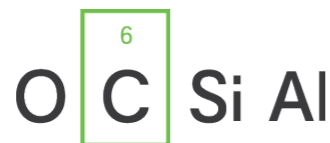


## EXHIBITION 2017

Some places are still available. Please contact us.

Ecole Polytechnique Fédérale de Lausanne (EPFL)  
Swiss Federal Laboratories for Materials Science and Technology (EMPA)  
Institute of Polymer Nanotechnology,  
FHNW University of Applied Sciences & Arts NW Switzerland  
iPrint Center  
Plastics Innovation Competence Center (PICC)  
Haute école d'ingénierie et d'architecture de Fribourg  
Idonus Sàrl  
Micropat SA  
NanoXplore GmbH  
Institute of Materials and Process Engineering  
ZHAW Zurich University of Applied Sciences  
Polycompound AG

## SPONSORS



SAVE THE DATE - MAY 3<sup>RD</sup> 2018

PLASTICS TECHNOLOGY DAY

JOURNÉE TECHNOLOGIQUE DE LA PLASTURGIE

TECHNOLOGIETAGUNG KUNSTSTOFFTECHNIK

# PRACTICAL INFORMATION

## REGISTRATION

<http://conferences.innosquare.com/2/micro/registration/>

### Registration deadline

March 2nd 2017

### Notice of withdrawal

free of charge until February 27th 2017 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 300.-

Non-Member  
Swiss Plastics Cluster

**Rate C** : CHF 30.-

Student

### Payment

The invoice is sent 30 days prior to the conference.

## ORGANISATION

Swiss Plastics Cluster  
Passage du Cardinal 11  
Annexe 2  
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  
Adress GPS:  
Boulevard de Pérolles 80  
1700 Fribourg

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



swiss plastics  
cluster

3<sup>RD</sup> EDITION

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

MARCH 9<sup>TH</sup> 2017

<http://conferences.innosquare.com/micro>



INNOSQUARE



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



## 3<sup>rd</sup> EDITION MICRO- AND NANOTECHNOLOGY IN SERVICE OF THE SWISS PLASTICS PROCESSING INDUSTRY

Nowadays, nanotechnologies hold remarkable potential for Swiss companies active in the field of plastics. The conference hosted in Fribourg aims at providing industry professionals with impulses for innovation which render companies in plastics more competitive and to strengthen their market position. The conference gathers professionals from academia and industry which foster innovation by sharing their expertise.

The speakers will demonstrate the wide spectrum of industrial applications nanotechnologies behold for the plastics industry which are among others: plastic parts produced with optical effects, textures enhancing productivity or applied for counterfeiting, micro- and nano-encapsulation for the dosage of drugs, surface functionalization by the means of ions- or alternatively by electron beam, components for lithium-ion-electrodes, 3D prints of thermoplastic materials as well as the development of new materials based on the compounding process.

Participants of the conference discover not only indicated technologies but more importantly their concrete applications for specific industries. Especially complex technologies require an application-oriented approach which demonstrates the added value and its applicability for the plastics industry, which is hence the main focus of the conference.

## PROGRAM

CONFERENCE in English and French  
Auditorium Edouard Gremaud (building A, ground floor)

**08H30 REGISTRATION - WELCOME COFFEE**

**09H00 Welcome address | FR**  
Christophe Jacot, President Swiss Plastics Cluster and CEO Admo Plastiques SA

**09H05 Presenter's address | FR**  
François Aeby, Vice-president Swiss Plastics Cluster and Director Advanced Technologies, Dentsply Sirona

### SESSION 1: MICRO- AND NANOTECHNOLOGY IN HEALTH & ENERGY

**09H15 KEYNOTE: Making nano-products safe for the market thanks to the knowledge of nano-safety research | EN**  
Harald Krug, International Research Cooperations Manager, EMPA, Swiss Federal Laboratories for Materials Science and Technology

**09H50 Nanoparticles for health and energy applications | EN**  
Katharina Fromm, Full Professor, Department of Chemistry, University of Fribourg

**10H15 COFFEE BREAK - VISIT OF THE EXHIBITION**

**10H50 SESSION 2: FUNCTIONALIZED POLYMERS  
Digital deposition of flax yarns on 3D supports for composite manufacturing | EN**  
Mathieu Soutrenon, Scientific Collaborateur, IPrint Center, School of Engineering and Architecture Fribourg

**11H15 Technological and operational safety requirements for the compounding of Nano-Composites | EN**  
Hans-Ulrich Siegenthaler, Technology Expert, Kneading Experts GmbH  
Peter Imhof, Processing & Sales, Polycompound AG

**11H40 Industrial commercial applications of graphene enhanced thermoplastics | EN**  
Francis Nedvidek, Managing Director Europe, NanoXplore GmbH

**12H05 Stimuli-responsive polymeric materials | EN**  
Stephen Schrettel, Postdoctoral Researcher, Adolphe Merkle Institute, University of Fribourg

**12H30 LUNCH BREAK - VISIT OF THE EXHIBITION**

**PARALLEL SESSION A**  
Auditorium B30.08 (building B, 3<sup>rd</sup> floor)

**13H45 SURFACE FUNCTIONALIZATION  
Surface treatment by ion implantation | EN**  
Christian Spoerl, Managing Director, Idonus Sàrl

**14H10 Electrons for functional surfaces | EN**  
Sonja Neuhaus, Group Leader Surface Functionalization, Institute of Polymer Nanotechnology, FHNW University of Applied Sciences & Arts NW Switzerland

**14H35 Imparting functionality by wet application of polymeric coatings | EN**  
Martin Winkler, Head of Laboratory Polymeric Coatings, Institute of Materials and Process Engineering, ZHAW Zurich University of Applied Sciences

**PARALLEL SESSION B**  
Auditorium Edouard Gremaud (building A, ground floor)

**13H45 MICRO- AND NANO STRUCTURATION  
Des traitements de surface pour faciliter le démoulage des pièces plastiques: un projet Eurostars | FR**  
Stefan Hengsberger, Professor, Plastics Innovation Competence Center, School of Architecture and Engineering Fribourg

**14H10 Projet PIMENT, micro et nano structuration de moules d'injection | FR**  
P.-F. Chauvy, CEO, Micropat SA

**14H35 Polymer replication on micro- and nanoscale - functionality by structure | EN**  
Per Magnus Kristiansen, Professor, Institute of Polymer Nanotechnology, FHNW University of Applied Sciences & Arts NW Switzerland

**15H00 COFFEE BREAK - VISIT OF THE EXHIBITION**

**15H35 SESSION 3: SURFACE ANALYSIS IN HEALTH  
Investigation and manipulation at micro and nanoscale. The added value of smart proof and FluidFM microscopes | EN**  
Alessandra Apicella, Materials Specialist, Swiss Integrative Center for Human Health (SICHH)

**16H00 Hierarchical macro-micro porous structures for tissue engineering applications | EN**  
Matteo Gregorio Modesto Marascio, PhD Student, Ecole Polytechnique Fédérale de Lausanne

**16H25 Conclusion**  
François Aeby, Vice-president Swiss Plastics Cluster and Director Advanced Technologies, Dentsply Sirona

**16H30 CONFERENCE END - APERITIF**