



Malvern Instrument – Light Scattering School @ Colorado State

This course will be a full day training course discussing the operation of the Malvern Zetasizer Nano system. The course will cover all aspects of light scattering including size by DLS, zeta potential and protein mobility by ELS, molecular weight by SLS, microrheology and additional parameters that can be determined using these light scattering techniques. This course will be focused on data acquisition, interpretation and method development and general system maintenance including verification of a system. This course will be most useful to new and advanced users or those who own or regularly use a Zetasizer system, and a basic knowledge of light scattering will be assumed.

Topics covered:

- Introduction to Size using DLS
- Introduction to Zeta Potential using ELS
- DLS and ELS sample preparation
- Introduction to Zetasizer Nano software, sample setup and measurement



Agenda

- › **Session 1** (9.00 – 10.30am)
 - **Introduction to Size using DLS**
 - Technology, Basic Principles and Data Output
 - **Advanced DLS Measurements**
 - MW Estimates, Shape,
- › **Session 2** (11.00 – 12.30pm)
 - **Introduction to Malvern Instruments**
 - **Introduction to Zeta Potential using ELS**
 - Technology, Basic Principles and Data Output
 - **Advanced ELS Measurements**
 - A2, Protein Charge
- › **Session 3** (1.30 – 3.00pm)
 - **Sample Preparation, data analysis, and trouble shooting**
 - **Advanced Techniques for the Zetasizer Nano**
 - Flow Mode, MW by SLS, Microrheology
- › **Session 4** (3.30 – 5.00pm)
 - **Practical Session**
 - **Verifying the performance of your system**
 - **Advanced Software Features**