

Malvern Instruments - Discovery MicroCal Systems ITC – Isothermal Titration Calorimetry

VP-ITC



ITC 200



PEAQ ITC



Auto PEAQ ITC



Entry

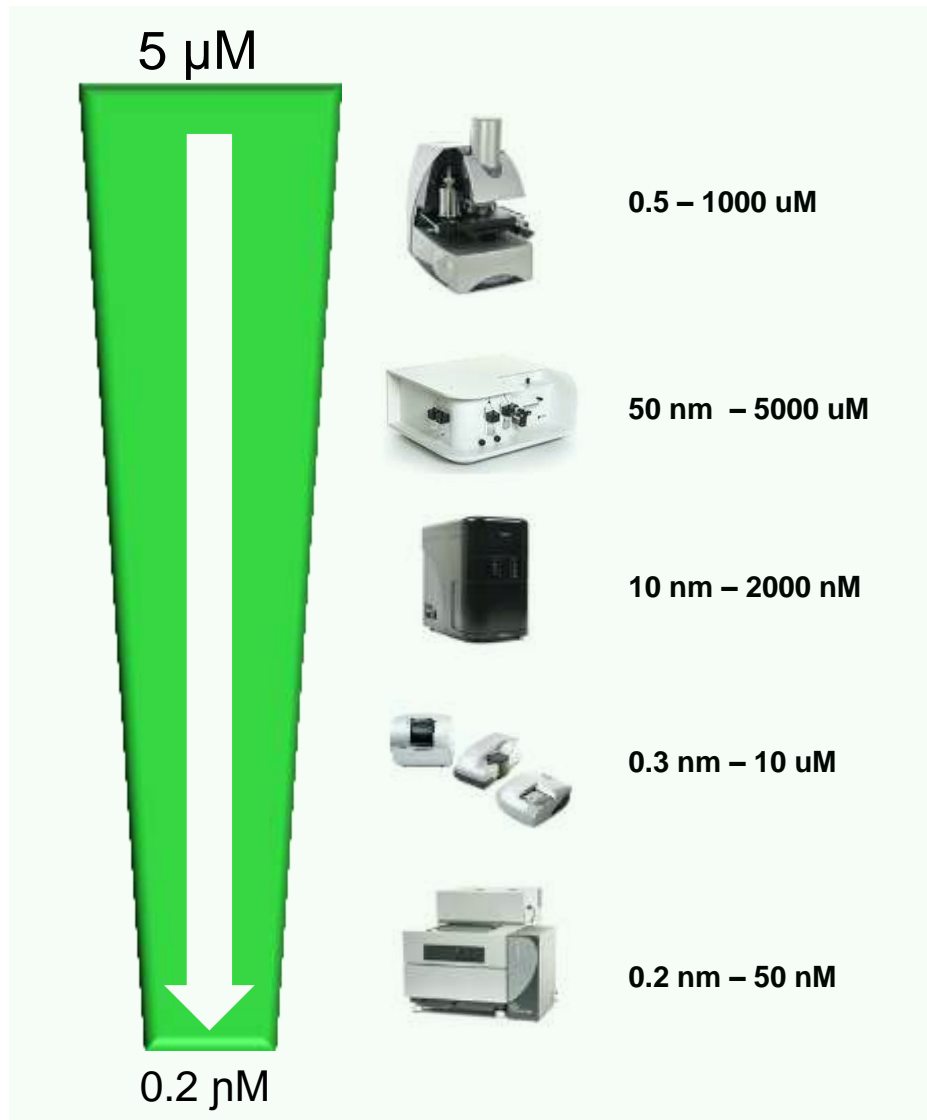


Advanced
Future Proofed



High Through-put

Malvern Instruments – Aggregation studies



Automated microscopy

RMM - Resonant Mass
Measurement

NTA – Nano particle Tracking
Analysis

DLS
SLS
SEC – SEC MALS

Taylor dispersion



DLS/SLS/ELS
 T_{Agg}
 Colloidal stability

Particle number
 Silicon oil



Stability
 T_m , $T_{1/2}$
 ΔH , ΔC_p

Pre-
 Formulation
 and
 Formulation



NTA
 Single particle
 Exosomes
 Viruses



Water viscosities
 Colloidal stability KD
 Sizing <50 nm



SEC
 Monomer/dimer

Viscosity and Stress Testing

> Thermal Stress



Changes in side chain exposure
Disulphide bonds analysis
Tertiary structural changes
 T_{Agg} , KD



KD, T_{Agg}



T_M , $T_{M\ onset}$, $T_{1/2}$, ΔC_p , ΔH

> Shear Stress



Shear analysis
Water interface issues

> Low viscosity screening



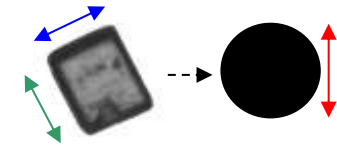
Intrinsic viscosity
Small changes in viscosity
Buffer viscosity measurements for size analysis

Particles identification - Morphologi G3-ID

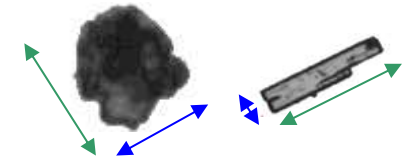
Particulate characterization system with automated imaging and Raman spectroscopy



Particle Size



Particle Shape



Chemical Identity

