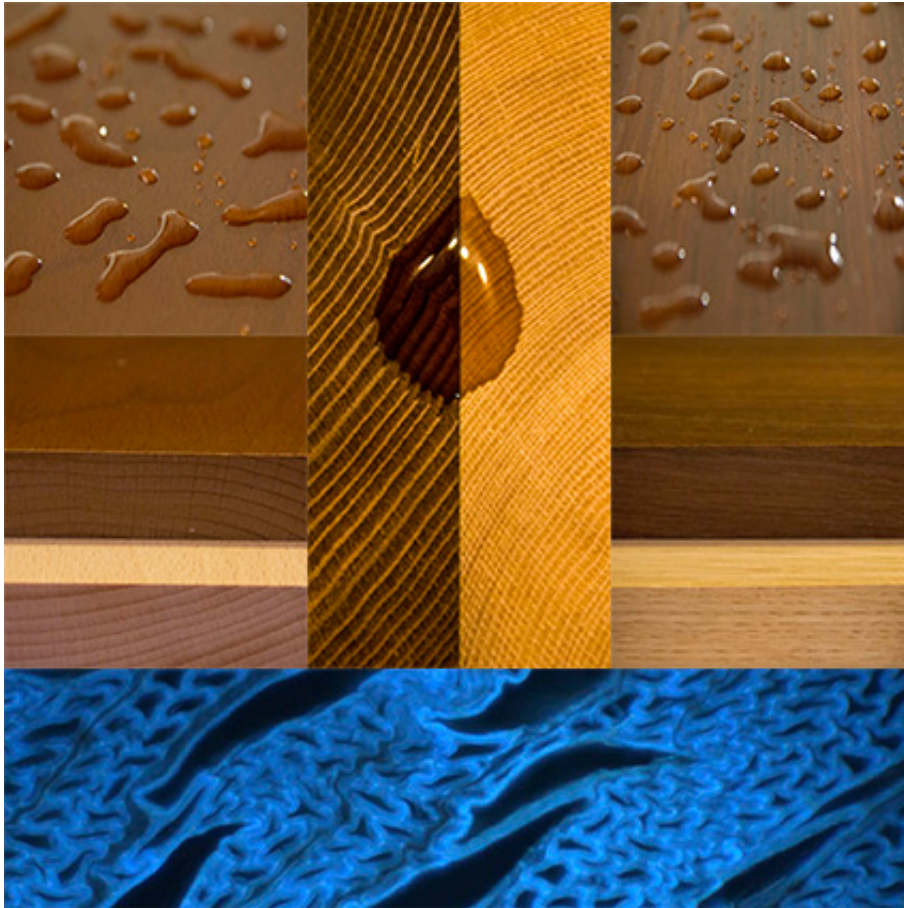


## Joint COST FP0904 & FP1006 International Workshop



## CHARACTERIZATION OF MODIFIED WOOD IN RELATION TO WOOD BONDING AND COATING PERFORMANCE

16<sup>th</sup> to 18<sup>th</sup> October 2013  
Terme Zreče, Hotel Rogla and Hotel Planja  
Zreče, Rogla  
SLOVENIA



## SCHEDULE

### 15<sup>th</sup> October 2013

*Conference venue place: Terme Zreče, Zreče*

- 12:00→ Registration  
20:00→ Dinner (unformal)

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### 16<sup>th</sup> October 2013

*Conference venue place: Terme Zreče, Zreče*

- 09:00 – 09:30 Registration
- 09:30 – 09:45 Welcome address  
For local organizer: Sergej Medved  
For FP1006: Stefanie Wieland  
For FP0904: Dennis Jones
- 09:45 – 10:30 Keynote speaker  
*Kamke F.A.*: THM – a Technology Platform or Novelty Product?
- 10:30 – 11:15 Session 1 – *Chair: Andreja Kutnar*  
*Clauder L., Rådemar M., Rosell L., Vestergren M. & Pfriem A.*: Emissions of thermally modified timber products  
*Rozanska A. & Sandak A.*: Application of FT-NIR for recognition of substances used for conservation of wooden parquets of 19th century manor houses located in South-Eastern Poland  
*Krystofiak, T., Lis B., Muszyńska M. & Sobota K.*: Gluability of thermally modified ash wood with EPI adhesives
- 11:15 – 11:45 Coffee break
- 11:45 – 13:00 Session 2 – *Chair: Dennis Jones*  
*Militz H. & Bastani A.*: Bondability of phenol formaldehyde modified beech wood glued with phenol resorcinol formaldehyde and polyvinyl acetate adhesives  
*Müller M., Hauptmann M. & Hansmann C.*: Bonding properties of wood modified with various siloxanes and silanes  
*Šernek M., Ugovšek A., Kutnar A. & Kamke F.A.*: Viscoelastic thermal compressed wood as a component in green building composites  
*Kariž M., Kitek Kuzman M. & Šernek M.*: Effect of heat treatment of spruce on adhesive bond performance after soaking in water
- 13:00 – 14:30 Lunch break





14:30 – 15:45 Session 3 – *Chair: Mark Hughes*

*Bak M., Németh R., Csordós D. & Tolvaj L.:* Effect of treatment medium on the moisture uptake rate and colour change during natural weathering of heat treated wood

*Hill, C.:* The Effect of Surface Weathering on the Water Sorption Properties of Wood

*Petrič M., Hughes M., Kričej B., Kutnar A., Laine K., Medved S., Pavlič M. & Rautkari L.:* Coated surface densified wood: water vapour absorption and desorption and related dimensional changes

