Department	: Electrical & Electronics Engineering
Principal Investigator	: Dr. P.S. Manoharan
Name of the sponsor	: UGC- MRP
Title of the project	: Grid Connected Photovoltaic System Using Voltage Source Inverters
Date of Sanction	: 30.06.11
Ref . No.	: F.No. 40-468/2011 (SR)
Project Duration	: 2011-2014
Sanctioned Amount	: Rs. 6.7 Lakhs

Objectives : i) To inject the energy produced by the PV generation system in to the electric grid, accordingly to the pre-established quality and reliability specifications, without affecting grid's normal operation. ii) To decrease harmonics. iii) To optimize the system design, permitting reduction of system losses and increases of the energy injected into the grid and improve the grid quality. iv) To validate the simulation results, in-house model has developed and tested.

Equipments : 3 Phase 3 Level Diode Clamped Multilevel Inverter
This multilevel inverter is utilized by PG students and research scholars.

Publications :

1. "Modeling and simulation of three phase multilevel inverter for grid connected photovoltaic systems", Solar Energy 85 (11), 2811-2818, 2011
2. "Simulation and an experimental investigation of SVPWM technique on a multilevel voltage source inverter for photovoltaic systems" International Journal of Electrical Power & Energy Systems 52, 116-131, 2013.

PhD produced :

1. Implementation of FPGA based Multilevel Voltage Source Inverters for Photovoltaic System - M.Valan Rajkumar, 2014
2. Analysis and Perform Evaluation of Fuzzy Logic Approach and Traditional methods Towards MPPT on a PV System fed Multilevel Inverter System, A.Ravi, 2014.