Host Organizations



KIT | Karlsruhe Institute of Technology

Karlsruhe Institute of Technology (KIT) pools its three core tasks of research, higher education, and innovation in a mission. The KIT Climate and Environment Center develops strategies and technologies to secure the natural bases of life. www.kit.edu



EFCA | The European Federation of Clean Air and Environmental Protection Associations aims at encouraging professional activity in Europe while working at the interface between science and (European) policy on environ-

mental problems. www.efca.net



GUS | Gesellschaft für Umweltsimulation

e.V. (Society for Environmental Engineering). It Gesellschaft für Unweltsimulation e.k is the organisation of people, institutions and companies who work in environmental engineering and testing. Since 1969, GUS supports the development of environmental engineering on a non profit basis.

www.gus-ev.de



CEEES | The Confederation of European **Environmental Engineering Societies**

is the umbrella organisation of national technical societies for environmental engineering and testing. CEEES promotes technical advisory boards, seminars and conferences with the support of national member societies.

www.ceees.org

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Venue

Representation of the State of Baden-Württemberg to the EU Rue Belliard 60-62 B-1040 Brussels, Belgium



Registration and Fee

Please register online via **ufp.efca.net** Participant fee: € 520,-Reduced fee for authors: € 350,-(one author per contribution) Including book of abstracts, conference proceedings, conference buffets and refreshments



European Federation of Clean Air and Environmental Protection Associations (EFCA) International Symposium

Ultrafine Particles – Air Quality and Climate

Brussels, Belgium July 5 and 6, 2022

Announcement – Call for Papers

Issued by

Karlsruhe Institute of Technology (KIT) President Professor Dr.-Ing. Holger Hanselka Kaiserstraße 12 76131 Karlsruhe, Germany www.kit.edu

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Introduction

Ultrafine particles (UFP), the nano fraction of airborne particulate matter, are considered to be causing serious health problems and environmental effects. Combustion is a major source, also by producing volatile organic pollutants which are converted in the atmosphere through photochemical reactions.

Increasing applications of man-made nanomaterials add to the problem, e.g. after incineration at the end of their lifetime. A further interest in UFP's results from their specific role in atmospheric processes such as cloud formation and precipitation and, in fact, in climate. The relation between UFP and human health and that of UFP and climate are both areas of active research and cross-links between these fields are found nowadays. The subtitle of the conference series: "air quality and climate" reflects this development.

Present policies to decrease exposure to particulate matter make use of the mass-based metrics PM10/PM2.5, which do not properly represent all risks for human health. EFCA is, therefore, in favour of the development of a fraction-by-fraction approach on particulate matter, both with respect to size and chemical composition. It already recommended European policymakers the introduction of Black Carbon Particles as additional metric in the Air Quality Directive. The organizers trust that EFCA's 8th Ultrafine Particles Symposium 2022 will again feature the most recent scientific progress in the field and so contribute to policy-relevant developments which improve the dialogue with policymakers in Europe. The Symposium has gained visibility by permanently moving to Brussels and attracts an effective mix of EU representatives and scientists. EFCA and KIT, together with GUS and CEEES are pleased to organize this event again. We cordially invite all experts to contribute actively and hope to see you again at the State representation of Baden-Württemberg in Brussels in July, 2022.

Call for Papers

Conference topics in ultrafine particles research and abatement strategies include:

Sources: Emissions, inventories, nucleation, and growth of ambient ultrafine particles

Characterization: Particle size, volume, shape, particle size distribution, chemical composition, oxidative capacity

Air quality: Measurement and methods; modelling atmospheric transformation of particles; monitoring approaches and data; equipment

Climate effects: Role of ultrafine particles in cloud formation and stimulating climate effects; regional aspects

Epidemiology: Epidemiological and human clinical studies with size differentiation of small particles

Health effects and mechanisms: In vivo and in vitro toxicity, transport in the body; relevant research techniques

Abatement strategies and policies: Policy studies on UFP; cost-effective mitigation of PM; Decision finding: Public hearings, citizen tables

Submission of Abstracts

Please send abstracts (max. 300 words) to

Karlsruhe Institute of Technology Susanne Bolz ufp@imk-aaf.kit.edu

not later than March, 21st, 2022.

The abstract should be a pdf-file. Authors will be informed about the acceptance of the paper by April, 11th, 2022.

Symposium Chairman

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