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Particle Size Analysis by Sedimentation Field Flow Fractionation.

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The analysis of particles in the submicron range by sedimentation field flow fractionation (SFFF) is not new but its commercial exploitation is recent. This inevitably will lead to a rigorous evaluation of the technique by many laboratories and for many applications as well as to rapid development. This paper describes first an evaluation of the new commercial instrument using both ideal and real materials. These experiments lead to a discussion on the software package, the detection system and the influence of composition of the eluent. A particular study is described of the combination of the SFFF technique with that of quasi-elastic light scatter (QUELS). This paper concludes that with suitable calibration, there is now available the technology for realistically measuring particle size distributions in the range of 10 nm - 1 μ m.