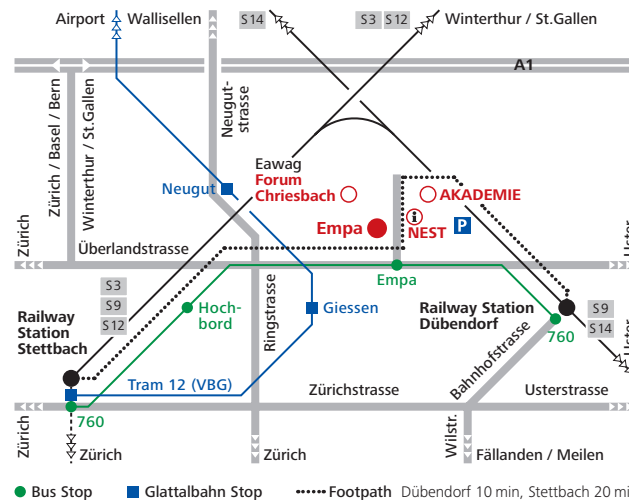


EMPA – MATERIALS AND TECHNOLOGIES FOR A SUSTAINABLE FUTURE

As an interdisciplinary research institute of the ETH Domain, Empa, the Swiss Federal Laboratories for Materials Science and Technology, conducts cutting-edge materials and technology research. Empa's R&D activities focus on meeting the requirements of industry and the needs of society, and thus link applications-oriented research with the practical implementation of new ideas. As a result, Empa is capable of providing its partners with customized services and solutions that not only enhance their innovative edge and competitiveness, but also help to improve the quality of life for the public at large.

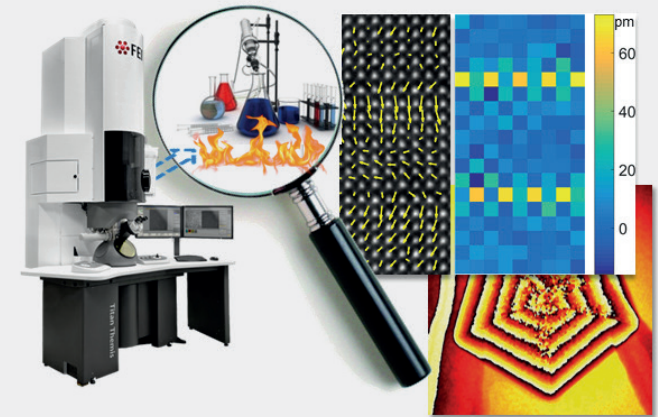
GENERAL INFORMATION

Location	Empa, Dübendorf Überlandstrasse 129 AKADEMIE
Costs	The event is sponsored by Empa and free of charge for the participants.
Registration	www.empa-akademie.ch/e-microscopy
Deadline	May 26, 2017
Contact	Yadira Arroyo Phone +41 58 765 41 01 yadira.arroyo@empa.ch www.empa.ch/web/s299
	Rolf Erni Phone +41 58 765 40 80 rolf.erni@empa.ch www.empa.ch/web/s299
How to get here	Please do use public transport. There is only very limited parking available.



TOPICAL DAY

Electron Microscopy: New Possibilities @ Empa



Empa, Dübendorf, Überlandstrasse 129
Wednesday, June 7, 2017, from 9:00 to 12:30

Online registration:
www.empa-akademie.ch/e-microscopy

TOPIC

Electron microscopy, materials science, materials characterization

TARGET AUDIENCE

Everybody interested in new electron microscopy techniques, and especially scientists, postdoctoral researchers and doctoral students who work or who plan to work with electron microscopes.

AIMS

The aim of this workshop is to provide information about the new electron microscopy facilities at Empa:

- FEI Titan Themis equipped with an aberration corrector for STEM and Super EDX system operated at 300 and 80 kV. The implementation of the spherical aberration corrector increases the resolution to the sub-Ångstrom level. New analytical methods in combination with dedicated in-situ equipment allow for advanced characterization, inspection and testing of (nano-)materials and processes.
- FEI Quanta 650 Environmental Scanning Electron Microscope. This microscope has three imaging modes: high vacuum (conductive materials), low vacuum (non-conductive materials) and environmental SEM. The (E)SEM, equipped with an advanced EDX system, will be put into operation second half of 2017.

Information about the new instrumentation and the new possibilities will be presented by staff of Empa's Electron Microscopy Center. The presentations cover the following topics: advanced STEM/EDX measurements, off-axis electron holography, electron tomography and two new in-situ capabilities, namely liquid cell measurements and heating & electrical-biasing measurements. This topical (half-)day shall offer a platform for discussions and questions about the applicability of the new methods to different materials and projects.

PROGRAM

- 09:00 **Welcome & Opening**
Rolf Erni
- 09:30 **New STEM & EDX Possibilities**
Marta D. Rossell
- 10:00 **Electron Holography**
Marco Campanini
- 10:30 **Coffee Break**
- 11:00 **Liquid Cell Measurements**
Yucheng Zhang
- 11:30 **Electron Tomography**
Yadira Arroyo Rojas Dasilva
- 11:45 **Heating / Electrical-Biasing Measurements**
tba
- 12:00 **Discussion & Summary**
Rolf Erni

REGISTRATION

Electron Microscopy: New Possibilities @ Empa

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AKADEMIE

Wednesday, June 7, 2017, from 9:00 to 12:30

Deadline: May 26, 2017

Please register online:

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You will receive a confirmation by e-mail.