

Analytical Characterization & Technical Consultancy Price Card-2026

Sl. No	Technique	Base Price, Rs	Description/Specifications (@All prices Excluding 18% GST)	
1	Atomic Force Microscope	₹2999	Tapping Mode (Intermittent Contact Mode) (Soft & hard materials) *	
		₹3999	Contact Mode (Hard materials) *	
		₹7999	EFM – Electrostatic Force Microscopy (Semiconductors, films) *	
		₹7999	MFM – Magnetic Force Microscopy (Magnetic materials) *	
			*Sample preparation charges	
2	Brunauer–Emmett–Teller (BET) Surface Area Analysis	₹2999	N ₂	Per sample, 5 point Surface area (BET)
		₹3999	N ₂	Per sample, 7 point Surface area, average pore size & pore volume (BET)
		₹4999	N ₂	Per sample, 10 point Surface area, pore size distribution & pore volume distribution
		₹7999	N ₂	Per sample, 20 point Surface area, pore size distribution & pore volume distribution
		₹4999	CO ₂	Per sample, 5 point Surface area (BET)
		₹6999	CO ₂	Per sample, 7 point Surface area, average pore size & pore volume (BET)
		₹7999	CO ₂	Per sample, 10 point Surface area, pore size distribution & pore volume distribution
		₹11999	CO ₂	Per sample, 20 point Surface area, pore size distribution & pore volume distribution
3	Differential Scanning Calorimetry (DSC)	₹2999	High Temperature, Per sample, (RT to 900 °C) Heating Only	
		₹3999	Low Temperature, Per sample, (RT to 900 °C) Both Heating and cooling	
		₹3999	High Temperature, Per sample, (- 90 °C to 300 °C) Heating Only	
		₹4999	Low Temperature, Per sample, (- 90 °C to 300 °C) Both Heating and cooling	
4	Dynamic Light Scattering (DLS)	₹1599	Particle size, Per Sample	
		₹1599	Zeta Potential, Per Sample	
5		₹1999	Room temperature, 1 sample/slot	

	Electron paramagnetic resonance spectroscopy (EPR)	₹2999	Low Temperature, 1 Sample/slot/temperature
6	Field Emission Scanning Electron Microscopy (FESEM)	₹1499	Imaging, per sample, 8 images (extra ₹99/image)
		₹599	Energy Dispersive X-ray Spectroscopy (EDS)-per sample, 2 points (extra ₹99/point)
		₹999	EDS mapping-per sample, Max 4 elements (extra ₹99/element)
7	Fourier Transform Infrared Spectroscopy (FTIR)	₹699	per solid sample (ATR mode)
		₹799	per solid sample (KBr mode)
		₹999	per Liquid Sample (ATR Mode)
8	High Resolution Liquid Chromatography Mass Spectrometer (HR-LCMS)	₹2999	Per sample, UPLC #Ultra-Performance Liquid Chromatography (UPLC)
		₹3999	Per sample, UPLC-MS # Ultra-Performance Liquid Chromatography–Mass Spectrometry (UPLC–MS)
		₹5999	Per sample, UPLC-MS-MS # Ultra-Performance Liquid Chromatography–Tandem Mass Spectrometry (UPLC–MS/MS):
		₹2999	Per sample, MS # Mass Spectrometry (MS)
		₹3999	Per sample, MS-MS # Tandem Mass Spectrometry (MS/MS)
		₹2999	# Compound identification and analysis: per hour. Sample preparation is charged separately and will be finalized after discussing the sample preparation requirements.
9	Inductively Coupled Plasma Mass Spectrometry*	₹2999	Standardization (per element/sample)
		₹999	Measurement (Subsequent sample per element)
		₹4999	Sample preparation (per sample)
		*	Analysis of flowing elements are possible in ppm and ppb concentration range. (Elements: Ag, Al, Au, Sb, As, B, Ba, Bi, Bo, Cd, Ca, Co, Cr, Cu, Fe, Ga, Ge, Hg, In, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Rb, Sc, Se, Sr, Sn, Tb, Ti, V, Y, Zn)
10	Ion Chromatography System	₹1999	Standardization [Per parameter] *
		₹1999	All cations (Li, Na, K, Ca, Mg) [per sample] *
		₹1999	All anions (F, Cl, NO ₃ , SO ₄ , PO ₄) [per sample] *
		₹2999	All ions (Cations + Anions) [per sample] *

