#### **REGISTRATION FORM**

# Short Term Course on

Power Conversion of Renewable Energy Resources

Jan 29- Feb.03, 2015

Name:
Organization:
Designation:
Gender: Male/Female
Corresponding Address:
Mobile #Fax#
E-mail:
Registration Category: Academic/Industry/Student.
Amount (Rs.)
Paid through Demand Draft in favour of
"Director, MNNIT Allahabad", payable at Allahabad
DD.No.: Date:
Drawn on:
Accommodation required: Yes/No

(Signature of delegate with date)

All Correspondence must be addressed to:

Dr. Rajesh Gupta, Convener PCRER Department of Electrical Engg. M. N. National Institute of Technology, Teliarganj, Allahabad-211004, UP, India

Email:

rajeshgupta@mnnit.ac.in, rajgupta310@gmail.com

Ph. +91-532 2271410 M: +91 9415540587, Fax: +91-532 2545341

#### COMMITTEE

## **Patron**

Prof. P. Chakrabarti
Director, MNNIT, Allahabad

## Chairman

Prof. R. K. Tripathi

Head, EE Dept., MNNIT, Allahabad

# **Course Coordinators**

Prof. R. K. Tripathi, *EE Dept., MNNIT*Dr. Rajesh Gupta, *EE Dept., MNNIT*(Convener)
Dr. Paulson Samuel, *EE Dept., MNNIT* 

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# Self Sponsored

**Short Term Course** 

on

Power Conversion of Renewable Energy Resources (PCRER)

### **Course Coordinators**

Prof. R. K. Tripathi
Dr. Rajesh Gupta (Convener)
Dr. Paulson Samuel

Jan. 29-Feb.03. 2015



Organised by

Department of Electrical Engineering
Motilal Nehru National Institute of
Technology Allahabad

An Institute of National Importance as declared by NIT Act, GOI 2007

Allahabad - 211004, INDIA

#### PREAMBLE

Fossil fuels at present have adverse environmental impact and limited availability and have to give way to renewable sources of energy. The main advantage of electricity generation from renewable sources is the absence of harmful emissions and its renewable nature. Efficient conversion of renewable sources of energy is an emergent need in every aspect of our life. Among many, the Solar photovoltaic (PV), Wind energy, Fuel cells has seen a tremendous growth in the past decade. It ranges from few watts to mega watts of wind power system. The devices involved for power conversions are Voltage Source Converter (VSC) to convert DC into AC, AC into DC. The other important converter is DC to DC.

Recent developments in this field have opened up broad areas of research such as. Static power converters. High performance Power Electronics Converters, Power Quality issues, Distributed Generation, High/Low Power conversion, On & Off-shore wind turbines, DC Grids, Solar PV technologies, Fuel cells, MPPT, Power balance. Renewable sources of energy and its conversion into usable form is the major concern at present. Abundant, environment friendly and the costefficient energy is a key resource for growth of any country. Important sources of energy, wind, solar, fuel cells, have high potential to strengthen the energy pool. Both the form of energy requires efficient and economic power conversion devices and technology.

This short term course aims to enhance the awareness of the problems and solutions of Renewable Energy Resource and power conversion issues among the participants.

## **MNNIT ALLAHABAD**

Motilal Nehru National Institute of Technology, Allahabad was formerly Motilal Nehru Regional Engineering College, Allahabad. It is an institute with total commitment to quality and excellence in academic pursuits is among one of the leading institutes in India and was established in year 1961 as a joint enterprise of Govt. of India and Govt. of U.P. in accordance with the scheme of establishment of REC. However with effect from June 26th of 2002 the institute became a deemed university and is now known as Motilal Nehru National Institute of Technology. It offers B. Tech. programmes in nine branches of technology, M. Tech. programmes in more than twenty disciplines, MCA, MBA, and Ph.D. programme in all branches of engineering, science and management.

#### **DEPARTMENT OF ELECTRICAL ENGG.**

The Department of Electrical Engineering offers courses leading to a Bachelor of Technology in Electrical Engineering and a Master of Technoloav in Power Electronics & ASIC Design, Control & Instrumentation and Power System along with part-time Master of Technology courses. In addition to this the department has strong research groups in the area of Power and Control. The Department enrolls candidates for the Doctor of Philosophy programs in various categories. This includes full time, part-time and QIP (Quality Improvement Program) Ph.D programmes. The Department has qualified and experienced faculty in all the related fields of Electrical Engineering viz. Electrical Power System, Power Electronics. Control, Instrumentation, Virtual Instrumentation and Digital Controls. The theoretical knowledge is supplemented by well equipped laboratories.

## RESOURCE PERSONS

The experts for the above short term course shall be drawn from MNNIT, other academic institutions and Industries.

## BROAD COVERAGE

Following broad areas will be covered in the course.

- Renewable Energy Resources
- Solar photovoltaic (PV)
- Wind energy
- Fuel cell energy
- Power electronics converters
- Modes of power conversion
- Converters control
- Grid Integration
- Custom Power Devices
- Hybrid Systems etc.

The course consists of presentations by experts and laboratory sessions.

#### **PARTICIPANTS REGISTRATION**

Students Rs. 1000/-Faculty members Rs. 2000/-Persons from industry Rs. 3000/-

All payments are to be made by Demand Draft drawn in favour of "Director, MNNIT Allahabad", payable at Allahabad. The registration fees must reach to the following address along with complete registration form.

Dr. Rajesh Gupta, Associate Professor, Convener PCRER Department of Electrical Engg. M. N. National Institute of Technology, Teliarganj, Allahabad-211004, UP, India Ph. +91-532 2271410

M: +91 9415540587, Fax: +91-532 2545341

Email: rajeshgupta@mnnit.ac.in, rajgupta310@gmail.com

#### Accommodation

Accommodation for the participants may be arranged in the MNNIT hostel on payment basis depending upon the availability.