



## REGISTRATION FORM

Workshop „Surfaces and Thin Films - Analytics in Practice“

Date: June 29 - 30, 2016  
Location: Empa Akademie, Überlandstraße 129, 8600 Dübendorf, Switzerland

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

### Contact details

Title	Last name	First name
Company / Organisation / Institute		
Phone	Fax	Email
Street		P.O. Box
State	Country	Postcode/City

### Workshop

☐ I would like to participate at the Workshop on June 29 – 30, 2016.

☐ I am an EFDS member or an Empa employee.

### Social Evening

☐ I would like to participate at the Social Evening on June 29, 2016 (Booking required).

Date, Stamp, Signature

The registration fee is 990,00 EUR, 890,00 EUR for EFDS members, 495,00 EUR for Empa employees. Please remit the registration fee after receipt of invoice.

## GENERAL INFORMATION

**Venue:**  
Empa Akademie  
8600 Dübendorf  
Switzerland  
[www.empa-akademie.ch](http://www.empa-akademie.ch)

**Organization:**  
European Society of Thin Films  
Gostritzer Straße 63  
01217 Dresden  
Germany  
[www.efds.org](http://www.efds.org)

**Online registration:**  
Please use the online registration: [www.empa-akademie.ch/efds](http://www.empa-akademie.ch/efds)

**Fees:**  
Registration fee: 990,00 EUR  
Registration fee for EFDS members: 890,00 EUR  
Registration fee for Empa employees: 495,00 EUR

Workshop fees are free of VAT according to §4 (22a) UStG (German value-added tax law).

**Fee Covers:**  
The registration fee includes the participation of the workshop, conference proceedings, coffee and lunch breaks and the Social Evening. Please note, that the number of participants is limited, so please register early. Please use the registration form and complete and return this form until June 15, 2016 to: Fax: +49 351 8718431 or Email: [kotschenreuther@efds.org](mailto:kotschenreuther@efds.org). Upon receipt of your registration, you will receive the invoice/ confirmation. Please remit the amount after receiving our invoice.

**Terms:**  
The general terms and conditions of sale of the EFDS apply ([www.efds.org/agb](http://www.efds.org/agb)). Cancellations must be made in written form. In case of the cancellation of your registration before June 15, 2016, a cancellation fee of 50,00 EUR will be charged. After this date, a refund is not possible. A substitute will be accepted anytime.

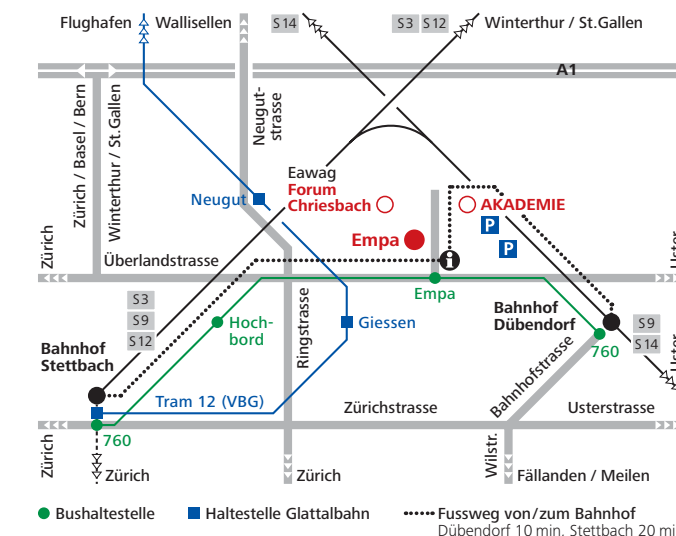
**Contact :**  
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Empa Akademie  
Überlandstraße 129  
8600 Dübendorf  
Switzerland  
[www.empa-akademie.ch](http://www.empa-akademie.ch)

## RECOMMENDATION FOR HOTEL

**Sorell Hotel Sonntal**  
Zürichstraße 94 / 96  
8600 Dübendorf  
Switzerland

Promo Code: EMPA46  
Deadline: May 27, 2016  
Room Rate: 130,00 CHF per night (City Tax is not included)  
Tel: +41 44 8021282  
[sonntal@sorellhotels.com](mailto:sonntal@sorellhotels.com)  
[www.sorellhotels.com/de/sonntal/duebendorf](http://www.sorellhotels.com/de/sonntal/duebendorf)

