



Annual Event 2026



Advances in bio-based coatings & biofunctionalized hybrid materials

Bio-based coatings and biofunctionalized hybrid materials combine the properties of synthetic and biological materials. Biofunctionalization can improve the bonding and interaction between synthetic and biological materials while also enhancing their environmental compatibility. Growing areas of application include medicine and environmental applications. Fundamentally, the goal is to increasingly utilize renewable, bio-based material sources and to ensure that hybrid material systems can be degraded without leaving residues and in a non-toxic manner after their useful life in the body or in nature.

Technology impulses on the state of the art
Showcases, best practices, networking &
foyer exhibition
In cooperation with  Swiss Polymers Cluster

Thursday, 22 Oktober 2026, 10.30h - 16.30h, HEFR-Fribourg, Boulevard de Pérolles 80, CH-1700 Fribourg

Morning program:

Roundtables with showcases

Afternoon program:

Advances in bio-based coatings & biofunctionalized hybrid materials

Foyer Exhibition

Apply: info@innovativesurfaces.ch

Registration

Until 16 October 2026: www.innovativesurfaces.ch.

Association NTN Innovative Surfaces

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



In cooperation with:



Supported by:



10.00	Registration / Welcome Coffee
10.30	Roundtables / Showcases
12.00	Lunch / Foyer Exhibition
13.00	Plenary Talks
14.30	Coffee break / Foyer Exhibition
15.00	Plenary Talks
16.30	Apéro / Foyer Exhibition

Event Location:

HEFR-Fribourg, Boulevard de Pérolles 80, CH-1700 Fribourg

Event fee (excl. VAT):

Members NTN Innovative Surfaces & Swiss Polymers Cluster CHF 50.-, Non-members CHF 100.-

Cancellation policy:

Administrative fee CHF 50.- (excl. VAT)
Substitutes are accepted at any time

Apply: info@innovativesurfaces.ch

Table fee: CHF 360.00 (excl. VAT)

Foyer Exhibition

Morning program – Roundtable Sessions

10.30h - 12.00h: 3 parallel sessions



Water-based fluoride-releasing dental varnish

Roman Brönimann, IMPE ZHAW



Dissolved or not? T2-NMR insights into the micro-scale mobility of polymers in disperse systems

Nikolaus Nestle, BASF SE



Modifying surface properties with ink-jet printed patterns - Opportunities and challenges

Jean-Marie Antonietti, iPrint HES-SO



Printed Biosensors: How 2D Materials are Revolutionizing Biobased Sensing Platforms

Jakob Heier, Empa



From Seaweed to Shelf: Scaling Macroalgae Biopolymers into Protective Packaging Materials

Mert Furkan Filizoglu, B'ZEOS Switzerland SA



Machine Learning & Artificial Intelligence towards Autonomous AFM

Marco Portalupi, Nanosurf AG



Wood Protects Wood: A Fluorine-Free Bio-Based Coating for Sustainable Surface Protection

Arnaud Schöni, Sylvain LeCoultré, Berner Fachhochschule BFH



Industrial Applications of PFAS-Free Coatings

Edin Balic, SuisseNano SA



In cooperation with:



Afternoon program - Plenary Session

13.00h - 16.30h Auditoire Edouard Gremaud

Advances in bio-based coatings & biofunctionalized hybrid materials

13.00 **Welcome & Introduction**, Andreas Hafner, Jörg Güttinger, Raphaël Hatem

Trends in Barrier Coatings for Packaging: Bio-Based Innovations driven by Regulations and Circular Economy Requirements

Gabriela MeloRodriguez, Omya International AG

Porous Modified Calcium Carbonate as an Efficient Carrier for Gallic and Ascorbic Acids in Humidity-Activated Oxygen Scavenging Systems

Selçuk Yldirim, Zurich University of Applied Sciences, ZHAW

Development of a reinforcement composite coating for flexible compostable packaging, tailored to existing processes

Loris Castagnolo, SurfAce Cleantech SA

Surface functionalisation of recycled glas fibers with bio-based resins and its application

Mitchell D. Anderson, Verretex SA

14.30 **Coffee Break** (hosted by Swiss Polymers Cluster)

15.00 **Materialien und Oberflächen für die Plastifiziereinheit und Werkzeuge in der Kunststoffindustrie**, Patrick Margraf, Härterei Gerster AG

Multilayer Origami Scaffold for Regenerative Medicine

Maurizio Gullo, University of Applied Sciences Northwestern Switzerland FHNW

Engineering Interfaces in Bio-Based Materials: Water-Based AQiBond™ Adhesion Promoters for Functional Coatings

Sina Goehl, SuSoS AG

Light-inducible and skin friendly antimicrobial coatings

Giacomo Reina, Swiss federal lab for materials science & technology Empa

16.30 **Closing Remarks & Networking Apéro**



Gabriela MeloRodriguez,
Omya International AG



Selçuk Yldirim
ZHAW



Loris Castagnolo
SurfAce Cleantech SA



Mitchell D. Anderson
Verretex SA



Patrick Margraf
Härterei Gerster AG



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Empa