

List of Sophisticated Equipments

Sr. No.	Name of the Equipment	Make	Purpose
1	Differential Scanning Calorimetry (DSC)	5000/ 2920 TA Instruments, USA	Thermal Properties of Polymers
2	Thermogravimetic Analyzer/ Differential Thermal Analyser (TGA/DTA)	5000/2960 TA Instruments, USA	Thermal Properties of Polymers
3	¹ H FT-NMR - 60 MHz	R-1500 Hitachi Japan	Structure Determination of Compounds
4	¹³ C NMR - 400 MHz	Bruker USA	Structure Determination of Polymers and Organic Compounds
5	Gel Permeation Chromatography 25 ⁰ to 200 ⁰ C. (GPC)	Polymer Lab., USA	Molecular Weight Estimation of Polymers
7	Vapour Pressure Osmometry (VPO)	KNAUER Germany	Molecular Weight Estimation of Polymers
8	Light Scattering (Low Angle)	Chromatix, USA	Molecular Weight Estimation of Polymers
9	Light Scattering (Multi-Angle)	Wyatt Technology Corporation, USA	Molecular Weight Estimation of Polymers
10	UV-Visible Spectrophotometer	160-A Shimadzu, Japan	Structural Study of Compounds
11	Visible Spectrophotometer (Water Analysis Kit)	DR-2500, HACH, USA	Hard Water and Effluent Water Analysis
12	Chemical Impedance Analyzer	SOLATRON UK	Electrical Property of Polymer/ Composites
13	High Resistance Meter (Electrometer)	Keithley, UK	Electrical Property of Polymer/ Composites
14	Atomic Force Microscope (AFM)	VEECO, U.S.A.	Surface Characteristics of Polymeric Materials

Sr. No.	Name of the Equipment	Make	Purpose
15	Brabender Plasticorder	Brabender USA	Processing Characteristics of Plastics and Rubber
16	Rheostat-II (Concentric Spindle Viscometer)	Germany	Rheological Study of Polymer Solutions
17	Brookfield Viscometer DV-II Digital Viscometer	Brookfield USA	For Viscosity and Rheological studies of Polymer Solutions
18	Dynamic Mechanical Analyser (DMA)	Tritec, Triton Technology USA	Mechanical Properties of Polymers at -160 ⁰ to +400 ⁰ C.
19	Heat Distortion Temperature & Vicat Softening Point (HDT / VSP)	CEAST, Germany	HDT & VSP determination of Rigid Plastics
20	Melt Flow Indexer (MFI)	NOVA Ahmedabad	MFI determination of Thermoplastics
21	Universal Impact Tester (Izod / Charpy / Tensile Impact tester)	ZWICK, Germany	Impact strength determination of plastics
22	Cold Bending Tester	Budapest, Hungary	Cold Temperature Flexibility determination of Plastics
23	Universal Testing Machine (UTM)	Lloyds U.K.	Mechanical Properties of Composites, Plastics and Rubbers
24	Hardness Tester Brinell / Shore A, Shore D	Brinell, Germany	Hardness of Plastics and Rubbers
25	Dart Impact Tester	Khusboo, Bombay	Dart Impact Strength of Plastic Films
26	DIN Abrasion Tester	Khusboo, Bombay	Abrasion Resistance of Rubbers
27	Adhesion Tester	Khusboo, Bombay	Adhesion strength of Laminates