



ILLUMINARIES



A.Y 2023-24

ISSUE -2

JUNE- 2024


SVECW

ESTD : 2001

Shri Vishnu Engineering College for Women
(Autonomous)

Vishnupur, Bhimavaram, Andhra Pradesh

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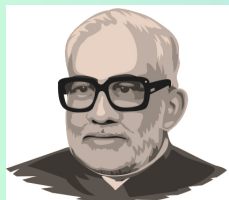
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Editorial Board

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Asst. Professor
Dept. of EEE

Vision:

“To establish a knowledge hub in the field of Electrical & Electronics Engineering to meet the needs of the society”

Mission:

- To produce quality Electrical and Electronics Engineers.
- To inculcate discipline and ethical values among the students.
- To empower students to succeed in higher education and research.

Editor's MESSAGE:

I am pleased to announce the publishing of the Department of Electrical and Electronics Engineering's newsletter for the first half of 2024. It showcases a range of our staff and students' achievements and activities. Shri Vishnu Engineering College for Women (Autonomous) aims to make students' life brighter by applying their knowledge of flame to make unique shapes.

Student Article

Student Members

- 1) P.Pushpa Rekha
21B01A0210
- 2) K.Baby sree
21B05A0207
- 3)K.K.G.Lakshmi
21B01A0221



Title : Design and Implementation of Solar-Powered Grass Cutter: (A Prototype)

ABSTRACT : Since ancient times, Sunlight has been the main source of heat energy. Alternative energy sources, commonly termed non-conventional or renewable energy sources, are naturally available like Solar, Wind, and Hydro. It is used as an alternative source of energy in place of fossil fuels which causes pollution. This paper describes how we designed and built a solar-powered grass cutter. By incorporating solar panels, the machine harnesses sunlight as its main energy source. The main objective of developing the Prototype model of the grass cutter is to create an eco-friendly solution for lawn maintenance that reduces greenhouse emissions and minimizes the usage of fossil fuels. This prototype is designed so that it is controlled remotely by using Arduino UNO. After developing the prototype model, the system analysis is accomplished, and based on the results, the solar grass cutter's reliability with the system's high efficiency is compared with previous studies. This project aims to showcase solar-powered technology in practical applications to inspire the adoption of non-conventional energy sources in everyday tasks.

Authors

- 1) Kunapareddy Navya Harshitha
- 2) Pulagam Usha Devi
- 3) Pappoppu Pushpa Rekha
- 4) Patan Sabiha Roshin

Workshop

Department of Electrical & Electronics Engineering-EEE organized one day Workshop on “Intellectual Property Rights (IPRs) and IP management for start-up” on April 13, 2024 for I year students. The Resource person is Mr. Muthyala Sarath, Associate Faculty at National Institute of Micro, Small & Medium Enterprises (NI-MSME), Hyderabad.



WORKSHOP ON
IPR & IP Management for Start-ups

Saturday
13th April, 2024

Venue
A-Block 202

Mr. Muthyala Sarath
Associate Faculty member,
National Institute for Micro, Small and Medium
Enterprises (NI-MSME) Hyderabad.

organized by
Department of



Alumini Meet

SVECW Alumni Meet was held at Vishnu Educational Development and Innovation Centre (VEDIC), Bengaluru on 10/02/2024. The EEE Alumni from various MNC Companies like Mahindra & Mahindra, MuSigma, PWC, Capgemini attended the meet.