		₹5999	Carbohydrates/ Alcohols/ Cyanide / Sulphide [each parameter] *
			*Sample preparation charges,
11	Impedance Analyzer	₹1999	Impedance, per sample or Cell
		₹1999	I/V
12	Laser Flash Analyser	₹3999	Analysis [for 3 temperature] (for every extra temperature ₹300/- will be charged) Note: General Instructions: <ul style="list-style-type: none"> • Samples must be dry, moisture free, free of oil and grease. • Compact powder sample should be used. • Sample dia is fixed (1.27 cm) and thickness should be (0.15 to 0.5 cm) • Melting point of the sample should be known
13	Mass Spectroscopy	₹1999	Per sample- High Resolution Mass Spectroscopy (HRMS)
		₹1999	Per sample- Electrospray Ionization (ESI) for Hydrophilic Samples, 20 mins
		₹1999	Per sample- Atmospheric Pressure Chemical Ionization (APCI) for Hydrophobic Samples , 30 mins
		₹1999	Per sample- Atmospheric Pressure photoionization (APPI) for Hydrophobic Samples, 30 mins
		₹1999	Multimode Ionization (MMI) for Hydrophobic Samples, 30 mins
14	Multi-purpose Impact testing Machine with SHPB	₹1999	Drop Weight Impact Testing at Ambient Temperature
		₹2599	Drop Weight Impact Testing with Temperature Chamber [30°C - 150°C]
		₹2599	Impact Testing with SHPB
		₹3599	Impact Testing with SHPB Temperature Chamber [30°C - 700°C]
		₹3599	Impact Testing with SHPB Temperature Chamber [30°C - 700°C]
			*Sample preparation charges extra.
15		₹1599	for 1H and 19F (default scans)

	Nuclear Magnetic resonance (NMR)- Default solvent CDCl ₃	₹1999	for 13C, 31P, 15N, 29Si, water suppression (default scans)
		₹1999	for variable temperature (default scans)
		₹3599	2D DEPT measurements (default scans)
		₹1999	or Higher number of scans than default, additional charge
16	Nuclear Magnetic resonance - NMR Solid State	₹4599	for 13C (default scans) for 2.5 mm Probe
		₹6999	for 11B, 15N, 23Na, 27Al, 29Si, 31P, 79Br, water suppression (default scans) for 2.5 mm Probe
		₹4599	for 13C (default scans) for 4 mm Probe
		₹6999	for 11B, 15N, 23Na, 27Al, 29Si, 31P, 79Br, water suppression (default scans) for 4 mm Probe
		₹2599	or Higher number of scans than default, additional charge
17	Photoluminescence (PL)	₹1999	Per sample, PL in Visible range [350 – 750 nm]
		₹2999	Per sample, PL in NIR Range [750 – 1500 nm]
		₹1999	Per sample, Life time measurement in Visible range [350 – 750 nm]
		₹2999	Per sample, Quantum Yield Measurements in Visible range [350 – 750 nm]
		₹3999	Per sample, Quantum Yield Measurements in NIR range [750 – 1500 nm]
		₹3999	Per sample, Life time measurement in NIR range [750 – 1500 nm]
		₹9999	Per sample, PL in Visible range at Low temperature up 77 K [350 – 750 nm]
		₹10999	Per sample, PL in NIR range at Low temperature up 77 K [750 – 1500 nm]
		₹13999	Per sample, Life time measurement in Visible range at Low temperature up 77 K [350 – 750 nm]
		₹16999	Per sample, Life time measurement in NIR range at Low temperature up 77 K [750 – 1500 nm]
18	Photoluminescence (temperature Dependent)	₹2999	for Ambient Temperature measurements (Emission spectra, Excitation spectra, lifetime, Quantum yield, Gated em-ex) for solid samples (pellets, drop casted, thin films) and liquid samples, Slot one Hr

		₹3599	for 77K Measurements (Emission spectra/ excitation spectra, lifetime, Gated em/ex) only for liquid samples and powder samples, slot one Hr
		₹5999	for NIR Measurements (500nm-1700nm)(Emission spectra/ excitation spectra, lifetime, Gated em/ex) for solid samples (pellets, drop casted, thin films) and liquid samples, Slot one Hr
		₹29999	for Cryostat Measurements(13k- 400k) for only solid samples, 24 Hr, Max one sample
19	Raman Spectroscopy	₹899	per sample
20	Superconducting Quantum Interference Device (SQUID)	₹9999	for ZFC and FC 2 to 300K at one field (5 Hrs max) per sample, (₹ 5999/- for every additional field)
		₹3999	for M vs H at one temperature (max 3 Hr), per sample, (₹ 1999/- for every additional field)
		₹12999	for ZFC and FC 2 to 390K at one field (7 Hrs max), per sample, (₹ 6999/- for every additional field)
		₹39999	for MvsT in one field and MvsH in one temperature He 3 option per sample (48 Hr per sample)
21	Thermogravimetric Analysis (TGA)	₹1999	TGA per solid sample (>= 10 °C/min)
		₹2999	TGA per solid sample (= 5 °C/min)
		₹5999	TGA per solid sample (= 1 °C/min)
		₹11999	Thermal Gravimetric Analysis-Fourier Transform Infrared (TGIR)
		₹199	*Sample preparation extra: Rs.150/- per sample
22	Transmission Electron Microscopy (TEM)	₹3999	Imaging, per sample, 8 images (extra ₹199/image)
		₹599	Selected Area Electron Diffraction (SAED)-per sample, 2 points (extra ₹99/point)- (Excluding TEM image)
		₹4999	High-Resolution Transmission Electron Microscopy (HRTEM)- per sample, 8 images (extra ₹299/image)
		₹2999	High-Angle Annular Dark-Field Imaging (HAADF)- per sample, 4 Elements (extra ₹199/point) (Excluding TEM image)
23	Tribometer	₹1999	per hour, RT to 600°C, #
		₹2999	per hour, 600°C to 800°C, #

