

■ Organisation

Venue: EMPA **AKADEMIE**
Überlandstrasse 129
CH-8600 Dübendorf

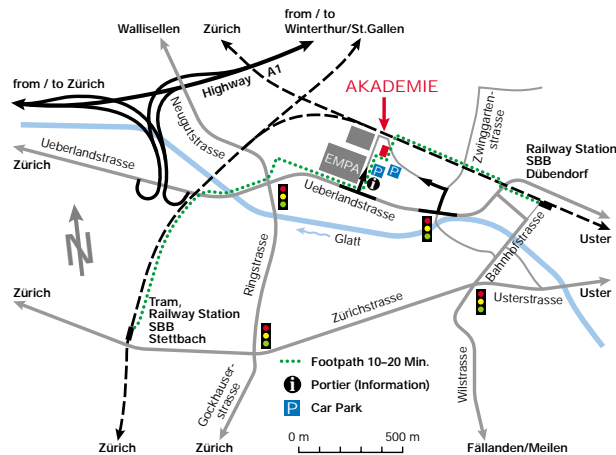
Date: **Friday, 17. January 2003** 08.30 –17.00

Conference language: English

Fees: No charges. Coffee, lunch, refreshments will be served.

Proceedings: Available at the conference as «EMPA Forschungs- und Arbeitsbericht».

■ Site map:



■ Local train connections

Zürich HB	dep.	S14	07.38	Dübendorf	arr.	07.53
		S 9	07.58			08.08
Dübendorf	dep.	S 9	17.19	Zürich HB	arr.	17.32
		S14	17.34			17.51
Zürich HB	dep.	S12	07.48	Stettbach	arr.	07.55
		S 9	07.58			08.05
		S 3	08.03			08.10
Stettbach	dep.	S 3	17.48	Zürich HB	arr.	17.56
		S 9	17.22			17.32
		S12	16.33			17.41

All listed local trains run every 30 min.

Registration: With separate form or via e-mail until 30. June 2002. Max. 160 registrations can be accepted in order of entry.

Location: Dübendorf is located 6 km east of Zürich city with efficient public transport to Zürich main station (see map and time table). The airport Zürich-Kloten is about 5 km north of Dübendorf (10 minutes by taxi).

Confirmation: All registrations will be confirmed on receipt.

Hotel

reservation: <http://www.zurichtourism.ch>

Information: Dr Klaus Richter
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klaus.richter@empa.ch

A symposium dinner will be organised for specially invited colleagues, friends, and fellows of Jürgen Sell.



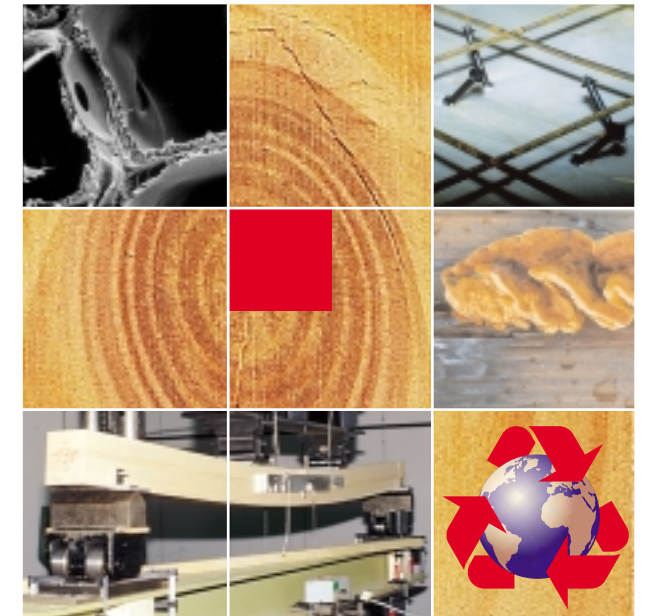
The EMPA Wood Laboratory Team
Welcomes You



Wood research knowledge and concepts for future demands

A tribute to Prof Dr Jürgen Sell

Friday, 17. January 2003 08.30 –17.00



EMPA **AKADEMIE**
Überlandstrasse 129
CH-8600 Dübendorf

A tribute to Prof Dr Jürgen Sell
Friday, 17. January 2003, EMPA AKADEMIE



Wood research knowledge and concepts for future demands

At the end of 2002, Prof Dr Jürgen Sell will retire from his position as head of the EMPA Wood Laboratory. In recognition of his long and successful career as a wood scientist and teacher an international conference will be held on Friday, 17. January 2003 at the Akademie of EMPA Dübendorf. The program is structured in five thematic blocks, reflecting the working fields and activities of the Wood Laboratory which evolved under the leadership of Jürgen Sell.

