

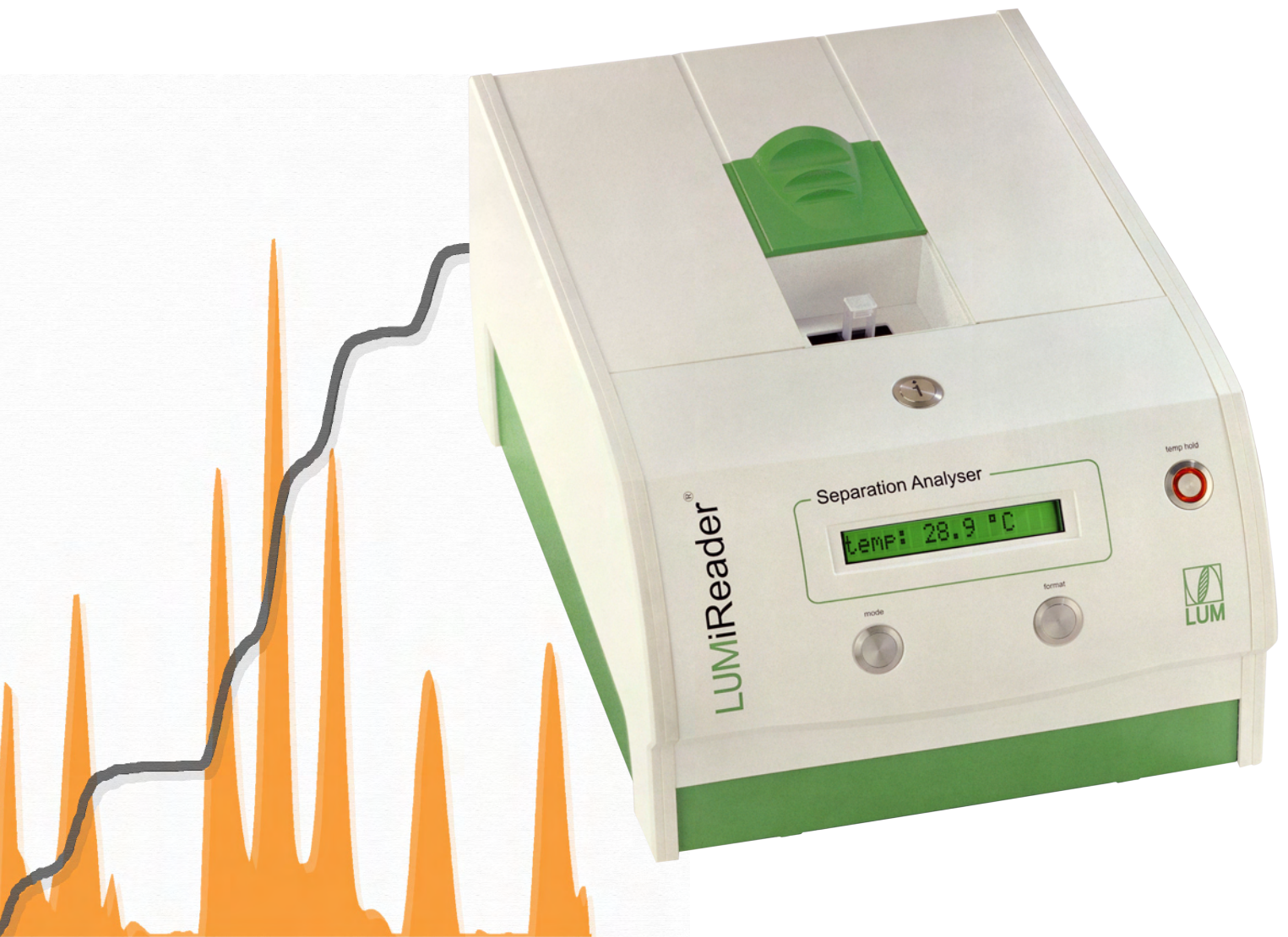
**NEW FEATURE:**  
Particle sizing  
according to  
**ISO 13317**



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

# Multi-Wavelength Separation Analyser **LUMiReader<sup>®</sup> PSA**

## Real-Time Dispersion Stability & Particle Size Distribution



# 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



## Velocity Distribution $Qv(v)$ , $qv(v)$

- + 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 $QInt(x)$ , $qInt(x)$

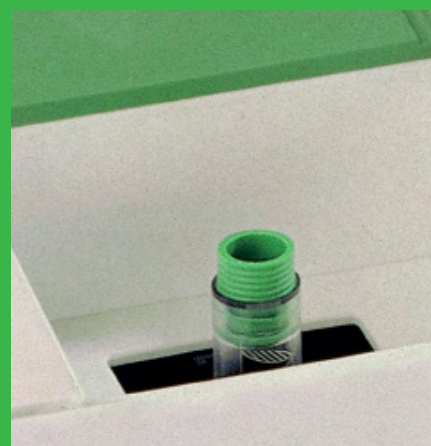
- + Quantitative information about particle size distribution

## Volume Weighted Particle Size Distribution $Q3(x)$ , $q3(x)$

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

# Specifications

- ▶ Multiple light sources with different wavelengths
- ▶ Advanced optics, variable light intensity
- ▶ Temperature control from room temperature + 4K to 60° C,  $\pm 1$  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  $\mu\text{m}$
- ▶ PC controlled operation, USB 2.0 interface
- ▶ Conformity: ISO 13317; CFR 21 Part 11



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