

Ultrafine Particles – Air Quality and Climate

Online Meeting 2021, May 18th | 2 p.m. – 5 p.m. Central European Time

Meeting Organization Information

Due to the pandemic situation and its impact on planning and scheduling of conferences and gatherings in 2021 the traditional Ultrafine Particles Symposium, held in Brussels every second year, will be postponed to 2022. But to maintain the scientific and societal contact and exchange on that issue a very condensed three-hours online meeting of the community will be organized free of charge. Meanwhile all around the globe there is now enough experience with digital tools for teaching and conferencing. Nevertheless, this online meeting 2021 does not replace the Symposium in presence.

Ultrafine Particles

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.

A further interest 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.

Scientific Focus of the 2021 Online Meeting

The scientific focus of the 2021 online meeting will be on traffic and energy related sources of ultrafine particles, and mechanisms of the impact of ultrafine particles on the brain and the lungs. Exposure effects of recent lockdown episodes will be assessed.

Chairman of the Meeting

Thomas Leisner, KIT

Register for Participation

Karlsruhe Institute of Technology | ufp.efca.net

Formal registration is mandatory and the number of participants is limited.



KIT | Karlsruhe Institute of Technology
www.kit.edu



EFCA | The European Federation of Clean Air and Environmental Protection Associations
www.efca.net



GUS | Gesellschaft für Umweltsimulation e.V.
www.gus-ev.de



CEEES | The Confederation of European Environmental Engineering Societies
www.ceees.org

EFCA – KIT – GUS – CEEES online-Meeting 2021

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Program

- 13.45** Opening of the ZOOM conference room
- 14.00** Welcome and Introduction | *Thomas Leisner, Chairman of UFP, KIT*
- 14.05** Greeting address | *EFCA President Andrzej Jagusiewicz*

Session 1: From emissions to impact | Session Chair: Harald Saathoff (KIT)

- 14.15** Effect of alternative fuels on UFP emission of aircraft
Prem Lobo, National Research Council, Canada
- 14.40** International Airports as Major Source of Ultrafine Particles in Urban Areas
Constantinos Sioutas, University of Southern California, USA
- 15.05** Lung toxicity of UFP and nanomaterials: Mechanistic insights | *Andrea Hartwig, KIT*
- 15.30** Quick Break

Session 2: Neuronal effects & discussion | Session Chair: Flemming Cassee (RIVM)

- 15.40** Interaction of UFP and the Brain | *Katja Kaninen, University of Eastern Finland*
- 16.05** UFP, neurotoxicity and neurodegeneration
Roel Schins, Leibniz Research Institute for Environmental Medicine, Germany
- 16.30** Open Discussion – Questions from Chat | *All Participants*
- 16.55** Closing remarks | *Karl-Friedrich Ziegahn, KIT*
- 17.00** End of Meeting

Meeting Organizing Committee

Symposium Chairman

Thomas Leisner | Institute for Meteorology and Climate Research, Karlsruhe Institute of Technology, KIT, Germany

Organizing Committee

Flemming Cassee | Dutch National Institute for Public Health and the Environment (RIVM), Bilthoven, The Netherlands

Thomas Reichert | Fraunhofer ICT and EFCA, President of CEEES, Germany

Karl-Friedrich Ziegahn | Karlsruhe Institute of Technology (KIT) and President of GUS, Germany

Harald Saathoff | Karlsruhe Institute of Technology (KIT), Germany

Klara Langer | Karlsruhe Institute of Technology (KIT), Germany