

## Summer School „Basic Aerosol Science“



### When?

Monday 10<sup>th</sup> July – Saturday 16<sup>th</sup> July, 2017

### What?

The summer school "Basic Aerosol Science" offers a broad education in basic principles and techniques of aerosol science. The main focus is on aerosol physics, but other fields such as aerosol chemistry and applications of aerosol science for e.g. issues of human health are also covered. The teachers of this summer school are leading European experts in the field of aerosol science.

### Who?

The summer school is targeting international graduate students and early post-doctoral researchers, as well as persons who work in the field of aerosol science.

### Why?

The students participating in this summer school will acquire an excellent knowledge of the basics of aerosol science needed to understand and critically review aerosol processes and their interaction with the environment. They can immediately implement their knowledge in research projects of their institutions, act as decision makers in solving air pollution problems or contribute to regulatory processes and setting of standards.

### Requirements to obtain a certificate (5 ECTS)

- Attendance of lectures and participation in the field experiment
- Submission of assignments from the individual lectures (assignments can be handed in during the summer school or within two weeks after the end of the summer school)
- Grading will be based on submitted assignments

**Pre-registration opens on 5 April 2017**

## Program

Time	Monday	Tuesday	Wednesday	Thursday	Friday
08:30-09:00	Opening				
09:00-10:30	Aerosol mechanics	Electrical properties of aerosols	Optical particle measurements	Atmospheric aerosol	Aerosol chemistry
11:00-12:30	Aerosol optics	Aerosol sampling and measurement	Nucleation and condensation - measurements	Primary biological aerosol in the atmosphere	Black carbon measurement methods
14:00-15:30	Particle statistics	Electrical aerosol measurement	Inertial separation	Aerosol remote sensing	Aerosol & respiratory system
16:00-17:30	Nucleation & condensation	Aerosol generation	Diffusion and filtration	Modern spectroscopy	PM & health effects

+ Field experiment on Saturday (visual determination of visibility and extinction)

## Lecturers (in alphabetical order)

### University of Vienna, Austria, Aerosol Physics and Environmental Physics

Prof. Dr. Regina Hitzemberger

Prof. Dr. Helmuth Horvath

Dr. Gerhard Steiner

Prof. Dr. Wladyslaw Szymanski

Prof. Dr. Paul Wagner

Prof. Dr. Bernadett Weinzierl

Prof. Dr. Paul Winkler

Dr. Anna Wonaschütz

### International Lecturers

Prof. Dr. Lucas Alados Arboledas University of Granada, Spain, Science Faculty and Center for Environmental Research

Prof. Dr. Werner Hofmann University of Salzburg, Austria, Division of Physics and Biophysics, Department of Materials Research and Physics

Prof. Dr. Ruprecht Jaenicke University of Mainz, Germany, Institute for Meteorology and Geophysics

Prof. Dr. Anne Kasper-Giebl Technical University of Vienna, Austria, Analytical Chemistry

Prof. Dr. Reinhard Niessner Technical University Munich, Germany, Analytical Chemistry

PD Dr. Andreas Petzold Research Center Jülich, Germany, Institute for Energy and Climate Research, Global Observations

Prof. Dr. Michael Riediker Institute of Occupational Medicine and Nanyang Technological University Singapore

Prof. Dr. Imre Salma Etövös University, Budapest, Hungary, Institute of Chemistry

Prof. Dr. Jyrki Mäkelä Tampere University of Technology, Finland, Department of Physics, Aerosol Physics Laboratory

## How to participate?

Pre-registration opens on 5 April 2017.

For pre-registration, applicants should submit the following documents to [aerosol.summerschool@univie.ac.at](mailto:aerosol.summerschool@univie.ac.at):

- Motivation letter (1-2 pages including a short description of your experience in aerosol science)
- Short CV
- Letter of support from thesis supervisor (master and Ph.D. students) or Post-doctoral sponsor

Participants will be selected based on their application documents.

Upon acceptance, applicants are requested to register online (for details see website: <http://aerosols.univie.ac.at/teaching/summerschool> ).

### Registration Fees

#### Early bird registration before 30 May 2017

Student registration rate	695.--€
Corporate registration rate	1200.--€

#### Registration fees after 30 May 2017

Student registration rate	750.--€
Corporate registration rate	1300.--€

The registration fees include lectures, coffee breaks, lunches, travel to/from Hohe Wand during the field experiment, participation in „Heuriger“ on Monday and Saturday.

### Contact:

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