

## Scientific Research Equipment

1. Automatic pH and Conductivity meter  
(Make: Mettler Toledo AG, Switzerland)



2. Water cooled bench top grinding machine (Planetary ball mill type)  
(Make: Retsch, Germany)



3. Microprocessor based High-Temperature Furnace  
(Temperature range: upto 1800°C)  
(Make: Nabertherm, Germany)



4. Dynamic Light Scattering Particle Size cum Zeta Potential Analyser (Make: Micromeritics Instruments Corp., USA)



5. X-Ray Diffractometer with temperature (lq. N2 - 1200°C) variation facility  
(Make: Bruker, Germany)



6. Scanning Electron Microscope  
(Make: Carl Zeiss Microscopy Ltd., UK)



7. Digital Refractometer with temperature variation facility  
(Make: Mettler Toledo AG, Switzerland)



8. UV-Vis-NIR spectrophotometer with temperature variation facility  
(Make: PerkinElmer, UK)



9. FTIR spectrophotometer  
(PerkinElmer, UK)  
(Make: PerkinElmer, UK)



10. Photoluminescence measurement system with temperature variation facility  
(Make: PerkinElmer, UK)

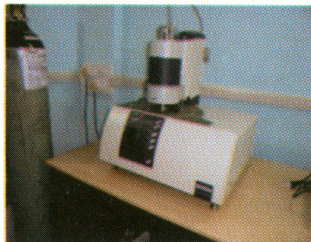


- 11-13. Atomic Force Microscope cum Scanning Tunnelling Microscope  
(Make: NT-MDT, Ireland)





14. High Temperature (lq. N<sub>2</sub> - 1600°C) Simultaneous TG-DTA / DSC Analyser (Make: NETZSCH Technologies, Germany)



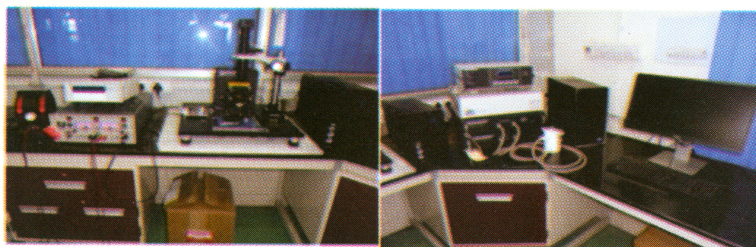
15. High Precision Dilatometer (NETZSCH Technologies, Germany) (Make: NETZSCH Technologies, Germany)



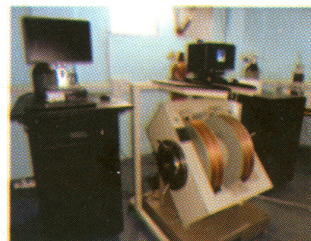
16. Impedance Analyser (40 Hz – 110 MHz) with temperature (up to 1000°C) variation facility. (Make: Keysight Technologies, USA)



17. Precision Multiferroic Test System (P-E, piezoelectric, pyroelectric, magneto-electric for bulk and thin-films) with temperature variation facility (Make: Radiant Technologies Inc., USA)



18. Vibrating Sample Magnetometer with temperature variation facility (Make: Lake Shore Cryotronics, Inc., USA)



19. Nanoparticle Tracking Analysis system (Make: Malvern Instruments, UK)



20-21. Micro Twin Screw Extruder and Micro-Injection Moulding Machine (Germany)



22. Microwave assisted Hydrothermal technique for nanomaterial synthesis (Milestone, Italy)

