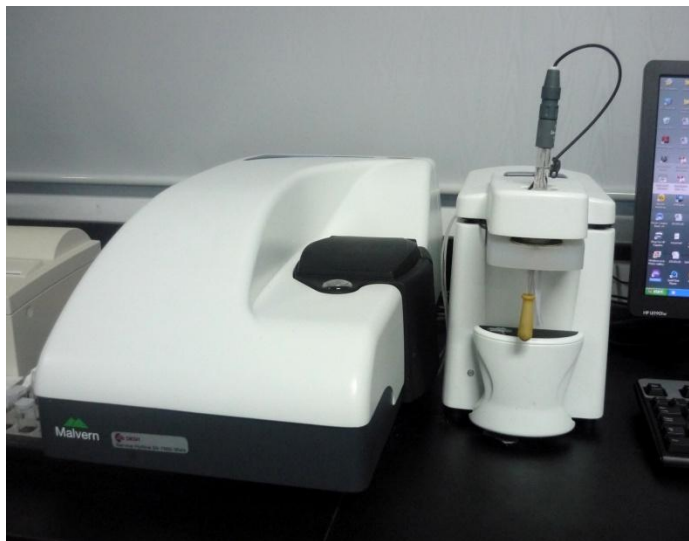


Zetasizer (Particle Size Analyzer)



The Zetasizer Nano range of instruments provides the ability to measure three characteristic of particles or molecules in a liquid medium. These three fundamental parameters are Particle size, Zeta potential and Molecular weight. By using the technique technology within the Zetasizer system there parameters can be measured over a wide range of concentrations. The Zetasizer system also has the ability to perform Autotitration measurements and Trend measurements, including the determination of the Protein melting point.

LABORATORY FACILITY

Malvern ZEN 3600 Zetasizer with Autotitrator

Features:

- **Particle size** – NIBS technology enables measurements of particles and molecules from 0.6nm to 8.9 microns.
- **Zeta potential** – M3-PALS technology enables accurate measurements of zeta potential in aqueous and non-aqueous dispersions.
- **Molecular weight** – Using static light scattering (SLS) and the classical Debye plot, the molecular weight of random coiled polymers up to 5×10^5 Da as well as globular polymers and proteins up to 2×10^7 Da can be determined without the necessity for multi-angle measurements.
- **Autotitrator** – Provide fully automated titration and sample preparation.

APPLICATIONS

- **Colloids** – Measure the size and zeta-potential to optimize stability and shelf life and speed up formulation development. Automate pH titrations and measurements using the autotitrator.
- **Nanoparticles** – Measure size, polydispersity and zeta-potential to optimize production processes.
- **Proteins** – Determine the presence of aggregates, screen for optimum crystallisation conditions as well as study for oligomer formation.