

# K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

# INDUSTRY INSTITUTE INTERACTION CELL &



# DEPARTMENT OF MECHANICAL ENGINEERING



## **TECHNICAL VISIT TO**

# "RENEWABLE ENERGY PLANT, MAHATMA GANDHI INSTITUTE OF RURAL AND ENERGY DEVELOPMENT (GoK), BENGALURU"

Date of Visit: 10th July 2024

Industry address: Mahatma Gandhi Institute of Rural & Energy Development (GoK), Sriramapura

Cross, Jakkur, Bengaluru - 560 064

Time: 8.30AM - 3.30PM

**Duration: 6 Hours** 

Sponsoring Bodies / Associating Organization: NA

#### Brief about the Industry:

Mahatma Gandhi Institute of Rural Energy and Development (MGIRED) located in Bengaluru were established in the year 2000 with assistance of Ministry of New and Renewable Energy (MNRE), Government of India and the Rural Development & Panchayat Raj Dept., Government of Karnataka. The main objective was to have a unique Institution to carry out Capacity Building and Awareness Programmes in the areas of Rural Energy and Sustainable Rural Development which will cater to the needs of Karnataka and neighboring southern states namely Andhra Pradesh, Telangana, Tamil Nadu, Kerala and Union Territory Pondicherry. The energy park is installed with latest renewable and energy saving working /live equipments for effective teaching and demonstration.

#### Description of the Event:

As per the directions of Dr. Girish T.R, Head – ME, 4<sup>th</sup> and 6<sup>th</sup> Semester ME students assembled in parking area at 8.25AM. The journey towards industry started at 8.45AM with students and faculty in-charge Dr. Nirmala L, Assistant Prof. Dept. of ME and Mr. Rajesh G.L, Chief Coordinator, Industry-Institute Interaction Cell and Assistant Prof. Dept. of ME and reached MGIRED, at 10.00AM. Shri. Vikram, Training faculty, MGIRED, welcomed the gathering and outlined the agenda of visit. The activities and various programmes conducted at MGIRED were briefed by Shri Vijay Kumar, faculty at MGIRED. He also explained the need of renewable energy sources and energy conservation for sustainable development. Initially students were taken to solar pv cells plant where they explored the harnessing process of solar energy into electric energy. Further, Mr. Vijaykumar demonstrated the working of horizontal and vertical axis wind mills with students and illustrated solar cooker and dryer which encouraged students to do project work on renewable energy sources. The visit ended with vote of thanks by Dr. Nirmala L, Assistant Professor, MED and returned to KSIT campus at 03.30PM.

## Objectives / Key Highlights:

- Understand the need of energy sources for sustainable development.
- Explore on different methods of harnessing the renewable energy sources

Participant details -

No. of Participants: 40

Students (internal/external): Internal (4 $^{th}$  and 6 $^{th}$  semester) - 40

Faculty in-charge: Dr. Nirmala L & Mr. Rajesh G.L, MED

Photos (Geo Tagged):



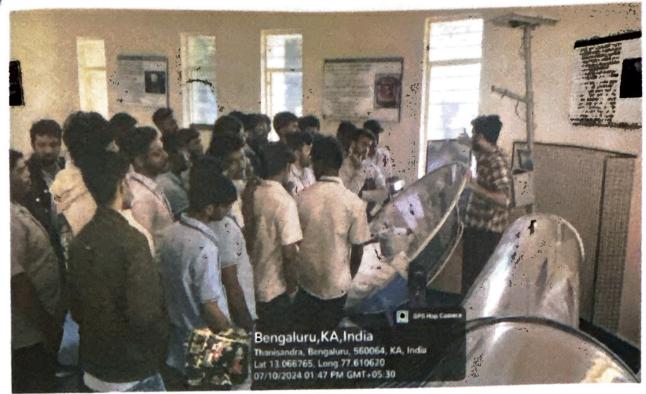




Team briefing about activities at MGIRED



Mr. Umashankar, Training faculty @MGIRED illustrated PV cell method of harnessing solar energy



Demonstration of dish type solar cooker



Demonstration of flat plate and evacuated tubular collectors



Vertical axis wind mill



Solar dryer

## Outcomes / Benefits:

- Students understood the harnessing methods of solar and wind energy.
- Students explored on internship and training programmes at MGIRED for career development

#### Attachments:

- 1. Communication with Industry
- 2. Industry visit circular and transport arrangement request letter
- 3. Visit attendance sheet
- 4. Feedback

### CO/PO&PSO mapping - ME

CO/PO&PSO	POI	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	POII	PO12	PSO 1	PSO 2
Industry visit	-	-	-	-	-	-	02	-	-	-	-	-	-	-
Average	-	-	-	-	-	-	02	-	-	-	-	-	-	-

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Mr. Rajesh G.L

Chief Coordinator - IIIC

Industry Institute Interaction Cell (IIIC)
K. S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109

Dr. Girish T.R

Head - ME

Head of the Department Dept. of Mechanical Engg. K.S. Institute of Technology Bengaluru 2560 109 Dr. Dilip Kumar K

Principal, KSIT

K.S. INSTITUTE OF TECHNOLOGY BENGALURU - 560 109.