*Sivrikaya H. & Can A.:* Water repellent efficiency of wood treated with copper-azole combined with silicon and paraffin emulsions

*Willems W.:* Wood moisture analysis under THM-conditions by employing scaling properties of room temperature moisture isotherms

15:45 – 16:15 Coffee break

16:15 – 17:30 Session 4 – *Chair: Holger Militz*

*Popescu C.M. & Popescu M.C.:* A structural study of the biodegraded [poly(hydroxy urethane acrylate)] coated lime wood

*Lesar B., Pavlič M., Petrič M., Sever Škapin A. & Humar M.:* Wax impregnation slows down photodegradation processes of wood

*Podgorski L., Grüll G., Truskaller M., Lanvin J.D., Georges V. & Bollmus, S.:* Weathering performance of coatings on acetylated, furfurylated and heat treated wood at two exposure sites in Europe

*Altgen M., Ala-Viikari J., Hukka M., Tetri T. & Militz H.:* Surface performance of thermally modified wood for exterior applications

*Strautmann J., Noël M. & Volkmer T.:* Surface qualification of weathered wood

17:30 Bus transfer to Rogla

18:30 – 19:45 SC FP1006

20:00 Dinner

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## 17<sup>th</sup> October 2013

**Conference venue place: Hotel Planja, Rogla**

09:00 – 09:45 Keynote speaker

*Rennekar S., Church, W.T., Dolan J., Lin Z. & Frazier C.E.:* Characterization of laser modified wood surfaces for resin-free adhesion

09:45 – 10:45 Training school and poster session 1 – *Chair: Sergej Medved*

*Hughes M.:* 3<sup>rd</sup> Training School of FP0904 at Aalto University “Chemical and property changes in wood during THM-treatment”

*Cademartori P.H.G., Bihlava dos Santos P.S, Gatto D.A. & Labidi J.:* Changes in technological properties of thermally treated gypmie messate wood

*Herrera R., Erdociaa X., Gattob D.A. & Labidia J.:* Changes in chemical composition of wood during the hydrothermal treatment process





*Sansonetti E., Cirule D., Grinins J., Andersone I. & Andersons B.:* Colour changes of hydrothermally modified coated wood after artificial and outdoor exposure

*Živković, V., Arnold, M., Richter, K. & Turkulin, H.:* Characterization of wood surface degradation using activation spectra approach

10:45 – 11:15 Coffee break

11:15 – 12:15 Training school and poster session 2 – *Chair: Stefanie Wieland*

*Candelier K., Dumarcy S., Petrissans A., Gerardin P. & Petrissans M.:* Advantage of vacuum versus nitrogen to achieve inert atmosphere during wood thermo-modification

*Burnard M.D., Leavengood S., Muszynski L. & Ganio L.:* Rapid assessment of check development in veneer overlays

*Pierre F., Almeida P.Lv.G. & Perre P.:* Grindability of heat treated biomass: effect of the treatment intensity on the development of particles suitable for second generation BtL chain

*Nguyen S.L., Pitti R.M. & Destrebecq J.F.:* Stresses in bonded plans in reconstituted solid wood under moisture variation: a numerical approach

*Lu P, Pierre F., Almeida G. & Perre P.:* Heat flux study of mild pyrolyzed wood and components through microcalorimetry

12:15 – 13:45 Lunch break

13:45 – 15:15 Session 5 – *Chair: Lone Ross Gobakken*

*Popović J., Djiporović-Momčilović M., Gavrilović-Grmuša I., Popović M. & Medved S.:* The influence of the sodium carbonate treatment of narrow-leavedash on the lap shear strength

*Salman S., Petrissans A., Thevenon M.F., Dumarcy S., Pollier B. & Gerardin P.:* Combined treatment using boron impregnation and thermo-modification to improve properties of heat treated wood - Effect of additives on boron leachability

*Sandak J., Sandak A., Riggio M. & Santoni I.:* Superb wood surface finishing – SWORFISH project approach

*Sinic J. & Müller U.:* Method for the quantitative analysis of an optimized wettability of Plasma treated thermal modified timber using contact angle measurements

*Popescu M.C. & Popescu C.M.:* Spectral study of hydro-thermal treated lime wood

15:15 – 15:45 Coffee break

15:45 – 17:00 Session 6 – *Chair: Graham Ormondroyd*

*Krajnc H. & Kokol V.:* The comparison of fungal and bacterial laccase ability to oxidaze different lignin model compounds and isolated lignins from lignocellulosic fibres

*Semple K., Kamke F.A., Kutnar A. & Smith G.:* Viscoelastic Thermal Compression of Moso Bamboo Tissue





*Straže A., Gorišek Ž., Pervan S., Sandak A. & Sandak J.: Sorption properties of some thermal treated hardwoods analysed by thermodynamics, surface fractality and IR spectroscopy*

*Karami E., Matsuo M., Bremaud I., Bardet S., Froidevaux J. & Gril J.: Modification of wood acoustic, hygroscopic and colorimetric properties due to thermally accelerated ageing*

17:30 – 1:45 SC FP1006 or individual meeting(s)

20:00 Dinner (Cottage Jurgovo)

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### **18<sup>th</sup> October 2013**

***Conference venue place: Hotel Planja, Rogla***

09:00 – 10:00 Working group meeting

10:00 – 11:00 MC meeting

11:00 – 11:30 Coffee break

11:30 – 12:30 Conference conclusions

12:30 – 14:00 Lunch

14:00 Departure to Ljubljana or airport

