

Analytical instruments for the entire life cycle of materials...



Comprehensive analytical characterization of:

Emulsifiable Concentrates
Oil Dispersions I Suspension
Concentrates &
Water dispersible Granule

Animal Husbandry I Chemicals
Fertilizers I Fungicides
Insecticides I Liming &
Acidifying Agents I Pesticides I Soil
Conditioners & more...

Multi-wavelength Dispersion Analyser

- Get direct & accelerated stability measurements in original concentration
- Particle size distribution (PSD) with high resolution
- Run up to 12 samples at a time
- See and understand your complete sample from top to bottom
- Measure samples under a broad temperature range (4 °C to 60 °C)
- Measure particle size distribution even at higher concentrations
- Analyse concentrated samples (up to 90%)
- Acquire particle densities
- Comparative and predictive shelf life analysis

Norms: ISO 13318, ISO/TR 13097, ISO/TR 18811, ISO 18747, ASTM STP1527 (Oil Dispersion)

Multi-wavelength Separation Analyser

- · Measure real-time stability directly
- Speed up separation analysis time (up to 10-fold)
- Volume and number-based PSD (ISO 13317)
- Obtain volume PSD w/o having to know refractive indices
- Multi-wavelength approach
- Velocity distribution even for fast-settling particles
- Temperature stabilization from 4 °C up to 80 °C
- Handle any dispersing media: water, oils, organic solvents

Norms: ISO/TR 18811, ISO 13317, ASTM D7827, ISO 18747, ISO/TR 13097

X-Ray Separation Analyser

- In-situ analysis of transparent up to very opaque particulate systems
- No dilution of emulsions or suspensions
- Nanoparticle detection
- See/understand complex dispersion behaviour
- Study the various instability mechanisms
- High resolution phase separation
- Detect concentration gradients within phases and sediment
- Determine packing densities in the sediment
- Endless monitoring of sample behavior for long-time storage information
- Real time, non-invasive and non destructive

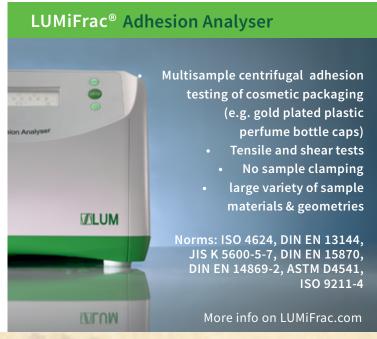
Norms: ISO/TR 13097, ISO/TR 18811, ISO 18747











Recent Applications include:

Oxiteno Crop Solutions: https://bit.ly/3YtKpuj

Da síntese ao campo: http://bit.ly/3X71Lff

Additives for Pesticide Formulations: http://bit.ly/40vhZC1

Aditivos para Formulações Agroquímicas: http://bit.ly/3RGu0jN

Aditivos para Formulaciones con Plaguicidas: http://bit.ly/3x5nj00

Interaction and stability in spray mixtures of fungicide and adjuvants with insecticides: https://bit.ly/3wR4rD1

Stability Analysis of Fertilizer dispersions: https://bit.ly/3wPWVbE

Encapsulation of anti-viral active material for plant protection based on inverse Pickering emulsions: https://bit.ly/3YhoE1f

Accelerated Sedimentation for the Prediction of long-term Storage Stability, Anwenderseminar 2D/3D Rheologie und Stabilität von dispersen Systemen, 2010

Ultra-Sensitive Quantification of Pesticide Contamination and Drift using Silica Particles with Encapsulated DNA: https://bit.ly/3wSnI7f

Assessment of Oil Dispersion Pesticide Formulations Using Rheology and Near Infrared Centrifugation Techniques (STP1527): http://bit.ly/3HI5nid

The NEXT STEP in Dispersion Analysis & Materials Testing

LUM social



bit.ly/3GM5p8i



bit.ly/3ylkwx9

LUM community

Visit our platform 'Dispersion Letters' dedicated to professionals working in various fields of R&D, QC:



bit.ly/3HglILZ

LUM knowledge For further information, search the LUM Literature Database:



bit.ly/3J1mUUS

Demo & samples

Contact us for sample testing, instrument demonstrations or application support:

T +49 30 6780 60 30

■ M <u>support@lum-gmbh.de</u>

LUM GmbH, Berlin, Germany info@lum-gmbh.de LUM-GmbH.com dispersion-letters.com