

Conference Agenda

Tuesday, April 09, 2013	
09:00 – 09:30	Registration at the Desk (conference place)
09:30 – 09:45	Opening Session
Chairpersons: Mark Hughes, Mathieu Pétrissans	
09:45 – 10:25	Keynote (Session 1)
09:45	Two dimensional correlation spectroscopy applied for evaluation of the structural changes in wood <u>Carmen-Mihaela Popescu</u> , <u>Maria-Cristina Popescu</u>
10:25 – 10:50	Poster presentation (Session 1)
	Determination of dimensional stability of thermally modified beech and spruce wood <u>Lothar Clauder</u> , <u>Alexander Pfriem</u>
	Thermal behaviour of some wood species treated with ionic liquid <u>Cornelia Vasile</u> , <u>Manuela-Tatiana Nistor</u> , <u>Silvia Florica Patachia</u>
	Evaluation of surface quality of wood composites as function of weathering <u>Aniela Garcia Perez</u> , <u>Emilia-Adela Salca</u> , <u>Bobadilla Maldonado</u> , <u>Salim Hiziroglu</u>
	The correlation between wood moisture content and air state properties during drying <u>Daniela Sova</u> , <u>Venetia Sandu</u> , <u>Ioan-Bogdan Bedelea</u>
	Wood anatomical changes on thermally modified surfaces of Norway spruce and Scots pine <u>Michael Altgen</u> , <u>Jukka Ala-Viikairi</u> , <u>Antti Hukka</u> , <u>Timo Tetri</u> , <u>Holger Militz</u>
10:50 – 11:30	Coffee break and Poster Session
11:30 – 12:50	Oral Presentation (Session 1 & 2)
11:30	Comparison of chemical composition of heat treated wood cured at a same temperature under different inert atmospheres: nitrogen, vacuum and steam pressure <u>Kévin Candelier</u> , <u>Stéphane Dumarçay</u> , <u>Anélie Pétrissans</u> , <u>Philippe Gérardin</u> , <u>Mathieu Pétrissans</u>
11:50	On-line monitoring of hygroscopicity and dimensional changes of wood during thermal modification by means of neutron imaging methods <u>David Mannes</u> , <u>Walter Sonderegger</u> , <u>Eberhard Lehmann</u>
12:10	Comparison of acoustic NDT for assessment of small stiffness changes during low temperature thermal treatment <u>Dan Ridley-Ellis</u> , <u>Barbara Keating</u> , <u>Carmen-Mihaela Popescu</u>
12:30	Modelling the isolated and combined effects of chemical modification and hygro-thermo-mechanical loading of wood. <i>Report of COST FP0904 Meeting, Paris, 19-20 December 2012</i> <u>Patrick Perré</u> , <u>Joseph Gril</u>
12:50 – 14:30	Lunch
Chairperson: Joseph Gril	
14:30 – 15:10	Keynote (Session 2)
14:30	The role of water in the HTM behavior of wood <u>Dominique Derome</u>

