

Workshop Chairman

Karin HOFSTETTER
Action Chair
Vienna University of Technology, Austria

Advisory Committee

Lennart SALMÉN
Action Vice-Chair
STFI-Packforsk, Sweden

Lisbeth THYGESEN
WG1 Leader
University of Copenhagen, Denmark

Michaela EDER
WG2 Leader
MPI of Colloids and Interfaces, Germany

Kristofer GAMSTEDT
WG3 Leader
KTH - Royal Institute of Technology, Sweden

Workshop Office

Martina PÖLL
Institute for Mechanics of Materials and Structures
Vienna University of Technology
Karlsplatz 13
1040 Vienna
Austria

Tel: ++43-1-58801-20211
Fax: ++43-1-58801-920211
email: Martina.Poell@tuwien.ac.at
web: <http://COST-FP0802.tuwien.ac.at>

Supporting Organisations

- COST - European Cooperation in the field of Scientific and Technical Research
- Vienna University of Technology, Austria
- Federal Ministry for Science and Research, Austria

Workshop Venue

The workshop will be held at Vienna University of Technology which is centrally located and within walking distance of Vienna's most impressive sights. It is accessible by public transportation from Vienna International Airport which provides direct flights to over 170 destinations worldwide.

Accommodation

A sufficient number of hotel rooms (hostels, three-star, four-star) have been reserved in the vicinity of the workshop venue. Detailed accommodation information is available at the Action's website (<http://COST-FP0802.tuwien.ac.at>). Participants are asked to make their hotel reservation directly with the hotel by referring to "COST".

Registration

Registration should be made through the Action's website at <http://COST-FP0802.tuwien.ac.at>.

Participants will be asked for a moderate fee for covering costs for lunches and the banquet.

Important Dates

| | |
|---------------------------------|-------------------|
| Abstract submission, deadline | January 16, 2009 |
| Notification of acceptance | February 18, 2009 |
| Registration, hotel reservation | asap |

About COST

COST – European Cooperation in the field of Scientific and Technical Research – is one of the longest-running European instruments supporting cooperation among scientists and researchers across Europe. COST is also the first and widest European intergovernmental network for coordination of nationally funded research activities.

More information on COST can be found at the COST website (<http://www.cost.esf.org>).



Action FP0802

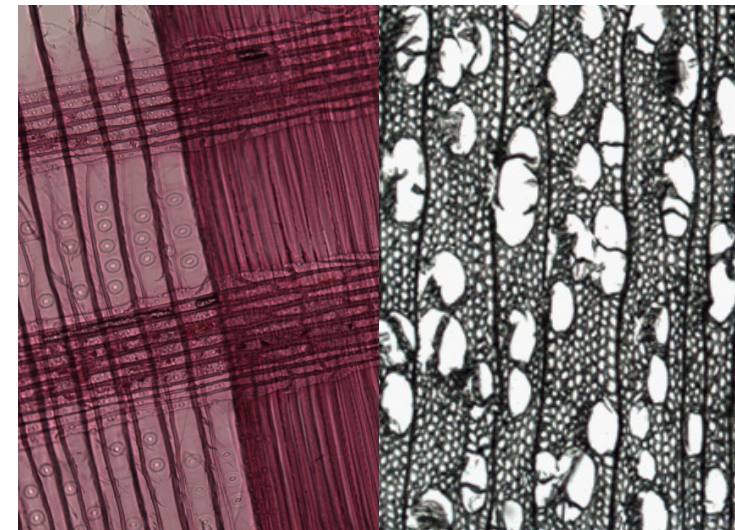
Experimental and Computational
Micro-Characterization
Techniques in Wood Mechanics



<http://COST-FP0802.tuwien.ac.at>

Kick-off / Workshop “Experimental and computational methods in wood micromechanics”

May 11-13, 2009
Vienna, Austria



COST is supported by
the EU RTD Framework Programme

ESF provides the COST Office
through an EC contract



COST Action FP0802

The main objective of the COST Action FP0802 “*Experimental and Computational Characterization Techniques in Wood Mechanics*” is to increase the understanding of the wood microstructure and micromechanics by exploring and evaluating emerging techniques in the fields of physics, chemistry, materials and computer science in order to provide a strong basis for the development of innovative wood-based products in the future and for enhancing the use of the natural resource wood.

Workshop Objectives

The objective of the workshop is to present and discuss the state of the art of wood micro-characterization and to communicate current ideas and strategies for its exploration in the field of wood micromechanics. Particular emphasis will be given on assessing the potential of emerging experimental and computational techniques and of combinations of already well-established techniques for investigating the ultrastructural origin of the moisture and time dependence of the mechanical behavior of wood.

The workshop aims at fostering interdisciplinary collaboration and interactions among researchers in wood mechanics within and beyond the framework of COST Action FP0802.

The workshop will bring together researchers from a different areas of engineering including biology, physics, chemistry, material science, forestry, engineering, etc. Also specialists in micro-characterization techniques working in other fields than wood mechanics are very welcome to the workshop.

Participation of specialists in wood modification and related science sectors would be appreciated in order to assess the potential of using samples that have been treated mechanically or modified thermally, chemically, genetically, or with enzymes.

Workshop Topics

The workshop will be concerned with experimental and computational characterization techniques in wood mechanics.

Topics of interest include, but are not limited to:

Wood microstructure

- wood structure at sub-micrometer scale,
- spatial arrangement of wood polymers in wood cell wall,
- molecular organization and cross-linking structure of wood cell wall,
- interaction of wood polymers with moisture in the cell wall,
- ...

(Hygro-)mechanical properties

- (micro)structure function relationships,
- hygro-thermo-mechanical properties of cell wall and its components,
- effect of moisture and time on micromechanical behavior of wood,
- in-situ tests,
- ...

Modelling of the material behaviour

- modeling of (hygro-)mechanical behavior of wood at different length scales,
- multiscale approaches,
- hygro-thermo-mechanical couplings,
- inverse parameter identification,
- virtual testing,
- ...

Call for Papers

Prospective authors are kindly invited to submit a one- to two-page abstract related to the topics of the workshop by January 16, 2009. Instructions for preparing the abstract and the abstract submission form are available at the Action’s website.

Scientific Programme

The scientific programme will comprise

- four keynote lectures of distinguished colleagues (40 min. incl. discussion) ,
- oral presentations (20 min. incl. discussion), and
- poster presentations (3 min.).

No parallel sessions.

Programme at a glance

| | Sunday | Monday | Tuesday | Wednesday |
|-------|--------------|---------------------|---------------------|------------------------------|
| 08:30 | | Opening | Keynote 3 | Meeting of working groups |
| 08:50 | | Keynote 1 | Oral/poster session | |
| | | Oral/poster session | Oral/poster session | |
| 10:25 | | coffee break | coffee break | General discussion |
| 11:00 | | Oral session | Oral session | |
| 12:40 | | lunch | lunch | lunch |
| 14:00 | | Keynote 2 | Keynote 4 | Management Committee Meeting |
| | | Oral/poster session | Oral/poster session | |
| 15:50 | registration | coffee break | coffee break | |
| 16:30 | | Oral session | Oral session | |
| | | | Banquet | |

On Wednesday, working group meetings and a management committee meeting of COST Action FP0802 are scheduled.