PLACEMENTS

Teech Mahindra



KUSUMA JESSI
21B05A0210
8 lakhs

Teech Mahindra



K S L N V Nikhitha
20B01A0296
8 Lakhs

Teech Mahindra



K Usha Sria
21B01A0209
8 Lakhs

Teech Mahindra



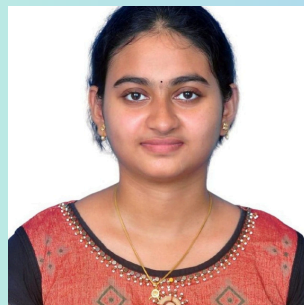
Manne Pallavi
20B01A0270
8 Lakhs

Schnider Electric



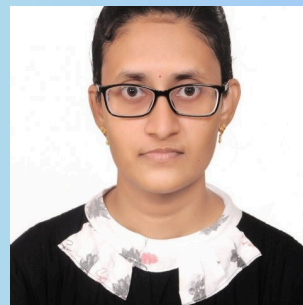
KENGAM NEELIMA
20B01A0254
5.5 Lakhs

Schnider Electric



Mudunuri Saranya
20B01A0275
5.5 Lakhs

Schnider Electric



P DIVYA SRI LEKHA
20B01A0285
5.5 Lakhs

Schnider Electric



TELLAM HEMA SRI
20B01A02A3
5.5 Lakhs

Schnider Electric



K. SRI SANJANA
21B01A0208
5.5 Lakhs

Schnider Electric



P. Devika Sri RaniI
20B01A0283
5.5 Lakhs

Faculty Interaction

FACULTY INTERACTION

Dr. Kaushik Basu, Professor, Department of Electrical Engineering, Indian Institute of Science (IISc.), Bangalore, Interacted with faculty and Visited all Special Labs and research projects in the departments of EEE, ECE and Mechanical at Shri Vishnu Engineering College for Women .



FACULTY TEAM VISIT

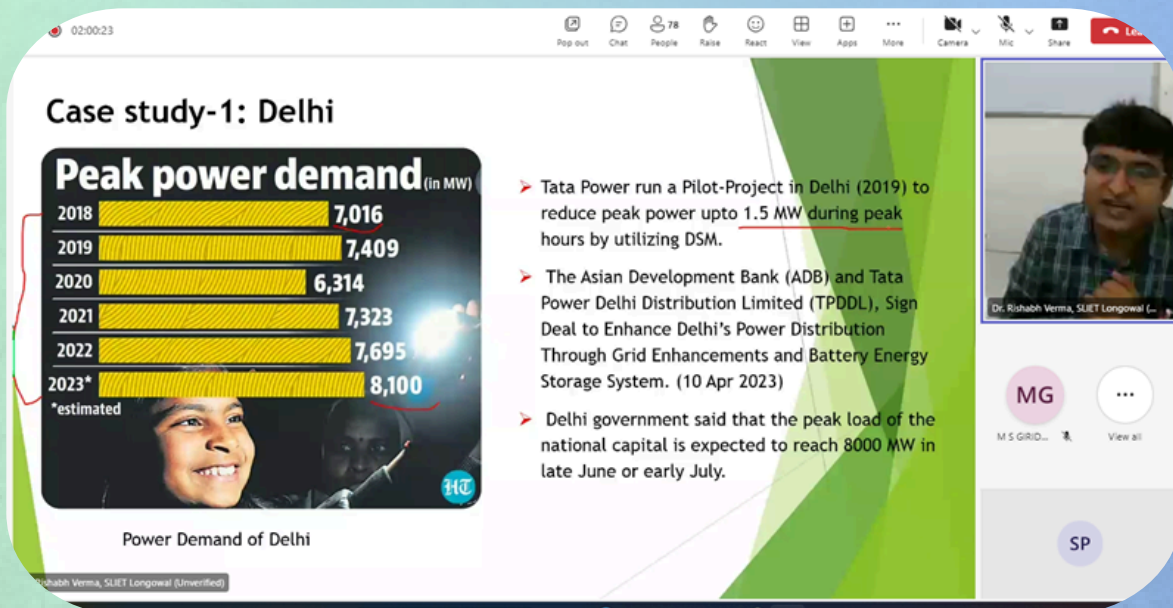
Mr. A. Siva, Asst. Professor, EEE & Team visited State of Art Labs on “Automotive Design” at IIT Madras and VIT chennai on 23-04-2024. He Interacted with Dr. K.Annamalai , professor and Dean , Interacted with the Faculty regarding MIT (Madras institute of technology) Anna university regarding Automotive Design course-on 24-04-2024.



Faculty Development Program

FACULTY DEVELOPMENT PROGRAM :

our Department organized one week online FDP on “Entrepreneurial Perspectives on Green Energy & Electric Vehicle Innovation” during 21st -26th May 2024 under the esteemed coordination with Dr.SSSR Sarath babu , Professor & Dr.M.V.Srikanth, Associated Professor who played a Key role for the successful Completion.



