

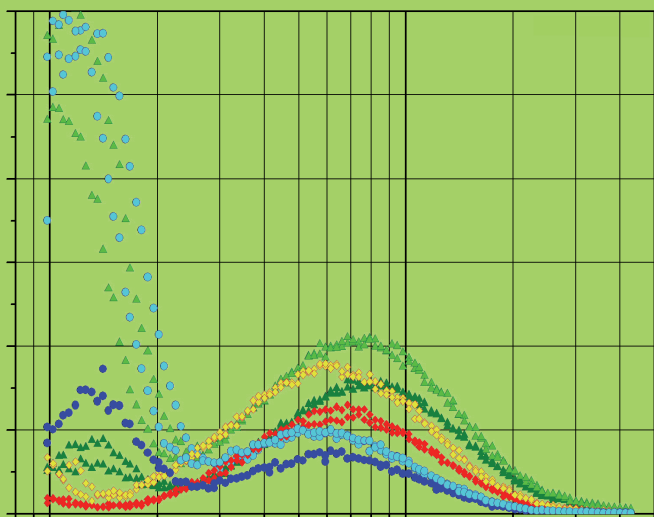
On-site
Conference

Invitation and call for papers to the

26th ETH-Nanoparticles Conference (NPC-23)

Focus Event

Indoor air filtration of biogenic and combustion nanoparticles



June 20 – 22, 2023

ETH Zürich, Switzerland – on-site

www.nanoparticles.ch

@ethnpc

No conference fee, sponsors welcome

Organized by the
NPC-Association, a registered
non-profit organization

Under the auspices of
FOEN, SCS and ETH Zürich



SCS
Swiss Chemical
Society

26th ETH-Nanoparticles Conference (NPC-23)

The Nanoparticle Conference in 2023 is organized as an on-site conference at the ETH Zürich. It serves as an interdisciplinary platform for expert discussions on all aspects of nanoparticles, freshly emitted from various sources, transformed in ambient air, distributed on local and global scale, on technical mitigation aspects, particle legislation, and impact of particles on health, environment, and climate. The conference brings together representatives from research, industry, and legislation.

Conference Topics

- Aircraft, marine and other non-road sources
- Ambient air particles, secondary pollutants
- Biomass-, biofuel- and synfuel combustion
- Brake and tyre wear, non-combustion emissions
- Emission control of combustion engines
- Environmental effects
- Filtration of combustion and biogenic nanoparticles
- Health effects
- Impact on climate
- Indoor particles
- Legislation and enforcement
- Nanoparticle formation and transformation
- Nanoparticle metrology and chemical characterization
- Nanoparticle chemistry and toxicology
- Occupational exposure and prevention
- Periodical technical inspection for in-use vehicles

Focus Event

Indoor air filtration of biogenic and combustion nanoparticles

The outbreak of the COVID pandemic taught us that viruses indeed are nanoparticles, which travel with aerosols, similar to combustion-generated nanoparticles. Both classes of particles are mainly taken up by inhalation. The translocation of sub-200 nm particles through the alveolar membrane and the distribution in the body show similarities too. The formation and release of such particles are quite different. However, their dimensions are similar and the abatement of biogenic nanoparticles can be achieved using similar filtration principles and technologies that have been applied successfully for combustion engines. These aspects will be discussed in the 2023 focus event.

Health Session

The session will provide new experimental and epidemiological results about health consequences of combustion emissions. Special emphasis will be given to effects of nanoparticles on children's health.

