

#### LABORATÓRIO NACIONAL DE ENGENHARIA CIVIL

# The Seventh European Conference on Wood Modification

edited by: Lina Nunes Dennis Jones Callum Hill Holger Militz PORTUGAL + LISBON LNEC + March 10-12, 2014

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Oral 8:6 <u>Maziar Sedighi Moghaddam</u>, Magnus E.P. Wålinder, Per M. Claesson, Agne Swerin Wettability and swelling of acetylated and furfurylated wood analysed by a multicycle Wilhelmy plate method

Oral 8:7 <u>Dennis Jones</u>, Christian Brischke, Linda Meyer, Ed Suttie Moisture risk and wood durability testing for modified wood

### Preface

Wood modification research already goes back to the first half of the 20th century when Stamm and co-workers for the first time published their comprehensive work. Due to restrictions of biocides and the use of tropical hardwoods in Europe, in the 1990's, new research activities evolved. The relatively small group of researchers those days strongly felt the need to a better exchange of knowledge with international colleagues and they organized themselves in the European Network on Wood Modification. A first international conference of this network was held in Ghent in 2003.

Since then, much has happened! Wood modification research is not anymore performed by a small group of researchers but the international community has grown considerably! This year we are happy to welcome more than 100 researchers and representatives from industry from many countries around the world to the 7th ECWM in Lisbon! New research networks have been formed these last years, strengthening the exchange of knowledge in our exciting field of research. As in earlier years, the ECWM conference links up with some European COST Actions, which have a focus on wood modification research in their scientific programme (COST FP 1006, COST FP 0904 and COST FP 1303).

In the last decennia, quite some wood modification processes made their way from laboratory to production level. Nowadays, approx.  $200.000 - 300.000 \text{ m}^3$  of modified wood is produced throughout Europe. Nevertheless, it must be mentioned as well, that the sector is growing only very slowly. Possible reasons for this are diverse: consumer perceptions towards a new material, partly unknown material properties, missing long term experience in use, higher prices of modified wood than untreated wood or biocide treated wood, to mention just a few.

In this phase it is even more important for the research community to exchange their knowledge about the behaviour of the new material, about new processes and improvements of existing processes, about environmental profiles etc.

Thanks to the members of the scientific committee and the local organisers from LNEC to give us an excellent forum for meeting friends and colleagues within our "modification family"!

Holger Militz Chairman of the Scientific Committee Georg-August-University Göttingen, Germany

### Acknowledgement to COST

COST is an intergovernmental framework for European Cooperation in Science and Technology, allowing the coordination of nationally-funded research on a European level. COST has a very specific mission and goal. It contributes to reducing the fragmentation in European research investments and opening the European Research Area to cooperation worldwide.

As a precursor of advanced multidisciplinary research, COST plays a very important role in building a European Research Area (ERA). It anticipates and complements the activities of the EU Framework Programmes, constituting a "bridge" towards the scientific communities of emerging countries. It also increases the mobility of researchers across Europe and fosters the establishment of scientific excellence in nine key domains, with Forestry, their Products and Services (FPS) being one of these. At any given time, there are between 20 and 30 COST Actions running within the FPS Domain, each one running for 3-4 years.

As in previous ECWM conferences, ECWM7 has been fortunate to be linked with three current COST Actions:

- FP0904: Thermo-hydro-mechanical wood behaviour and processing
- FP1006: Bringing new functions to wood through surface modification
- FP1303: Performance of bio-based building materials

As part of the interaction between these Actions and ECWM7, the following presenters have been provided with financial assistance towards travel and subsistence for their involvement at this conference:

#### COST FP0904:

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#### COST FP1006:

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#### COST FP1303:

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