

# 12<sup>th</sup> Informal Conference on Atmospheric and Molecular Science



7<sup>th</sup> - 9<sup>th</sup> June 2015  
Department of Chemistry  
Aarhus University, Denmark

# Conference program

## Sunday 7 June 2015:

18:00 Icebreaker/Welcome Dinner

## Monday 8 June 2015:

09:00 Registration

**09:30 Keynote speaker Mikael Ehn** - Extremely low volatility vapors and their importance for secondary organic aerosol

10:30 Coffee

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**10:45 Session 1 - Organic aerosol** (Session chair: Quynh Nguyen)

10:45 - 11:05 O1/ *Kasper Kristensen* - Formation of high molecular weight dimer esters in  $\alpha$ -pinene SOA

11:05 - 11:25 O2/ *Hasse Knap* - Ultrafast hydrogen shift reactions in organic hydroperoxide peroxy radicals

11:25 - 11:45 O3/ *Eva Emanuelsson* - Saturation vapour pressures from evaporation rates of organic aerosol particles – or does size matters in the atmosphere?

11:45 - 12:15 O4/ *Henrik Kjærgaard* - Accurate determination of  $\Delta G$  in bimolecular complexes

12:15 Lunch

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**13:30 Session 2 - Field measurements** (Session chair: Kasper Kristensen)

13:30 - 14:00 O5/ *Henrik Skov* - Atmospheric research at Villum research station Station Nord

14:00 - 14:20 O6/ *Henschel Henning* - Molecular processes in coastal particle formation involving iodine oxides

14:20 - 14:40 O7/ *Quynh Nguyen* - Impacts of the sea surface microlayer on sea spray aerosol

14:40 Coffee

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**15:10 Session 3 - Exoplanets and climate drivers** (Session chair: Carl Meusinger)

15:10 - 15:40: O8/ *Brandon Tingley* - Atmospheres of exoplanets

15:40 - 16:10: O9/ *Sara Pryor* - How skillfully can we simulate drivers of aerosol direct climate forcing?

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**16:10 Poster Session (see page 4)**

**18:15 Dinner**

## Tuesday 9 June 2015:

**09:30 Keynote speaker *Frank Stratmann*** - Biological aerosol and ice nucleation

### 10:30 Coffee

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**10:45 Session 1 - Cloud formation** (Session chair: Ole John Nielsen / Andrew Butcher)

10:45 - 11:15: O10/ *Tina Temkiv* - Microbial interventions: how airborne bacteria interact with atmospheric chemistry and nucleation

11:15 - 11:35: O11/ *Maher Sahyoun* - Implementation of classical nucleation theory and new parametrization based on measurements of ice nucleation rate to study the impact of bacteria on ice nucleation in the HIRLAM weather prediction model

11:35 - 11:55: O12/ *Robert Lange* - Hygroscopicity investigations of atmospherically relevant pure, mixed and coated isoprene derived aerosols

11:55 - 12:15: O13/ *Berit Rasmussen* - Development of a capillary rise system for determination of surface tension of sea water

### 12:15 Lunch

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**13:20 Session 2 - Gas phase chemistry** (Session chair: Eva Emanuelsson)

13:20 - 13:40: O14/ *Freja Østerstrøm* - Atmospheric chemistry of  $(\text{CF}_3)_2\text{CHOCH}_3$ ,  $(\text{CF}_3)_2\text{CHOCHO}$ , and  $\text{CF}_3\text{C}(\text{O})\text{OCH}_3$

13:40 - 14:00: O15/ *Jonas Ingemar* - Characterisation of gas phase kinetics and particle formation in treatment of reduced sulphur

14:00 - 14:20: O16/ *Matthew Johnson* - Development of a new methane tracer: Kinetic isotope effect of  $^{13}\text{CH}_3\text{D} + \text{OH}$

**14:20 Concluding Remarks**

**14:30 Coffee and Lab Tours**

## Poster session

P1 - Jonas E. Christensen - Tracing the Criegee intermediate oxidation pathway by the oxygen mass-independent isotope anomaly

P2 - Olga Garmash - Quantification of ELVOC Formation in Oxidation of Benzene

P3 - Getachew Adnew A. - Smell abatement using a chemical wet scrubber

P4 - Freya Gøbel - Mixtures of Inorganic and Organic Aerosols as CCN

P5 - Emelie Graham - Reactivity of unsaturated cyclic ethers

P6 - Louise N. Jensen - A new environmental chamber facility at Aarhus University

P7 - Matthew S. Johnson - Gas Phase Advanced Oxidation for Emissions Control

P8 - Kristoffer S. Kilpinen - Thermal decomposition of ozone

P9 - Kristine H. Kjær - Cloud forming ability of coated sea spray particles

P10 - Oona Kupiainen-Maatta (Henning Henschel) - A simulation-based method for determining collision and evaporation rates from measured cluster distributions

P11 - Mildrid Kyte (Verena Rauchenwald) - Photochemical Indoor Air Purification

P12 - Jesper Baldtzer Liisberg - Creation of an OH-gun for enhanced air purification

P13 - Kjertan Lyster - Filterbased TD-GC-MS Analysis of Organic Aerosol

P14 - Nguyen Quynh T. - Development of a Portable Ice Nucleation Chamber (PINCii) for field measurements

P15 - Henrik Skov - Characterization of atmospheric submicrometer aerosols at Villum Research Station during the CRAICC campaign in spring 2015