




List of Facilities of Chemistry Group, BARC to Share with UGC-DAE-CSR (Mumbai)

S. No	Instrument	Research Area	Contact Person	Phone No. (Extn)	Photograph, if you intend to include
1	Powder X-ray Diffractometer Source: Cu Ka Power: 3kW Two theta range: 3-130°		Dr. S. N. Achary sachary@barc.gov.in	022-25592328	
2	Small angle X-ray scattering Model: Anton Paar, SAXSpace Source: Cu-Ka (2.2kW); line collimation Detector: 2D CCD Angle range: 0.2° - 10 ° D = 1 nm - 100 nm Samples: Liquids, Solids and Paste Temperature: -25 to 250 deg C	Soft condensed matter, Micelles, Microemulsions and liquid crystals	Dr. P. A. Hassan hassan@barc.gov.in	022-25595099	
3.	Ferroelectric, Piezoelectric and Pyroelectric Analyzer Model: TF 2000 (AixACCT, GmBH) Sample: Bulk solid and thin film Temperature range: RT to 250°C External bias voltage range: +/- 10KV		Dr. S. N. Achary sachary@barc.gov.in	022-25592328	

4.	<p>Rheometer(Anton Paar, Physica MCR 92) Rotational Viscosity and Oscillatory measurements Torque Range:1.0 μNm to 120 mNm Temperature: Ambient to 80 deg C Geometries: Parallel plate, Cone/plate and Concentric Cylinder</p>	Polymers, Wormlike micelles, Colloids	Dr. P. A. Hassan hassan@barc.gov.in	022-25595099	
5	<p>Confocal microscope (Olympus Fluoview) Bright field, Fluorescence and DIC illumination with following excitation laser</p> <ul style="list-style-type: none"> a) 405 nm with 5mW power b) 488 nm with 10mW c) 561 nm with 10mW. d) 640 nm with 5mW 	Vesicles/liposomes, Cells and biological materials	Dr. P. A. Hassan hassan@barc.gov.in	022-25595099	
6.	<p>High Temperature thermodilatometer</p> <p>Sample: Bulk cylindrical solid Temperature range : RT – 1373 K Dilation range : $\pm 1000 \mu$m Resolution (dilation) : $\pm 0.1 \mu$m</p>		Dr. S. N. Achary sachary@barc.gov.in	022-25592328	