

Main Topics

Aerosols & Particles

- environmental relevance
- occupational safety
- particle synthesis

Air Quality & Gas Treatment

- filtration and sorption
- process development
- CFD simulations

Circular Economy & Water Technology

- mechanical & thermal processes
- reactive & oxidative processes
- process development

Analysis & Measurement Techniques

- trace analysis
- development of instruments
- process digitalisation



Filtration & Aerosol Research



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Fields of Application and Research Topics

General measurements of:

- Aerosol filtration
- Gas adsorption and catalysis
- Compressed air filtration
- Droplet filtration and drainage
- Odour filtration
- Elemental and organic carbon
- Toxic compounds

Standardized measurements:

- ISO 16890 (HVAC filters)*
- DIN 71460 / ISO 11155 (cabin air filters)*
- ISO 12500 / ISO 8573 (compressed air)*
- EN 1822 / ISO 29463 (EPA/HEPA/ULPA filters)
- GB/T 18801 / IEC 63086 (indoor air purifiers)*

Research Topics:

- Filtration research
- Electrostatic charging and deposition
- Drainage behavior of coalescence filters
- Adsorption research
- Catalytic reduction of NO_x and VOC
- Aerosol science and technology
- Characterization of brake dust
- Particles in extreme conditions
- Customized test methods
- and many more...

Tests according to these standards are accredited according to DIN EN ISO/IEC 17025:2018. The accreditation is only valid for the scope specified in the annex of accreditation certificate no. D-PL-19759-01-03 by the Deutsche Akkreditierungsstelle GmbH (DAkkS) from 30.11.2022 (updated certificate pending).