



**X-Ray Diffraction (XRD)**X-ray diffraction is the industry standard for crystallographic analysis including crystal structure, chemical composition, crystal strain, and phase purity of materials.

\*Inquire for pricing

**Scanning Electron Microscope (SEM)**Scanning Electron Microscopy is an extremely versatile imaging tool used mainly to analyze samples at high magnification and can resolve features down to ~3 nm. Our SEM, equipped with a variable pressure detector (VP-SEM) can analyze non-conductive samples to resolutions of 4 nm. SEM is used primarily for failure analysis, powder size distribution, morphology, and composition.

\*Inquire for pricing

**Energy Dispersive Spectroscopy (EDS)**Energy Dispersive Spectroscopy, typically coupled with Scanning Electron Microscopy (SEM), is used for spatially resolved bulk elemental and compositional analysis.

\*Inquire for pricing

**Electron Backscattered Diffraction (EBSD)**Electron Backscattered Diffraction coupled with SEM, is an imaging technique used to investigate crystallographic properties of materials such as grain size, grain shape, texturing, phase analysis, and spatial distribution of phases.

\*Inquire for pricing

**Glow Discharge Mass Spectroscopy (GDMS)**Glow Discharge Mass Spectroscopy is a robust, standalone technique used to determine trace elemental analysis down to the parts per billion (ppb). Can be used to measure 72 elements, excluding gases (C, H, O, N, S)

\*Inquire for pricing

**Inductively Coupled Plasma Mass Spectroscopy (ICP-MS)** Inductively Coupled Plasma -Mass Spectrometry is the industry standard for trace elemental analysis with extremely high sensitivity for a wide range of elements. Capable of sub-parts per billion (sub-ppb) detection limits.

\*Inquire for pricing

**Instrumental Gas Analysis (IGA)**Instrumental Gas Analysis is used for trace to bulk gas (C, H, O, N, S) analysis capable of detection limits from parts per million (ppm) to percentage levels.

\*Inquire for pricing

**Laser Diffraction Particle Size Distribution Analysis (PSD)**Laser Diffraction Particle Size Distribution Analysis is an extremely fast technique used to determine powder size distributions and powder properties including agglomeration, aggregation, dispersion, etc.

\*Inquire for pricing

**X-ray Photoelectron Spectroscopy (XPS)**X-ray Photoelectron Spectroscopy is a fast technique for elemental surface characterization including compositional analysis, layer thicknesses, failure analysis, and depth profiling down to percentage levels.

\*Inquire for pricing

**X-ray Fluorescence Spectroscopy (XRF)**X-ray Fluorescence Spectroscopy is an extremely fast, nondestructive surface compositional and elemental analysis technique. Capable of ppm to percentage level resolutions, XRF is used for compositional depth profiling, film thickness measurements, alloy composition validation, and trace element analysis for contamination.

\*Inquire for pricing

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