









Research and Innovation Infrastructure

Sl No	Item	Specification
	Bruker ALPHA-T FT-IR Spectrometer	
	JASCO UV Vis NIR Spectrometer with DRS	
	GC-Fid Gas chromatograph with FID and data storing	
	Spectrophotometer 104 (Systronics)	

1	<p>Wide Band Microwave Source (40 MHz -12 GHz) (Sweep Source) Microwave Power Sensor-Power meter with sensor</p>	 <p>40Mhz to 12.4Ghz to be supplied with SMA-SMA Cable N-SMA Adapter 'wave guide to Coax Adapter. Step size: 3KHz RF level: +10 dBm Modulation: AM/PM/FM Adapter : N-SMA, X-band waveguide to coax adapter</p>
	<p>PC Based Constant Deviation Spectrometer (For Arc Emission & Absorption Measurements)</p>	 <p>Wavelength Range 390 - 750 nm max. Resolution of Spectrometer 0.1nm / pixel (D- lines) Collimating Lens (Achromatic).. 335 F Focusing Lens (Achromatic): 65 F</p>

Michelson
Interferometer(Sodium D'
Lines)



Optical Bread board with Rigid Support
Diode Laser with power supply
Sodium vapor lamp with power supply
CCD with mount
LCD screen




Solar Simulator







Pockel Effect Apparatus





Diode Laser with Power supply, Polarizer,
Pockel Cell
Electro-Optic Crystal
Analyzer with precision adjustment
Output Measurement Unit
Constant Current Power supply (0-2KV)

	Faraday Effect Apparatus	 <p>Diode Laser with Power supply(Green and Red), Polarizer, Electromagnet Analyzer with precision adjustment Detector Mount Output Measurement Unit Constant Current Power supply</p>
7	Apparatus for Study of Photo Electric Effect (Plank's Constant)	 <p>Halogen source with four filters (R, B, G, Y) Photo tube detector, supporting electronic system to find the stopping potential</p>
	Magnetic Susceptibility-Quinke's Method	 <p>Electromagnet with Power supply Digital Gauss Meter Quinke's Tube with Stand Travelling Microscope Paramagnetic sample</p>


	Four Probe	
	Acoustic-Optic Effect (Ultrasonic Diffraction)	 <p>Diode Laser with Power Supply Glass Tank 2 Nos RF Oscillator Crystal with Mount (5 MHZ and 3 MHZ) Cell mount with linear - translation stage detector, Output measurement unit</p>
	Vacuum compatible heater	<p>Max temperature 800 °C. High Vacuum compactable, Size 2" Sensitivity +/-0.01 deg</p>
11	PID controller for the vacuum compactable heater	
12	Magnetic Stirrer with hot plate (10 numbers)	 <p>RPM 1200, Capacity – 2Lts</p>

	Hot Air Oven (2 numbers)	 <p>Chamber Size 450X450X600 mm No: of trays – 3, Power – 1000 W PID based microprocessor digital temperature controller Vertical model, Front opening door Temperature range: 50-300 C Electrically operated Thermostat & 3 – Heat Switch Control with corresponding indicators</p>
14	Centrifuge	 <p>RPM – 5000, Digital Speed Regulator, Digital Timer</p>

15	Heating Mantle	 <p>Power 350 W, Capacity 2000 ml</p>
16	High Temperature Muffle Furnace (2 Numbers)	 <p>Max. Temperature – 1400 °C Size 6”X6”X9” Temperature controller: PID controller Accuracy: +/- 1°C Display: LED / LCD Display</p>
	Networking Lab	

	Optical Microscope with Camera	
	High Power R.F Oscillator	
Strong	<p>Strong Elctromagnet</p> <p>Features</p> <p>Mass = 124kg</p> <p>604 x 270 x 359mm</p> <p>Adjustable pole gap, 0 to 86mm</p> <p>Variety of pole caps, 10, 38, 76mm</p> <p>1T @ 35mm, 2T @ 15mm gap</p>	
	Digital Polarimeter	

	Refractometer	 <p>2021/3/31 14:20</p>
	Citizen Digital Ultrasonic cleaner (Sonicator)	 <p>2021/3/31 14:19</p>
	Electronic balance 2 Nos	
	Electronic Balance Shimadzu	 <p>2021/3/30 12:55</p>

Hall	Hall Effect Apparatus	 A photograph of a Hall Effect Apparatus. It consists of a cylindrical metal core with two large, dark, rectangular magnets mounted on either side. A small, white, rectangular electronic device is connected to the apparatus by wires. The setup is placed on a wooden base. A timestamp '2021/3/30 15:22' is visible in the bottom right corner.
	Turbidity meter	 A photograph of a turbidity meter. The device is white with a red and blue front panel. It has a digital display screen and several buttons labeled 'ESC', 'PRINT', 'ENTER', and 'T'. The text 'µC TURBIDITY METER 135' is printed on the red section. A timestamp '2021/3/31 14:29' is visible in the bottom right corner.
	Hydrothermal reactor 100 ml 50ml	 A photograph of a hydrothermal reactor. It is a cylindrical metal vessel with a flange on top. The reactor is placed on a wooden surface. A timestamp '2021/3/31 14:32' is visible in the bottom left corner.
	Digital Conductivity meter 2 Nos	 A photograph of a digital conductivity meter. The device is yellow and black with a digital display showing '1000'. It has several buttons and a yellow knob. The text 'DIGITAL CONDUCTIVITY METER MODEL NO. 10-1000' is printed on the top. A timestamp '2021/3/31 14:22' is visible in the bottom right corner.

Digital Potentio meter
3Nos



Viscometer College
Pattern 10Nos



	Revolutionary micro processer lab Centrifuge	
	Ele. Bunsen Burner with energy regulator 10 Nos	
	Special Platinum Electrode 3Nos	
	Calomel Electrode 3Nos	
	PH Meter Digital model MKVI 2Nos	
	Ultra Violet inspection cabinet	
	Vaccum Dessicator 2Nos	
Calorimeter	Calorimeter	

	Electronic Pippette filling device	
	Incubator	
	Rotary Shaker	
		
	Water Bath Double wall	

Laminar	Laminar Flow	
		
	Bactriological Incubator	