Current Topics in Biophysics (Zagadnienia Biofizyki Współczesnej) vol. 37, 2014, 49-53

Nanoparticle tracking analysis of latex standardized beads

Tomasz Śliwa, Maciej Jarzębski, Kosma Szutkowski

The most popular technique for particle size characterization is the dynamic light scattering (DLS). In recent years new advanced method based on counting each single particle movement was introduced giving perspective for measurement of each component of mixture. This study presents some advantages of nanoparticle tracking analysis (NTA) method in comparison to DLS. For tests standard polystyrene beds were chosen vary diameter of 22, 61 and 150 nm and its mixtures. Experiments showed that the particles size resolution allows to distinguish each population in two population suspension opposed to DLS. The NTA method permits to eliminate the negative effects i.e. dust or aggregates in sample during post processing, that permits to use it in a variety of studies.