

16th Finnish-Estonian Air Ion and Aerosol Workshop

Pühajärve 2012, June 12 – 14, 2012. The program version 20120604

(Pühajärve Spa Hotel restaurant: breakfast 7:30 –10:00, lunch 12.30–14.30, dinner 17–19).

Recommended presentation time is 20 min + 5 min for discussion

Tuesday (12.06.2012)

Arrival to Pühajärve around 11:30, accommodation of participants, coffee.

12:30 – 13:30 Lunch in Pühajärve Spa Hotel restaurant

13:30 – 13:45 Opening the workshop, welcome words (Urmas Hõrrak, Hannes Tammet; Markku Kulmala).

13:45 – 15:30 Presentations

Plenary presentation

Markku Kulmala: Recent results on direct observations of atmospheric nucleation (60+10 min).

Tuomo Nieminen: Trends in atmospheric particle formation in boreal forest.

15:30 – 16:00 Coffee break

16:00 – 18:00 Presentations:

Steffen M. Noe: SMEAR Estonia: current and future developments (40+10 min).

Johannes Leppä: Determining the growth rate and the fraction of ion-induced nucleation from the aerosol charging state.

Meelis Eller: Aerosol measurements in Tartu air quality monitoring station.

18:00 – 18:30 General discussion, development of SMEAR–Estonia, planning of joint activities, publications, etc.

18:30 – 19:30 Workshop dinner in Pühajärve Spa Hotel pub or restaurant.

Wednesday (13.06.2012)

Swimming-pool and sauna are opened during 7:00 – 10:00.

7:30 – 10:00 Breakfast

Workshop starts at 8:30

8:30 – 10:30 Presentations:

Adam Kristensson, Natalia Kelbus, Andreas Massling, Markus Fiebig, Bas Henzing, Marianne Glasius, Merete Bilde, Marcel Moerman, Gerrit de Leeuw, and Miikka Dal Maso: NanoShip: Mapping of new particle formation events over the North Sea.

Emma Järvinen: Defining charging state, ion-induced fraction and growth rates on SMEAR II, Hyytiälä.

Alessandro Franchin: Ion-ion recombination coefficient: experimental investigation at atmospherically relevant conditions

Hannes Tammet: KL-parameterization of atmospheric aerosol size distribution.

10:30 – 11:00 Coffee break

11:00 – 13:00 Presentations:

Hanna Manninen: The latest updates from field and the newest calibration results of the ion spectrometers.

Sander Mirme: Latest developments of the NAIS.

Erik Teinemaa, Marek Maasikmets: Estonian-Swiss aerosol measurement campaign and new equipment available for Estonia.

Kaupo Komsaare, Hõrrak Urmas, Hilja Iher: Long time air ion and radon measurements in hemiboreal site, Tahkuse, Estonia.

13:00 – 14:00 Lunch in Pühajärve Spa Hotel restaurant

14:00 – 15:30 Presentations:

Devendraa Siingh: Temperature-dependence of the positive intermediate ion concentrations at Maitri, Antarctica. (Invited presentation from the Indian Institute of Tropical Meteorology, Pune, India). *Invited presentation (India).*

Katrianne Lehtipalo: Producing ions in sub-3 nm range for calibration of aerosol instrumentation.

Eva-Stina Kerner, Janek Uin: About the lower particle size limit of aerosols generated by the electrospray method using sucrose solutions.

Andris Skromulis: Possible links between the concentrations of some air pollutants and air ions.

15:30 – 16:00 Coffee break

16:00 – 18:00 Presentations:

Aare Luts, Jaan Salm, Urmas Hõrrak, Marko Vana and Hannes Tammet: A case study of the simulation of aerosol nucleation bursts.

Madis Noppel: Theoretical estimates of dissociation rates of Fe_2^+ , Fe_2^- , and Fe_2 at various pressures and temperatures.

Tuija Jokinen: Atmospheric chemical ionization with nitrate ion.

Marko Kaasik: Particulate matter and sub-micrometer aerosol: first results from Estonian SILAM model.

Katrin Aavik, Veljo Kimmel: Influence of forest fires on PM_{2.5} levels at Estonian monitoring stations in remote area.

18:00 – 19:00 Dinner in Pühajärve Spa Hotel restaurant.

Thursday (14.06.2012)

Swimming-pool and sauna are opened during 7:00 – 10:00.

7:30 – 10:00 Breakfast

9:00 Departure from Pühajärve

Visit to aerosol laboratory in the Institute of Physics, University of Tartu (Only for interested people, registration on Wednesday evening).

List of participants:

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16th Finnish-Estonian Air ion and Aerosol Workshop

List of presentations (04.06.2012)

1. **Devendraa Siingh:** Temperature-dependence of the positive intermediate ion concentrations at Maitri, Antarctica.
2. **Adam Kristensson,** Natalia Kelbus, Andreas Massling, Markus Fiebig, Bas Henzing, Marianne Glasius, Merete Bilde, Marcel Moerman, Gerrit de Leeuw, and Miikka Dal Maso: NanoShip: Mapping of new particle formation events over the North Sea.
3. **Steffen M. Noe:** SMEAR Estonia: current and future developments.
4. **Hannes Tammet:** KL-parameterization of atmospheric aerosol size distribution.
5. **Andris Skromulis:** Possible links between the concentrations of some air pollutants and air ions.
6. **Katrin Aavik, Veljo Kimmel:** Influence of forest fires on PM_{2,5} levels at Estonian monitoring stations in remote area.
7. **Erik Teinemaa, Marek Maasikmets:** Estonian-Swiss aerosol measurement campaign and new equipment available for Estonia.
8. **Kaupo Komsaare,** Hõrrak Urmas, Hilja Iher: Long time air ion and radon measurements in hemiboreal site, Tahkuse, Estonia.
9. **Madis Noppel:** Theoretical estimates of dissociation rates of Fe²⁺, Fe²⁻, and Fe² at various pressures and temperatures.
10. **Aare Luts,** Jaan Salm, Urmas Hõrrak, Marko Vana and Hannes Tammet: A case study of the simulation of aerosol nucleation bursts.
11. **Alessandro Franchin:** Ion-ion recombination coefficient: experimental investigation at atmospherically relevant conditions.
12. **Tuija Jokinen:** Atmospheric chemical ionization with nitrate ion.
13. **Emma Järvinen:** Defining charging state, ion-induced fraction and growth rates on SMEAR II, Hyytiälä.
14. **Markku Kulmala:** Recent results on direct observations of atmospheric nucleation.
15. **Katrianne Lehtipalo:** Producing ions in sub-3 nm range for calibration of aerosol instrumentation.
16. **Johannes Leppä:** Determining the growth rate and the fraction of ion-induced nucleation from the aerosol charging state.
17. **Hanna Manninen:** The latest updates from field and the newest calibration results of the ion spectrometers....
18. **Tuomo Nieminen:** Trends in atmospheric particle formation in boreal forest.
19. **Marko Kaasik:** Particulate matter and sub-micrometer aerosol: first results from Estonian SILAM model.
20. **Sander Mirme:** Latest developments of the NAIS.
21. **Eva-Stina Kerner, Janek Uin:** About the lower particle size limit of aerosols generated by the electrospray method using sucrose solutions.
22. **Meelis Eller:** Aerosol measurements in Tartu air quality monitoring station.