Scientific and Organizing Committee

Anita Anselmi, Lunge Zürich

Claudia Auinger, Empa

Dr. Oliver Bischof, TSI

Peter Bonsack, FOEN

Prof. em. Dr. Heinz Burtscher, FHNW/ISE

Prof. em. Dr. Jan Czerwinski, BFH/AFHB, Biel

Prof. Danilo Engelmann, BFH/AFHB, Biel

Prof. em. Dr. Peter Gehr, University of Bern

Dr. Martin Gysel, PSI

Dr. Norbert Heeb, Empa

Dr. Christoph Hüglin, Empa

Ron Kappeler, Swiss TPH

Dr. h.c. Andreas Mayer, TTM

PD. Dr. Loretta Müller,

DBMR University of Bern, Inselspital Bern

Prof. Dr. Barbara Rothen-Rutishauser,
AMI, University of Fribourg

Dr. Lauretta Rubino, VERT

Dr. Claus-Detlef Schegk, VerAn

David Spichiger, Swiss Chemical Society

Dr. Martin Stöckli, inspire AG

Dr. Konstantina Vasilatou, METAS

Céline Wittwer, Swiss Chemical Society

Yan Zimmerli, BFH/AFHB, Biel

Papers and Posters

- We invite you to submit abstracts for oral and poster presentations on the conference website www.nanoparticles.ch/registration.
- Abstracts must contain new information and results related to the aforementioned topics.
- Best poster presentations will be awarded with prize money and certificates.
- Presenters at the conference will be invited to submit full length papers for publication after peer-review, in the journal "Emission Control Science and Technology"
- All contributions (including pdf and mp4 video files of talks, posters, and abstracts) will be published on the conference website.
Submission of an abstract includes your agreement for publication on the conference website.

Exhibition

The exhibition on particle measurement instrumentation (PMI) and emission control devices (ECDs) is an important part of the conference.

For further information and registration contact:

Prof. Dr. H. Burtscher (PMI)

E-mail: heinz.burtscher@fhnw.ch

Dr. L. Rubino, VERT-CEO (ECDs)

E-mail: ceo@vert-dpf.eu

Important Dates and Deadlines

- Registration opening: February 27, 2023
- Abstract submission for oral and poster presentations: April 21, 2023
- Exhibition application: April 21, 2023
- Information on paper/poster acceptance by May 22, 2023

Registration and Conference Fee

Online registration is required under www.nanoparticles.ch/registration where abstract and exhibitor application forms are available. No participation fee will be charged. This is possible only thanks to the generous financial support of our sponsors.

Travel Information and Accommodation

Online hotel reservation is possible via

Zürich Tourism

Post Box

CH-8023 Zürich

Phone: +41 44 215 40 00

www.zuerich.com

General information is also available on CH Tourism,

www.myswitzerland.com

Further Information

Chair of the Organizing Committee NPC-23

Dr. Norbert Heeb

E-Mail: norbert.heeb@empa.ch

Under the Auspices of

ETH Zürich, Swiss Chemical Society,

Federal Office for the Environment, FOEN

On-site
Conference

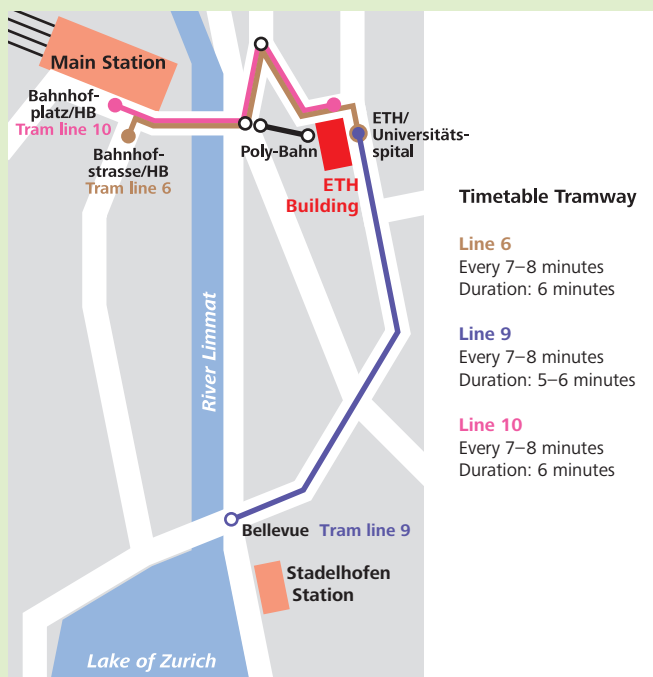
Conference Location

The conference is held at the
Swiss Federal Institute of Technology Zurich (ETHZ)
Main Building
Rämistrasse 101
CH-8092 Zürich
Switzerland
www.ethz.ch

