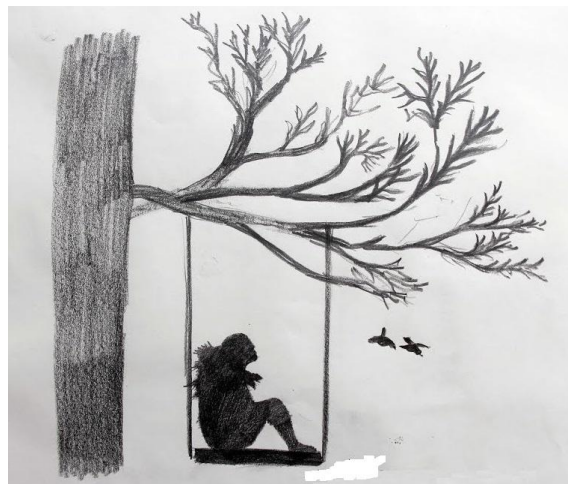
(BATCH 2015 – 2019)

Program: EEE		Assessment Year: 2018 – 2019		LYG (2015-16)
S.no.	Student Name	Enrollment no.	Company Name	Appointment No
1	AKASH KANNAN A	963315105001	Perfect Electronics Ltd	PEIPL/TE/19E-29
2	ANAND.T	963315105003	Perfect Electronics Ltd	PEIPL/TE/19E-17
3.	ANANDHU RAJ V R	963315105004	DS Connectors and Cables India Pvt Ltd	DSCACIPL/ET19/E-37
4.	CHARLET P	963315105007	Taiwan Surface Mounting Technology Corp	VS/TSMT/GT19/E131
5	KAVITHA R	963315105014	Elcompo Electronic Industries Private Limited	ELCO/ET19/E-67
6	NANTHINI T	963315105016	iled lighting systems pvt Ltd	ILEDLS/ET19/E-23
7	RENUKA DEVI S	963315105025	Taiwan Surface Mounting Technology Corp	VS/TSMT/GT19/E134

8	SANTHIYA J	963315105026	Perfect Electronics Ltd	PEIPL/TE/19E-21
9	VEGIN.M	963315105036	DS Connectors and Cables India Pvt Ltd	DSCACIPL/ET19/E-39
10	VINO BHARATH P	963315105038	Elcompo Electronic Industries Private Limited	ELCO/ET19/E-69
11	VISHNU S	963315105039	BESTON Industries	BIA/TE19/2-21
12	AJIN.M	963315105301	iled lighting systems pvt ltd	ILEDLS/ET19/E-25
13	AJITH.R	963315105302	Elcompo Electronic Industries Private Limited	ELCO/ET19/E-71
14	ARUN JOTHI. K	963315105303	DS Connectors and Cables India Pvt Ltd	DSCACIPL/ET19/E-39
15	BREEZE	963315105304	Taiwan Surface Mounting Technology Corp	VS/TSMT/GT19/E137
16	JENIFER. D	963315105308	iled lighting systems pvt ltd	ILEDLS/ET19/E-28
17	JIMSONCARDOZ	963315105309	BESTON Industries	BIA/TE19/2-23
18	NAVIN KUMAR.M	963315105313	Perfect Electronics Ltd	PEIPL/TE/19E-24

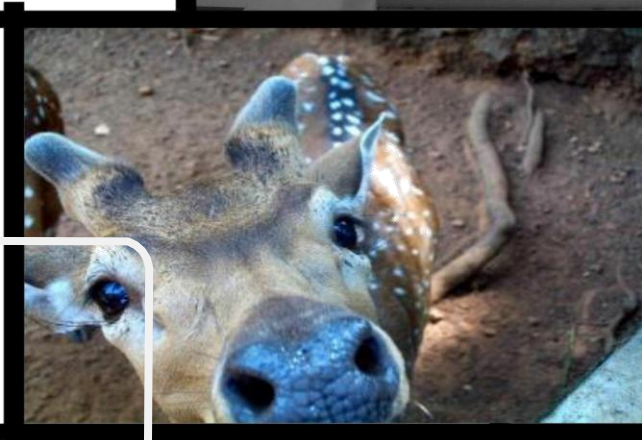


P .ANANTHA SHIJI/Final EEE





Click-O-Clicks



ARUN JOTHI. K/Final EEE



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WE WILL HELP YOU TO LEARN
LEARN MORE - EARN MORE