## **Objective of the Summer Internship Program**

This internship/training program is aimed at Undergraduate and Post Graduate Students of Engineering to learn and fulfill the their enthusiasm of Renewable Energy Technologies. The participant can choose any one module from the course module listed below. This training program will cover different renewable energy systems, simulations, modeling, statistical analysis of data along with and hands-on training of the relevant systems. The usage of innovative technologies methods in mathematical modeling & Simulation in the internship program will automatically nurture the participants to grasp the fundamental concepts of Renewable Energy Systems and their implementation in various domain of engineering, science and technology. Moreover, the participants will also be trained to innovate, develop problem-solving abilities and learn soft skills during the internship. This will be accomplished by the extensive use of intuition, graphical plots and real world examples. Although the participant may be new to many technologies and its application, still he/she will find this summer internship program a great platform to grasp it quickly in systematic manner due to programs multidisciplinary content. This course is designed not only to cover all the aspects of renewable energy system, experimentation but also guide the proper content requirement for research paper publications.

## Course Modules

- Harnessing solar energy (PV+solar thermal)
- Energy storage; thermal and chemical
- Design, Modelling and Estimation of Battery
  Parameters
- Forecasting Models
- Wind Prediction
- Intelligent control
- Resource assessment/feasibility assessment of solar-wind hybrid system
- Energy management and audit
- Energy conservation and waste heat recovery
- Biogas production and biomass characterization
- Energy Conservation in built environment

## **Resource Persons**

The various sessions of this internship program will be preceded by faculty members of MNIT Jaipur, faculty of other reputed institutions like IITs, NITs, IIITs and experts from industries.

## **Eligibility / Target Audience**

This summer internship program is targeted towards UG, PG students and Faculty of Govt. / Govt. aided / self-financed engineering colleges who have interest in computational simulation and experimental work on membrane. All the undergraduate students who are appearing in the 4th and 6th semester examinations are eligible to apply.

## How to Apply / Registration

Fee (INR 15,000/- per participant) will be payable through Online Transaction/NEFT/IMPS to the account of "The Registrar MNIT, Jaipur (TEQIP Phase III)" of Account No. 36875887782, State Bank of India, MNIT Campus Jaipur (IFSC Code: SBIN0015921). Duly filled application form in the prescribed format may be sent to the Coordinator so as to reach on or before 30<sup>th</sup> April 2019. The applicant may also send an advance-scanned copy of the application form and transaction detail through E-mail. The selection is on first come first served basis depending upon the availability of the seats. Registration charges are non-refundable for selected participants. The participants will be intimated by 3<sup>rd</sup> May, 2019.

## Accommodation

Limited accommodation is available in the MNIT Hostels for outstation participants on nominal charge and first come first serve basis. The participant will not be paid any TA/DA. Charges of Institute Hostels Guest rooms are approximately **Rs. 200/- per day** including food and accommodation.

## Venue

Centre for Energy and Environment, Malaviya National Institute of Technology, Jaipur 302017 (Rajasathan)

# Registration Form Summer Internship Program

#### on

## Renewable Energy Systems

13<sup>th</sup> May – 25<sup>th</sup> June 2019 Centre for Energy and Environment MNIT Jaipur – 302017 Rajasthan

Name:			
Category (UG/PG):			
Branch:			
Year of Study:			
Department:			
Institute:			
Mailing Address: _			
Phone (M)	(O)		
E-Mail:		_	
Accommodation required? Yes/ No			
Modules/days:			
Registration fee Details			
Transc. No Bank	Dt		
For Rs			

The above information provided is true and to the best of my knowledge. If, selected, I agree to abide by the rules and regulations of the program and MNIT Jaipur.

Date:	Signature of Condidate
Dale.	Signature of Candidate

The applicant will be permitted to participate in the above program, if selected.

Date: \_\_\_\_\_Signature of Competent Authority

## **About MNIT Jaipur**

Malaviya National Institute of Technology Jaipur (Deemed University) is one of the premier NITs, designated with the status of "Institute of National Importance" by MHRD. The institute was established in 1963, and its campus spreads over 325 acres of lush green area in the central location of Jaipur city. The institute offers undergraduate and postgraduate courses (B.Tech.,M.Tech./MBA/M.Sc. & Ph.D.) to about 4500 students, in leading fields of engineering, technology, architecture, management & sciences. Through the internationally renowned faculty, laboratories with state of art equipments and excellent infrastructure, the institute is actively engaged in research, consultancy and developmental activities, besides imparting regular teaching.

## Centre for Energy and Environment

The Centre for Energy and Environment (CEE) was commenced in the year 2012 with 20 MTech in Renewable Energy and Ph.D. was started in same year. So far six batch of PG students have passed out with flying colour and brought laurels to MNIT. More than 20 research scholars are registered as PhD in different domains of Renewable Energy system. The Centre is well equipped with research laboratories having state of art and modern facilities. Thanks to all International and National funding agencies for the projects and MNIT for all the support. The CEE provides a life-long learning experience, through its state of art laboratories, vast pool of courses, and industry-orientation. A strong collaborative framework with reputed universities in India and abroad, the centre offers ample opportunities for individual growth and career enhancement.

## **BENEFITS TO THE STUDENT INTERNS**

- Individual Batch-wise staff Allocation & Assistance
- Materials cum Certifications
- · Hands on Oriented Training
- Labs for their preparation
- Certificate on Internship Completion / Implementation

Patron Prof. Udaykumar R Yaragatti, Director, MNIT-Jaipur

> **Conveners** Dr Rohit Bhakar

Coordinators Prof Rajesh Kumar Prof Tarush Chandra Dr Vivekanand Dr Amartya Chowdhury Dr Kapil Pareek Dr Sunanda Sinha Dr Aneesh Prabhakar

## Address for Correspondence

Dr. Rohit Bhakar Head, Centre for Energy & Environment Malaviya National Institute of Technology JLN Marg, Jaipur - 302017 India Tel: 0141-2713422 e-mail: <u>head.cee@mnit.ac.in</u> Self-financed Summer Internship Program of Forty Five Days under TEQIP-III

on

## Renewable Energy Systems

(13<sup>th</sup> May to 25<sup>th</sup> June 2019)



## **Organized By**

Centre for Energy and Environment Malaviya National Institute of Technology Jaipur- 302 017 Rajasthan- India