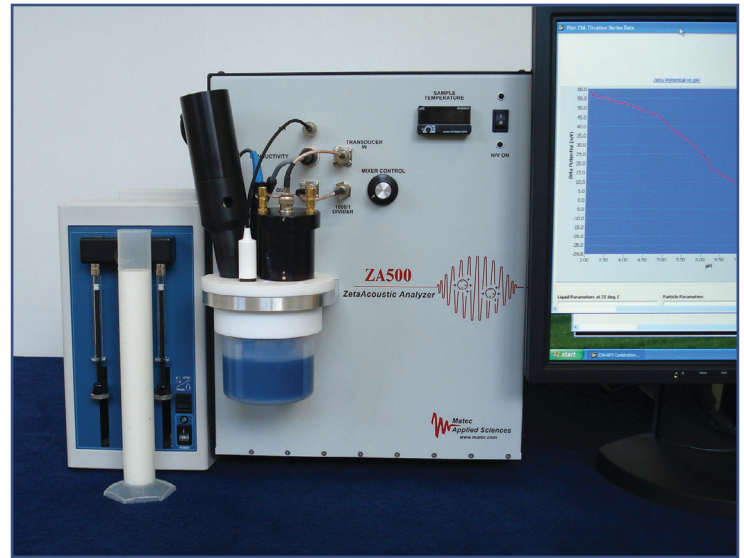


ZetaAcoustic: High-Resolution Zeta Potential

**Zeta Potential
Without Dilution!**



Without Dilution: Quickly, Easily, and with little or No Sample Preparation!

Rugged and Versatile. ZetaAcoustic Analyzes: Aqueous...Non-Aqueous...Opaque...Viscous...NanoParticles...

Automatic Titration for easiest IEP measurement

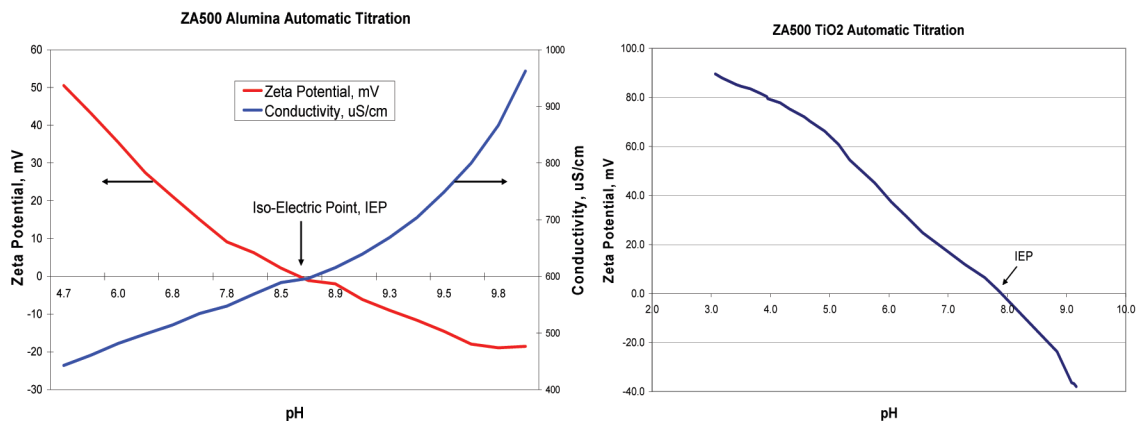
Onboard sample mixing and pumping for sample homogeneity....without particle settling...

Ideal for Lab and Plant use...R&D, QC and On-Line

The **ZA500**, ZetaAcoustic, Zeta potential analyzer combines Electro-acoustic with Acoustic measurements into the most powerful, highest-resolution, undiluted Zeta potential analysis. Matec Applied Sciences (MAS) invented the Electrokinetic Sonic Amplitude (ESA) technique for high percent solids Zeta measurements. Using our unmatched expertise in Zeta potential and Particle Size analysis instrumentation, MAS has designed the most powerful Zeta potential instrument yet. Here are some of the many benefits the ZA500 offers:

- ❖ Zeta measurements without sample dilution or sample preparation, thus eliminating operator errors, and data uncertainty while saving time.
- ❖ High-resolution/accuracy Zeta measurements by combining Electrokinetic and Acoustic measurements into a single measurement.
- ❖ Automatic Particle Size Correction (via acoustic measurement) required for most-accurate Zeta measurement (1 nanometer to 30 microns).
- ❖ Automatic/Unattended Potentiometric and Volumetric Titrations for easiest and fastest Iso-Electric Point (IEP) determination, Surfactant Adsorption Effects, and many other dynamic measurements.
- ❖ No particle-settling adverse effects thanks to its onboard sample mixing and/or pumping capability during measurement.
- ❖ Zeta dip sensor allows measurements in sample cell or standalone containers.
- ❖ Rugged, suitable for most samples including nanoparticles, aqueous, non-aqueous, highly viscous, low-to-high percent solids (0.1 to 60% vol), and 0-14 pH among others.
- ❖ Simultaneous pH, Conductivity, and Temperature measurements.
- ❖ Free lifetime consulting with any of our Matec colloid experts...whether related to the *ZetaAcoustic*...or any other colloid-science topic.

The figures below show examples of automatic, unattended potentiometric titrations of an alumina (left), and a titania sample. Their IEP locations are readily determined by the *ZetaAcoustic* instrument.



Here is how to contact Matec Applied Sciences. We look forward to assisting you.

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