

## Workshop Chairman

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## Local Organising Committee

Mike JARVIS (University of Glasgow, UK)

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## Advisory Committee

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Action Chair (University of Glasgow, UK)

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## Supporting Organisations

- COST - European Cooperation in the field of Scientific and Technical Research
- Forestry Commission, UK
- Forest Research, UK
- The University of Glasgow, UK
- Edinburgh Napier University, UK

## Workshop Venue

The final workshop will be held in Edinburgh, the capital city of Scotland and a major tourist destination. A UNESCO World Heritage Site at the heart of the city combines the medieval Old Town, the Georgian New Town and award winning modern architecture. Many of the galleries and museums are free to enter and within easy reach of the conference venue.

The workshop venue - Our Dynamic Earth - is one of Edinburgh's top attractions, a distinctive tent-like building which houses a popular science museum.

## Accommodation

Details of hotels located close to the workshop venue will be available on the Action's website (<http://COST-FP0802.tuwien.ac.at>). Participants are asked to make their own reservations, mentioning COST FP0802.

## Registration

The deadline for registration is September 14, 2012. Participants will be asked for a fee of £220 covering costs for lunches, workshop 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	June 15, 2012
Notification of acceptance	before August 31, 2012
Registration deadline	September 14, 2012
Workshop dates	October 24-26, 2012

## 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>).



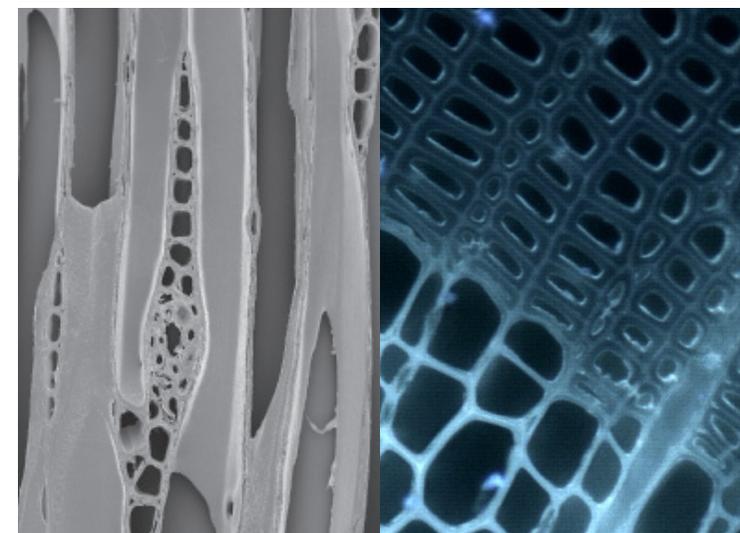
## Action FP0802

Experimental and Computational  
Micro-Characterization  
Techniques in Wood Mechanics

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

# Workshop “Micro-Characterisation of Wood Materials and Properties”

October 24-26, 2012  
Edinburgh, Scotland, UK



## 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

Key objectives of the final workshop within this COST Action FP0802 are to present the main outcome of the Action to stakeholders, to summarise the scientific progress achieved as a result of the Action, and to formulate remaining open questions and future research challenges. The workshop will include an evaluation session with representatives of COST, which will only be open to the Management Committee members.

The main purpose of the workshop will remain to serve as a scientific platform and forum to communicate current ideas and strategies in the field of wood micro-characterisation. As has been customary, there will be a focus on 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 behaviour of wood.

The workshop, as with previous events within COST Action FP0802, 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 characterisation at smaller length scales with no particular focus on wood mechanics are also strongly encouraged to participate.

## 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 June 15, 2012. 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),
- poster presentations (3 min.).

There are no parallel sessions.

In addition, there will be a dedicated dissemination session and an evaluation session (the latter only for Management Committee members), in which the outcome of the Action will be summarized and discussed.

## Tentative programme at a glance

### Wednesday, October 24:

09:00-17:30 Workshop

### Thursday, October 25:

09:00-12:30 Workshop

14:00-17:00 Dissemination session

19:00: Workshop Dinner (incl. in the registration fee)

### Friday, October 26:

09:00-12:30 Workshop

14:00-17:00 Evaluation Session

## Post-Workshop Tour

Subject to participant interest, the organisers will host on Saturday, October 27, a visit to Stirling Castle ([www.stirlingcastle.gov.uk](http://www.stirlingcastle.gov.uk)), which will include a presentation on the conservation and restoration of historic wooden buildings and artefacts. This will be followed by a visit to a whisky distillery. Cost will be approximately £35.