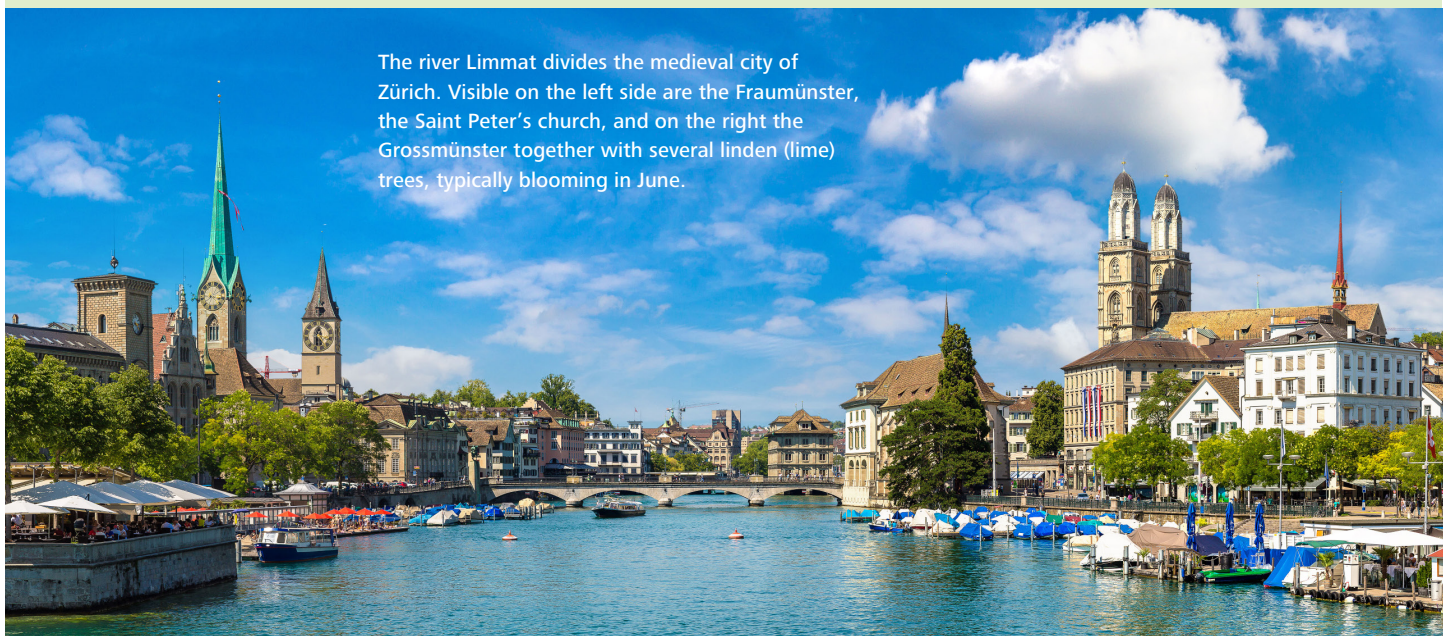
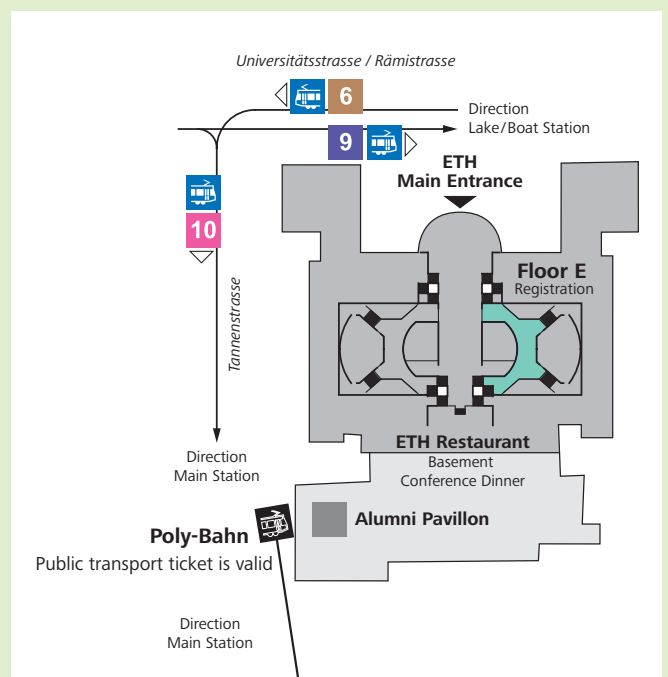


The ETH main building is situated above Zürich's old town. It is accessible by tram lines 6, 9 and 10 or, as an adventurous alternative, by the Polybahn (see maps below).

Tram Connections



ETH Main Building



The river Limmat divides the medieval city of Zürich. Visible on the left side are the Fraumünster, the Saint Peter's church, and on the right the Grossmünster together with several linden (lime) trees, typically blooming in June.