Case study-1: Delhi

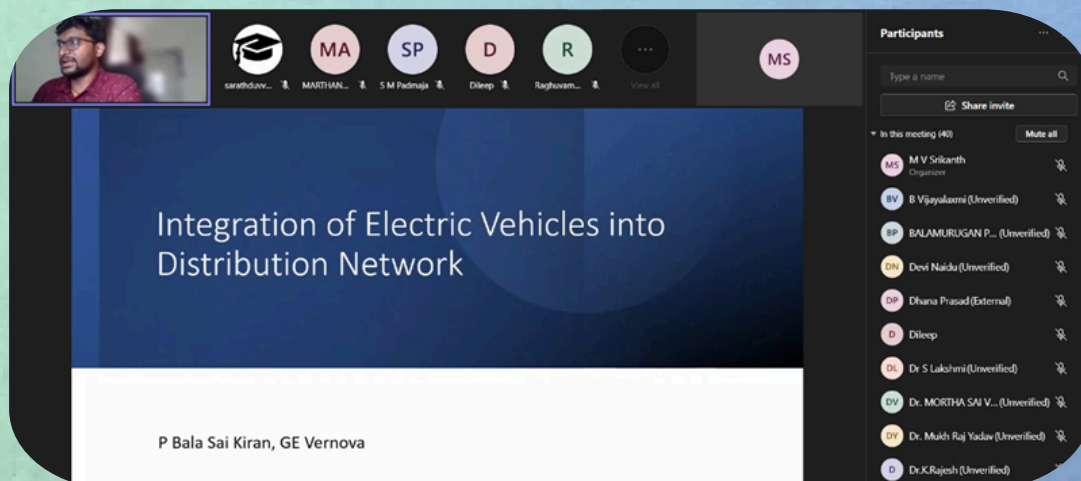
Peak power demand (in MW)

Year	Peak power demand (in MW)
2018	7,016
2019	7,409
2020	6,314
2021	7,323
2022	7,695
2023*	8,100

*estimated

Power Demand of Delhi

- Tata Power run a Pilot-Project in Delhi (2019) to reduce peak power upto 1.5 MW during peak hours by utilizing DSM.
- The Asian Development Bank (ADB) and Tata Power Delhi Distribution Limited (TPDDL), Sign Deal to Enhance Delhi's Power Distribution Through Grid Enhancements and Battery Energy Storage System. (10 Apr 2023)
- Delhi government said that the peak load of the national capital is expected to reach 8000 MW in late June or early July.

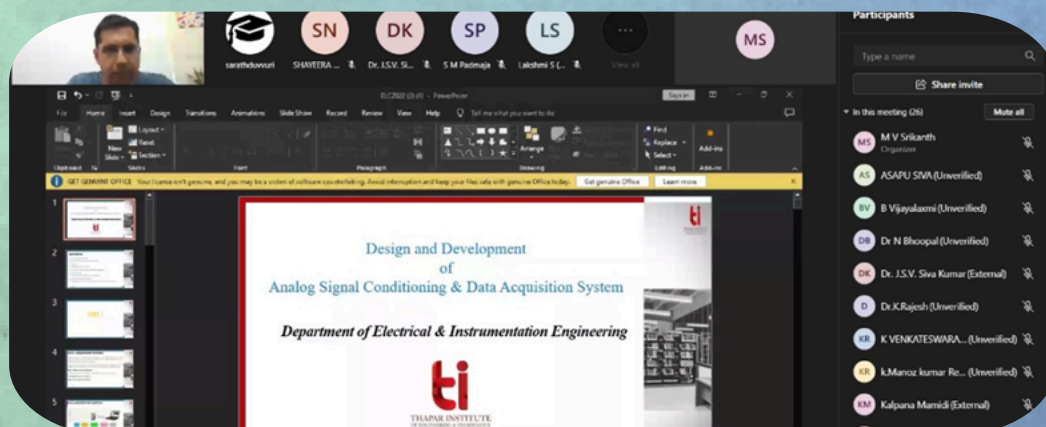


Integration of Electric Vehicles into Distribution Network

P Bala Sai Kiran, GE Vernova

Participants:

