

Workshop Chairman

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Supporting Organisations

- COST - European Cooperation in the field of Scientific and Technical Research
- von-Thünen-Institute, Germany

Workshop Venue

The workshop will be held in the main building of the von-Thünen-Institute (vTI) Hamburg which is located in the south-east of Hamburg, about 20km from the city centre. It is accessible by public transportation from Hamburg Airport and Hamburg Main Station.

Accommodation

A sufficient number of hotel rooms has been reserved in the vicinity of the workshop venue. Details are available in the Registration Form and on the Action's website (<http://COST-FP0802.tuwien.ac.at>). Participants are asked to make their hotel reservation through the local organizer.

Registration

Deadline for registration is May 21, 2010. Participants will be asked for a fee of € 175 covering costs for lunches, conference dinner, coffee breaks and abstract booklet. Please use the Registration Form which is also available on the Action's website.

Important Dates

Abstract submission deadline	April 30, 2010
Notification of acceptance	before May 21, 2010
Registration deadline	May 21, 2010
Tutorial	October 5, 2010
Workshop dates	October 6-8, 2010

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

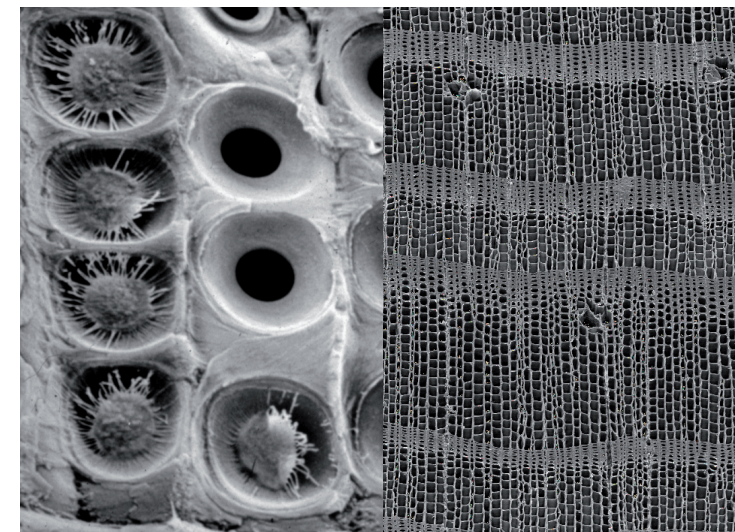
Experimental and Computational
Micro-Characterization
Techniques in Wood Mechanics

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



Workshop “Wood Structure/Function Relationships”

October 5-8, 2010
Hamburg, Germany



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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 current status, the technical challenges and the latest research results of the micro-characterization in wood mechanics within and beyond the framework of COST Action FP0802. In addition, the workshop provides a forum to communicate current ideas and strategies in this field. 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 will bring together researchers from different areas of engineering including biology, physics, chemistry, material science, forestry, engineering, etc. Scientists with a general methodological background in material characterization at smaller length scales with no particular focus on wood mechanics are also strongly encouraged to participate.

New presentation format

Besides poster and oral presentations contributed presentations for the Working Group meetings will be established as new presentation format at this workshop. More generous time for in-depth discussions is foreseen for this kind of presentation. Authors can submit an abstract either for the workshop or the WG meeting, or for both (different abstracts).

Tutorial

A Tutorial is planned in the late afternoon on the day before the workshop. It offers an opportunity to refresh and update the knowledge on “Micro X-Ray Tomography”. We are very pleased that Prof. Markku Kataja from Jyväskylä University agreed to give us detailed information on this topic. Please indicate your attendance on the Abstract Submission Form and the Registration Form.

Workshop Topics

The workshop will be concerned with the microstructure and micromechanics as well as experimental and computational microcharacterization methods used and developed in the wood sector.

Topics of interest include, but are not limited to:

Techniques & Tools

- tomography,
- spectroscopic techniques,
- nanomechanical testing (NI, FIB, AFM, etc.),
- multi-field and multi-physics modeling,
- multiscale modeling, homogenization
- parameter identification and inverse modeling
- hybrid methods (both purely experimental and experimental & numerical)
- ...

Modified wood & wood-/cellulose-based materials

- thermal & enzymatic treatment,
- genetically modified material,
- wood plastic composites,
- decay and decay resistance,
- ...

Structure-function relationships

- structural investigations,
- molecular mechanisms,
- hygro-thermo-mechanical properties,
- moisture effects,
- biomimetic applications,
- ...

Call for Papers

Authors are kindly invited to submit an abstract related to the topics of the workshop by April 30, 2010. The Abstract Submission Form is also available on the Action’s website.

Scientific Programme

The scientific programme will comprise

- keynote lectures of distinguished colleagues (40 min. incl. discussion) ,
- oral presentations (20 min. incl. discussion),
- oral presentations at WG-meetings (10 min.), and
- poster presentations (3 min.).

There are no parallel sessions.

Programme at a glance

Tuesday, October 5:

16:00-18:00 Tutorial: Markku Kataja-“Micro X-Ray Tomography”
18:00 Welcome Drink

Wednesday, October 6:

09:00-17:30 Workshop
18:00-21:00 Boat Trip with dinner (€ 26, not included in the registration fee, prize includes dinner, drinks extra)

Thursday, October 7:

09:00-18:00 Workshop, WG meetings and MC meeting
19:00: Conference Dinner (incl. in the registration fee)

Friday, October 8:

09:00-12:00 Workshop
12:00 Coffee and cake
13:00 Optional tour through the institute

On Thursday, October 7, Working Group meetings and a Management Committee meeting of COST Action FP0802 are scheduled.