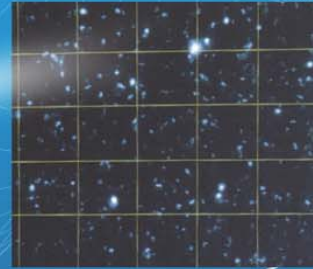


ZetaPhoremeter®

Zeta potential meter
for nanoparticles



Laser illumination
& video interface

High resolution
spectrum of mobility
& zeta potential

Ideal for water
treatment applications

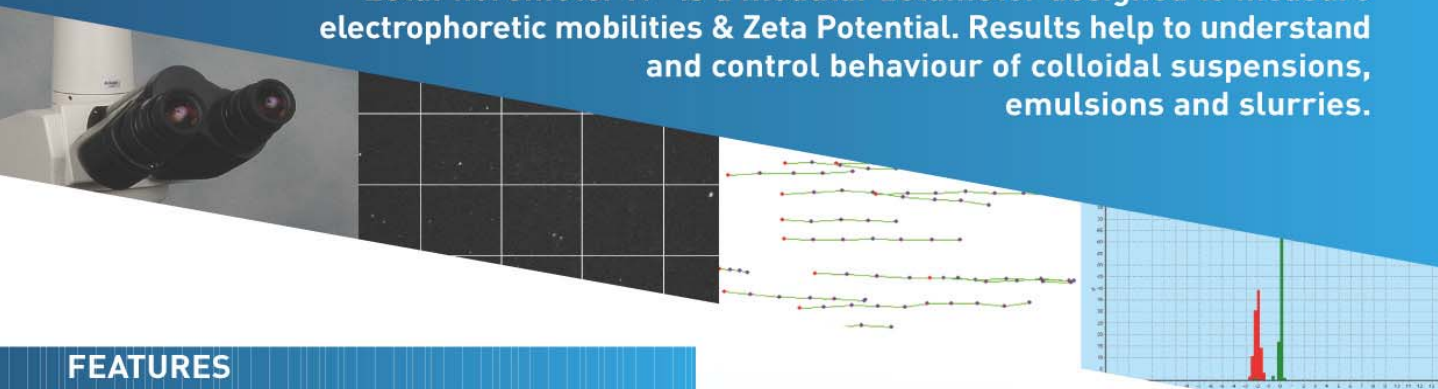
Automatic zeta potential measurement by video analysis



Zeta potential solutions

ZetaPhoremeter IV® SPECIFICATIONS

ZetaPhoremeter IV® is a modular zetameter designed to measure electrophoretic mobilities & Zeta Potential. Results help to understand and control behaviour of colloidal suspensions, emulsions and slurries.



FEATURES

- 1/ Charged particles in a liquid suspension can be made to move by applying an electric field to the liquid through two electrodes.
- 2/ ZetaPhoremeter combines laser light scattering and microscope to observe the movements of particles.
- 3/ Microscopic observation shows the enormous advantage of seeing the particles and visualizing any perturbation within the electrophoretic chamber e.g convection, sedimentation, contamination...
- 4/ Sample temperature & electrical conductivity are permanently measured in-situ by fast response micro-probe.
- 5/ Software is easy to use (image analysis, mobility spectrum, zeta potential calculation with different equations).
- 6/ Lot of options available - Compatible with several existing microscopes - Specific models.

PARAMETERS MEASURED

Electrophoretic mobility
Zeta potential
pH
Electrical conductivity
Temperature
Cell position



The CELL contains 4 electrodes fitted into perfectly symmetrical chambers - Easy to use & to clean

TECHNICAL DATA*

Electronics Units

- Electric field generator 250V – 10mA
- Conductivity meter 10 μ S/cm – 100mS/cm
- Communications Via RS232C serial port
- Positioning sensor resolution 1 μ m
- Power supply 100V to 250V – 50 to 60Hz – 50 VA
- Dimensions W 450mm x D 300mm x H 150mm
- Weight 6kg

Measuring Cell

- Particle size measured 30nm-10 μ m
- Cell Quartz interchangeable capillaries
- Rectangular section 5x2x70mm
- Main electrodes Palladium
- Secondary electrodes To measure electric field
- Temperature sensor precision 0.1°C
- Sample volume 6mL

Microscope

- Compatible with several existing microscopes.
Contact your local agent for supply of specific cell support.
NIKON ECLIPSE 50i™ is supplied as standard.
- Optional dark field, phase contrast, fluorescence, polarisation.



Zeta potential solutions