



GIDC Degree Engineering College, Abrama, Navsari

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Mechanical Engineering Department

INDUSTRIAL VISIT REPORT

DATE: 09/03/20

1.About Institute:

Sardar Patel Renewable Energy Research Institute (SPRERI) was established in January 1979 as a result of the initiative taken by a group of foresighted persons led by Late Dr. H.M. Patel and Late Shri Nanubhai Amin.

SPRERI is a non-profit autonomous organization registered as a Society under the Societies Registration Act 21 of 1860 and also as a Public Trust under the Bombay Public Trust Act 1950. It has been approved as a Research Association for the purpose of clause (ii) of subsection (1) of Section 35 of the Income Tax Act 1961 and is recognized as a Scientific and Industrial Research Organization (SIRO) by the Department of Science & Technology, Govt. of India. It is recognized by S.P. University, Vallabh Vidyanagar, Junagadh Agricultural University, Junagadh, Nirma University, Ahmadabad as a Centre for M.Tech and Ph.D. Research.

2.Research and Development activities are organized under following Divisions:

Solar Energy Division is carrying out design, development, evaluation and refinement of solar thermal and SPV systems

Regional Test Centre, approved by Bureau of Indian Standards and MNRE, carries out testing of various solar thermal devices such as solar cookers, solar water heaters etc.

Bio-Conversion Division pursues basic studies and development of technologies and systems for conversion of biomass to energy carriers through various biological routes and their utilization for thermal applications and power generation.

Thermo-Chemical Conversion Division is engaged in basic studies and development of technologies and systems for efficient conversion of biomass to energy through thermo-chemical / mechanical pathways and their use for thermal applications and power generation.

Technology Transfer Division facilitates promotion of new RE technologies through field evaluation, demonstrations, trainings and entrepreneurship development, awareness programmes and integrated development of selected tribal villages.

3.Visit Brief

On 14th February, 61 students of 4th year, Mechanical Department visited Sardar Patel Renewable Energy Research Institute (SPRERI) located at Vallabh Vidhyanagar, Anand. Visit was co ordinated by Faculties- Daksh R Tandel, Bruhad S Naik and Aakash A Patel. Visit was arranged to enhance the knowledge of students of Renewable Energy Engineering field. Ms. Shradhdha Pandya and Mr. Pares Mer from SPRERI, guided students during visit.

Research related to Solar energy and Biogas energy was presented to students by researcher. Students observed and understand following research.

- Evacuated solar water heater.
- Flat plate solar collector
- Box type solar cooker
- Solar cooker with parabolic concentrator
- Solar cooker with scheffler concentrator
- Solar refrigerator
- Solar cold room

- Solar distillation
- Solar dryer
- Solar water pumping
- Intermittent and continuous pyrolysis of Biomass
- Flexible bag type Biogas plant and floating drum type biogas plant

Glimpse of visit in form of images.



