

Interessegruppe for Gasanalyse

afholder i samarbejde med IDA Kemi og Innovationsnetværket for Miljøteknologi temamødet

Airborne particles in and outside our homes – Physicochemical characteristics and toxicity

Onsdag den 21. november 2018 kl. 13:00 – 16:30

Det Nationale Forskningscenter for Arbejdsmiljø, Lersø Parkalle 105, 2100 København Ø

Alle er velkomne – tilmelding er nødvendig.

Particles found in the indoor environment have very different compositions, sizes and shapes due to a multitude of sources, e.g. sources are cooking, smoking and candle burning. Resuspension of dust from the floor can also be a major source of airborne particles and may happen as a result of simple indoor activities such as walking. Floor dust is also complex in nature as it is composed of a variety of elements such as human skin scales, soil, and textile fibers and may also contain house dust mites and bacteria.

Dust also acts as a major sink for industrial chemicals emitted to the air from building materials, furniture, and articles or emitted from indoor activities such as cleaning. Human skin scales and textile fibers are also emitted directly to the air from people, animals or their activities. Up to 50% of the particles found in the air outside buildings may infiltrate the building together with reactive gasses including ozone. Once ozone has infiltrated a building, it may react with high indoor concentrations of volatile organic carbon compounds, like terpenes, to form various products that may lead to the formation of secondary organic aerosols.

At the meeting, results from a number of studies of physicochemical characteristics of indoor and outdoor particles and their toxicity will be presented.

13.00	Welcome and introduction	Per Axel Clausen, National Research Centre for the Working Environment (NFA)
13.10	Airborne particles in our homes – project overview and performed measurements	Aneta Wierzbicka, University of Lund
13:20	Physical characteristics of particles found inside and outside homes and process of extraction for tox studies	Aneta Wierzbicka and Yuliya Omelekhina, University of Lund
13.40	PAHs, metals, endotoxin and ions in collected particles	Bo Strandberg, University of Lund
14.00	Differences in chemical compositions between indoor and outdoor particles measured with online aerosol mass spectrometry in an occupied residence in Malmö	Yuliya Omelekhina, University of Lund
14.20	Kaffe/te/kage pause	
14.50	Results of toxicological studies	Nicklas Raun Jacobsen, NFA
15.20	Role of chemical composition of particles for uptake of SVOCs for subsequent delivery for inhalation and dermal exposure – novel application of online aerosol mass spectrometry.	Christina Andersen, University of Lund
15.40	Ultrafine particles and Black Carbon in outdoor air in Copenhagen Harbor: Effect of emissions from cruise ships near to residential homes	Arne Oxbøl and Ismo Koponen, Force Technology
16.10-16.30	Discussion and end of meeting	Per Axel Clausen, NFA

Der er ingen mødeafgift. Tilmelding foretages *senest den 14. november 2018* til:

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eller

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