

Press release



Spin at very high speeds to analyze particles and dispersions directly and efficiently

The World Congress on Particle Technology (WCPT 10) celebrates 100 years of analytical (ultra)centrifugation.

Berlin, 8 May 2026:

From May 11 to 15, the 10th World Congress on Particle Technology will take place in Osaka, Japan. LUM GmbH—globally recognized for its scientific and metrological expertise, and specializing in particle characterization, the stability assessment of suspensions and emulsions, and the determination of adhesion strengths—is pleased to actively support this event as a sponsor.

LUM GmbH's core business includes analytical centrifuges for particle and dispersion characterization. As early as 1994, an analytical centrifuge was integral to the founding concept of the company. Since 1998, these analytical instruments from Berlin have been continuously developed and sold worldwide as commercial products under the brand names LUMiFuge and LUMiSizer. In 2011, the analytical centrifuge LUMiFrac expanded the scope of application to include the materials testing of coatings and composite materials.

In a special session organized by Prof. Dr. Dr. Lerche—founder and Managing Director of LUM GmbH—the community is now celebrating 100 years of analytical (ultra)centrifugation. The session opens with his presentation, “From the development of the Svedberg Analytical Ultracentrifuge to current numerous applications of AC and AUC sedimentation analysis.”

Among the exciting topics featured in this session are: “Characterization of nanoparticles – Global analysis of sedimentation data from multiwavelength analytical ultracentrifugation and analytical centrifugation” (Spruck et al.), “Surface Modification of Silica Particles and Its Influence on Particle-Liquid Interactions” (Takai-Yamashita), “A Method for Determining the Hamaker Constant of Particulate Materials Using Sedimentation Technique” (Takeda et al.), and “Analytical-centrifugation-informed dispersion formulation and thin film fabrication of gas-phase synthesized graphene” (Segets)—all of which demonstrate the power and versatility of the LUMiSizer analytical centrifuge in addressing current and future challenges.

Through the additional scientific contributions “Single Particle Light Scattering Analysis: A Simple, High-Resolution Approach to Nano- and Microparticle Counting and Sizing” and “Reliably Counting the Unseen: Establishing a First-of-its-Kind Nanoscale Number Concentration Standard” (Hood et al.), LUM shares its own findings in the field of single-particle characterization with the research community. The contribution by Lerche, “In-Line Characterizing Concentrated Liquid Dispersions by Means of Spectral Reflectance Measurement,” is aimed primarily at industrial users.

The significance of LUM technologies for scientific and industrial problem-solving in the fields of particle size analysis and industrial separation technology is underscored by the presentations of renowned speakers Babick and Gleiss, titled “Comparability of sedimentation-based particle size analysis: Impact of measurement technique and operational parameters” and “Enhancing Solid Bowl Centrifuge Scale-up Through Analytical Centrifugation and Numerical Modeling.”

LUM GmbH wishes all participants an exciting congress and a stimulating exchange of ideas.

Detailed information about the World Congress can be found here: <https://wcpt10.org/>

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In the attached photo:

Current flagship model and bestseller: Multi-wavelength analytical centrifuge LUMiSizer 651.