







## A REPORT ON ONE DAY INDUSTRIAL VISIT

Place of Visit: Mahatma Gandhi Institute of Rural Energy & Development (MGIRED)

Date of Visit: 27th February 2024

Faculty visited: Dr.Dinesh Kumar D S, Mrs Suma Santhosh

Students: 8th Semester A & B (Total 92 students)

Department Electronics and communication under IETE student's forum, IEEE, ISTE and IEI organized one day industrial visit for  $S^{th}$  Semester students along with faculty members to "Mahatma Gandhi Institute of Rural Energy & Development (MGIRED)", Bengaluru on  $27^{th}$  February 2024.

## **Objectives:**

 To develop the institute into a premier institute in rural energy, environment, natural resource management, biofuels, rain water harvesting, improved cook stoves, and rural development subjects with prime focus on training, awareness creation, demonstration, research, planning and execution of projects, monitoring and evaluation, consultancy and policy advisory services.

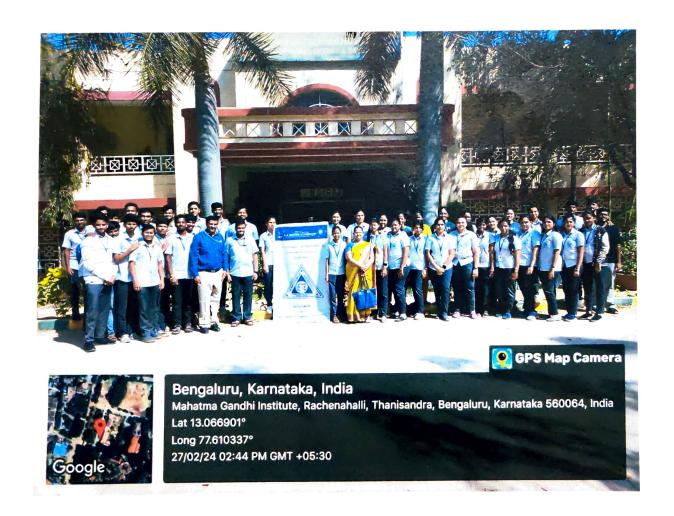
There are three departments.

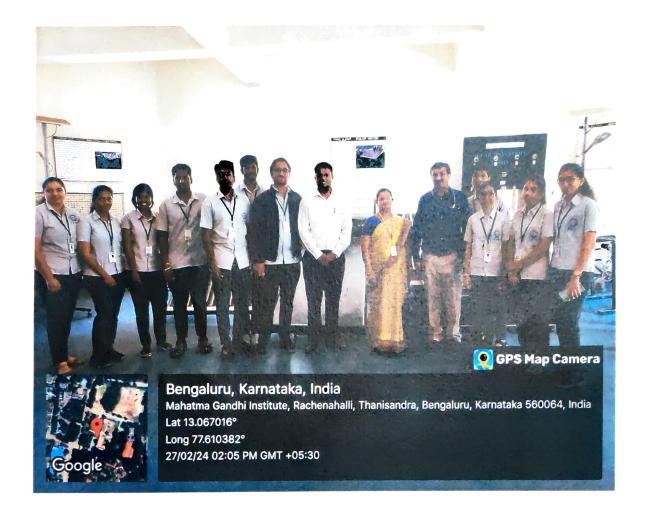
- 1. Department of Small Wind and Pico Hydro Energy
- 2. Solar Technology
- 3. Bioenergy

As a part of industrial visit our students visited solar technology department. Mr.Santhosh sir explained about different renewable sources of energy, photovoltaic cell working principle, power generation and power transfer.

There is a scope for research in the following areas

- Roof Top Photovoltaic Systems operating in Islanded mode and Grid connected mode (net metered).
- Solar Photo Voltaic Water Pumping Applications.
- Remote Village Electrification using micro grids / nanogrids.
- Solar based Hybrid Systems for power generation.
- Evaluation of Solar PV cell technologies used in power generation.
- Solar Thermal Applications viz. Water heating Systems, Dryers.
- Solar based Applications for Rural Environment.
- Field studies on installed Solar Energy Systems.





## **Outcomes of the visit:**

- Learning about new inventions in the field of design, development, assembly & integration of solar panels for power generation.
- Gaining the knowledge about uses of solar energy for different applications
- From this visit the students were able to find their field of interest by doing projects

We would like to thank our Management, Principal and H OD of ECE Dept for arranging this industrial visit which was very informative and useful for the students. Also, we thank transport Dept for arranging bus facility for the industrial visit.

## Mapping of FDP with PO'S and PSO'S

Program	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1
Industrial visit	-	-	-	3	-	-	-	-	3	2	2	2	2

- PO4: Participants can identify complex problems for project work
- PO9: Individual & Team work
- PO10: Participants can communicate effectively by gaining knowledge about solar energy
- PO11: Project Mgmt. & Finance
- PO12: Participants can apply the basic knowledge in lifelong learning.
- PSO1: Participants are able to understand and apply communication tools to various fields of power generation and utilization using renewable sources of energy

**Industrial visit coordinators** 

Dr. Dinesh Kumar D S Div

HOD ECE

Principal

Mrs.Ramya K R

Dept. of Electronics & Communication Engg.

BENGALURU - 560 109.

K.S. Institute of Technology Bengaluru - 560 109.