



ACTRIS - CAIS-ECAC - Aerosol In-Situ Course

Fundamentals & Methods for Aerosol Sampling and Physical & Chemical In-Situ Measurements

Date: April 14-20, 2024

Venue: National Atmospheric Observatory Kosetice, Czech Republic

Course contents & learning outcomes:

The lecture course provides fundamental knowledge in aerosol sampling & conditioning as well as methods for in-situ measurements of physical and chemical aerosol variables, covering all ACTRIS aerosol in-situ variables. Furthermore, a visit of the National Atmospheric Observatory Kosetice and hands-on training for few aerosol instruments are part of the course.

The course will be held face-to-face at the National Atmospheric Observatory Kosetice in Czech Republic. Interactive lectures will be given Monday to Friday from 8.00 to 17.00. After dinner, there will be time to meet for leisure activities or discuss with the lecturers. All participants will obtain a certificate for their participation.

Target group:

The course is mainly intended to people related to the ACTRIS aerosol in-situ measurements at the National Facilities. This could be technicians, advanced master students, doctoral students, as well as scientists. The course is however also open to external (non-ACTRIS) users.

Lectures are given in English. Good communication skills in English are required.

Due to the limited accommodation in Kosetice, up to 16 participants can be accepted.

Lecturers:

The course is coordinated by CAIS-ECAC. Lectures are given by top-level experts from the ACTRIS central facility for aerosol in-situ measurements..

Course fee, accommodation, meals & travel:

The course fee is 500€ per participant, including accommodation in two-bed rooms, all meals (breakfast, lunch, dinner), and the transportation from and to Prague on Sunday April 14 and Saturday April 20, 2024, respectively.

The fee must be paid prior to the course – latest until April 7.

Course organizer:

The course is organized by CAIS-ECAC & ACTRIS Czech Republic.

For any additional information about the course look at the CAIS-ECAC website, or please contact Alfred Wiedensohler (alfred.wiedensohler@tropos.de)

For the application, please fill the form at:

The application deadline is March 01, 2024. We will inform applicants about the acceptance latest by March 08, 2024.

| Time schedule Kostice CAIS-ECAC aerosol course | | | | | | | |
|--|---|---|---|---|--|---|---|
| Day time | Sunday April 14, 2024 | Monday, April 15, 2024 | Tuesday April 16, 2024 | Wednesday April 17, 2024 | Thursday April 18, 2024 | Friday April 19, 2024 | Saturday April 20, 2020 |
| 07.00 - 07.30 | Travel & pick-up from Prague airport & Center | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast |
| 07.30 - 08.00 | | Introduction & Discussion Atmospheric Aerosol AW+JO | Impactor JPP | Neutral Cluster & Air Ion Spectrometer KL | Aerosol Chemical Speciation Monitor & Aerosol Mass Spectrometer EF | Mass Concentration Heavy Metals & Inorganic Elements FG | |
| 08.00 - 08.30 | | | | | | | |
| 08.30 - 09.00 | | | | | | | |
| 09.00 - 09.30 | | | | | | | |
| 09.30 - 10.00 | | General Definitions AW | Particle Filter JPP | Particle Size Magnifier KL | | | |
| 10.00 - 10.30 | | | | | | | |
| 10.30 - 11.00 | | | | | | | |
| 11.00 - 11.30 | | Mechanical Properties JO | Particle Charging AW | Artifacts & Thermodesorption JPP | Cloud Condensation Nuclei Counter SH | General Sampling Considerations AW | |
| 11.30 - 12.00 | | | Electrical Particle Mobility AW | | Discussion AW+JO | | |
| 12.00 - 12.30 | | Lunch | Lunch | Lunch | Lunch | Lunch | |
| 12.30 - 13.00 | | | | | | | |
| 13.00 - 13.30 | | Particle Diameter Definitions AW | Differential Mobility Analyzer AW | | Integrating Nephelometer AW | Data Handling NN | Travel & transport to Prague Airport & Center |
| 13.30 - 14.00 | | | | Organic Tracers FM | Absorption Photometer AW | Discussion AW+JO | |
| 14.00 - 14.30 | | Particle Size Distribution JO | Mobility Particle Size Spectrometer AW | | | | |
| 14.30 - 15.00 | | | | | | | |
| 15.00 - 15.30 | | Coffee break | Coffee break | Coffee break | Coffee break | Coffee break | |
| 15.30 - 16.00 | | Condensation Particle Counter JO | Aerodynamic Particle Size Spectrometer JO | Hands-On Training JO | Hands-On Training JO | Examination AW+JO | |
| 16.00 - 16.30 | | | | | | | |
| 16.30 - 17.00 | Discussion AW+JO | Discussion AW+JO+JPP | | | Correction & discussion exam | | |
| 17.00 - 17.30 | | | | | | | |
| 17.30 - 18.00 | | Free time | Free time | Free time | | | |
| 18.00 - 18.30 | Dinner | Dinner | | Dinner | Dinner | | |
| 18.30 - 19.00 | | | | | | | |
| | Fundamental | | AW: Alfred Wiedensohler | | | | |
| | Microphysical | | JO: Jakub Ondracek | | | | |
| | Sampling | | KL: Katrianne Lehtipalo | | | | |
| | Optical | | SH: Silvia Henning | | | | |
| | Chemical | | JPP: Jean-Philippe Putaud | | | | |
| | Discussion & Hands-On-Training | | FM: Falk Mothes | | | | |
| | Examination | | EF: Evelyn Freney | | | | |
| | Meals | | FG: Fabio Giardi | | | | |
| | Data Handling | | | | | | |

<https://www.actris-ri.cz/narodni-atmosfericka-observator-kosetice>