

## WORKSHOP ORGANIZER

**Dr. Patrik Schmutz** has a degree in experimental physics and is currently group leader at Empa for "Functional Surfaces in Reactive Environments" in the „Joining Technologies and Corrosion“ laboratory, ETHZ Lecturer and president of the Swiss Society for Surface Treatment (SGO-SST) .

**Dr. Laetitia Philippe** has a degree in experimental physics and is currently group leader at Empa for 'Electrochemical process for micro and nanostructuration' in the 'Laboratory for Mechanics of Materials and Nanostructure' ETHL Lecturer.

**Dr. Werner Rutsh** has a degree in chemistry and is currently president of the Association NTN Innovative Surfaces.

**Dr. Joerg Güttinger** has a degree in Economics, Ing. and is currently managing director, of the Association NTN Innovative Surfaces.

## 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.

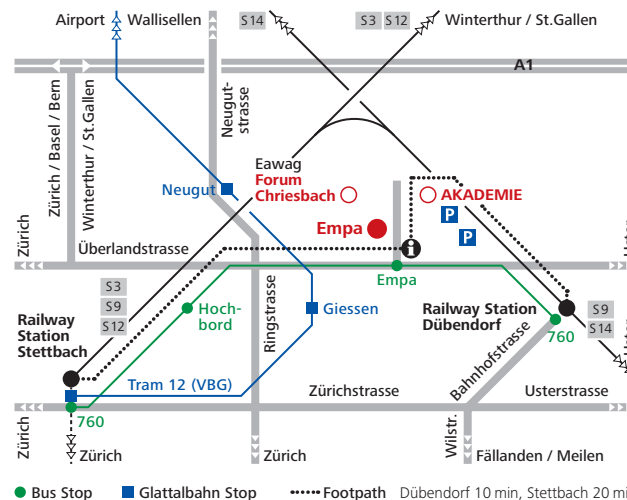
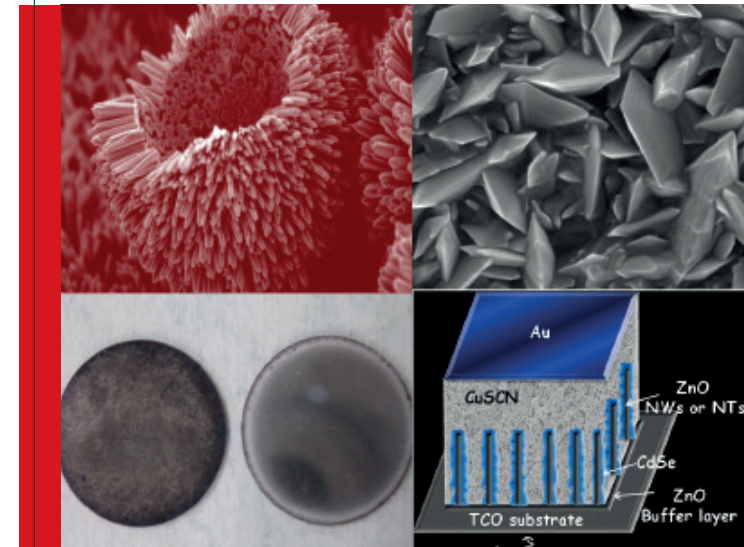
The National Thematic knowledge and technology transfer Network (NTN) **Innovative Surfaces** is the leading network in Switzerland for targeted and performance-oriented Knowledge & Technology Transfer (KTT) between public research institutions and companies seeking innovative surface technologies and collaborations to stimulate competitiveness and value creation.

## GENERAL INFORMATION

Location	Eawag, Dübendorf Überlandstrasse 133 FC-C20
Costs	The event is sponsored by Empa and free of charge for the participants.
Registration	<a href="http://www.empa-akademie.ch/ntn-sgo">www.empa-akademie.ch/ntn-sgo</a>
Deadline	January 20, 2016
Contact	Empa Dr. Patrik Schmutz Laboratory for Joining Technologies and Corrosion Phone +41 58 765 48 45 <a href="mailto:patrik.schmutz@empa.ch">patrik.schmutz@empa.ch</a> <a href="http://www.empa.ch">www.empa.ch</a>
How to get here	Please do use public transport. There is only very limited parking available.

## WORKSHOP

# Functional Coatings, Layers and Interfaces



Eawag, Dübendorf, Überlandstrasse 133  
Wednesday, January 27, 2016, 14:00 – 17:00

Online registration: [www.empa-akademie.ch/ntn-sgo](http://www.empa-akademie.ch/ntn-sgo)

## TOPIC

Improved surface functionalities are desired for a constantly broader spectrum of materials and technology developments. A true “material dependent/surface property” driven approach needs to be established in future innovative industrial surface treatments. There is also a growing need in new combinations of tailored surface treatments and coatings when optimal surface properties can no longer be achieved with a single process. For this development, electrochemical processes (deposition, electroless, anodizing) are, in particular, promising tools with high potentials to explore. Concerning functional surfaces, a certain number of initiatives are already going on at the national level in order to promote industrial innovation and collaboration with academic partners. The CTI-sponsored National Thematic Network “NTN-Innovative Surfaces” is currently a leading one and in 2016, the Swiss Academy of Engineering Science (SATW) has launched a call to further promote new collaborations.

## AIMS

This workshop aims at informing about the current initiatives with respect to innovation support in the field of functional coatings/surfaces in general and, in particular electrochemical surface modification/characterization. A central aspect of the workshop is, besides the technical/scientific contributions, to allow direct interaction with initiatives responsible persons. They can answer your questions and provide practical information about project formulation/feasibility, development/support possibilities and potential partners for your innovation ideas.

## TARGET AUDIENCE

The workshop is intended for representatives from industry and academia interested in innovation in surface treatments (in particular “electro”chemical nature). It further addresses all persons interested to be involved or to take advantage of the new initiatives/project submission and expertise’s present within the NTN Network (CTI-support), SATW Transferkolleg, SGO-SST and the Empa.

## PROGRAM

- 14:00 **Introduction and Welcome Address**  
Dr. Patrik Schmutz, Empa
- 14:10 **Presentation „Innovative Surfaces“ CTI Network + 12<sup>th</sup> edition SATW Transferkolleg “Functional coatings, layers and interfaces**  
Dr. Werner Rutsch President of NTN “Innovative Surface” association  
Dr. Jörg Güttinger, NTN, Managing Director
- 14:20 **Q & A concerning the SATW call and NTN activities**
- 14:30 **Introduction of a working group on electrochemical surface treatments and characterizations within NTN / SGO-SST**  
Dr. Patrik Schmutz, Empa  
Dr. Laetitia Philippe Empa
- 14:40 **Discussion about key topics to be addressed by the new working group and identification of interested partners**
- 15:10 **GreenTEG AG**  
**Thermoelectric converters based on electroplating of Bismuthtelluride**  
Dr. Lukas Dürer, GreenTEG AG
- 15:30 **Coffee break and Networking**
- 16:00 **Galvanische und elektrochemische Prozesse und deren Charakterisierung (deutsch)**  
Dr. Laetitia Philippe, Empa
- 16:20 **Von der Passivschicht zur anodisierten Oberfläche; Charakterisierung mit Nanometer Auflösung (deutsch)**  
Dr. Patrik Schmutz, Empa
- 16:40 **End of the Workshop**  
Dr. Patrik Schmutz, Empa, Dr. Jörg Güttinger, NTN

## REGISTRATION

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You will receive a confirmation by e-mail.