



Department of Renewable Energy Sources
College of Technology and Engineering
Maharana Pratap University of Agriculture & Technology
Udaipur (Rajasthan) 313001

Proposed Training Details

- (i) Number of participants – 10
- (ii) Period of training- 21 days / 7 days
- (iii) Topics to be covered-
 1. Solar Energy & its application for thermal heat recovery and power generation
 2. Biogas technology & mechanism, biogas plant design, construction & maintenance, utilization of biogas for cooking, heat, lighting & power generation
 3. Wind energy utilization for power generation, system & design.
 4. Biomass energy conservation & processing waste
 5. Fundamentals of energy conservation and management in all sectors, energy auditing and cleaner production.
 6. Gasifiers & Briquating machine
 7. Recent trends in renewable Energy utilization
 8. Organic farming, sustainable development and environmental concerns

Field visits to working & functional units of solar, biogas, biomass, wind, etc. shall be arranged simultaneously during the training period for better exposure of technology.

Department of Renewable Energy Sources

The Department engaged in teaching, extension and research activities and has made steady progress since its establishment in 1980-81 with highly qualified staff having long teaching and research experience supported by well established infrastructural facilities, equipment & laboratories.

The following laboratories and ongoing Research & Extension activities/projects highlights its significance achievements.

Name of Laboratory	Plinth area (Sq m)	Major Equipment/facilities
Biogas Appliances Testing Lab	20	Biogas monitoring and measurement unit, GC
Biomass power lab	90	Gasifier, Stirling & dual fuel engines, briquetting machine etc
Improved Cook stove lab	80	Working models of about 50 designs of Improved Cook stove
Solar Energy lab	20	Solar pyranometer, Albido meter, Data logger, Solar radiation measurement instruments
Biogas Microbiology & Biochemistry lab	175	Microbiology & Biochemistry instruments
Open Energy Appliances Yard	1000	Working models of biogas plants, Solar thermal & PV system, bio-energy plantation, aero generator etc.

Research & Extension Projects

Project title	Funding Agency
AI India coordinated Research Projects on Solar Energy, Biogas Technology & Thermo Chemical Conversion of biomass	Indian Council of Agricultural Research, Govt. of India
Regional Biogas Training & Development Centre	Ministry of New & Renewable Energy, Govt. of India
Performance evaluation of greenhouse for medicinal plants in Tribal Areas of Udaipur Region	Indian Council of Agricultural Research, New Delhi
Techno economic studies of protected cultivation of Vegetables	Indian Council of Agricultural Research, New Delhi
Design & Development Hybrid Design System By Eco-friendly Biomass Gasifier	Ministry of New & Renewable Energy, Govt. of India
Installation of Improved Gas Cook stoves in Udaipur Region.	Petroleum Conservation Research Association, New Delhi.
Installation of Solar Tunnel Dryer in Agro Industries.	Petroleum Conservation Research Association, New Delhi.

A number of National & International Training Courses, National conferences /Seminars/Symposia, Publication of Proceedings/Books/Booklets/Popular articles on various aspects of Renewable Energy Sources have been organized/published by the department.

Besides, about 21 M.E. Thesis and 4 Ph.D. Thesis have been submitted by the P.G. students enrolled in the Department so far and have worked on various local and national issues of importance in popularization of non-conventional energy sources for the benefit of poor & rural people.