



# *Association NTN Innovative Surfaces*

*Dr. Jörg Güttinger, Managing Director*

*Trends in Micro and Nano, 28 October 2019, St.Gallen*



Supported by:



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

Innosuisse – Swiss Innovation Agency

# The Association



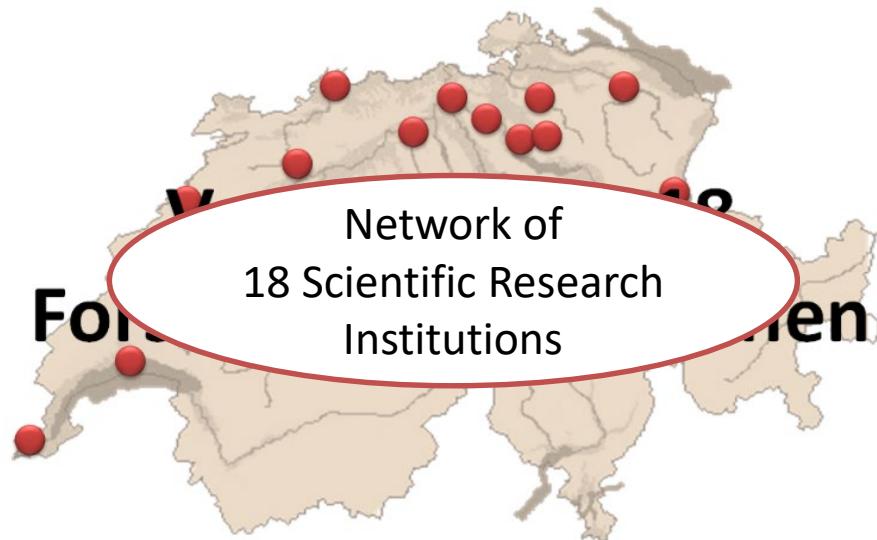
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## Board