		₹3999	per hour, >800°C, #
		₹1999	Lubrication, #
			#Sample preparation charges is not included
24	UV-Visible Spectrophotometry (UV-Vis)	₹699	for Transmittance, 15 mins/sample [₹3999/hr]
		₹699	for Absorbance, 15 mins/sample [₹3999/hr]
		₹699	for Diffused reflectance, 15 mins/sample [₹3999/hr]
25	X-ray Diffraction (XRD)	₹899	per sample, 20 min scan, 10–80° (additional features extra cost)
26	X-ray Photoelectron Spectroscopy (XPS)	₹2999	for Survey Scan and Max 5 elements; per sample per point, Rs 599 for every additional element
		₹999	for Valence band only per location per sample
		₹999	for Etching; per sample per location
		₹1999	for Additional service: Mapping/Line scan/ Depth Profile/Angle resolved (only for THIN FILM); per service per location

Materials Structure Analysis & Reporting Pricing

Sl. No	Technique	Rs	
1	X-ray Diffraction (XRD)	₹2999	**
	Analysis & Reporting Includes: ** The XRD analysis includes comprehensive data plotting and peak analysis, followed by precise phase identification using crystallographic databases such as JCPDS. The study further involves determining the crystal system, space group, Miller indices (hkl), and corresponding d-spacing values. Any shifts in 2θ peak positions are carefully identified and interpreted to understand possible structural changes. All findings are compiled into a concise technical report that summarizes the results and highlights key observations.		
2	Field Emission Scanning Electron Microscopy (FESEM)	₹2999	**
	Analysis & Reporting Includes: ** The FESEM analysis involves high-resolution imaging to examine the surface morphology and microstructure of the sample, along with accurate determination of particle size, shape, and distribution. Surface features, defects, and textural characteristics are identified to provide deeper insight into material behaviour. The workflow includes image processing, scale calibration, and contrast enhancement to ensure clarity and		

	precision. All observations are compiled into a brief analytical report highlighting the key findings.		
3	Energy Dispersive X-ray Spectroscopy (EDS)	₹999	**
	Analysis & Reporting Includes: ** The EDS analysis includes elemental identification along with qualitative and quantitative composition assessment, enabling accurate detection of impurities and evaluation of elemental distribution within the sample. Spot, area, and line-scan analyses are performed as required, supported by the generation of detailed elemental maps and spectra. All analytical results are consolidated into a concise report that highlights the key findings.		
4	Transmission Electron Microscopy (TEM)	₹2999	**
	Analysis & Reporting Includes: ** The TEM analysis provides high-resolution imaging of the internal structure, lattice fringes, and overall morphology, enabling precise determination of particle size, shape, and crystallinity. The study also involves identifying defects, grain boundaries, and other nanostructural features that influence material behaviour. All observations and interpretations are consolidated into a brief report summarizing the key findings.		
5	Selected Area Electron Diffraction (SAED)	₹999	**
	Analysis & Reporting Includes: ** SAED analysis involves the acquisition of electron diffraction patterns from selected regions of the sample, followed by identification of crystal phases and indexing of diffraction rings or spots. The study includes determination of lattice parameters, d-spacing values, and overall crystallinity, along with analysis of orientation, defects, and structural order. All interpreted diffraction results are compiled into a short report summarizing the key observations.		
6	High-Resolution Transmission Electron Microscopy (HRTEM)	₹2999	**
	Analysis & Reporting Includes: ** HRTEM analysis provides high-resolution lattice imaging for atomic-scale structural examination, including precise measurement of lattice fringes, d-spacing, and crystallographic orientation. The technique enables identification of defects, dislocations, grain boundaries, and interfaces, along with detailed analysis of nanostructure, crystallinity, and phase-related features. All observations and interpretations are compiled into a brief report summarizing the key findings.		
7	High-Angle Annular Dark-Field Imaging (HAADF)	₹1999	**
	Analysis & Reporting Includes: ** HAADF imaging provides Z-contrast visualization based on atomic-number-dependent brightness, enabling high-resolution examination of structural features, interfaces, and compositional variations. The technique allows precise identification of heavy and light element distribution at the nanoscale and facilitates detection of defects, strain fields,		

