## **WORKSHOP ORGANIZERS**

Dr Margarethe Hofmann has a degree in materials science from Technical University Berlin and in foundry from University Duisburg. For 25 years she is owner of the Consulting company MatSearch and in this function she is organising and managing research projects on a national and European level, and materials conferences as well. She is also CEO of the Foundation of Rare Metals (ESM), Vice President of the Federation of European Materials Societies (FEMS) and appointed to become President of FEMS (2014–2015). She was CEO and the President of the Swiss Association for Materials Science and Technology (SVMT) for about 20 years.

Prof. Dr Alex Dommann is heading the Department "Materials meet Life" at Empa since summer 2013. Before he was CTO of the CSEM, Centre Suisse d'Electronique et de Microtechnique S.A. Neuchâtel and he was also heading together with Nico de Rooji the Microsystems Technology division at CSEM. He received his PhD in Solid State Physics in 1988 from ETHZ in Switzerland. His research concentrates on the structuring, coating and characterization of thin films and MEMS structures. He is member of different national and international committees and teaches MEMS technology, Biomaterials and Crystallography at different Swiss universities and has published more than 100 papers in the fields of thin films, MEMS reliability and microtechnology.

### GENERAL INFORMATION

Location Empa, Dübendorf

Überlandstrasse 129

AKADEMIE

Costs The course is free of charge.

The registration is binding.

Registration www.empa.ch/funct

Deadline January 14, 2014

**Contact** Empa-Akademie

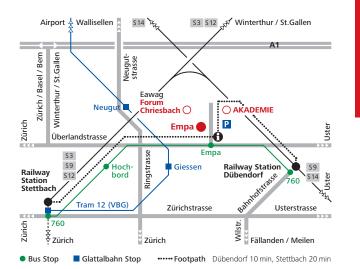
Dr Anne Satir

Phone +41 58 765 45 62 anne.satir@empa.ch

www.empa.ch

**How to** There is only limited parking available;

**get here** please do use public transport.



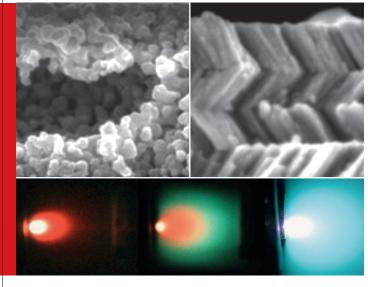






### WORKSHOP

## Functional Coatings For Innovative Applications



Empa, Dübendorf, Überlandstrasse 129 Tuesday, January 21, 2014, 13.30–17.00

Online registration: www.empa.ch/funct

### TOPIC

Coatings are protecting materials. They are, however, also applied for functional purposes. With a variety of architectures from single to multi layer, from very thin to thick coatings, they fulfill specific functions. Depending on the different application branches, a large variety of properties can be achieved like specific mechanical absorbing or permeable properties, optical characteristics like transparency or reflection, etc. These properties – in different and sometimes unusual combinations - are achieved by tailored selection of layer materials and architectures in combination with sophisticated processing techniques for film deposition. The requirements emerging from the various applications have to be met by a combination of novel research, adaptation of already existing or novel processes, and the sustainable handling of less common elements which are needed in such innovative technologies. The workshop gives an overview of various thin functional coatings in different applications.

### **TARGET AUDIENCE**

The workshop is intended for representatives from industry and academia interested in learning about new developments in functional coatings useful in various industrial sectors and for the different applications.

### GOAL

The aim of this workshop is to offer an overview of some interesting functional surface coatings, their processes, functions and applications and to discuss their challenges and opportunities with experts from different fields in processing and applications and likes to stimulate the exchange between different sectors and stakeholders towards new and interesting ideas and collaborations.

### PROGRAMME

| 13.30 | Introduction and Welcome Address<br>Prof. Dr Alex Dommann<br>Empa  |
|-------|--|
| 13.35 | New developments on Thin Film Processing<br>Alex Dommann<br>Empa   |
| 14.00 | Thick coatings deposited by thermal spray<br>Mario Tului<br>Centro Sviluppo Materiali S.p.A.                 |
| 14.30 | The Coating Challenge! Rethinking Surfaces Dr Rudolf Koopmans Dow Europe GmbH                                |
| 15.00 | Coffee break   |
| 15.30 | Functional sound absorbing thin coatings<br>for windows (tbc)<br>Prof. Dr Jens Günster<br>BAM                |
| 15.50 | Functional thin oxide films<br>for renewable energy applications<br>Thomas Lippert<br>Paul Scherrer Institut |
| 16.20 | Nanoparticles based coatings and<br>their applications<br>Prof. Dr Heinrich Hofmann<br>EPFL                  |
| 16.50 | <b>Final Discussion</b> Dr Margarethe Hofmann MatSearch Consulting Hofmann                                   |
| 17.00 | End of the Workshop  |

### **REGISTRATION**

# Functional Coatings For Innovative Applications

Empa, Dübendorf, Überlandstrasse 129 AKADEMIE Tuesday, January 21, 2014, 13.30–17.00

Deadline: January 14, 2014

Please register online:

www.empa.ch/funct

You will receive a confirmation by e-mail.