



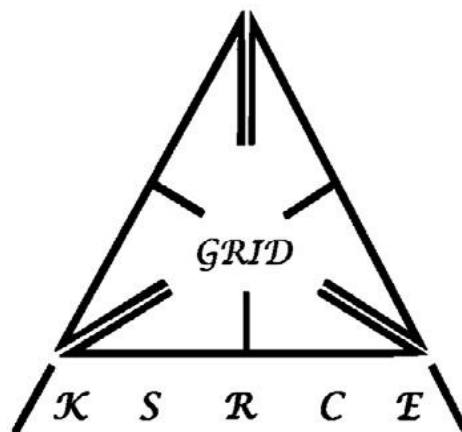
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TIRUCHENGODE - 637 215



**ELECTRICAL AND ELECTRONICS ENGINEERING  
ASSOCIATION (EEEE)**

**PRESENTS**

**GRID 2022**



**18<sup>th</sup> NATIONAL LEVEL TECHNICAL SYMPOSIUM**

**30<sup>th</sup> September 2022**

**Organized by**

***Department of Electrical and Electronics Engineering***

**MESSAGE FROM PRINCIPAL**

I take up immense pleasure to know that the Department of Electrical and Electronics Engineering has successfully organized several activities for updating the knowledge of our students and in continuance of this, conducts the National Level Technical Symposium brings out the magazine “**GRID 2K23**” on this occasion. With the increasing demand for technical manpower all over the world, the department is gearing up to cater to the needs of the industry. I congratulate all the faculty members and students of the EEE department who have involved themselves in organizing the mega event of their Association for this year and bringing out this magazine with great success.

**Dr. P. SENTHIL KUMAR**  
PRINCIPAL

**MESSAGE FROM HOD / EEE**

It gives me an immense pleasure that the department of Electrical and Electronics Engineering is organizing a National Level Technical Symposium “**GRID 2024**” on 28<sup>th</sup>September 2024.

I am sure that this symposium will address the advancement in the theme area of the electrical technology and the participants will get the advantage of an authentic insight into the emerging trends in electrical systems. My best wishes to the successful conduct of this symposium.

**Dr. S. RAMESH**  
HOD / EEE

## ACKNOWLEDGEMENT

It is our pleasant duty to thank our beloved FounderChairman **Theivathiru.Lion.Dr.K.S.Rangasamy,MJF.,**andVice-Chairman**Thiru.R. Srinivasan,B.B.M., M.I.S.T.E.,** for their constant support and motivation in organizing this symposium. We extend our profound thanks to **Dr.M.VENKATESH,** Principal for his valuable guidance and encouragement.

We thank to our Head of the Department **Dr. S. Ramesh,** and our colleagues of the Electrical and Electronics Engineering department for their continuous support.

Our special thanks to the organizing committee members of “**GRID 2024**”for their hard work in organizing the symposium. We thank one and all who directly and indirectly helped us in organizing this symposium successfully.

**Dr.R. Sankar Ganesh**

**Mrs.B.Yuvarani**

Coordinators -GRID 2024

Total No. of Paper Received :5

As per the quality and requirements, papers are shortlisted by our expert members.

No. of Selected Papers : 21



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

We cordially invite you to the inaugural function of

**20<sup>th</sup> NATIONAL LEVEL TECHNICAL SYMPOSIUM**

**“GRID 2K24”**

*on*

**28<sup>th</sup> September 2024**

**Thiru. R. SRINIVASAN, B.B.M., M.I.S.T.E.**

*Vice Chairman*

*KSR Educational Institutions*

*Principal, K.S.R. COLLEGE OF ENGINEERING*

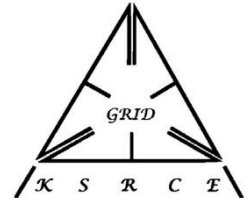
*Will deliver the presidential address*

DATE:28.09.2024  
a.m.

