



CENTRE OF EXCELLENCE IN ENERGY SCIENCE AND TECHNOLOGY



THE **IMPACT**
RANKINGS

Ranked
2nd Worldwide for
SDG-7: Affordable and Clean Energy
&
6th Worldwide for
SDG-6: Clean Water and Sanitation

6 CLEAN WATER AND SANITATION 	7 AFFORDABLE AND CLEAN ENERGY 
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CENTRE OF EXCELLENCE IN ENERGY SCIENCE & TECHNOLOGY

ABOUT US

A multi-disciplinary centre was established at Shoolini University in 2019 under the Faculty of Engineering and Technology.

The Centre, ranked 12th in India in Energy as per SCIMAGO Institutional Rankings 2021, offers M Tech (Energy Technology) & PhD in Energy. It boasts a highly specialised faculty in various disciplines of Energy with well-equipped laboratories for teaching, R&D and consultancy.

MISSION

- To provide multidisciplinary education, research & development solutions with focus on clean energy sources
- To identify energy, environmental and climate change concerns & policy issues to provide local and global solutions, mainly focused on the Himalayan Region
- To carry out detailed energy resource assessment with focus on solar, wind, bio-mass and other clean technology applications to improve the living conditions of people
- To promote energy education, environmental awareness, entrepreneurship development and National & International collaboration for technology development and transfer
- To provide high quality trained professionals for the Institutions/Energy Industry in the country and worldwide

VISION

To achieve excellence in research and technology development in the area of sustainable energy.

CONSULTANCY FOR INDUSTRY

POLICY DESIGN

- Policy Design and interventions for mini-grids in India
- Policy on water pumping for drinking water and irrigation supplies in developing countries under International solar Alliance (ISA)
- Implementation of Sustainable Development Goals SDG 7, 11, 13

SOLAR THERMAL SYSTEMS

- Design, application, and performance evaluation of solar thermal systems
- Development of Concentrated Solar Systems for Steam Cooking and power generation
- Passive Solar Building technology for Space heating and cooling systems
- Solar Drying, Solar air heating



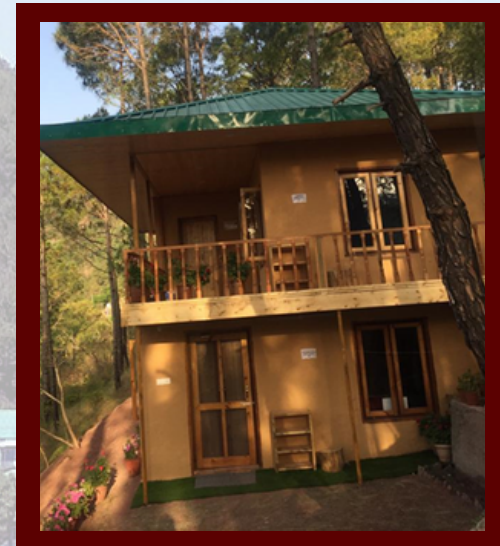
SOLAR MICRO/MINI GRIDS

- Analyzing microgrids performance and detecting the losses and potential enhancements
- Optimum solar microgrid design based on locations.
- Design of smart mini-grids for efficient grid operation using metaheuristic control algorithms
- Design and application of mini-grids in rural areas



EFFICIENT BUILDINGS DESIGN

- Design and application of thermoelectric cooling systems in Buildings and for PV power plants
- Passive Solar Building technology for Space heating and cooling systems
- Providing efficient and sustainable building design using solar passive technology



BIOGAS PLANTS

- Design of Biogas Plant in the Agricultural Farm for Research and Sustainable Energy Use



SOLAR WATER PUMPING

- Design of efficient PV water pumping systems for hilly regions

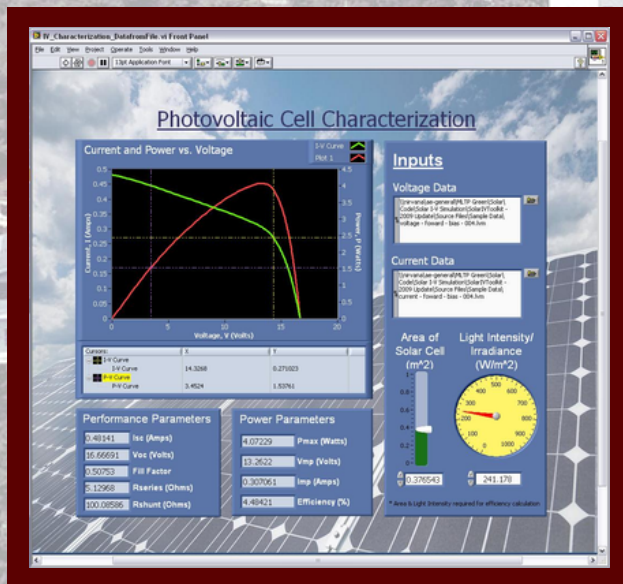


ENERGY AUDITING

- Auditing energy consumption and generation in microgrids
- Analysing the loads and providing solutions to save energy

MANUFACTURERS CONSULTANCY

- Direct service for local solar cell manufacturers.
- Solar Cell Characterization
- Detecting the degradation of microgrid systems including solar modules and batteries



CONTACT US

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