

ANALYTICAL SERVICES & CHARGES FOR VARIOUS INSTRUMENTAL FACILITIES

Note: (A) Educational and Research Institutions/ Government Departments.
 (B) Industry including public sector undertakings.

Sr. No	Name of Instrument	Make & Model	Type of Analysis	Testing Charge Rs./ per sample	
				A	B
1.	NMR Spectrometer	HITACHI , Japan R-1500 / 60 MHz	Using deuterated solvents : CDCl ₃ , Acetone-d ₆ , DMSO-d ₆ , D ₂ O, etc.	600	1000
			Using Common Solvents like CCl ₄	400	800
2.*	¹³C-NMR,(H-NMR Spectra) (Additional charge Rs.300/- per hour of additional scanning period)	Bruker, U.S.A. 400 MHz	H-NMR, using common solvents	400	800
			H-NMR, using DMSO-d ₆ solvent	1000	1500
3.*	¹³C-NMR,(¹³C-NMR Spectra) (Additional charge Rs.300/- per hour of additional scanning period)	Bruker, U.S. A. 400 MHz	¹³ C NMR using common solvents	1000	1500
			¹³ C NMR using DMSO-d ₆ solvent	1200	2500
4.	Thermo Gravimetric Analyser (TGA / DTA)	TA Instruments, USA, Model: 2960, TA-5000	Thermal Properties of Polymers	300	600
5.	Differential Scanning Calorimeter (DSC)	TA Instruments, USA, Model: 2920 TA-5000	Thermal Properties of Polymers	300	600
6.	IR-Spectrophotometer :	Nicolet, U. S. A. Impact 400 D	IR-Spectra	250	500
7.	UV-VIS Spectrophotometer	Shimadzu, Japan 160A	UV-VIS Spectra	225	450
8.	Gel Permeation Chromatograph (GPC)	Waters, U.S.A.	Mol.Wt Of Polymers	500	1000
9.*	Gel Permeation Chromatograph (GPC)	Polymer Lab.,U.K PL 220, High Temp.	Mol.Wt Of Polymers	700	1500
10.	Light Scattering Detector	WYATT, U.S.A . DAWN EOS	Mol.Wt Of Polymers	500	1000

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11.*	Chemical Impedence Analyzer	Solartron, U. K.	Impedence Measure	400	800
12.*	Atomic Force Microscope (AFM)	VEECO, U.S.A. CP.II	Surface properties of Materials	400	800
13.*	High Electrical Resistance Analyser	Keithley, Germany Electrometer	Ele. Resistance	250	500
14.*	Dynamic Mechanical Analyser (DMA)	Triton, U.S.A. Tritec, 2000 B	Rigid & Flexible Plastics	500	1000
15.*	Melt Flow Indexer	NOVA, Ahmedabad	Thermoplastics	250	500
16.*	Carbon Content Analyser	NOVA, Ahmedabad	Carbon in Polyolefins	250	500
17.	Vapour Pressure Osmometer (VPO)	KNAUER, Germany K-7000	Mol.Wt. Of Polymers	350	700
18.	ELEMENTAL ANALYZER :	Heraeus, Germany CHNO RAPID	(a) C,H,N Analysis (b) C,H,N,S, Anal.	300 500	600 1000
19.	Universal Testing Machine (UTM)	Lloyds, U.K. 30 K +	(a) Tensile Strength, Elongation (b) Flexural Strength (c) Compression Set	225 225 225	450 450 450
20.	HDT/VSP Testing Equipment :	CEAST, Germany	(a) Heat Distortion Temperature (b) Vicat Softening Point (VSP)	250 250	500 500
21.	Universal Pendulum Impact Tester	ZWICK, Germany	(i) Izod (ii) Charpy and (iii) Tensile Impact	200 200 200	400 400 400
22.	Brabender Plasticorder	Brabender, Germany RE-651	(a) Mixing (b) Extrusion/Blowing	250 400	500 800
23.	Vibrating Sample Magnetometer	Lakeshore, U.S.A. VSM 7304	Magnetic Properties of Complexes	300	600
24.	Magnetic Susceptibility Analyser	Citizen, Germany	Magnetic Properties of Complexes	300	600
25.	Water Analyser	HACH, Germany DR-2500	Several elements	300	600

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26.	Hardness Tester	Brinell, Hungery Shore A & Shore D	(a) Brinell Hardness (b) Shore A & D	100 100	200 200
27.	Brookfield Viscometer	Brookfield U.S.A. DV-II	Viscosity of Resins and Solutions---	200	400
28.	Ubbelohde Viscometer	Ubbelohde	Mol. Wt.	250	500
29.	DIN-Abrasion Tester	Khushboo, Mumbai	Rubbers Abrasion	250	500
30.	Adhesion Tester	Khushboo, Mumbai	---	200	400
31.	Falling dart Impact tester	Khushboo, Mumbai	IS if Films	200	400
32.	% Moisture / % Solid	--	--	200	400
33.	Rubber/Filler Content	--	--	200	400
34.	Identification of Plastic / Rubber / Filler	--	--	250	500
35.	Density / Specific Gravity	--	--	125	250
36.	Rubber / Additive Content	--	--	250	500
37.	OH Value / I.V./Acid Value	--	--	250	500
38.	Purity of plasticizer	--	--	250	500
39.	Flammability test	--	--	250	500
40.	Percentage Oil Content	--	--	200	500
41.	Extraction of UV-Stabilizer	--	--	250	500

Terms & Conditions :

(1)	The above charges are subjected to changes from time to time and other government taxes will be charged extra.
(2)	Besides above testing, analysis on some other instruments and analysis by the processes, not mentioned above, shall be carried out at approximate charges.
(3)	The charges are liable for a reduction or waiving off alongwith depending on the merit of the case and collaboration with the Industry/Institute concerned on mutual benefit basis.
(4)	All correspondence should be addressed to: THE HEAD, DEPARTMENT OF CHEMISTRY, SARDAR PATEL UNIVERSITY, V. V. Nagar - 388120 (GUJ.).
(5)	The Cheque/DD of the Analytical Bill be drawn in favour of The Registrar, Sardar Patel University, V.V.Nagar and should be sent to THE HEAD, DEPARTMENT OF CHEMISTRY, SARDAR PATEL UNIVERSITY, V.V.Nagar-388120