- M V Srikanth (Organizer)
- B Vijayalaxmi (Unverified)
- BALAMURUGAN P... (Unverified)
- Devi Naidu (Unverified)
- Dhanya Prasad (External)
- Dileep
- Dr S Lakshmi (Unverified)
- Dr. MORTHAI SAI V... (Unverified)
- Dr. Mukh Raj Yadav (Unverified)
- Dr.K.Rajesh (Unverified)



Design and Development of Analog Signal Conditioning & Data Acquisition System

Department of Electrical & Instrumentation Engineering

Participants:

- M V Srikanth (Organizer)
- ASAPU SWA (Unverified)
- B Vijayalaxmi (Unverified)
- Dr N Bhooopal (Unverified)
- Dr. J.S.V. Siva Kumar (External)
- Dr.K.Rajesh (Unverified)
- K VENKATESWARA... (Unverified)
- K.Manoo Kumar Re... (Unverified)
- Kalpna Marudhi (External)

FACULTY ACHIEVEMENTS

Faculty Publications



M. S. R. Ganesh, R. Pradeep Sudha and S. S. Duvvuri of EEE department presented a paper titled "Restructuring of Conventional to Electric Vehicle and Timely-Based Prepaid Charging," 2024 3rd International conference on Power Electronics and IoT Applications in Renewable Energy and its Control (PARC), Mathura, India, 2024, pp. 421-426, doi: 10.1109/PARC59193.2024.10486231.

M. S. R. Ganesh of EEE department presented a paper titled "Development of Restructured Electric Vehicle with Battery Charge Monitoring System using IoT " 2024 1st International Conference on Innovative Sustainable Technologies for Energy, Mechatronics, and Smart Systems (ISTEMS) | 979-8-3503-8424-6/24/\$31.00 ©2024 IEEE | DOI: 10.1109/ISTEMS60181.2024.1056015.



M. S. R. Ganesh, Mahendra Chand Bade of EEE department presented a paper titled "Integration of Electric powertrain to Conventional vehicle through Renovation technique" 2024 1st International Conference on Innovative Sustainable Technologies for Energy, Mechatronics, and Smart Systems (ISTEMS) | 979-8-3503-8424-6/24/\$31.00 ©2024 IEEE | DOI: 10.1109/ISTEMS60181.2024.10560323.

Lakshman Kumar Dangeti, SSSR Sarathbabu Duvvuri, Mahendra Chand Bade, M Siva Rama Ganesh of EEE department presented a paper titled "A Modified Non-Isolated Switched-Inductor based Boost Converter using Voltage Multiplier Cell for EV Application," 3rd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES), held at Delhi Technological University, Delhi, India from 26 - 28 April, 2024.



SSSR Sarathbabu Duvvuri and et al, "Modified Dynamic Modeling of Three-Phase Induction Motor in ABC Reference Frame," 2024 1st International Conference on Innovative Sustainable Technologies for Energy, Mechatronics, and Smart Systems (ISTEMS), Dehradun, India, 2024, pp. 1-4

Program Educational Objectives :: B. Tech. - EEE

PEO 1 : Demonstrate employability skills and leadership qualities to serve the society.

PEO 2: Achieve personal and professional success with awareness and commitment to their ethical and social responsibilities.

PEO 3: Improve professional competence through life-long learning including higher education and research.

Program Outcomes:: B. Tech. - EEE

P01: Engineering Knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

P02: Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4).

P03: Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5).

P04: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).

P05: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6).

P06: The Engineer and The World: Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).

P07: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9).

P08: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

P09: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences.

P010: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.

P011: Life-Long Learning: Recognize the need for, and have the preparation and ability for

i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8).

Program Specific Outcomes :: B. Tech. - EEE

PSO 1: Ability to enhance living standards of disabled people by designing appropriate products with the help of technology.

PSO 2: Competence to explore, analyze and solve problems related to power electronic systems.