Analytical Chemistry Seminar

Tuesday, November 7, 2023 3:30 p.m. ~ WTHR 320

"Multispectral/Nanoparticle Tracking Analysis - Technique and Applications"



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Abstract:

Nanoparticle tracking analysis (NTA) is a powerful tool for the analysis of submicron particles in solution. Utilizing this technique, myriad solutions containing mono or polydisperse particles can be analyzed for concentration, particle morphology and size. As a complementary analytical tool to Dynamic Light Scattering (DLS), Transmission Electron Microscopy (TEM) or flow cytometry, NTA necessarily fills a gap in the continuum of particle size analysis. Further, this tool offers a functional and practical solution for the high throughput, low-cost needs of the modern laboratory and can be used without laborious sample preparation and for many sample types. As will be discussed, NTA finds application in the study of diverse fields including nanomaterials chemistry, biologics, and medicine and shows promise for the emerging field of targeted nanodrug delivery systems.