

## COST FP1303 Meeting

### Design, Application and Aesthetics of biobased building materials

Vitosha Park Hotel, Sofia, Bugaria

28 February – 1 March 2017

#### Provisional agenda

<b>TUESDAY 28<sup>th</sup> February, 2017</b>		
08:30 – 08:45		Welcome, Introduction
08:45 – 09:15	1	Peter Wilson Building the New World: Innovation and Paradigms in Bio-Based Architecture
09:15 – 09:45	2	Emilia Markström Prospects for an Increased Use of Bio-based Building Materials in Sweden
09:45 – 10:00	3	David Lorenzo Performance of fir timber houses built in Northern Spain. The examples of wooden buildings and the importance of design details in the performance.
10:00 – 10:15	4	Mohammed Hussein Hoballah Discovering design principles of a wood-based insulating material through multi-objective optimization
10:15 – 10:30	5	Simon Curling Implications of synergistic durability relationships on design of construction elements
10:30 – 11:00		<b>COFFEE</b>
11:00 – 11:15	6	Thomas Thiis Simulation of weathered colour change on an untreated aspen façade
11:15 – 11:30	7	Jöran Jermer Performance of a noise barrier with different wood materials – results from a service trial after 20 years' exposure
11:30 – 11:45	8	Julia Buchner How do biotic and abiotic factors combine to affect the weathering of wood surfaces?
11:45 – 12:00	9	Ingunn Burud Comparing hyperspectral imaging technology and visual assessment for mould growth on wooden surfaces
12:00 – 12:15	10	Zuzana Vidholdova Colour changes of wooden shingles treated with pine tar after weathering
12:15 – 12:30	11	Athanasios Dimitriou Surface characterisation of spruce to understand the effects of natural weathering
12:30 – 13:30		<b>LUNCH</b>
13:30 – 13:45	12	Bostjan Lesar COST FP 1303 Cooperative Performance Test – Results after 2 years outdoor exposure
13:35 – 14:00	13	Linda Meyer-Veltrup Durability-based design of timber structures – Quantifying design, exposure, and resistance on the basis of dose-response relationships
14:00 – 14:15	14	Cihat Tascioglu

		Seventh-year durability analysis of post-treated wood-based composites
14:15 – 14:30	15	Jakub Sandak Development of an algorithm for computation of the weather dose used for natural weathering models
14:30 – 14:45	16	Liselotte DeLigne Fungal susceptibility testing of bio-based building materials: using image analysis as an assessment tool
14:45– 15:18		<b>POSTER SESSION</b>
14:45 – 14:48	17	Aneta Gumowska Sorption hysteresis of selected structural wood – based composites
14:48 – 14:51	18	Emilia Salca Some aesthetic decorative features of varnished surfaces
14:51 – 14:54	19	Morwenna Spear Artificial weathering effects on glue bond, varnish stability and surface appearance in thermally modified larch
14:54 – 14:57	20	Younes Aounes Updating the Reliability of cracked timber structures by using experimental results and numerical fracture model
14:57 – 15:00	21	Izabela Burawska Research on modified floorboard of higher hardness
15:00 – 15:03	22	Vjekoslav Živković Contribution of Site Orientation to the Seasonal Fluctuations of Wood Moisture Content in Wooden Windows
15:03 – 15:06	23	Mesut Yalcin Total Color Change of Wood Impregnated With Mimosa Tannin
15:06 – 15:09	24	Miklos Bak Colour variation within the material of new Robinia varieties with high growing rates
15:09 – 15:12	25	Anna Rozanska Possibilities to Use Modern Biobased Materials in Traditional Wooden Beam Floors
15:12 – 15:15	26	Kristine Nore Passive conditioning with wood in grocery stores
15:15 – 15:18	27	Simon Curling MDF Recovery: Recycled MDF technologies for routed and laminated applications.
15:18 – 16:00		<b>COFFEE AND POSTERS</b>
16:00 – 16:15	28	Wibke Unge Durability testing of a cattail (Typha spp.) based insulation material against termite attack
16:15 – 16:30	29	Younes Aoues Time-variant Reliability of a timber truss subjected to decay considering humidity and temperature climate change
16:30 – 16:45	30	Rostand Moutou-Pitti Environmental impact on crack propagation of biobased building materials: application to Abies Alba Mil
16:45 – 17:00	31	Lothar Clauder Emissions from bio-based building products
17:00 – 17:15	32	Katja Vahtakari Functional properties of wooden surfaces in real indoor environments
17:15 – 17:30	33	Charalampos Lykidis

		The use of NIR spectroscopy as a quality marker of hydrothermally treated wood
17:30 – 17:45	34	Marko Povacvesic Bringing nature into workspaces: Employees' perceptions of their offices
17:45 – 18:00	35	Morwenna Spear Combining the science and design of plant cells and structures
18:00		<b>CLOSE OF DAY</b>
<b>WEDNESDAY 1<sup>ST</sup> MARCH, 2017</b>		
08:45 – 09:00	36	Miha Humar Susceptibility of the conifer wood toward blue staining
09:00 – 09:15	37	Roman Reh Aesthetics of composites with the surface decorative veneers made of silver maple ( <i>Acer saccharinum</i> L.)
09:15 – 09:30	38	Mark Irle The Internal Structure of Modern Wood and Plastic Fibre Insulation Materials
09:30 – 09:45	39	Rene Herrera Diaz Potential use of plant extracts for protection of wood veneers
09:45 – 10:00	40	Cesar Niyigena Evidence of low impact of hemp bio-aggregates on the thermal conductivity of hemp concrete
10:00 – 10:30		<b>COFFEE</b>
10:30 – 10:45	41	Susanna Kallböm Water vapour sorption characteristics of thermally modified Norway spruce particles
10:45 – 11:00	42	Mladjan Popovic The curing behaviour of urea-formaldehyde adhesive in the presence of chemically treated narrow-leaved ash ( <i>Fraxinus angustifolia</i> Vahl. ssp. <i>Pannonica</i> Soo & Simon)
11:00 – 11:15	43	Charlotte Grosse Modifying wood with poly(butylene succinate). Influence of humidity on oligomers diffusion into the wood cell walls by screening of heat treatment parameters
11:15 – 11:30	44	Miklos Bak Decreasing the hygroscopicity of wood with nanoparticles
11:30 – 11:45	45	Tonis Teppand Using reinforced GLT laths for constructing grid shells without supports
11:45 – 12:00	46	Marius Aleinikovics Analysis of HWP production and impact on carbon storage in Lithuania
12:00 – 12:15	47	Mario Marra Design of Wood Wool Cement Board by Life Cycle Assessment method
12:15 – 12:30	48	Eduardo Robles Modified cellulose nanofibers thin-film as external layer for wood-based multi-layer composites
12:30		<b>CLOSE OF MEETING, LUNCH</b>
13:30		<b>MANAGEMENT COMMITTEE MEETING</b>