HEAT TRANSFER LABORATORY

This laboratory, students will have the opportunity to perform experiments to understand the three modes of heat transfer, namely conduction, convection and radiation.

Experiments on heat conduction through a metal rod, composite slabs and concentric spheres, applications such as pin-fins, heat pipes, heat exchanger, natural and forced convection, and Stefan-Boltzmann's experiment reinforce the theory taught in the classroom and gives them a good foundation for understanding the physics of heat transfer problems.

The facilities available in the laboratory

- Heat transfer through composite wall apparatus
- Heat transfer through lagged pipe apparatus
- Heat transfer through concentric sphere apparatus
- Thermal conductivity of metal rod apparatus
- Hear transfer through pin fin Apparatus
- Heat transfer Transient Heat conduction
- Forced convection apparatus
- Heat transfer in natural convection
- Parallel Flow and counter flow heat exchanger
- Emissivity apparatus.
- Stefan – Boltzmann apparatus.
- Heat transfer in drop and film wise condensation
- Critical Heat flux apparatus
- Study of heat pipe and its demonstration.

S.No	Name of major equipments	Photo
1.	Heat transfer through composite wall apparatus	

S.No	Name of major equipments	Photo
2.	Heat transfer through lagged pipe apparatus	

S.No	Name of major equipments	Photo
3.	Heat transfer through concentric sphere apparatus	

S.No	Name of major equipments	Photo
4.	Thermal conductivity of metal rod apparatus	

S.No	Name of major equipments	Photo
5.	Hear transfer through pin fin Apparatus	

S.No	Name of major equipments	Photo
6.	Heat transfer Transient Heat conduction apparatus	

S.No	Name of major equipments	Photo
7.	Forced convection apparatus	

S.No	Name of major equipments	Photo
8.	Heat transfer in natural convection	

S.No	Name of major equipments	Photo
9.	Parallel Flow and counter flow heat exchanger	

S.No	Name of major equipments	Photo
10.	Emissivity Apparatus	

S.No	Name of major equipments	Photo
11.	Stefan – Boltzmann apparatus.	

S.No	Name of major equipments	Photo
12.	Heat transfer in drop and film wise condensation	

S.No	Name of major equipments	Photo
13.	Critical Heat flux apparatus	

S.No	Name of major equipments	Photo
14.	Study of heat pipe and its demonstration