












Bipin Tripathi Kumaon Institute of Technology
Heat & Mass Transfer Lab

Sl. No.	Name of Machine/Equipment	Photo
1	Apparatus for measuring thermal conductivity of metal bar	 A photograph of a laboratory apparatus for measuring the thermal conductivity of a metal bar. The setup includes a metal bar held between two heat reservoirs, with a thermocouple and a voltmeter connected to measure the temperature gradient. The entire apparatus is mounted on a red metal stand.
2	Apparatus for measuring thermal conductivity of liquids	 A photograph of a laboratory apparatus for measuring the thermal conductivity of liquids. It features a liquid-filled chamber with a heater and a thermometer, connected to a control unit. The apparatus is supported by a red metal stand.
3	Stefan Boltzman apparatus	 A photograph of a Stefan Boltzman apparatus, used for measuring the Stefan-Boltzmann constant. It consists of a black body cavity with a thermopile and a voltmeter. The apparatus is mounted on a red metal stand.
4	Parallel flow/ counter flow heat exchanger	 A photograph of a parallel flow/counter flow heat exchanger apparatus. It shows two pipes in a heat exchanger core, connected to a water supply and a control unit. The apparatus is supported by a red metal stand.

5	Heat transfer in forced convection apparatus	
6	Heat transfer from pin-fin apparatus	
7	Heat transfer in natural convection apparatus	
8	Heat pipe demonstration	

9	Heat transfer through composite wall	
10	Emisivity measuring apparatus	
11	Critical flux apparatus	
12	Boiling heat transfer apparatus	