15:10 – 16:20	Oral and short oral (Session 1)
15:10	Physico-chemical characterization of THM modified wood using inverse gas chromatography (IGC) <u>Susanna Källbom</u> , Magnus Wålinder, Kristoffer Segerholm, Dennis Jones
15:20	A pseudoelastic mechanosorptive model for wood material <u>Omar Saifouni</u> , Rostand Moutou Pitti, Jean-François Destrebecq, Frédéric Dubois
15:40	Heat treatment of wood for energy purpose: effect of the treatment intensity on mechanical resilience measured by a new impact device <u>Floran Pierre</u> , Giana Almeida, Julien Colin, Patrick Perré
16:00	Strength prediction of mild thermo-hydro treatments and extrapolation for natural aging <u>Julien Froidevaux</u> , Joseph Gril, Parviz Navi
16:20 – 16:35	Poster presentation (Session 1 & 2)
	Experimental and numerical detections of cracks appear in green wood during drying process <u>Rostand Moutou Pitti</u> , Frédéric Dubois, Eric Fournely, Jean-François Destrebecq
	About some chemical changes to wood due to densification <u>Jakub Sandak</u> , Anna Sandak, Dusan Pauliny, MariaPaola Riggio, Ilaria Santoni
	Reducing set recovery of densified wood with heat treatment <u>Miha Humar</u> , Frederick A. Kamke, Andreja Kutnar
16:35 – 17:00	Coffee break and Poster Session
17:00 – 18:00	Oral presentations (Sessions 2 & 3)
17:10	Finite element modeling of deformation in fiber bundle during steam explosion of wood <u>Muhammad Muzamal</u> , Anders Rasmuson
17:30	Effects of closed system hydrothermal treatment conditions on colour and hardness of European beech wood <u>Charalampos Lykidis</u> , Petros Konstantakos, Stavros Tsalikis
17:50	Adhesion of polyurethane coating on surface densified Scots pine wood <u>Kristiina Laine</u> , Lauri Rautkari, Borut Kričej, Matjaž Pavlič, Marko Petrič, Mark Hughes, Andreja Kutnar
18:00	Day conclusions on Sessions 1 & 2 + Discussion on the THM modeling
19:30	Wine tasting
Wednesday, April 10, 2013	
Chairpersons: Peer Haller, Christelle Ganne-Chedeville	
09:00 – 09:40	Keynote (Session 3)
09:00	From chemical process monitoring to direct control of thermally modified wood properties <u>Wim Willems</u> , Holger Militz
09:40 – 10:20	Oral presentation (Session 3)
09:40	The Behaviour of Sorption Hysteresis in the Water Vapour Sorption Isotherm of Thermally Modified Wood <u>Callum Hill</u> , James Ramsay, Lauri Rautkari, Mark Hughes, Kristiina Laine

10:00	Effect of treatment medium on the colour change of heat treated wood during natural weathering <u>Róbert Németh</u> , László Tolvaj, Miklós Bak, Diána Csordós
10:20 – 10:55	Poster presentations (Session 3 & 4)
	Studies on post-welding heat-treated vibrational welded wood <u>Jussi Ruponen</u> , Martin Rhême, Silvia Ferrari, Lauri Rautkari, Mark Hughes
	Continuous Wood Densification Process of Circular Profiles <u>Jörg Wehsener</u> , Peer Haller, Jens Hartig, Tom-Egmont
	Shape stability of THM processed laminated veneer products glued with bio-based adhesive systems <u>Lars Blomqvist</u> , Jimmy Johansson, Dick Sandberg
	Effect of thermal-vacuum treatment on bond shear strength. A comparison among Norway spruce, White ash and Turkey oak wood <u>Luigi Todaro</u> , Silvia Ferrari, Paola Cetera, Ottaviano Allegretti, Nicola Moretti, Achille Pellerano
	Application of FT-NIR spectroscopy in chemometric modeling of heat-treated beechwood properties <u>Nebojša Todorović</u> , Goran Milić, Zdravko Popović
	Determination of Thermo-modified Oak Wood Emissivity Properties in the Infrared Spectral Wavelength Range 7.5-13 μm <u>Miljenko Klarić</u> , Stjepan Pervan, Silvana Prekrat, Aleš Straže, Željko Gorišek
	Characterisation of chemical and physical properties of thermo-modified wood by FT-NIR spectroscopy <u>Aleš Straže</u> , Željko Gorišek, Stjepan Pervan, Anna Sandak, Jakub Sandak
10:55 – 11:30	Coffee break and Poster Session
11:30 – 12:10	Oral presentation (Session 3 & 4)
11:30	Experimental and numerical investigations of mechanical properties of welded joint using the Arcan setup <u>Martin Rhême</u> , John Botsis, Joël Cugnoni, Parviz Navi
11:50	Challenges using dielectric heating for THM processing of solid wood <u>Jimmy Johansson</u> , Lars Blomqvist, Dick Sandberg
12:10 – 13:10	STSM presentations
12:10	Using Dynamic Mechanical Analysis (DMA) for fundamental understanding of thermo treatments of wood <u>Andreja Kutnar</u> , Robert Widmann, Iris Brémaud
12:20	Durability and chemical modifications of four Tunisian wood species after heat treatment <u>Mohamed Elaieb</u> , Kevin Candelier, Stéphane Dumarcay, Philippe Gerardin, Mathieu Petrissans
12:30	Experimental study of mechanosorptive hygro-lock effect in wood subjected to variable loading and relative humidity <u>Omar Saifouni</u> , Rostand Moutou Pitti, Jean-François Destrebecq, Julien Froidevaux, Parviz Navi
12:40	Thermal and Analytical Characterization of Welded Beech <u>María Inés Placencia Peña</u> , Carmen Mihaela Popescu, Frédéric Pichelin, Antonio Pizzi