In his 37 years of active involvement in basic and applied wood research, Jürgen Sell has seen considerable and often rapid changes in wood science and in the utilisation of timber, stimulated and driven by a multitude of national and global trends. Today industry grades and processes timber in a more efficient way; a variety of new engineered products based on small-diameter trees, thinnings, post-harvest and even post-consumer residues has been developed, which together with new fasteners, connectors and design concepts allow to build engineered structures that find world-wide attention; new types of adhesives, coatings, finishes and by-products which are less harmful to people and environment are used; because of intelligent design and detail construction the amount of toxic preservatives can significantly be reduced and we are yet able to provide safe, economical and durable housing; combining timber with concrete or other materials and using carbon-reinforced-fibres is an efficient way to strengthen and to retrofit timber structures. Having outlived the forest-decline discussion of the eighties, forests and long-living wood products are recognised nowadays for their ability to store carbon, to mitigate the greenhouse effect, and for their essential role as resource and material to maintain and advance the human welfare.

In the past decades, the wood research society has coped quite well with the various demands of industry, society and environment. Will we be prepared to face proactively the conceivable challenges of tomorrow? What further technological developments are necessary to continue the renaissance of bio-based materials?

This conference aims to inform about current activities in wood and timber research and to establish a platform for discussion between wood scientists and representatives of the forestry-wood chain on future demands and concepts.

■ Programme

- 08:30-08:40 **Welcome address**
EMPA: organisation, main activities
(Prof Dr L. Schlapbach / Prof U. Meier,
CEO EMPA, Dübendorf)
- 08:40-09:00 **Keynote**
Forest Products in the 21 century:
Challenges for wood research and
development
(Prof Dr G. Wegener, University of München)
- 09:00-10:20 **Wood morphology and
fine structure**
The fine structure of the cell wall of soft-
and hardwoods - A review of activities at
the EMPA Wood Laboratory
(T. Zimmermann, EMPA, Dübendorf)
- Analysis of different theories of shrinkage
(Dr R. Booker, New Zealand Forest
Research Institute, Rotorua)
- Wood decay fungi as analytic tools for
studies on the cell wall structure
(PD Dr F. Schwarze, Albert-Ludwigs-
University, Freiburg)
- Mechanical properties of single wood
fibres (Dr I. Burgert, University of Agri-
cultural Sciences, Wien)
- 10:20-10:50 **Coffee break**
- 10:50-11:50 **Wood technology and wood pro-
perties**
Properties and utilisation of native wood
species - A review of activities at the
EMPA Wood Laboratory (M. Arnold,
EMPA, Dübendorf)
- Wood quality as a result of silvicultural
mangement (PD Dr U. Seeling, Albert-
Ludwigs University, Freiburg)
- Wood properties on the raw material:
challenges for new processes and products
(Prof Dr A. Teischinger, University of Agri-
cultural Sciences, Wien)
- 11:50-12:50 **Application of timber in civil
engineering**
Improved efficiency of timber structures –
A review of activities at the EMPA Wood
Laboratory
(Dr R. Steiger, EMPA, Dübendorf)



- Timber concrete composite structural
elements (Prof Dr H.-J. Blass, University
of Karlsruhe)
- Application of timber in civil engineering/
timber-focused education of architects
and civil engineers in Switzerland
(Dr A. Steurer, ETH, Zürich)
- 12:50-13:50 **Lunch**
- 13:50-14:50 **Wood protection**
Durability of wood under different clima-
tic conditions - A review of activities at the
EMPA Wood Laboratory
(Dr E. Graf, EMPA, St. Gallen)
- Moisture dynamics in coated, exterior
wood (Dr J. Ekstedt, Traetek, Stockholm)
- SEM analysis of weathering effects on
unprotected and coated wood
(Dr H. Turkulin, University of Zagreb)
- 14:50-15:20 **Coffee break**
- 15:20-16:40 **Sustainability and environmental
aspects of timber products**
Comparative LCA of forest products -
A review of activities at the EMPA Wood
Laboratory
(Dr K. Richter, EMPA, Dübendorf)
- Forestry and forest products: their
potential for sustainable development
(Prof Dr J. Bowyer, Univ. of Minnesota)
- Carbon Forestry: Political, technical and
social implications (Dr C. Robledo,
EMPA, Dübendorf)
- End-of-life technologies: key processes
for an efficient resource utilisation in timber
industries (Prof Dr R. Marutzky, Wilhelm-
Klauditz-Institute, Braunschweig)
- 16:40-17:00 **Concluding remarks**
Consequences for national promotion stra-
tegies for timber research and education
programms
(A. Semadeni, Swiss Forest Agency, Bern)

