

Annual Event 2022



Efficient Design for New Functionalities

Novel and optimized functional materials are the driving force behind technological progress. To meet ever-shorter development cycles more efficient selection and evaluation processes need to be explored and used for materials selection, formulations and optimized coatings.

Simulations to predict efficient compositions, new processes but also combinatorial approaches are effective tools to achieve such goals. However, efficient testing methods are additionally required, allowing for in-situ testing of performance profiles as well as of final functionalities. This is often a bottleneck.

Automatization by appropriate combination of such technologies can make a significant contribution to keep a competitive edge. It allows an efficient and reproducible development of new materials and formulations.

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

Thursday, 27 October 2022, 10.30h - 16.30h, HTA-Fribourg, Boulevard de Pérolles 80, CH-1700 Fribourg

Morning program: Roundtables with showcases

Afternoon program: Plenum talks «Efficient Design for New Functionalities»

Incl. simulation, combinatorial material design and effective testing methods

Registration

info@innovativesurfaces.ch or www.innovativesurfaces.ch.

Fee for participation:

Member 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 350.00 (excl. VAT).

info@innovativesurfaces.ch / Tel. 071 277 93 45

Association NTN Innovative Surfaces

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



Morning program - Roundtables

10.30h - 12.00h Showcases & best practise

Glasartige Beschichtungen für besondere Anforderungen

Roman Fuchs, FME GmbH

Surfaces in the context of prevention and oral health

Andaç Armutlulu, Institut Straumann AG

Openair-Plasma® Technology for Wetting, Sealing & Bonding in Battery Applications

Klaus Kresser, Plasmatreat Schweiz AG

Injection overmoulding of plasma functionalized substrates: adhesion promotion and new material combinations

Johannes Konrad, Institut iRAP HEFR

Searching for traces in the primordial soup

Lukas Schuler, Xirus GmbH

Pitch your Projects in the Nano Community Collaboration Corner (nc³)

Leendert den Haan, Marcus Morstein, Hightech Zentrum Aargau AG

Die Fähigkeiten der Gruppe Oberflächen aus der Fachhochschule (Haute Ecole Arc) zu Ihren Diensten!

Oksana Banakh, Haute Ecole Arc Ingénierie (HES-SO)

State of the Art Testing, Quick Mode - Preserving Accuracy

Philippe Renaud, Stefano Okretic, Anton Paar Switzerland AG

Entwicklung von funktionalen Beschichtungen am IMPE

Toni Schneider, IMPE – ZHAW

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

Smart Materials by Inkjet: Combining innovative nanomaterials with Inkjet to produce new functional surfaces

Gilbert Gugler, iPrint Institute HEFR

Towards an autonomous robotic battery materials innovation platform

Corsin Battaglia, Empa

14.15 **Coffee Break**

14.45 **Innovative parylene-based PECVD/ALD multilayer structure with optimized surface functionality**

Andreas Hogg, Coat-X SA

High-entropy ceramics: Between hype and future opportunities

Michael Stuer, Empa

Use of Artificial Intelligence and Big Data Analysis in Thermal Spray Modelling

Majid Nabavi, Oerlikon Surface Solutions

16.30 **Apéro**