TIME:09.30



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

We cordially invite you to the inaugural function of

**20<sup>th</sup> NATIONAL LEVEL TECHNICAL SYMPOSIUM**  
**“GRID 2K24”**

*on*  
**28<sup>th</sup>SEPTEMBER 2024**

**PROGRAM SCHEDULE:**

TIME	FUNCTION DETAILS
8.00 AM– 9.30AM	REGISTRATION
9.30AM – 10.30AM	INAUGURAL FUNCTION
10.30AM – 10.45AM	TEA BREAK
10.45 AM– 12.30PM	PAPER& PROJECT PRESENTATION
12.30 PM -1.00PM	LUNCH

01.00PM-03.30PM	TECHNICAL AND FUN EVENTS
03.30PM-03.45PM	CERTIFICATE DISTRIBUTION

**Organizing Committee - "GRID 2022"**

**II EEE**

**(2021-2025)**



**III EEE**

**(2020-2024)**





## IV EEE (2019-2023)



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## **PAPER PRESENTATION**

### **APPLICATION IN ELECTRICAL POWER SYSTEM**

(SWETHA.V, SHARMILADEVI.S)

(KONGU ENGINEERING COLLEGE)

#### **ABSTRACT:**

The Internet of things (IoT) describes physical objects (or groups of such objects) with sensors, processing ability, software, and other technologies that connect and exchange data with other devices and systems over the Internet or other communications network. This is the part of a project under smart cities way wireless IOT solutions or deployed to connect IP based lights . This smart public lighting uses intelligent-connect outdoor LED luminaries which are centrally controlled from the control stations . This type of infrastructure also facilitate dynamical adjustment of illumination based on environmental changing conditions. Fusing both IOT and machine learning technology will definitely help the man kind to overcome real time difficulties. The evaluation of the IOT in the electrical power industry transform the things performed in usual manner SCADA in IOT SCADA is a type of process control system architecture that uses computers, networked data communications and graphical Human Machine Interfaces (HMIs) to enable a high-level process supervisory management and control. The IOT has the potential to add new dimension to the process by enabling communication with and among smart objects ,thus lead the vision of"anytime ,anywhere, anything".There is no oubt that IOT will change the way we interact with devices ,key ,things or systems.

**IOT AND ITS APPLICATION IN ELECTRICAL POWER SYSTEM & POWER  
ELECTRONICS**

(VARSHINI V.G, NIVETHA.S)

(KONGUCOLLEGE OF ENGINEERING)

**ABSTRACT:**

Electrical power demand has drastically increased globally. To accomplish this energy demand power engineer needs to erect a rigid infrastructure to control and monitor the complex power system. Internet of Things(IoT) is the key solution mitigate this issue. IoT help to identify the power leakages, power theft and consumer satisfaction. IoT can be improve the efficiency of network. This paper focused the application of IoT in power system. India is at 3 rd position in power production and power consumption in the world. The total installed capacity of India is 368.79 GW as of 31.12.2019. The per capita electricity consumption is also getting increase day by day as illustrated in below Fig. With such a large amount of consumption and production of electricity, it becomes very essential to have a competent infrastructure of the power system is required. In India, around 30 % of the electricity produced is waste in T & D losses. To compensate such losses in transmission and distribution network it is required to have some robust mechanism for the same. The Internet of things is a great available option for strengthening the control mechanism for the power system. Internet of Things is a kind of network to connect anything with the internet. It is also defined as an emerging technology utilizing the internet and targeted to give connectivity to physical things or devices. When anything, object machines are interacting with each other through the internet is know as the internet of things.

**IOT AND ITS APPLICATION IN ELECTRICAL POWER SYSTEM & POWER  
ELECTRONICS**

(LAKSITHA R, HEMAMALINI S)

KNOWLEDGE INSTITUTE OF TECHNOLOGY

**ABSTRACT:**

We would like to present about internet of things which is very closely related to our life and to make everything done in a smart manner. The internet of things (IOT) describes a kind of network which interconnects various devices with the help of internet. IOT make objects 'smart' by allowing them to transmit data and automating of tasks so, everyone should get to know about these topics. For a good development of any country Power and Energy, the sector is required at its best. To strengthen the same IoT is observed as a key source. India is also likely to move to embedded IoT in the power system. With the use of IoT, transmission losses can be reduced. Also, it is helpful in the detection of power theft. Controlling outages and overdrawn of power from generating stations. Most of the parts of the internet of things associated with the energy management system and it is incorporated in the smart grid. With the aid of the Internet of things in the smart grid, the power system can be managed in a more proper manner. It gives several modern and better control system like substation Automation and Load Scheduling can be done in an effective manner.

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BY  
SANDEEP RAJ.K

BY  
SANDEEP RAJ.K – III YEAR

## **EDITORIAL COMMITTEE**

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