

# SUMMER SCHOOL ON ORGANIC AEROSOLS

## Gothenburg – Kristineberg

June 22-28

| MONDAY      | Title                                                                                                                                | Presenter                                          |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| 08:30-09:00 | Welcome and Administrative issues                                                                                                    | <b>Mattias Hallquist*</b> and <b>Andre Prevot*</b> |
| 9:00-10:00  | <b>Overview on Organic Aerosols</b>                                                                                                  | <b>Mattias Hallquist*</b>                          |
| 10:00-10:30 | <i>Coffee break</i>                                                                                                                  |                                                    |
| 11:00-13:00 | <b>Partitioning theory and smog chamber experiments</b>                                                                              | <b>Neil Donahue*</b>                               |
| 13:00-14:20 | <i>Lunch</i>                                                                                                                         |                                                    |
| 14:20-15:00 | The use of the IFT chamber to determine carbonyl compounds from the oxidation of monoterpenes                                        | <b>Ariane Kahnt</b><br>Disc.: Thomas Pugh          |
| 15:00-15:40 | Impact of a diesel car on primary and secondary organic aerosols                                                                     | <b>Roberto Chirico</b><br>Disc.: Alexandre Caseiro |
| 15:40-16:20 | Important aspects of the NO <sub>x</sub> dependence of SOA formation: Organic nitrates and oxidation via NO <sub>3</sub>             | <b>Andrew Rollins</b><br>Disc.: Andrius Garbaras   |
| 16:20-16:40 | <i>Coffee break</i>                                                                                                                  |                                                    |
| 16:40-17:20 | Design and initial results from a new multiphase atmospheric simulation chamber (CESAM)                                              | <b>Wang Junnan</b><br>Disc: Inga Rimselyte         |
| 17:20-18:00 | Investigation of primary and secondary aerosols from wood combustion with a high resolution time of flight aerosol mass spectrometer | <b>Heringa, Maarten</b><br>Disc.: Julia Burkart    |
| 18:00-18:40 | Secondary Organic Aerosol Formation from Ozonolysis of β-pinene                                                                      | <b>Eva Emanuelsson</b><br>Disc.: Nolwenn Perron    |
| 18:45       | Light Dinner and Drinks at the University                                                                                            |                                                    |

| TUESDAY     | Title                                                                                                                  | Presenter                                            |
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| 08:30-10:00 | <b>Off-line Chemical Analysis of Aerosols</b>                                                                          | <b>Marianne Glasius*</b>                             |
| 10:00-10:30 | <i>Coffee Break</i>                                                                                                    |                                                      |
| 10:30-12:00 | <b>On-Line Measurements of Aerosols</b>                                                                                | <b>Peter De Carlo*</b>                               |
| 12:00-12:40 | Analytical technique for the identification of tracers for secondary organic material in atmospheric aerosols          | <b>Nélida González</b><br>Disc.: Maarten Heringa     |
| 12:40-14:00 | <i>Lunch</i>                                                                                                           |                                                      |
| 14:00-14:40 | Construction and Characterisation of a Particle Magnifier                                                              | <b>Helene Holmgren</b><br>Disc.: Wu Zhijun           |
| 14:40-15:20 | Analysis of Soot Produced on Combustion of Biomass                                                                     | <b>Jacqueline Wilson</b><br>Disc.: Kent Salo         |
| 15:20-16:00 | Source apportionment of particulate matter in urban aerosol                                                            | <b>Karanasiou Angeliki</b><br>Disc.: Helene Holmgren |
| 16:00-16:20 | <i>Coffee break</i>                                                                                                    |                                                      |
| 16:20-17:00 | Online measurements of chemical composition and size distribution of submicron aerosol particles in east Baltic region | <b>Inga Rimselyte</b><br>Disc.: Mika Vestenius       |

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| 17:00-17:40 | Linear unmixing of reactive organic pollutants in the atmosphere | <b>Valentin Lanz</b><br>Disc.: Claire Lucas |
| 17:40-18:20 | <i>Working group* formation and discussion</i>                   |                                             |

| <b>WEDNESDAY</b> | Title                                                                                                    | Presenter                                              |
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| 08:20-09:50      | <b>Modelling of organic aerosols</b>                                                                     | <b>David Simpson*</b>                                  |
| 09:50-10:20      | <i>Coffee Break</i>                                                                                      |                                                        |
| 10:20-11:00      | Modelling the fate of biogenic emissions from tropical rainforest                                        | <b>Thomas Pugh</b><br>Disc.: Nélida González           |
| 11:00-11:40      | Meteorological variability, climate trends and emission source regions affecting air pollution in Europe | <b>Camilla Andersson</b><br>Disc.: Junnan Wang         |
| 11:40-12:20      | Source apportionment of ambient aerosol applying PMF on AMS mobile and stationary data                   | <b>Claudia Mohr</b><br>Disc.: Noenne Prisle            |
| 12:20-13:00      | Wood burning contribution to PM10 in three Austrian cities                                               | <b>Alexandre Caseiro</b><br>Disc.: Soonsin Vacharaporn |
| 13:00-14:20      | <i>Lunch</i>                                                                                             |                                                        |
| 14:20-15:00      | Separation of OC and EC for 14C analyses of carbonaceous aerosols                                        | <b>Nolwenn Perron</b><br>Disc.: Camilla Andersson      |
| 15:00-16:00      | <b>SOA from biogenic precursors</b>                                                                      | <b>Mattias Hallquist*</b>                              |
| 16:00-17:20      | <i>Coffee Break and Visit of Flow Tube</i>                                                               |                                                        |
| 17:20-18:00      | Chemical characterisation of urban particulate matter in the UK                                          | <b>Mark Hammonds</b><br>Disc.: Erik Engström           |
| 18:00-18:40      | $\delta^{13}\text{C}/^{12}\text{C}$ measurements of aerosol particles in Preila                          | <b>Andrius Garbaras</b><br>Disc.: Valentin Lanz        |
| 18:40-19:10      | <i>First Discussions within the working groups</i>                                                       |                                                        |

