

Name of Laboratory: Heat Transfer Operations

A. List of Equipments/instruments

Conduction through Composite Wall
Thermal Conductivity of Insulating Powder
Heat Transfer in Laminar Flow
Heat Transfer in Turbulent Flow
Forced Convection Setup
Natural Convection Setup
Plate Heat Exchanger
Shell and Tube Heat Exchanger
Stefan Boltzmann Law Apparatus
Heat Transfer in Agitated Vessel
Thermal Conductivity of Metal Rod



Conduction through Composite Wall



Thermal Conductivity of Insulating Powder



Forced Convection Setup



Heat transfer in double pipe heat exchanger in laminar flow



Natural Convection Setup



Plate Heat Exchanger



Stefan Boltzmann Law Apparatus

B. List of Experiments

1. Experiment on “Heat transfer through composite wall of different thermal conductivity”
2. Experiment on “Thermal conductivity of insulating powder (Asbestos powder) ”
3. Experiment on “Heat transfer in double pipe heat exchanger in laminar flow”
4. Experiment on “Heat transfer in double pipe heat exchanger in turbulent flow”
5. Experiment on “Heat transfer by forced convection during flow of air through a pipe”
6. Experiment on “Heat transfer coefficient in natural convection from a vertical cylinder”
7. Experiment on “Heat transfer in Plate Heat Exchanger”
8. Experiment on “Heat Transfer in shell and tube heat exchanger”
9. Experiment on “Heat transfer by radiation: Stefan-Boltzmann Law”
10. Experiment on “Heat Transfer in Agitated Vessel”
11. Experiment on “Thermal conductivity of a metal rod ”