The light scattering toolkit for characterization of proteins and other bio-macromolecules

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L. Rouzic[I]

[I]Wyatt Technology, Toulouse, France

Biophysical characterization and protein quality assessments are central capabilities in any laboratory that seeks qualified, reproducible results in biomolecular or biochemical research. This seminar describes a comprehensive suite of tools based on static and dynamic light scattering that provides biophysical characterization and quality screening from first-principles.
Common uses of the light scattering toolkit include determination of molecular weight and size, native oligomeric or aggregation state, protein-protein binding parameters, and the composition of glycoproteins or other conjugated macromolecules, net charges. Beyond molecules, light scattering tools characterize vesicles, virus-like particles and other macromolecular assemblies for size, conformation and structure. All measurements are performed entirely in solution and without any form of labeling, offering valuable alternatives to less general methods.
Separation by Fied Flow Fractionation will be also presented.