

HEAT TRANSFER LABORATORY



Laboratory : Heat Transfer Laboratory
Laboratory In-Charge : Dr P.P.Sethusundaram
Technical Supporting Staff : Mr.M.Murugesan
Area of The Laboratory : 13*9.8 Sq.M

Major Equipments:

- Air conditioning tutor test rig
- Refrigeration tutor test rig
- Composite wall apparatus
- Thermal conductivity –Insulating powder apparatus
- Thermal conductivity –Metal rod apparatus
- Pin-Fin apparatus
- Forced convection apparatus
- Natural convection apparatus
- Emissivity apparatus
- Stefan-Boltzman apparatus
- Parallel flow Counter flow apparatus
- Digital turbo fan anemometer
- LPG Refrigeration test rig
- Cooling tower test rig

Major Experiments:

- Determination of Thermal conductivity of composite wall
- Determination of Thermal conductivity of pipe insulation using lagged pipe apparatus
- Determination of Natural convection heat transfer coefficient from a vertical cylinder
- Determination of Forced convection heat transfer coefficient inside tube
- Determination of Heat Transfer coefficient from Pin-fin (Natural & Forced convection)
- Determination of Stefan- Boltzman constant
- Determination of Emissivity of a grey surface
- Determination of Effectiveness of parallel/ Counter flow heat Exchanger
- Determination of Effectiveness of cooling tower
- Study of Refrigeration and Air conditioning systems
- Determination of COP of a Refrigeration system
- Determination of COP of an air conditioning system