Zeta Potential Measurement

Measurement Services – Zetasizer Nano ZSP - Malvern

Overview

Surface charge (Zeta-Potential) of particles

Zeta potential is a measure of the magnitude of the electrostatic or charge repulsion/attraction between particles and is one of the fundamental parameters known to affect colloidal stability. Its measurement brings detailed insight into the causes of dispersion, aggregation or flocculation, and can be applied to improve the formulation of dispersions, emulsions and suspensions.

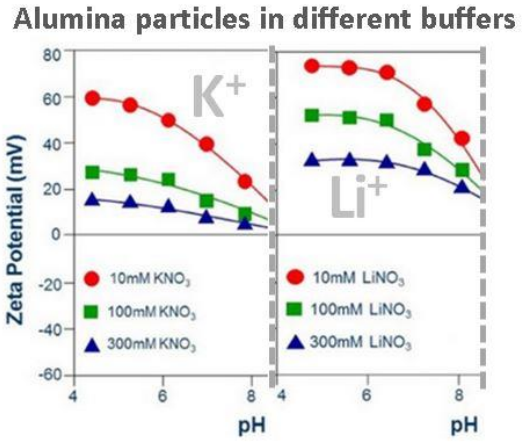
The Malvern Nanosizer ZSP instrument can measure Zeta Potential as well as Dynamic Light Scattering of high accuracy, using especially high light intensity. It enables investigation over a wide concentration range and offers precise temperature control necessary for reproducible, repeatable determination of the Zeta-potential for small amounts of colloidal particles.

Although we measure usually the Zeta-potential under standard conditions of ion strength and pH (10 mM Tris buffer pH 7) other parameters can be taken and also the pH dependence of the particle surface charge can be performed.

Sample Requirements:

- Aqueous suspension or dried particles
- Slow particle sedimentation (size below 10 µm)
- 0.1 % Solution, minimum amount 1 mg

Image of Instrument Source: Malvern Panalytical Ltd.



Zeta-Potential in dependence on pH and ion strength Source: https://www.materials-talks.com/zeta-potential-in-salt-solution-or-any-other-ions/

Sample Measurements:

- Particle sizes between 5 nm – 10 µm
- Determination of Zeta-Potential
- pH Titration of Zetapotential
- Determination of Isoelectric Points

Prices

1 sample:	100 €
2 samples:	150 €
4 samples:	300 €
10 samples:	750 €

Visit surflay.com for more information on all product services

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