

Empa

Materials Science and Technology

TEDD Workshop

Materials Meet Life

Empa in St.Gallen

Thursday, November 30th, 2017



Materials Meet Life

Empa in St. Gallen is pleased to invite the members and partners of the TEDD Competence Centre to a gripping journey through the world of research and innovation – especially into the world where «Materials Meet Life».

With innovative materials into a healthy future – the goal of Empa's Research Focus Area "Health and Performance" is to provide innovative and sustainable technologies and products for the textile, biotech and medtech industries at the interface of materials and life sciences.

Protecting people, promoting good health in a sustainable manner, maintaining and improving our quality of life and physical constitution – these are and will remain major challenges, especially in view of our increasing life expectancy. In the Research Focus Area "Health and Performance", we pool our interdisciplinary expertise in the fields of textiles, material science, biology, medtech and nanotechnology. We focus on the development of materials for medical applications in and on the human body, and re-search materials and new systems that protect and support us in our daily lives. Moreover, we examine the interactions of new materials closely and develop new methods to study this in biological systems – in close collaboration with hospitals and industrial partners.

As an information and matchmaking hub, TEDD transfers knowledge and technologies in order to promote the development and application of 3D cell culture. The TEDD community is currently composed of partners from academia, clinical medicine and industry. The industrial partners represent the majority of TEDD partners, and comprise a spectrum from young spin-off company to world player. Thus, TEDD represents the entire value chain of biotech R&D relevant for 3D tissue engineering, be it ultraflat 3D monolayer culture, bioprinted tissue constructs, or organoids.



Date: Thursday, November 30th, 2017

Time: 12:00 – 17:00

Location: Lerchenfeldstrasse 5, 9014 St. Gallen (see map)

Program

Material Meets Life

TIME

TOPIC

PRESENTER

November 30th, 2017

12:00 – 13:00

Networking Lunch

13:00 – 13:10

Opening of the Meeting

Prof. Dr Michael Raghunath
Head of TEDD Competence Centre,
Zurich University of Applied
Sciences (ZHAW)

13:10 – 13:20

Welcome

Prof. Dr Alex Dommann
Member of the Empa Board, Head
of Department «Materials Meet Life»