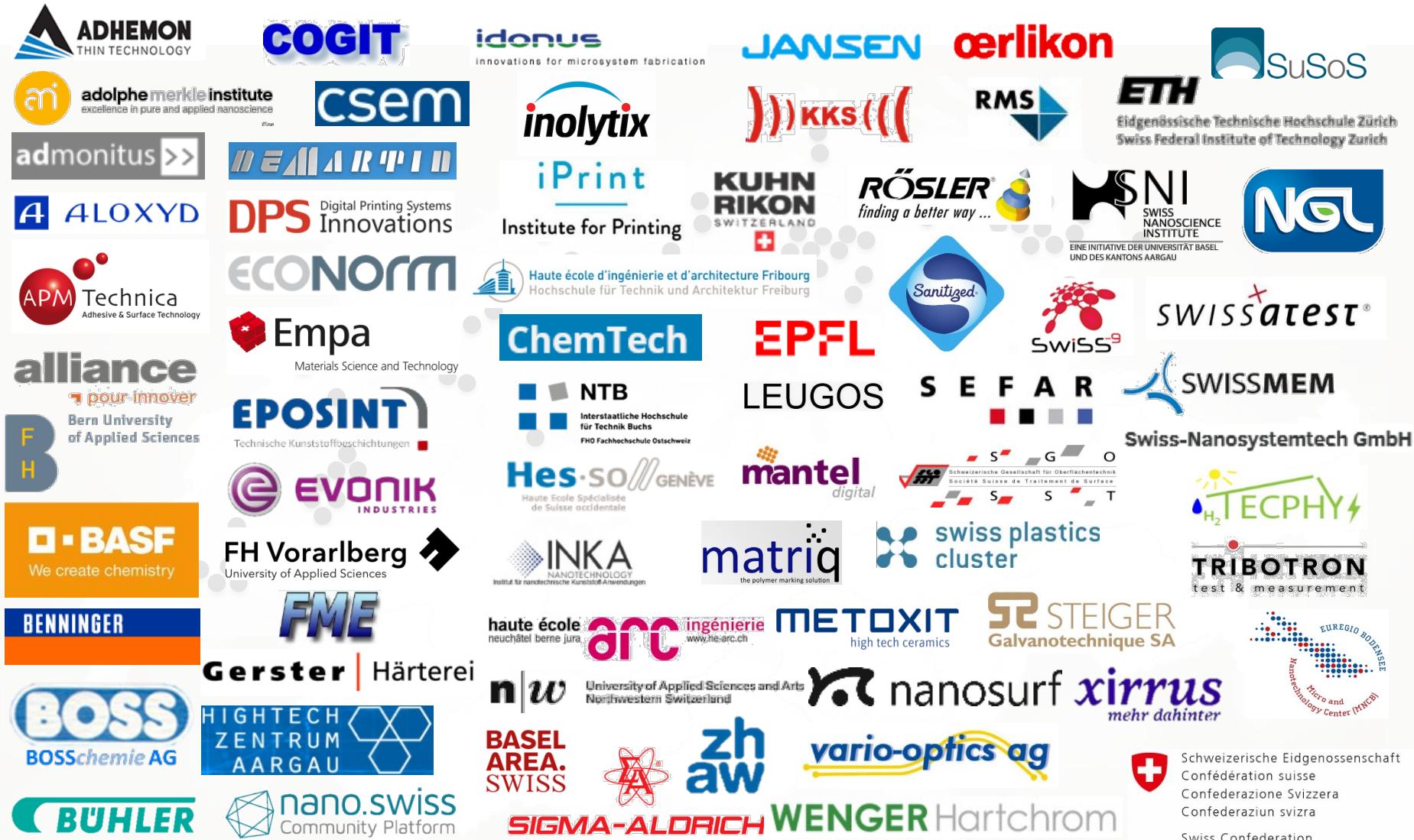


## Expert Committee



Around 1000 active participants annually

# Members & Partners



# *Innovation platforms*

## *Joint project initiation*



**IPL  
Body near  
Assistive  
Systems**

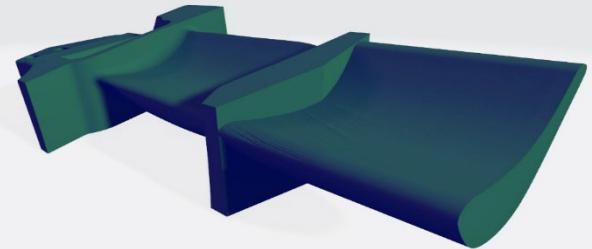
**IPL  
Surfaces of  
Smart Systems**

**IPL  
Advanced  
Coatings**



## Innovationsplattform 2D Surface Manufacturing

Industriekonforme Nachbearbeitung generativ  
gefertigter Werkstücke, **30. Oktober 2019, Brugg AG**



### PROGRAMM WORKSHOP-SERIE

#### Workshop 1: Stand der Technik, Verfahren & Herausforderungen

Mittwoch 22. Mai 2019, 13.30 – 16.30 Uhr, Hightech Zentrum Aargau AG

#### Workshop 2: Hands-on Praxisversuche, Analyse & Verfahrensvergleiche

Mittwoch 3. Juli 2019, 13.30 – 16.30 Uhr.

#### Workshop 3: Optimierungspotenziale, Ansätze & Machbarkeit einschätzen

Mittwoch 28. August 2019, 13.30 – 16.30 Uhr

#### Workshop 4: New Technology Showcases

**Mittwoch 30. Oktober 2019, 15.30 – 17.30 Uhr**

### TECHNOLOGIEPARTNER





# Annual Event 2019 - RESPONSIVE SURFACES

December 5, 2019 – HEIA Fribourg

Scientific impulses - technology showcases

## SESSION SPEAKERS: RESPONSIVE SURFACES



Raphaël Pugin

:: csem



Fritz Bircher

iPrint  
Institute for Printing



Samuele Tosatti

SuSoS  
SURFACE TECHNOLOGY



André Bernard

matriq  
the polymer marking solution



René Rossi

Empa  
Materials Science and Technology

Functional and responsive Nanosurfaces - Raphaël Pugin, CSEM

Inkjet for smart materials - Fritz Bircher, iPrint, HEFR

Controlled adhesion via responsive functional polymers

Samuele Tosatti, SuSoS AG

DynamicMold: Microtechnology-based creation of individual watermarks on every single plastic device - André Bernard, Matriq AG

Stimuli-responsive fibers for smart textiles applications - René Rossi, Empa



## ROUNDTABLE PRESENTATIONS

Saphirs fonctionnels

Anthony Schwab

ECONORM

Functional Surfaces

Yves Leterrier

EPFL

Traitements électrochimiques pour surfaces réactives

Stefano Mischler

EPFL

Funktionale polymere Beschichtungen

Ralf Altheimer

EPOSINT

Härterei Gerster AG – Innovationen in einem alten Industriezweig

Patrick Margraf

Gerster

Community-Plattform nano.swiss: Werkstoffe & Nano für die Industrie

Marcus Morstein

nano.swiss  
Community Platform

Analytical Services Reinvented

Ralf Dümpelmann

inolitix

Oberflächenveredelung in der Medizintechnik

Clément Cremmel

KKS

Leugos X-Link initiative: is there a future for biodegradable thermosets?