	and structural inhomogeneities. All key HAADF observations are consolidated into a brief report summarizing the major findings.		
8	Brunauer–Emmett–Teller (BET) Surface Area Analysis	₹2999	**
	Analysis & Reporting Includes: ** BET analysis involves nitrogen adsorption–desorption measurements to evaluate the specific surface area of the material, followed by multi-point BET calculations for accurate surface area determination. The study includes calculation of pore volume and pore size distribution using the BJH method where applicable, along with assessment of the adsorption–desorption isotherm characteristics. All key results and interpretations are summarized in a concise report.		
9	Raman Spectroscopy	₹2999	**
	Analysis & Reporting Includes: ** Raman analysis involves the acquisition of Raman spectra for material identification, followed by detailed peak fitting and examination of vibrational modes. The technique enables identification of phases, bonding environments, and structural defects, as well as detection of strain, disorder, and variations in crystallinity. All significant observations and interpretations are compiled into a concise report summarizing the key Raman findings.		
10	UV–Visible Spectrophotometry (UV–Vis)	₹2999	**
	Analysis & Reporting Includes: ** UV–Vis analysis involves recording absorbance or transmittance spectra across the required wavelength range, enabling determination of key optical properties such as band gap using Tauc plot analysis where applicable. The technique allows identification of electronic transitions and characteristic absorption features, along with qualitative or quantitative assessment of sample concentration when relevant. All spectral observations and interpretations are consolidated into a concise report summarizing the primary findings.		
11	Thermogravimetric Analysis (TGA)	₹2999	**
	Analysis & Reporting Includes: ** TGA analysis involves measuring mass changes with temperature under controlled heating conditions to evaluate thermal behaviour. This includes determining thermal stability, decomposition temperatures, and distinct weight-loss steps, as well as identifying moisture content, volatile components, and residual mass. Derivative thermogravimetry (DTG) profiles are interpreted where applicable to provide deeper insight into decomposition mechanisms. All key thermal analysis results are summarized in a concise report.		
12	Differential Scanning Calorimetry (DSC)	₹2999	**

	<p>Analysis & Reporting Includes: ** DSC analysis involves measuring heat flow associated with various phase transitions to understand the thermal behaviour of the material. This includes determining melting point, crystallization temperature, and glass transition (T_g), along with evaluating thermal stability, enthalpy changes, and specific heat (C_p). Heating and cooling curves are analysed to characterise material responses under different thermal conditions. All key DSC observations and interpretations are compiled into a concise report.</p>		
13	Fourier Transform Infrared Spectroscopy (FTIR)	₹1999	**
	<p>Analysis & Reporting Includes: ** FTIR analysis involves acquiring infrared spectra to identify functional groups, followed by detailed peak assignment and interpretation of characteristic vibrational modes. The study provides insight into chemical bonding, molecular structure, and the presence of possible impurities, with comparisons made against reference spectra for accurate phase or material confirmation. All key FTIR observations and interpretations are summarized in a concise report.</p>		
14	X-ray Photoelectron Spectroscopy (XPS)	₹3999	**
	<p>Analysis & Reporting Includes: ** XPS analysis provides detailed surface elemental identification and quantitative composition, supported by high-resolution scans to examine oxidation states and chemical bonding. The technique enables determination of surface functional groups and electronic structure, along with precise peak deconvolution, curve fitting, and interpretation of binding energies. All significant chemical-state findings are compiled into a concise report summarizing the key observations.</p>		

Instructions

1. The prices listed are **indicative** and provided **for reference only**.
2. **Final charges** will be communicated after further **email or phone discussion**, based on a clear understanding of the **actual testing and consultancy requirements**.
3. Prices are **subject to change** depending on **sample nature, testing complexity, and scope of work**.
4. **Testing duration and slot allocation** depend on **facility and instrument availability**.
5. The testing timeline may vary from **1 to 3 weeks after receipt of payment**.
6. All the above prices are exclusive of GST. **An additional 18% GST will be applicable** and added to the final invoice as per Government of India regulations.

For **ESSNANO MATERIALS LAB Pvt. Ltd.**



Director