12:50	Thermal behaviours of THM densified wood <u>Carmen-Mihaela Popescu</u> , Gabriela Lisa, Julien Froidevaux, Parviz Navi, Maria-Cristina Popescu
13:00	Surface characteristics of thermo-mechanically densified veneers <u>Pavlo Bekhta</u> , Stanislaw Proszyk, Tomasz Krystofiak
13:10 – 14:30	Lunch
Chairperson: Dennis Jones	
14:30 – 15:10	Keynote (Session 4)
14:30	Environmental impact assessment of THM products <u>Andreja Kutnar</u>
15:10 – 15:50	Oral presentations (Session 4)
15:10	Influence of thermo treatment on wood physical-mechanical properties and VOC and aldehyde emissions <u>Regula Moser</u> , Thomas Lorenz, Philipp Hass, Frédéric Pichelin, Thomas Volkmer, Urs Von Arx, Peter Niemz
15:30	Structural, economic and environmental performance of fibre reinforced wood profiles vs. solutions made of steel and concrete Cristoph Manthy, Edeltraut Guenther, Andreas Heiduschke, <u>Peer Haller</u>
15:50 – 16:30	Poster presentations (Session 3 & 4) + 1 announcement
	Set-recovery of densified and thermally modified wood under repeated soaking-drying-cycles <u>Kristiina Laine</u> , Lauri Rautkari, Mark Hughes
	Bonding performance of densified VTC beech bonded with liquefied wood <u>Andreja Kutnar</u> , Aleš Ugovšek, Frederick A. Kamke, Milan Sernek
	Baltic Sea network for efficient and sustainable wood processing based on wood modification processes <u>Alexander Pfriem</u> , Mario Zander, Lothar Clauder
	Fatigue behaviour of VTC and untreated beech wood <u>Georg Behr</u> , Holger Militz, Frederick A. Kamke, Andreja Kutnar
	Gluing ability of Pinus Pinaster depending on its moisture content <u>Anne Lavalette</u> , Gérard Elbez, Alain Cointe, Régis Pommier, Michel Danis
	Influence of hot-pressing regimes at MDF production <u>Viktor Savov</u> , Julia Mihailova, Cvetelin Evstatiev
	Thermo-Hydric behaviour of dowelled and bolted steel-to-timber connections exposed to fire <u>Abdoulaye Samake</u> , Patricio Palmili, Mustapha Taazount, Philippe Audebert, Maxime Audebert, Abdelhamid Bouchaïr
16:30 – 17:00	Coffee break and Poster Session
17:00 – 17:40	Oral presentations (Session 3 & 4)
17:00	Products meeting Needs: Applying Thermal Modification and Thermo-Hydro Mechanical Processing of Wood to its Fullest Potential <u>Dennis Jones</u> , <u>Edo Kegel</u>
17:20	Preliminary tests of combined steaming and thermal-vacuum treatment on Turkey oak (<i>Quercus cerris</i> L.) wood <u>Silvia Ferrari</u> , Luigi Todaro, Ignazia Cuccui, Ottaviano Allegretti, Mario Marra

17:40	Day conclusions on Sessions 3 & 4 + Discussion on the Products Meeting Needs
19:30	Conference dinner
Thursday, April 11, 2013	
09:00 – 10:00	WG groups meetings
10:00 – 10:40	General discussion with all the working groups
10:40 – 11:10	Coffee break
11:10 – 12:20	MC meeting