Christian Quillet

LEUGOS

Digitaler Eloxaldruck

Jon-Andri Mantel

mantel

Next-level nanotechnology tools empowering materials science research

Marco Portalupi

nanosurf

RMS Foundation: Ihr Partner für Oberflächenanalysen

Beat Gasser

RMS

Mechanische Oberflächenprüfung

David Ziltener

TRIBOTRON

test & measurement



## Biointerfaces International 2020 Conference, Zurich

### August 25 - 27, 2020 University of Zurich

### Science, Technology & Translation

#### Topics:

- 3D cell culture technologies (OOC, etc)
- 3D bioprinting
- Functional (bio)materials/interfaces
- Drug delivery systems, precision medicine
- Bioelectronics and Biosensors
- Surface and interface characterization

#### ⇒ Submission deadlines:

- Contributed talks: 18 May 2020
- Poster contributions: 31 May 2020

# Biointerfaces International

#### Organizers



innovative  
surfaces®



Empa

Materials Science and Technology



ETH

Eidgenössische Technische Hochschule Zürich

Swiss Federal Institute of Technology Zurich



University of  
Zurich UZH



#### One Day pre Conference Seminar

#### Translational sessions:

- Challenges to replace animal models (3R)
- Discussion on 3R
- Pitching sessions

<http://www.biointerfaces.ch>



NTN innovative surfaces



Biointerfaces International Conference



Biointerfaces International



**THANK YOU FOR  
YOUR ATTENTION!  
ANY QUESTIONS?  
NO? GREAT!  
BYE.**

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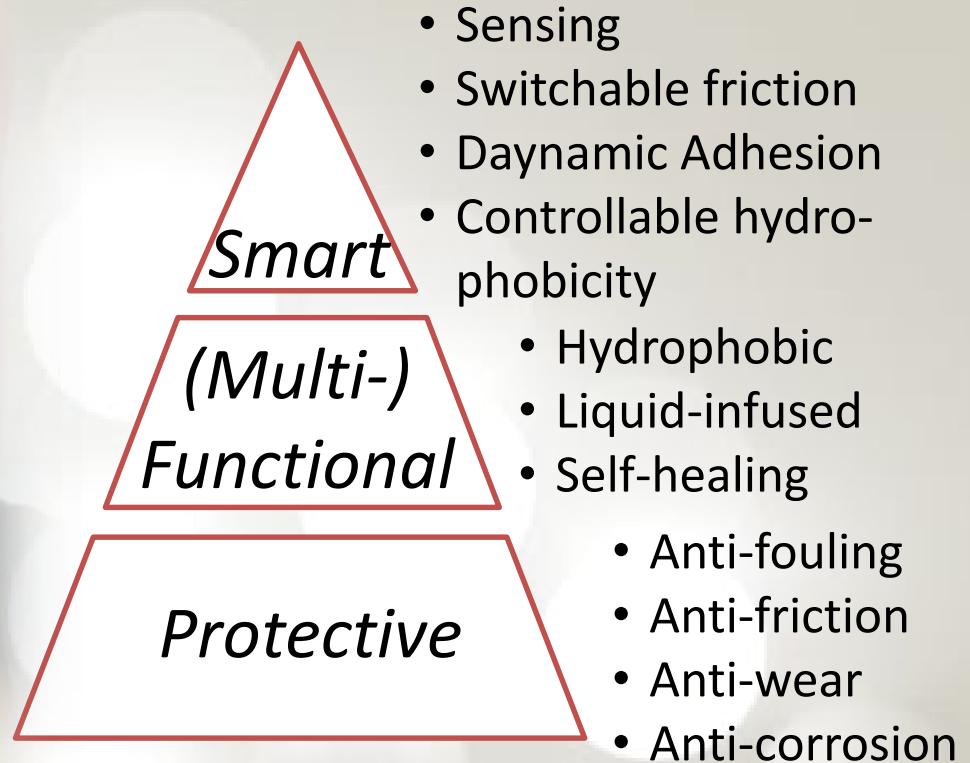
Join our group

# *Surface Engineering*



*Progress fuelled by trends: digitalisation, nanotechnology, platform solutions, biomimetics*

# Surface Engineering



*Focus moving from cost optimization  
to value creation*