



Annual Event 2023



## Ultrathin Coatings and 2D-Materials

In recent decades, thin-film technology has made important contributions to high-performance manufacturing processes, electronics, photonics and life sciences, as well as to the transition from fossil to renewable energies.

Due to their unique properties, 2D-materials have been repeatedly cited as "materials of the future" for ultrathin coatings. However, their integration into mass production processes raises several challenges. Great industrial interest has been expressed for applications in sensor technology, printed electronics and optoelectronic components, to only name a few.

The annual event will bring exciting presentations on the latest developments in the world of ultrathin functional coatings and the integration of 2D-materials. The exchange between experts from industry and research will again be a central element.

Showcases & best practices from NTN members  
Technology impulses on the state of the art  
Networking and Foyer-Exhibition

Wednesday, 25 October 2023, 10.30h - 16.30h, HTA-Fribourg, Boulevard de Pérolles 80, CH-1700 Fribourg

**Morning program: Roundtables with showcases**

**Afternoon program: Plenum talks «Ultrathin Coatings & 2D-Materials»**

### Registration

[info@innovativesurfaces.ch](mailto:info@innovativesurfaces.ch) or [www.innovativesurfaces.ch](http://www.innovativesurfaces.ch).

Fee for participation:

Members NTN Innovative Surfaces CHF 60.-, non-members CHF 90.- (excl. VAT).

Cancellation policy:

Administrative fee CHF 30.-, substitutes accepted.

### Foyer Exhibition

Tables and power supply available. Fee CHF 390.00 (excl. VAT).

[info@innovativesurfaces.ch](mailto:info@innovativesurfaces.ch)

Association NTN Innovative Surfaces

Lagerstrasse 14 | Chemin des Verdiers 4  
CH-8600 Dübendorf | CH-1700 Fribourg



# A day full of showcases & exchange of ideas

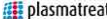





10.30	Welcome, Coffee
11.00 - 12.00	Roundtables / Showcases
12.00	Standing-lunch/Tabletop Foyer Exhibition
13.00	Lecture in the Auditorium
14.30	Coffee break / Tabletop Foyer Exhibition
15.00	Lecture in the Auditorium
16.30	Apéro / Tabletop Foyer Exhibition



**Foyer Exhibition**  
Tables : book now  
[info@innovativesurfaces.ch](mailto:info@innovativesurfaces.ch)

## Morning program - Roundtables

### 10.30h - 12.00h Showcases & best practise

-  **Atmospheric plasma enhanced chemical vapor deposition of anti-corrosive coatings**, Klaus Kresser, Plasmatreat Schweiz AG
-  **Optimierung von galvanischen Schichten mit AAACOAT/ Sol-Gel**  
Roman Fuchs, FME GmbH
-  **How Atomic Force Microscopy can help research, development and quality control on ultrathin coatings and 2D materials**  
Marco Portalupi, Nanosurf AG
-  **Polymeric 2D-aided 2D Materials**  
Sina Göhl, Susos AG
-  **Vom Federkiel zur Nanolithographie (2&2½D precision metrology)**  
Dietmar Bertsch, OST – Ostschweizer Fachhochschule
-  **Tribological considerations for ultra thin coatings and 2D materials: facing functionality and durability**  
Anna Igual-Munoz, EPFLausanne

**12.00 Buffet lunch**

## Afternoon program - Plenum talks

13.00h - 16.30h Auditoire Edouard Gremaud

- 13.00 Welcome and introduction**  
Andreas Hafner, Jörg Güttinger, NTN Innovative Surfaces
- Low Dimensional Materials: Challenges and Opportunities**  
Michel Calame, Empa, University of Basel
- Fabrication of next generation electronics with nanomaterials**  
Natanael Lanz, Chiral Nano AG
- Solution processing of 2D material inks into thin conductive coatings**, Jakob Heier, Empa
- 14.30 Coffee Break**
- 15.00 Random networks created by plasma, e-beam or UV: when chaos meets functionality**, Sonja Neuhaus, FHNW
- Nanocoatings by atmospheric atomic layer deposition for energy applications**, Andrea Giraldo, BASF Schweiz AG
- From Nanometer to Micrometer thin Films, or how to combine ALD and PVD to improve coating performance**  
Carlos Guerra, Swiss Cluster AG

**16.30 Apéro**

