



**Laser Diffraction**

Spray particle and droplet size distributions  
Dry powder Inhaler  
DPI particle size distribution

**Powder rheology**  
Flow properties and compressibility  
Manufacturability of powders

**Helium picnometry**  
True density of powders, API and excipients

**Gas physisorption**  
BET surface area, porosity  
adsorption capacity

**XRF**  
Elemental analysis of pharmaceutical  
products, impurities, packaging

**Scannign Electron Microscopy**  
Size, shape, surface morphology  
Microstructure and elemental analysis  
of API, excipients and impurities

**Dynamic image analysis**  
Particle size and shape of powders or pellets

**MDRS - Static automated image analysis**  
Size, shape and chemical identification of particles (API)  
inside a mixture of powders or in liquid dispersion  
Polymorphs identification, troubleshooting

**Laser Diffraction**  
Particle size of powders, emulsions and liquid dispersions

**Size Exclusion Chromatography**  
Molecular weight distribution and structural integrity  
of polysaccharides, biopharmaceuticals,  
polymers and other macromolecules



**XRD**  
Crystalline phase identification  
(polymorphs, hydrates, solvates, etc.)

**DSC/TGA**  
Thermal stability and purity  
Thermal decomposition and degradation  
Moisture content

**Optical tensiometry**  
Hydrophobicity of powders and tablets  
Surface and interfacial tension - contact angle

**High pressure omogenization**  
Production of stable nanoemulsions, nanoencapsulation  
Particle size reduction in suspensions  
Cell lysis

**Light Scattering - DLS/SLS**  
Liposomes, LNPs, colloids, nanoparticles  
size distribution and zeta potential

**Rotational rheology**  
Viscosity, flow behaviour, thixotropy and  
other viscoelastic properties

**Static Multiple Light Scattering**  
Formulation stability  
Fast and no-dilution shelf-life

