

# GAeF START 2024

## Revival of Schwebstofftechnische Arbeitstagung

Tuesday, 20.02.2024

9:00	Opening	<u>Asbach, Christof</u> – GAeF President <u>Weinzierl, Bernadett</u> – Local Host
9:15 – 10:15	Tandem Talk 1	<u>Maisser, Anne</u> / <u>Kruis, Einar</u> Aerosol-based Material Synthesis by Electrical Discharges: Challenges for Aerosol Technology & Instrumentation
10:15 – 10:45	Coffee Break	
10:45 – 12:30	Oral Session 1	<u>Wlasits, Peter</u> Reduction of the Composition Dependence of Counting Efficiencies in a Condensation Particle Counter by Choice of Working Fluid <u>Weber, Patrick</u> Further Findings From Working Fluids Studies for Condensation Particle Counters <u>Fierz, Martin</u> A New Device for Fast Solid-Volatile Nanoparticle Differentiation <u>Asbach, Christof</u> Performance of a Partector Pro for Atmospheric Number Size Distribution And Number Concentration Measurements at an Urban Background Site
12:30 – 14:00	Lunch Break	
14:00 – 15:00	Poster Café Session 1	<u>Tronville, Paolo</u> Aerosols From Condensed Vapors Can Contribute to Circular and Green Economy <u>Kupper, Martin</u> An Approach for the Roadside Measurement of Particulate Emissions of Category-L Vehicles by Point Sampling <u>Pail, Mario</u> Characterisation of Volatile Brake Wear Particle Nucleation and Simulation of Total Particle Measurement with a PN-System According to PMP Specifications <u>Schumacher, Stefan</u> Characterization of Particle Emissions From Ultrashort Pulsed Laser Material Processing <u>Kruis, Einar</u> Controlling an Unsteady Aerosol Reactor Applying Online, Real-Time Aerosol Measurements <u>Pongetti, Julie</u> Directly Measuring Droplet Dispersion in an Indoor Environment With a High-Sensitivity Aerosol Flame Photometer <u>Krinke, Thomas</u> Engineering Aerosols: Impact of DMA-Settings on the Yield <u>Fink, Lea</u> Applying the Aerosol Box Model Mafor to Determine the Particle Transition Inside Ship Plumes <u>Morawiec, Aleksandra</u> Comparing Analytical Techniques for Growth Rates in $\alpha$ -Pinen and Ozon Particle Formation Processes <u>Schöberl, Manuel</u> Characterization of the Airborne Aerosol Inlet and Transport System Used During the A-Life Field Experiment <u>Dollner, Maximilian</u> Aerosol-Cloud Interactions in Saharan Mineral Dust Over the Eastern Mediterranean

15:00 – 16:45	Oral Session 2	<u>Burkart, Julia</u> Exploring a Novel Measurement Method Based on Fluorescence and Holographic Images and Its Application to the Characterization of Plant Debris – A Laboratory Study <u>Schmitt, Steffen</u> Analysing the Impact of Safs on Local Air Quality at Copenhagen Airport <u>Luhmann, Niklas</u> Nanoelectromechanical Fourier-Transform Infrared (NEMS-FTIR) Spectroscopy for The Fast Chemical Characterization of Ultrafine Aerosols <u>Vogt, Ulrich</u> Determination of the Influence of Different Factors on the Emission Behavior During The Operation of Wood-Burning Stoves
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17:00 – 18:00	Uni Vie Lab Tours	
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19:00	Dinner (open end)	PhD Awards Ceremony <u>Asbach, Christof</u> – GAeF President <u>Moschos, Vaïos</u> – 2023 GAeF PhD awardee Assessing the Composition and Sources of Climate-Relevant Atmospheric Aerosol Species
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## Wednesday, 21.02.204

9:00	Opening	<u>Asbach, Christof</u> – GAeF President <u>Weinzierl, Bernadett</u> – Local Host
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9:15 – 10:15	Tandem Talk 1	<u>Mohr, Claudia / Winkler, Paul</u> Aerosol Particle Formation by Nucleation – To Grow or Not to Grow
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10:15 – 10:45	Coffee Break	
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10:45 – 12:30	Oral Session 3	<u>Jönsson, Linnéa</u> Engineering Aerosols: Nanomaterials Sparked in Lund <u>Gysel-Beer, Martin</u> Using a Multi-Sphere-T-Matrix Optical Kernel Makes It Possible to Retrieve Properties Of Pure Black Carbon Aerosol Samples From Measured Light Scattering Phase Function <u>Pratsinis, Sotiris</u> The New Mean Free Path of Air by Accounting for Inelastic Molecular Collisions <u>Pignatelli, Alessia</u> Effects of Ethanol Addition on Ethylene-Air Flame-Generated Aerosol
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12:30 – 14:00	Lunch Break	
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14:00 – 15:00	Poster Café Session 2	<u>Möhler, Ottmar</u> Development and Operation of a New Expansion-Type Simulation Chamber For Atmospheric Aerosol and Cloud Research <u>Friebel, Franz</u> Mass vs Diameter – How to Identify and Quantify Nanoparticles <u>Held, Andreas</u> Turbulent Fluxes of Cluster Ions During New Particle Formation Events <u>Zikova, Nada</u> Vertical Distribution of Aerosol Activation in Low-Level Stratiform Clouds <u>Asbach, Christof</u> Particle Emissions From Wood-Burning Stoves Into the Indoor Environment <u>Asbach, Christof</u> Characterisation of Dust Emitted by Metro Brakes <u>Li, Kangwei</u> Synthesis and Characterization of Organic Peroxides From Monoterpene-Derived Criegee Intermediates in Secondary Organic Aerosol
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14:00 – 15:00	Poster Café Session 2	<p><u>Niederberger, Erny</u> Real-Time Pollen Identification Using Holographic Imaging and Fluorescence Measurement</p> <p><u>Gratzl, Jürgen</u> Real Time Measurements of Biological Aerosol Particles in the Finnish Sub-Arctic</p> <p><u>Konrat, Ruth</u> Heterogeneous Nucleation of Water Vapor on Nanoplastic Particles</p> <p><u>Wieland, Lisa-Maria</u> Impact of Changes in Mineral Dust Size Distribution After Long-Distance Transport on Dust Optical Properties and Radiative Effects</p> <p><u>Spannagel, Dominik</u> Ice-Nucleating Particle Measurements With a High Temporal Resolution in Boreal Forests</p> <p><u>Straus (Kupc), Agnieszka</u> Investigating Particle Hygroscopicity in Mineral Dust Mixtures: Does the Type of Pollution Matter? Preliminary Results From the A-Life Aircraft Field Campaign</p>
15:00 – 16:45	Oral Session 4	<p><u>Rüther, Torben</u> CDMA: Centrifugal Differential Mobility Analyzer – Measurement of Transfer Functions, Theory and Data Inversion</p> <p><u>Pongetti, Julie</u> The Mass and Mobility Aerosol Spectrometer (M2AS) – A New Technique for Comprehensive Aerosol Characterisation</p> <p><u>Schmidt-Ott, Fabian</u> Mass and Mobility of Ions Produced by Radioactive Sources and Corona Discharges</p> <p><u>Schmidt-Ott, Andreas</u> Is Spark Mixing Triggering a Revolution in Catalysis? – Promising Results</p>
16:45	End of Meeting	