

POWER ELECTRONICS AND DRIVES LABORATORY

LAB INCHARGE : Mr.R.MANIKANDAN

DESCRIPTION OF THE LAB

Power Electronics and Drives is an important laboratory for the students who are pursuing undergraduate programs in the field of Electrical and Electronics Engineering. Through this lab students can demonstrate and simulate different experiments like Power semiconductor device characters, AC to DC Rectifiers, DC to AC Inverters, DC to DC converters, AC to AC voltage controllers and motor control applications.

MAJOR EQUIPMENTS

- ❖ SCR, MOSFET, TRIAC and IGBT device characteristics
- ❖ Single phase half and fully controlled converter
- ❖ MOSFET based step up and step down choppers
- ❖ IGBT based single phase PWM inverter
- ❖ IGBT based three phase PWM inverter
- ❖ Switched mode power converter
- ❖ SCR & TRIAC based single phase AC voltage controller
- ❖ Cyclo converter
- ❖ Dual regulated DC power supply
- ❖ Cathode ray oscilloscope
- ❖ Isolation transformer
- ❖ Single phase auto transformer
- ❖ DC and AC meters in different ranges
- ❖ MATLAB/SIMULINK Software

PHOTO

