

Determination of Particle Size for Colloidal Dispersions

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Practical:

Abstract

Colloids are dispersions of small particles of one material in another, where small means less than about 500 nm in diameter. Colloidal systems are very widely used in industry, for example in paints, aerosols and other emulsions. The physical properties of a given colloidal dispersion are dependent upon the average size of the colloidal particles and their polydispersity.

This experiment is aimed at students in a third year physical chemistry laboratory course. Some knowledge of colloids is helpful but not essential.

Duration

Prior to Lab 30 minutes

In Laboratory 2 hours for the experiment; 2 hours data analysis

After Laboratory 5-8 hours report writing

Further comments

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