Presentations

13:20 – 13:30

Particles for Healthcare

Dr Tina Bürki
Laboratory for
Particles-Biology Interactions

13:30 – 13:40

In vitro cell models with and for
materials research @Empa

Dr Markus Rottmar
Laboratory for Biointerfaces

13:40 – 13:50

Structured Nanofibers for Controlled
Drug Release and Tissue Engineering

Dr Giuseppino Fortunato
Laboratory for
Biomimetic Membranes and Textiles

13:50 – 14:00

X-Ray in Bio-Imaging – make the
invisible visible

Dr Amin Sadeghpour
Center for X-ray Analytics

14:00 – 14:10

Surface effects in Bio-Analytics

Prof. Dr Manfred Heuberger
Laboratory for Advanced Fibers

14:10 – 14:20

Bio-chemical mapping by Tof-Sims

Dr Laetitia Bernard
Laboratory for
Nanoscale Materials Science

14:20 – 14:30

Monitoring biochemical interactions
with Silicon devices

Dr Michel Calame
Laboratory for
Transport at Nanoscale Interfaces

Guided Laboratory Visits

Groups of 8 person, 15' per lab

14:30 – 16:00

Perfusion Laboratory

Dr Tina Bürki
Laboratory for
Particles-Biology Interactions

Microbiological S2 Laboratories

Dr Qun Ren Zulian
Laboratory for Biointerfaces

E-spinning Demonstration

Dr Giuseppino Fortunato
Laboratory for
Biomimetic Membranes and Textiles

SAXS

Dr Amin Sadeghpour
Center for X-ray Analytics

Protein-Adsorption TiNAS

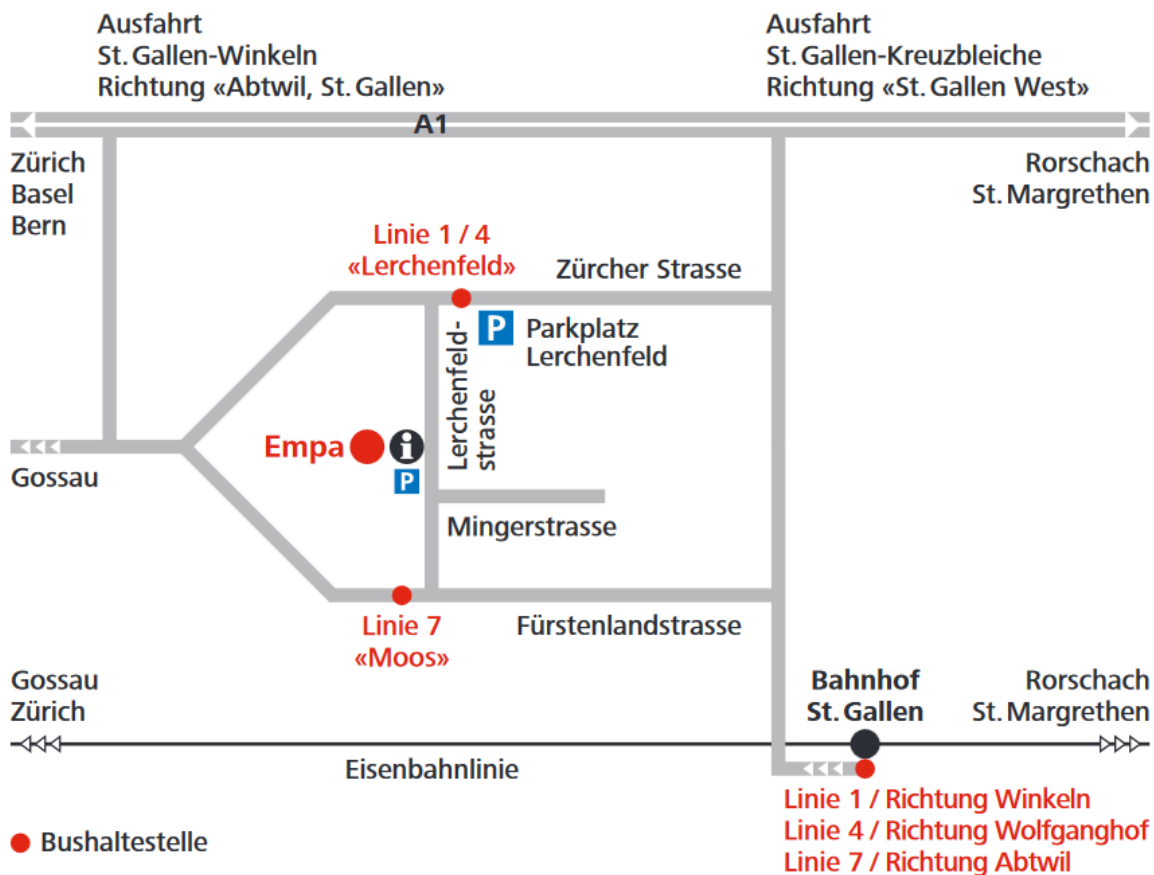
Prof. Dr Manfred Heuberger
Laboratory for Advanced Fibers

16:00 – 17:00

Networking Apéro and Farewell

How to Get There

We recommend using public transport, as parking space is limited.



By train (from St. Gallen main station)

Bus VBSG, line 1, (every 12 minutes)

Direction «Winkeln» till
«Lerchenfeld» bus stop

Bus VBSG, line 4, (every 12 minutes)

Direction «Wolfganghof» till
«Lerchenfeld» bus stop

Bus VBSG, line 7, (every 10 minutes)

Direction «Abtwil / St. Josefen» till
«Moos» bus stop

By car

Access coming from Zurich:

Motorway exit «St. Gallen-Winkeln»,
Direction «Abtwil, St. Gallen»

Access coming from St. Margrethen:

Motorway exit «St. Gallen-Kreuzbleiche»,
Direction «Engelburg St. Gallen-West»