## MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR-05

(A Govt. Aided UGC Autonomous Institute Affiliated to RGPV, Bhopal)

## **Department of Chemical Engineering**

## **Heat Transfer Lab**

- 1. To determine the thermal conductivity of metal rod.
- 2. To determine the equivalent thermal conductivity of composite wall.
- **3.** To determine heat transfer coefficient in forced convection.
- **4.** To determine heat transfer coefficient in natural convection.
- **5.** To determine heat transfer coefficient with the help of Stephan Boltzman Apparatus.
- **6.** To calculate emissivity of the test plate by emissivity measurement apparatus.
- 7. To determine heat transfer coefficient in double pipe heat exchangers.
- **8.** To study the heat transfer characteristics of a shell and tube heat exchanger (Heating / cooling)of water.
- 9. To determine heat transfer coefficient in counter and parallel flow heat exchanger
- 10. To measure the rate of evaporation using an open pan evaporator.
- **11.** To measure the rate of condensation of pure water vapor and to determine the heat transfercoefficient.
- **12.** Demonstrate the film wise, drop wise condensation and determination of heat transfercoefficient.
- 13. To study the single effect evaporator and find out the heat transfer coefficient.