



# GENERAL INFORMATION



Registration

[www.reseau-plasturgie.ch/en/micro-nano](http://www.reseau-plasturgie.ch/en/micro-nano)

Deadline

19<sup>th</sup> November 2012

Registration fees

**CHF 150.- incl. VAT**

for members: Swiss Plastics Cluster, Plastipolis, PST-FR, Alplastics and MicronArc

**CHF 250.- incl. VAT (non-members)**

**CHF 40.- incl. VAT (students)**

*Payment terms: 30 days on invoice reception*

Conference fee includes:

- Conference material

- Coffee breaks, lunch, cocktail

*Cancellations should be made in writing before 31<sup>st</sup> October 2012*

*No refund after 31<sup>st</sup> October 2012*

Place

College of Engineering and Architecture of Fribourg

Boulevard de Pérolles 80, CH-1700 Fribourg

Auditorium Edouard Gremaud

P. +41 26 429 66 11, F. +41 26 429 66 00

[www.reseau-plasturgie.ch/en/micro-nano](http://www.reseau-plasturgie.ch/en/micro-nano)

Access

Public transports

From Fribourg station

[www.tpf.ch](http://www.tpf.ch)

Bus Line 1 Marly - Gérine

Exit at Plateau de Pérolles

Departures at 09, 19, 29, 39, 49, 59 past each hour

Bus Line 3 Pérolles

Exit Pérolles - Charmettes

Departures at 08, 23, 38, 53 past each hour

Bus Line 7 Cliniques

Exit Pérolles - Charmettes

Departures at 05 and 35 past each hour

Road

Highway A12

Exit Fribourg-sud, direction Marly

Toll Parking till 18h30

*(intermediate and higher levels reserved for visitors)*

GPS Address: Bd de Pérolles 86, Fribourg

Secretariat

Swiss Plastics Clusters

Alexandra Musy

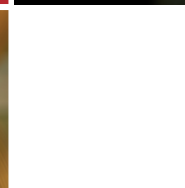
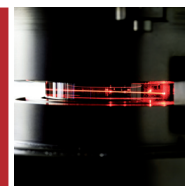
c/o EIA-FR

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1705 Fribourg

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## INVITATION CONFERENCE

Micro- and Nanotechnologies  
in Materials and Processes  
for the European Polymer  
Industry

College of Engineering and Architecture  
of Fribourg, Switzerland

22<sup>nd</sup> November 2012

[www.reseau-plasturgie.ch/en/micro-nano](http://www.reseau-plasturgie.ch/en/micro-nano)



# CONFERENCE

## «Micro- and Nanotechnologies in Materials and Processes for the European Polymer Industry»

The latest scientific and technological developments in the field of micro- and nanotechnologies are the core issues of this international conference to be held in Fribourg and organized by the Swiss Plastics Processing Cluster and by «Plastipolis», the competitiveness division of the French Plastics Cluster.

Numerous European specialists from Austria, Denmark, Germany, France and Switzerland, will be gathered in the College of Engineering and Architecture in Fribourg in order to present the latest developments in their respective fields of expertise concerning diverse polymer applications, including shaping and its associated processes.

This event will also provide an excellent opportunity to demonstrate the importance of inter- and intra-cluster cooperation which reinforces research partnerships between colleges and companies and which, in turn, strengthens regional economies and enables them to better meet the challenges of globalization.

Renowned researchers and cutting edge industrialists will illustrate the major stages encountered on the road map from basic to applied research and thence towards industrialization and process-optimization. Various speakers will demonstrate concretely how micro- and nanotechnologies can confer added value to the polymer processing industry.

Patrick Vuillermoz and Jacques Bersier, coordinators of the before-mentioned Plastics Clusters, will be happy to welcome you to Fribourg for this highly important European meeting.

Presentations will be given either in English or in French, while a simultaneous translation will be provided in the other language.



Réseau nanotechnologies  
Nanotechnologie Netzwerk

# PROGRAM

08:30 WELCOME – REGISTRATION – COFFEE

## 09:00 OPENING MESSAGE

Mr. Patrick Vuillermoz, Plastipolis Director, France  
Mr. Jacques P. Bersier, Plastic Cluster Coordinator, Switzerland

## 09:10 NANOMATERIALS OF ARKEMA: STILL CLIMBING THE STEEP CURVE OF MATERIAL DEVELOPMENT

Dr. Pierre Gérard, Arkema, Groupement de Recherche de Lacq, France

## 09:40 PROCESSING OF CELLULOSE CONTAINING POLYMER NANOCOMPOSITES

Dr. Johan Foster, Group Leader, Adolphe Merckle Institute, Switzerland

## 10:10 DEVELOPMENT OF NEXT-GENERATION OF WEAR-RESISTANT EASY-RELEASE COATINGS FOR INJECTION MOULDING

Dr. Lars Pleth Nielsen, Centre Manager, Tribology Centre, Danish Technological Institute

10:40 COFFEE BREAK

## 11:00 PRODUCTION EFFICIENCY BY IMPROVING PRODUCTION TOOLS

Prof. Dr. Clemens Holzer, Leoben University, Austria

## 11:30 A (NANO)TRIBOLOGICAL ANALYSIS OF ANTI-ADHESIVE SURFACE COATINGS OF POLYMER MOLDS

Prof. Dr. Stefan Hengsberger, HES-SO//Fribourg EIA-FR  
Mr. Yvan Bourqui, Innovative Director, Johnson Electric International AG, Switzerland

## 12:00 REPLICATION TECHNOLOGY TOOLBOX FOR MICRO- AND NANOSTRUCTURED POLYMER SURFACES

Prof. Dr. Per Magnus Kristiansen, Institut für nanotechnische Kunststoffanwendungen (INKA), Institut für Kunststofftechnik (IKT), Switzerland

12:30 LUNCH

## 13:30 CONVERGENCE OF MECHANICAL MICRO-MANUFACTURING PROCESSES

Mr. Thierry Barrière, Pr Jean-Claude Gelin, FEMTO-ST, France

## 14:00 PROCESS DEVELOPMENT AND MANUFACTURING OF PEEK RINGS FOR DENTAL BRACES

Mr. Joël Cupillard, Techno Synthetic SA, Switzerland

## 14:30 LASER MICROSTRUCTURING OF LARGE SURFACE AREAS

Prof. Patrik Hoffmann, Head Laboratory Advanced Materials Processing, EMPA Swiss Federal Laboratories for Materials Science and Technology, Switzerland

15:00 COFFEE BREAK

## 15:20 IMPRESS: FLEXIBLE COMPRESSION INJECTION MOULDING PLATFORM FOR MULTI-SCALE SURFACE STRUCTURES

Dr. Nicolas Blondiaux, R&D Engineer, CSEM, Switzerland

## 15:50 S2P AND 3D-HIPMAS : TWO MAJOR PLATFORMS PROJECTS FOR 3D HIGH PRECISION MID ASSEMBLIES

Mr. Maël Moguedet, Pôle Européen de Plasturgie, France

## 16:20 CLOSING MESSAGE

Mr. Dominique Dunon-Bluteau, France Embassy in Switzerland

16:30 COCKTAIL