

## EXHIBITION 2019

Some places are still available. Please contact us.

Come and visit the various stands displayed for your convenience inside the exhibitor's area. Discover new partners and technologies.

**Institute of Polymer Nanotechnology,**  
FHNW University of Applied Sciences & Arts NW Schweiz  
**Plastics innovation Competence Center (PICC)**  
School of Engineering and Architecture Fribourg  
**HASCO Suisse AG**

## SPONSORS



**PLASTICS  
INNOVATION**  
Competence Center



SAVE THE DATE - MAY 7<sup>TH</sup> 2020

PLASTICS TECHNOLOGY DAY

# PRACTICAL INFORMATION

## REGISTRATION

<https://www.swissplastics-cluster-event.ch/>

### Registration deadline

March 14th 2019

### Notice of withdrawal

free of charge until March 7th 2019 via mail to  
[info@swissplastics-cluster.ch](mailto:info@swissplastics-cluster.ch)  
After this deadline the full participation fee is due.

## RATES

**Rate A :** CHF 250.-  
Member Swiss Plastics Cluster

**Rate B :** CHF 400.-  
Non-Member Swiss Plastics Cluster

**Rate C :** CHF 55.-  
Student

### Payment

The invoice is sent 30 days prior to the conference.

## ORGANISATION

Swiss Plastics Cluster  
Passage du Cardinal 11  
CH-1700 Fribourg

T +41 26 429 67 72  
[info@swissplastics-cluster.ch](mailto:info@swissplastics-cluster.ch)

## CONFERENCE VENUE

**School of Engineering and Architecture Fribourg**  
Boulevard de Pérolles 80  
Auditorium Edouard Gremaud  
CH - 1700 Fribourg

## DIRECTIONS

**Bus service**  
From Fribourg railway station  
[www.tpf.ch](http://www.tpf.ch)

Bus number 1 Marly-Gérine  
Bus STOP Plateau de Pérolles  
Bus number 3 Pérolles  
Bus number 7 Cliniques  
Bus STOP Pérolles-Charmettes

### By car

Motorway A12,  
Exit Fribourg-south,  
direction Marly  
Address GPS:  
Boulevard de Pérolles 80  
1700 Fribourg

Car park - parking spaces available on 1st and 2nd floor



swiss plastics  
cluster

4<sup>TH</sup> EDITION

# MICRO- AND NANOTECHNOLOGY IN SERVICE OF THE SWISS PLASTICS INDUSTRY

MARCH 21<sup>ST</sup> 2019

<https://www.swissplastics-cluster-event.ch/>

INNOSQUARE



Haute école d'ingénierie et d'architecture Fribourg  
Hochschule für Technik und Architektur Freiburg



4<sup>th</sup> EDITION

MICRO- AND NANOTECHNOLOGY IN SERVICE OF  
THE SWISS PLASTICS PROCESSING INDUSTRY

In 2019, the potential of micro and nanotechnologies for the Plastics processing industry is definitely recognized but not fully commercially exploited. This fourth edition of the micro-nanotechnology conference is intended for stakeholders from plastics industry, academia and companies who provide service to the plastic processing market.

This year's conference covers three main aspects of this wide field, from nanotoxicology, nanostructuration to the applications in different technological fields.

The speakers will give insight into new findings and regulations concerning nanoparticles and their possible impact on the food chain. The demonstrated applications range from medical products and devices, tissue engineering, protection against moisture and corrosion to anti-counterfeit products. In the last program session, the technology and the applications of surface micro- and nanotreatments will be presented.

The participants of this conference will have an overview of new upcoming technologies, regulations and concrete applications and will take advantage of the networking with renowned experts.

This event is organized by the Swiss Plastics Cluster in collaboration with the Plastics Innovation Competence Center (PICC).



For the committee :  
Aurélie Auffret  
Swiss Plastics Cluster Manager

PROGRAM  
CONFERENCE

in English and French

Auditorium Edouard Gremaud (building A, ground floor)

09H00 REGISTRATION - WELCOME COFFEE

09H30 WELCOME ADDRESS

François Aeby, Vice-president Swiss Plastics Cluster and  
Director Advanced Technologies, Dentsply Sirona

09H35 SESSION 1: SAFETY AND HEALTH EFFECTS

Keynote : Reliability of Nanosafety Research - Toxicological Findings  
and Regulatory Activities - EN  
Harald Krug, NanoCASE GmbH (CH)

10H15 Micro- and nanoplastic particles - impacts on human health via the  
food chain - EN

Barbara Rothen-Rutishauser, Adolphe Merkle Institut (CH)

10H50 COFFEE BREAK - VISIT OF THE EXHIBITION

11H20 Towards a comprehensive modelling framework for assessing toxicity  
of nanoparticles - EN

Pietro Asinari, Department of Energy, Politecnico di Torino (IT)

11H45 SESSION 2: STRUCTURATION

Advanced manufacturing of polymer surface topographies - EN  
Per Magnus Kristiansen, Institut of Polymer Nanotechnology, FHNW  
(CH)

12H10 Surface texturing and coatings for higher productivity in plastics pro-  
cessing - FR

Stefan Hengsberger, Plastics Innovation Competence Center (CH)

12H35 LUNCH BREAK - VISIT OF THE EXHIBITION

PROGRAM  
CONFERENCE

in English and French

Auditorium Edouard Gremaud (building A, ground floor)

14H00 Femtosecond laser processing of glass micromolds with nanoscale  
resolution - EN

Yves Bellouard, EPFL (CH)

14H35 SESSION 3: APPLICATIONS

Using 3D Bioprinting to Advance Tissue Engineering - EN  
Marcy Zenobi-Wong, Institut of Biomechanics, ETH Zurich (CH)

15H00 Nanoparticules for medical applications: challenges and trends  
Heinrich Hofmann, Emeritus Professor EPFL (CH)

15H25 COFFEE BREAK - VISIT OF THE EXHIBITION

16H00 Authentication of molded plastic parts using surface microstructure -  
EN

Fred Jordan, AlpVision SA (CH)

16H20 Protecting high value-added components against moisture  
penetration and corrosion - EN

Yanik Tardy, Coat-X SA (CH)

16H45 CONFERENCE END - APERITIF - VISIT OF THE EXHIBITION