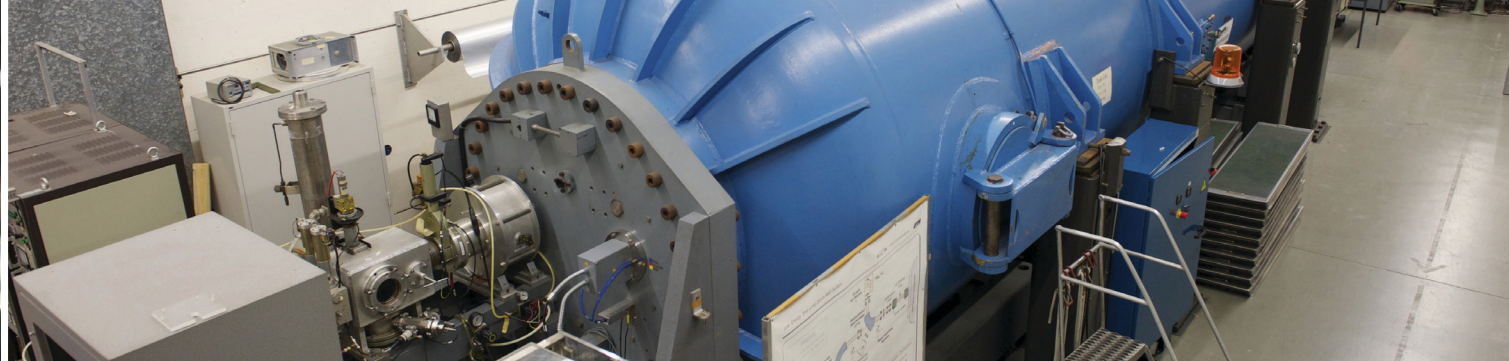


## Workshop

June 29 - 30, 2016 - Dübendorf (Zürich), Switzerland

**Surfaces and Thin Films**  
- Analytics in Practice





PREFACE

Surfaces and their specifically designed properties are nowadays integral parts of a very wide range of products. Knowing what is at a surface is a prime prerequisite for designing and controlling the functional behavior of such surfaces. Today a broad variety of surface analytical techniques are available, which provide targeted and detailed insights into the chemical and structural properties of surfaces and thin films. They are indispensable tools for the successful development of surface treatments and coatings.

EFDS and Empa are co-organizing this workshop that will provide you with an overview of the most important techniques for surface and thin film characterization. These are notably

- Ion beam analysis (RBS, ERDA, NRA)
- XPS (ESCA)
- ToF-SIMS
- Electron microscopy (STEM, SEM)
- Scanning probe microscopies (AFM, STM, MFM)
- XRD and X-ray tomography
- Surface mechanical properties (hardness, modulus)

The speakers of this seminar, coming from industry as well as from academia in three different countries, are leading experts in their fields, every one of them with decades of experience in applied surface analysis. As this workshop addresses primarily practical issues of surface analysis, the presentations will contain many examples on how the presented techniques are applied to solve problems in producing surfaces and coatings for specific applications. After each presentation of 60 minutes there will be sufficient time for discussing various aspects. The breaks and the dinner on the first day will provide ample opportunities for exchange and in-depth discussions.

PROGRAM COMMITTEE



Dr. Jörg Patscheider  
Empa, Swiss Federal  
Laboratories for Materials  
Science and Technology,  
Dübendorf, CH



Prof. Wolfgang Diehl  
Fraunhofer Institute  
for Surface Engineer-  
ing and Thin Films,  
Braunschweig, D



Dr. Sven Richter  
European Society  
of Thin Films,  
Dresden, D

Social Evening - Wednesday, June 29, 2016

18:30 - 22:00      Get-Together at the ETH Zürich “Dozentenfoyer”



PROGRAM

Wednesday, June 29, 2016

- 09:00      **Welcome and Opening**  
Dr. Jörg Patscheider  
Empa, Dübendorf, CH
- 09:15      **Keynote: Introduction to Materials Characterization:  
the Need for Complementary Techniques**  
Prof. Ivan Petrov  
University of Illinois, Urbana-Champaign, USA
- 10:30      **Coffee Break**
- 11:00      **Quantitative Surface Analysis by MeV Ion Beam Techniques**  
Dr. Max Döbeli  
ETH Zürich, Zürich, CH
- 12:15      **Lunch Break**
- 13:30      **XPS surface analysis in industry: practical examples, challenges  
and risks**  
Dr. Samuele Tosatti  
SuSoS AG, Dübendorf, CH
- 14:45      **Getting to know the surface-near chemistry: Time-of-Flight  
Secondary Ion Mass Spectrometry (ToF-SIMS) and Low Energy  
Ion Scattering (LEIS)**  
Dr. Birgit Hagenhoff  
tascon GmbH, Münster, D
- 16:00      **Coffee Break**
- 16:30      **How X-ray techniques can assist you in developing new coatings**  
Dr. Alex Dommann  
Empa, St. Gallen, CH
- 17:45      **End of day 1**

PROGRAM

Thursday, June 30, 2016

- 09:00      **Electron microscopy and related methods for the characterization of  
thin films and coatings**  
Dr. Rolf Erni  
Empa, Dübendorf, CH
- 10:15      **Coffee Break**
- 10:45      **Nanoscale characterization of surfaces and materials properties by  
Scanning Force Microscopies**  
Prof. Dr. Hans-Josef Hug  
Empa, Dübendorf, CH
- 12:00      **Micromechanics of thin films**  
Dr. Thomas Chudoba  
ASMEC GmbH, Radeberg, D
- 13:15      **Lunch Break**
- 14:30      **Visit of the Empa Laboratories**
- 16:00      **End of day 2**

Program is subject to change!

Note for Wednesday, June 29, 2016!

- 18:00      Bus shuttle to the ETH Zürich
- 18:30 - 22:00      Social Evening at the ETH Zürich