Dynamic Light Scattering

Subjects: Physics, Atomic, Molecular & Chemical

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Dynamic Light Scattering is an optical technique that derives particle size from the time-dependent fluctuations of light scattered by Brownian particles [1]. Multiangle static and dynamic measurements in the intermediate angle range sharpen what the correlation function can resolve [1]. Tandem use of dynamic light scattering with optical microscopy offers an attractive alternative for sizing oleosomes [2]. In chiral liquid crystals, the method reveals the structural properties of ferrielectric phases through their fluctuation spectra [3]. Electrorotational light scattering extends the measurement to inherent particle properties beyond size [4]. The static and dynamic properties of multiple scattering define the regime where light changes direction many times before detection [5].

photon correlation spectroscopy | particle size | static light scattering | brownian motion | liquid crystal | oleosome

References

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