

# International IAS summer school

## *Aerosol in polar and mountain areas: theoretical and practical aspects*

The Italian Aerosol Society (IAS) with the collaboration of Ca' Foscari University of Venice and Institute of Polar Sciences – CNR organizes an international summer school with particular focus on aerosol in polar and mountain areas. The School is addressed to PhD students, postdoctoral researchers and others researchers who operate in aerosol science.

Audience will be introduced to the most relevant aspects of aerosol properties and experimental methods with a special focus on those specifically used in climate studies.

The registration must be done by filling out the form scanning the QR code.

The participants are required to participate by presenting an A0 poster.



**16 - 21 June 2024**



### Venice and Dolomites, Italy

Lessons will be held at:  
Scientific Campus of Ca' Foscari  
University of Venice  
Via Torino 155, 30172 Mestre-Venice



**Deadline for application:  
31 May 2024**

### Topics

- Aerosol chemistry and physics
- Meteorology of polar and mountain areas
- Bioaerosol
- Atmospheric modelling
- Anthropogenic impact in remote regions
- Aerosol optical properties
- Economic and legal implications of air pollution
- Impact of communication of polar research

### International confirmed lectures

**Radovan Krejci** (Stockholm University, Sweden), **David Pearce** (Northumbria University, UK), **Tuukka Petäjä** (University of Helsinki, Finland), **Paolo Laj** (WMO), **Julia Schmale** (EPFL, Switzerland), **Zhiyong Xie** (Helmholtz-Zentrum Hereon, Germany)

**Organizing committee:** Andrea Gambaro (UNIVE), Elena Barbaro (ISP-CNR), Elisa Scalabrin (ISP-CNR), Matteo Feltracco (UNIVE), Giovanna Mazzi (UNIVE), Stefano Frassati (UNIVE), Eleonora Favaro (UNIVE), Carole Lecerf (IAS)

**Scientific committee:** Daniele Contini (IAS, ISAC-CNR), Elena Barbaro (ISP-CNR and WG4 IAS head), Carlo Barbante (UNIVE, ISP-CNR), Andrea Gambaro (UNIVE, ISP-CNR), Matteo Feltracco (UNIVE)

### Participation fees:

- PhD students IAS members 400€
- Post-docs IAS members 450€
- PhD students and post-docs non-members 550€
- Others 550€

### Participation fees + overnight stay:

- PhD students IAS members 800€
- Post-docs IAS members 850€
- PhD students and post-doc non-members 950€
- Others 950€

The registration fees include: lunch and coffee breaks from 17th to 21st June; trip to Dolomites and Venice; social dinner; certificate of attendance.

To have more information about location, scientific contributions, posters, etc., please contact: [ias.school2024@unive.it](mailto:ias.school2024@unive.it)

For information regarding payment: [c.lecerf@isac.cnr.it](mailto:c.lecerf@isac.cnr.it)

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## Aerosol in polar and mountain areas: theoretical and practical aspects

### PRELIMINARY PROGRAMME

#### 16th June 2024

Arrival and hotel accommodation

#### 17th June 2024

8:30-9:00 Arrival and registration of participants

Chairman: [Daniele Contini](#)

9:00-9:20 Presentation of the International School by local authorities

9:20-10:00 [Carlo Barbante](#)  
The importance of studying polar and mountain areas

10:00-10:45 *Coffee break*

10:45-11:30 [Julia Schmale](#)  
What did we learn from one year of aerosol observations in the central Arctic Ocean during MOSAIC?

11:30-12:15 [Dino Zardi](#)  
Climatology and meteorology of mountain areas

12:15-13:00 [Roberta Vecchi](#)  
Optical properties and black carbon

13:00-14:00 *Lunch & poster session*

14:00-18:00 Case studies and applications

Chairman: [Andrea Gambaro](#)

14:00-14:30 [Luca Ferrero](#)  
The climatic impact of anthropic settlements in the Arctic

14:30-15:00 [Fabio Giardi](#)  
Mineral dust in polar areas

15:00-15:30 [Stefano Bertinetti](#)  
Element characterization and chemical speciation of Arctic PM10

15:30-16:00 [Roberta Zangrando](#)  
Water soluble organic compounds in atmospheric aerosol in remote areas: sources and processes

16:00-16:30 *Coffee break*

16:30-17:00 [Marco Paglione](#)  
One year of organic aerosol source apportionment in Ny-Ålesund, Svalbard from advanced techniques

17:00-17:30 [David Cappelletti](#)  
Molecular tracers of carbonaceous aerosol at the Monte Martano EMEP station

17:30-18:00 [Angela Marinoni](#)  
The study of atmospheric aerosol at the WMO-GAW station on Monte Cimone

#### 18th June 2024

Chairman: [Matteo Feltracco](#)

9:00-09:45 [Zhiyong Xie](#)  
POPs and emerging chemicals of concern in the Arctic atmosphere: The impact of human activity and climate change

9:45-10:30 [Paolo Laj](#)  
Observations of aerosol properties at high-altitude stations of the GAW

10:30-11:00 *Coffee break*

11:00-11:45 [Tuukka Petaja](#)  
On the connection between biospheric emissions, aerosol particles and properties of clouds

11:45-12:30 ??????????????  
Bioaerosol of polar areas

12:30-13:15 [Radovan Krejci](#)  
Aerosol-cloud interaction in the Arctic

13:15-14:30 *Lunch & poster session*

14:30-18:00 Case studies and applications

Chairman: [Elena Barbaro](#)

14:30-15:00 [Stefania Gilardoni](#)  
Analysis of submicron aerosol particle mixing state in the Arctic

15:00-15:30 [Silvia Becagli](#)  
Biogenic aerosol in polar regions: a marker of ocean/atmosphere interaction in a climate change world

15:30-16:00 [Silvia Illuminati](#)  
Atmospheric particulate matter in Antarctica: size-distribution, sources, and seasonal evolution

16:00-16:30 *Coffee break*

16:30-17:00 [Antonio Donateo](#)  
Size-segregated particles deposition velocity by the eddy correlation method over snow in the Arctic

17:00-17:30 [Henri Diémoz](#)

Aerosol dynamics in the northwestern Alps: insights from in-situ and remote sensing observations at medium and high altitudes

17:30-18:00 [Gianni Formenton](#)  
Indoor pollution by wood burning in mountain houses

#### 19th June 2024

9:00-18:00 Field activities at Col Margherita Observatory (Falcade, BL)

#### 20th June 2024

Chairman: [Elisa Scalabrin](#)

9:00-9:45 [Francesco Bosello](#)  
Air pollution, methods and results from the economic analysis

9:45-10:30 [Paolo Brambilla](#)  
Air pollution regulation: navigating legislation for cleaner skies

10:30-11:00 *Coffee break & poster session*

11:00-11:45 [Mauro Mazzola](#)  
Scientific infrastructures at Ny-Ålesund

11:45-12:30 [Fabiana Corami](#)  
Microplastics in polar areas: occurrence and quantification

12:30-14:00 *Lunch & poster session*

14:00-15:00 [Jessica Marzaro](#), [Enrico Costa](#)  
Connecting the poles: The challenges for scientific communication of polar research

15:00-19:30 Social event, visit to Venice

20:00 Social dinner in Venice

#### 21st June 2024

9:30-10:30 Experimental activities performed by sponsors

10:30-11:00 *Coffee break & poster session*

11:00-12:30 Experimental activities performed by sponsors

12:30-13:00 Closing and final farewells