Annual Event 2025

innovative surfaces®

Materials, Surfaces & Interfaces for a Circular Economy of Polymeric Materials

Polymers are versatile materials and are used in everything from high-tech electronics to consumer packaging. Mostly derived from petrochemicals, polymer recycling and their useful breakdown can be challenging. The sustainable use of polymers in circular processes is key and might compete with bio-based alternatives in a future circular economy.

Experts present advances & challenges in the circular use of polymers, the contribution of innovative surface technologies & energy-efficient processes for the transition from linear to circular value chains. Surface technologies can significantly improve the sustainability of polymer products, their material value, and their use over multiple life cycles.

Discuss the latest innovations in surface technologies with experts from the network.

Tuesday, 21 October 2025, 10.30h - 16.45h, HTA-Fribourg, Boulevard de Pérolles 80, CH-1700 Fribourg

Morning program:

Roundtables with showcases

Afternoon program:

Materials, Surfaces & Interfaces for a Circular Economy of Polymeric Materials

Registration

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

Fee for participation (all excl. VAT):
Members NTN Innovative Surfaces CHF 50.-
Non-members CHF 100.-

Cancellation policy:
Administrative fee CHF 45.-, substitutes accepted.

Foyer Exhibition

Tables and power supply available. Fee CHF 360.00 (excl. VAT).
info@innovativesurfaces.ch

Association NTN Innovative Surfaces
Lagerstrasse 14 I Chemin des Verdiers 4
CH-8600 Dübendorf I CH-1700 Fribourg

Join our Group NTN innovative surfaces

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10.30	Roundtables / Showcases
12.00	Lunch / Tabletop Foyer Exhibition
13.00	Plenum Talks
15.00	Coffee break / Tabletop Foyer Exhibition
15.30	Plenum Talks
16.45	Apéro / Tabletop Foyer Exhibition

Foyer Exhibition

Tables available: book now
info@innovativesurfaces.ch

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Morning program – Roundtable Sessions

10.30h - 12.00h: 3 parallel sessions, each with 3 roundtables

Cellulose-based coatings for fruits and vegetables
Dr. Gustav Nyström, Empa

Inkjet printing research: a mouthwatering journey with edible inks *Natalia Carrie, HEFR, iPrint Institute*

Revolutionizing Plastic Recycling: A Novel Co-Binder for Efficient Ink Removal *Silvia Paula, Evonik Operations GmbH*

Monolayer Coatings in Lifecycle Assessment: Negligible Direct Environmental Footprint, Significant Systemic Gains
Sina Göhl, SuSoS AG

«Green» electropolishing of industrial alloys
Prof. Oksana Banakh, HE-Arc

Complement or Competition: Thermal Spray, Weld Overlay & Laser Cladding, *Mischa Weder, cross-ING AG*

Laser Texturing and DLC Optimization for Optimal Tribological Performance *Mirko Zago, ARGOR-ALJBA SA*

Encapsulation and Protection of Sensors
Dr. Cornelia Nef, Ost - Ostschweizer Fachhochschule

Between materials – sustainable interface modification using plasma treatment and plasma coatings
Prof. Sonja Neuhaus, University of Applied Sciences FHNW

Laser Processing and Laser Assisted Sensing of Surfaces
Yashar Khodaei, GMP SA

12.00 Buffet lunch

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In cooperation with: Swiss Polymers Cluster

Afternoon program - Plenary Session

13.00h - 16.45h Auditoire Edouard Gremaud

Materials, Surfaces & Interfaces for a Circular Economy of Polymeric Materials

13.00 **Welcome & Introduction** *Dr. Andreas Hafner, Dr. Jörg Güttinger*

Life-cycle Industrial Polymer Recycling (Chemcyling, Pyrolysis, Solvolyzes) *Dr. Hannah Mangold, BASF SE*

Chemomechanisches Recycling of TPU: Chances & Problems
Dr. Lena Marie Funke, BASF SE

Towards Sustainable Surface Technologies for Circular economy *Prof. Yves Leterrier, EPFL*

Challenges & Opportunities in PET Closed-loop Recycling: a Surface Engineering approach
Dr. Jérôme Larrieu, Plastic Technologies Inc.

14.40 Coffee Break

15.10 **On's Cyclon program - towards circular footwear**
Christian Goldhahn, On AG

Circularity Is Not a Destination: Re-rethinking the Packaging Sustainability Narrative *Dr. Lars Lundquist, Nestlé SA*

Gluten, a pseudo-thermoplastic, bio sourced, compostable Material *Dr. Michel Schenker, Omya International AG*

Unlocking Lignin: A Versatile Ingredient for Functional and Innovative Materials and Surfaces
Dr. Philip Scholten, Bloom Biorenewables Ltd.

16.45 Networking Apéro

Hannah Mangold	Lena Marie Funke	Yves Leterrier	Jérôme Larrieu	Christian Goldhahn	Lars Lundquist	Michel Schenker	Philip Scholten

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