



The NEXT STEP<sup>®</sup> in Dispersion Analysis



Multi-Wavelength Separation Analyser

# LUMiReader<sup>®</sup> PSA

## Real-Time Dispersion Stability & Particle Size Distribution

Particle sizing according to ISO 13317

# Benefits

- ▶ High-end analyser for quality control, process monitoring and R & D
- ▶ Direct, fast and objective characterization of any separation phenomena
- ▶ Analysis under original conditions
- ▶ Accelerated phase separation by patented inclination mode at gravity
- ▶ No moving parts
- ▶ Endless monitoring of sample behaviour for long-time storage information
- ▶ For concentrated and diluted suspensions and emulsions
- ▶ different cell types and customizing options to fit your application
- ▶ Easy operation, comprehensive information

# Specifications

- Multiple light sources with different wavelengths
- Advanced optics, variable light intensity
- Temperature control from room temperature + 4K to 60° C, ±1 K
- Measuring time 1 sec - months
- Append measurement option for long-time monitoring
- Sample volume 0.5 ml - 4 ml (depending on cell type)
- Sample concentration 0.00015 Vol% - 75 Vol%
- Particle size: 500 nm - hundreds of µm
- PC controlled operation, USB interface
- Conformity: ISO/TR 13097; ISO 13317; CFR 21 Part 11

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[www.LUMiReader.com](http://www.LUMiReader.com)

[www.dispersion-letters.com](http://www.dispersion-letters.com)

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## Velocity Distribution $Q_v(v)$ , $q_v(v)$

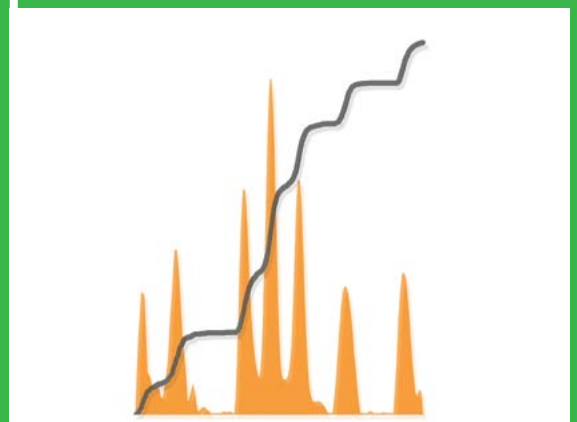
- Direct measurement no calibration / no material properties
- Always available - fast information for quality control
- Qualitative information about particle size and polydispersity

## Intensity Weighted Particle Size Distribution $Q_{Int}(x)$ , $q_{Int}(x)$

- Quantitative information about particle size distribution

## Volume Weighted Particle Size Distribution $Q_3(x)$ , $q_3(x)$

- Quantitative information about particle size and volume fraction of each class
- Conversion into mass or number distribution



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