

Malvern's Life Science “Toolbox”

Zetasizer range



- Size and charge analysis
- Aggregation state
- MW & polydispersity
- Optional Raman for structural information
(Zetasizer Helix)
- 0.6nm – 10 μ m

NanoSight range



- Particle size
- Particle count
- “Visualization”, NTA
- ~30nm – 2000nm

SEC range



- Chromatography systems
- SEC-MALS, RALS, LALS
- Size, MW, structure, intrinsic viscosity

Mastersizer range

- Suspensions, emulsions, dry powders
- 0.01 – 3500 μ m
- Size and distribution



Viscosizer TD



- Micro-capillary viscometry
- Viscosity/size in low volumes
- Capable of handling high concentrations
- 0.9cP – 120cP

Morphologi G3 / G3-ID



- Automated microscopy
- Particle size and shape
- Optional Raman for identification
- 1 μ m – 1000 μ m

MicroCal DSC & ITC



- Differential Scanning Calorimetry &
- Isothermal Titration Calorimetry
- Conformational changes, binding, affinity
- Measures heats of reactions

Archimedes Resonant Mass Measurement



- Single particle mass
- Number of particles
- Distinguish between protein aggregates and silicone oil
- 50nm – 5 μ m