

COST Action FP 0904 – Thermo-Hydro-Mechanical Wood Behaviour and Processing

http://www.cost-fp0904.ahb.bfh.ch

Evaluation, processing and predicting of THM treated wood behaviour by experimental and numerical methods

April 09-11, 2013, Iasi, Romania

"Petru Poni" Institute of Macromolecular Chemistry 41A, Grigore Ghica Voda Alley, RO 700487 Iasi, Romania

Congress Organization

Scientific Advisory Committee

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Local Organising Committee

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Objectives

After the success of the first two workshops, the scientific advisory committee of COST Action FP0904 has decided to extend the different working party to the international community. The objectives of this conference are to present and discuss: the state of art and new findings of Thermo-Hydro-Mechanical (THM) and Thermo-Hydrous (TH) processing in open and closed systems; different analytical methods for wood evaluation in order to understand the chemical changes occurring during different treatments; the challenges faced in wood characterization for process scaling-up from laboratory to full industrial production, through the discussion of latest research results and new ideas.

The advantage of combining renewable resources such as "wood" with a processing technique with low environmental impact to achieve a new high quality material is highly desirable. However, there are many problems associated with TH/THM processing, which require an interdisciplinary

approach to be resolved. A close collaboration between the wood mechanics and wood chemistry communities from both academia and industry is needed.

The conference will bring together experts and young researchers from worldwide academia and industry and will encourage dissemination of the latest research works, exchanging and developing new ideas, and building collaborations between laboratories and research activities.

Conference Topics

The conference topics will be related to experimental and numerical methods used for evaluation and predicting of TH and/or THM treated wood behaviours. The major challenges for commercializing treated wood products beyond the treatments will be also a focus of this conference.

Considering the topics of interest, it is expected presentations in the following four sessions:

- Session 1: TH treatment of wood
- Session 2: THM treatment of wood in closed system
- Session 3: THM treatment of wood in open system
- Session 4: Market applications of TH and THM treated wood

Primary scientific program

The scientific program will comprise:

- ✓ Four keynote lectures (40 min. incl. discussion)
- ✓ Oral presentations (20 min. incl. discussion)
- ✓ STSM communications (10 min. incl. discussion)
- ✓ Poster presentations (5 min.)

Conference Venue

The symposium will be held in Iasi, at "Petru Poni" Institute of Macromolecular Chemistry of the Romanian Academy.

lasi is the second city of Romania after Bucharest, the national capital, in terms of both population and cultural, historical and academic terms. It is the second largest university centre in Romania.

lasi is situated in the north-eastern part of Romania, very close to the border with the Republic of Moldova. Ancient churches, old European style houses and communist apartment buildings compete for space in this crowded city.





The "Petru Poni" Institute of Macromolecular Chemistry is located in Copou Hills, close to the centre of the city, connected by public transport. Its research achievements are recognized in Romania and abroad. For many years, the Institute has been in the first line of Romanian research and covers practically the whole area of macromolecular compounds science and technology, organic chemistry, as well as of polymeric materials.

