

postage

Empa
Inge Krombach
Überlandstrasse 129
CH-8600 Dübendorf

■ Organisation

Place Empa, AKADEMIE
Überlandstrasse 129
CH-8600 Dübendorf

Date **Monday, July 3, 2006**

Time 13.00 p.m. until 18.00 p.m.

Fee **No fee however registration needed!**

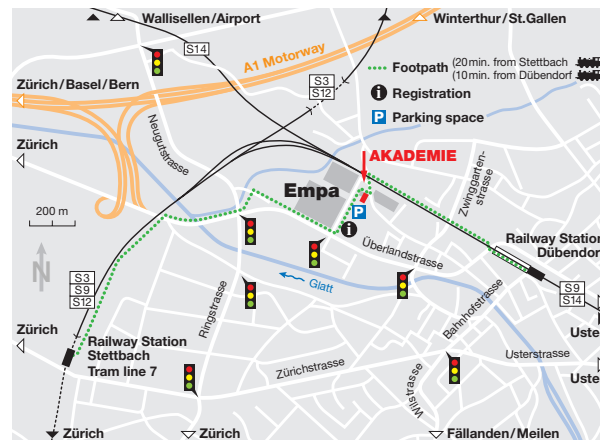
This workshop is free of charge
however the registration is required until
June 22, 2006.

Information Empa
Inge Krombach
Phone: +41 44 823 42 00
Fax: +41 44 823 40 14
E-Mail: inge.krombach@empa.ch

www.empa.ch

■ Map

Parking at Empa is free for visitors.
From the Dübendorf station it takes 10 minutes to walk to
the Empa. The taxi takes 5 minutes.



© Empa 2006 / fy_smart_materials_06



ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Zentrum für Wissenstransfer

Half-day Workshop

Smart materials, structures and systems

Enabling technologies for
novel products and applications



Empa, CH-8600 Dübendorf
AKADEMIE, Überlandstrasse 129

Monday, July 3, 2006
13.00 p.m. until 18.00 p.m.

Registration online at
www.empa.ch/smart

■ Subject

Innovative products help protect, expand or win markets. Smart materials, structures and systems are of vital importance to future product development in areas such as vibration reduction, nano positioning systems or optimizing physical states in general. Product development in modern technologies today is marked by the increasing complexity of functions and a growing heterogeneity, similar in this respect to the development of biological systems. Under these conditions smart materials, structures and systems offer useful services and will constitute a key technology in many technical fields in the years to come.

■ Objective of the workshop

This workshop is intended to help intensify the transfer of technology in the area of smart materials, structures and systems on the basis of over five years of research and development at ETH Zurich and Empa. The workshop has two targets, firstly to give attendees a picture of the current state of research and technology in this field and secondly to offer researchers some ideas on potential new areas of application. The aim is to establish new partnerships between industry and the research institutions and to highlight the significance of this subject for the national economy.

■ Target audience

R&D directors and engineers working in the areas of mechanical engineering, high precision instruments, process technology, transportation, robotics, power engineering and biomedical engineering.

■ Direction

Prof. Dr Paolo Ermanni

Institute for Mechanical Systems, ETH Zurich

Prof. Dr Edoardo Mazza

Institute for Mechanical Systems, ETH Zurich and Empa, Dübendorf

Prof. Dr h.c. Urs Meier

Empa, Dübendorf

Prof. Dr Manfred Morari

Automatic Control Laboratory, ETH Zurich

Prof. Dr Roland Siegwart

Institute of Robotics and Intelligent Systems, ETH Zurich

■ Programme

13.00 Welcome address, introduction

Urs Meier

13.10 Why will smart materials, structures and systems be enabling technologies for novel products and applications in the years ahead?

Paolo Ermanni

13.45 Assignment of tasks for group work sessions

Edoardo Mazza

14.00 Coffee break and poster session

14.30 Group work under the direction of the professors and scientific staff from ETH und Empa. Assistants will make a record of the results of the individual groups in PowerPoint.

- **Biomedical group**
Giovanni Terrasi
- **Energy group**
Edoardo Mazza
- **Transportation group**
Paolo Ermanni
- **Robotics group**
Roland Siegwart
- **Manufacturing and Automation group**
Manfred Morari

16.00 Presentation and discussion of the results of the group work sessions

Edoardo Mazza

17.30 Drinks

No fee however registration needed!

This workshop is free of charge however the registration is required until **June 22, 2006**.

Registration Form

Half-day Workshop

Smart materials, structures and systems

Enabling technologies for novel products and applications

Monday, July 3, 2006, 13.00 p.m. until 18.00 p.m.

AKADEMIE, Überlandstrasse 129, CH-8600 Dübendorf

No fee however registration needed!

This workshop is free of charge however the registration is required until **June 22, 2006**.

Please complete and return to:

Empa, Inge Krombach,
Überlandstrasse 129, CH-8600 Dübendorf

or register online at www.empa.ch/smart

Ms Mr Prof. Dr

Name _____

First name _____

Organization _____

Address _____

Phone _____

Fax _____

E-Mail _____

Signature _____