

## MAHARAJA INSTITUTE OF TECHNOLOGY MYSORE BELAWADI, NAGUVANAHALLI POST, SRIRANGAPATNA TALUK MANDYA-571438, KARNATAKA



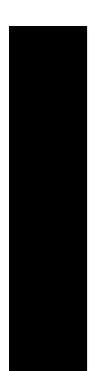
## 1. Research Centre Advanced Research Lab Facility:

Research Lab: 13.32 Sq.ft: Inside Engineering Physics Lab (New Building)
Research Lab: 16.5 Sq.ft.: Main Building: In main building (1<sup>st</sup> Floor)

- i. Material preparation facilities using solid state route and Chemical wet method
- ii. Electrical and Magnetic Characterizations.

Sl. No.	Equipment	Specification	Manufacture		
1.	Programmable High Temperature Furnace	(upto 1600 Deg C)	(Naskar& Company), Kolkatta		
2.	Two Zone : Programmable High Temperature Furnace	(upto 1200 Deg C)~	Indfurr, Chennai		
3.	Hydraulic Press with 12mm and 1 inch die.	10 Tone	Technosearch Instruments		
4.	Analytical Balance	Sensitivity: 0.1 mg	Denver		
5.	Hot Plate With Magnetic stirrer	5020, 10cm*10cm, Rugged Aluminium die casting housing, Acid & Alkali resistant glass cermaic Top.Electronic speed control from 100-1000 RP	Tarsson		
6.	Microwave Influx	Microwave range	LG.		
7.	Dry Box,	Usable Volume : 450 X 250 X 150 mm.  Temperature : ambient to 45°C, Power : 230 V, 50 Hz, 100 W	Technosearch Instruments		
8.	335, Temperature controller	Operates down to 300 mK with appropriate NTC RTD sensors, Two sensor inputs, Two configurable PID control loops providing 50 W and 25 W or 75 W and 1 W, Autotuning automatically collects PID parameters, Automatically switch sensor inputs using zones to allow continuous measurement and control from 300 mK to 1505 K, Custom display set-up allows you to label each sensor input, USB and IEEE-488 interfaces	Lakeshore, USA		
9.	6221 constant current Source	Source AC currents from <b>4pA</b> to 210mA peak to peak, 10MHz output update .Supports AC characterization of components and materials.Generates smooth sine waves up to <b>100kHz</b> .	Kithley, USA		
10.	2182 Delta mode Nano voltmeter,	1nV sensitivity, Typically just 15nVp-p noise at 1s response time, 40–50nV p-p noise at 60ms, Built-in thermocouple linearization and cold junction compensation	Kithley, USA		

11.	Vacuum Pump	Rotary (10 <sup>-3</sup> mbar) and Diffusion (10 <sup>-6</sup> Ran Vac, Bangalore
		mbar),



## ${\it FACILITIES\, AVAILABLES\, AT\, RESEARCH\, CENTER\,,\, MIT}$



High temperature furnace

Hydraulic Press & Dry Box

Analytical balance

Tubular furnace