|                 | Title                                                                                                                 | Presenter                                             |
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| <b>THURSDAY</b> |                                                                                                                       |                                                       |
| 08:00-10:00     | <i>TRANSFER to Kristineberg</i>                                                                                       |                                                       |
|                 |                                                                                                                       |                                                       |
| 11:00-12:00     | <b>Aerosol Field Measurements</b>                                                                                     | <b>André Prévôt*</b>                                  |
| 12:00-13:00     | <i>Lunch</i>                                                                                                          |                                                       |
| 13:00-13:40     | Effects of high RH on $\alpha$ -pinene SOA phase partitioning                                                         | <b>Noenne Prisle</b><br>Disc.: Esther Coz             |
| 13:40-14:20     | CCN measurements at an urban location – concentrations and activation diameters                                       | <b>Julia Burkart</b><br>Disc.: Viorela Ciobanu        |
| 14:20-15:00     | Discontinuous hygroscopic growth of a mixed organic/inorganic aerosol particle levitated in an electrodynamic balance | <b>Soonsin Vacharaporn</b><br>Disc.: Inna Kuznietsova |
| 15:00-15:20     | <i>Coffee break</i>                                                                                                   |                                                       |
| 15:20-16:00     | Volatility measurements of organic aerosols using a VTDMA system                                                      | <b>Kent Salo</b><br>Disc.: Claudia Mohr               |
| 16:00-16:40     | The biogenic role in cloud formation and aerosol chemistry                                                            | <b>Sanna Ekström</b><br>Disc.: Mark Hammonds          |
| 16:40-17:20     | The roles of sulfuric acid and organic                                                                                | <b>Wu Zhijun</b>                                      |

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|             | condensable vapors in the growth of newly formed particles in the rural environment | Disc.: Andrew Rollins                          |
| 17:20-18:00 | Light absorbing matter in air and in rain at the ABC-Maldives climate observatory   | <b>Erik Engström</b><br>Disc.: Roberto Chirico |
| 19:00       | Dinner                                                                              |                                                |

| <b>FRIDAY</b> | Title                                                                                            | Presenter                                           |
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| 08:30-09:10   | Background concentrations of PAHs in precipitation and air in Finland                            | <b>Mika Vestenius</b><br>Disc.: Angeliki Karanasiou |
| 09:10-09:50   | The role of carbonaceous particle morphology in ambient aerosol characterization                 | <b>Esther Coz</b><br>Disc.: Sanna Ekström           |
| 09:50-10:10   | <i>Coffee break</i>                                                                              |                                                     |
| 10:10-10:50   | Laboratory research on aqueous reactions of isoprene with inorganic radicals                     | <b>Inna Kuznietsova</b><br>Disc: Jacqueline Wilson  |
| 10:50-11:30   | Investigating the Oxidation of Organic Films on Cloud Droplets                                   | <b>Claire Lucas</b><br>Disc.: Eva Emanuelsson       |
| 11:30-12:10   | Liquid-liquid phase separation in mixed organic-inorganic aerosols exposed to hygroscopic cycles | <b>Viorela Ciobanu</b><br>Disc.: Ariane Kahnt       |
| 12:10-13:30   | Lunch                                                                                            |                                                     |
| 13:30-14:10   | Gathering ideas of collaboration                                                                 | All                                                 |
| 14:10-15:30   | Group work                                                                                       | All                                                 |
| 15:30-19:00   | <b><i>Activity/ Excursion / Free time (Could be shifted depending on weather)</i></b>            |                                                     |
| 19:00         | Dinner                                                                                           |                                                     |
| 20:10         | <b><i>Best presentation award</i></b>                                                            |                                                     |

| <b>Saturday</b> | Title                                                                  | Presenter                              |
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|                 |                                                                        |                                        |
| 08:30-09:30     | <b><i>Discussion on summer school. Feedback from the students.</i></b> | All                                    |
| 09:30-10:00     | <b>Closing remarks</b>                                                 | <b>Andre Prevot, Mattias Hallquist</b> |
| 10-10:20        | Coffee Break                                                           |                                        |
| 10:20-12:15     | Group work                                                             |                                        |
| 12:15-13:00     | Lunch                                                                  |                                        |
| 13:00           | Bus: Kristineberg – Airports - Gothenburg                              |                                        |
| 10:25-12:14     | Bus 1 to Gothenburg                                                    |                                        |
| 14:25-16:14     | Bus 2 to Gothenburg                                                    |                                        |
| 16:25-18:54     | Bus 3 to Gothenburg                                                    |                                        |