

PTF BPI 2014 - CONFERENCE PROGRAM

Tuesday, September 23rd – Conference pre-registration

18:00-20:00 Conference Pre-registration + Poster Set-up (Room E15)

Wednesday, September 24th - Conference, Day 1

08:00-09:00 Conference Registration +Poster Set-up (Room E15)

Plenary Session 1 (Room E17)

09:00-09:30 Keynote 1: FHS Officials and PTFBPI2014 Organizers (R. Ribitsch, G. Grall, A. Petutschnigg - FHS)

09:30-09:50 Keynote 2: Processing of data and evolution knowledge (T.M. Young - UT)

09:50-10:10 Keynote 3: Cascade utilization of wood (K. Richter - TUM)

10:10-10:30 Keynote 4: Market developments (M.C. Barbu - FHS/UTBv)

10:30-10:50 Coffee Break + Poster Set-up (Room E15)

10:50-12:10 Parallel Sessions

Session 1: Raw Materials for the Wood Industry (Chair: P. Chaowana, Room E17)

1. Verkasalo, E. (H. Kilpeläinen, A. Ihalainen, T. Ropponen) - Wood processing properties of plantation- Grown norway spruce for saw milling in Finland
2. Yildirim, H.T. - Forests as a renewable energy resource and bioenergy scenarios in Turkey
3. Koutsianitis, D. (E. Voulgaridis) - Wood production of fir and beech - Forests in relation to site quality
4. Chaowana, P. (M.C. Barbu, A. Frühwald) - Bamboo - a functionally graded composite material
5. Riegler, M. (N. Andre, M. Gronalt, T.M. Young) - Dynamic real-time simulation of continuous bulk material flow

Session 2: Bio-refinery and Energy from Wood (Chair: A. Astner, Room E13)

1. Rauch, R. (M. Jovicic, C. Aichernig, E. Ililopoulou, E. Heracleous, A.A. Lappas) - Hydroprocessing and catalytic cracking of Fischer-Tropsch biowaxes to biokerosene
2. Jungmeier, G. (R. van Ree, E. de Jong, H. Stichnothe, I. de Bari, H. Jørgensen, M. Wellisch, P. Walsh, G. Garnier, J. Spaeth, K. Torr, K. Habu) - The possible role of wood-biorefining in a biobased industry
3. Astner, A. (T.M. Young, J.J. Bozell) - Taguchi robust product design for lignin yield maximization by organosolv fractionation using mixed biorefinery feedstocks
4. Labidi, J. (X. Erdocia, R. Prado, M.A. Corcuera) - Olive tree pruning acetosolv lignin biorefinery
5. Meng, Y. (T.M. Young, S. Wang) - Ultralight carbon aerogel as oil absorption materials

12:10-13:10 Lunch Break (FHS Canteen)

13:10-14:45 Parallel Sessions

Session 3: Forests and Modern Wood Constructions (Chair: K. Richter, Room E17)

1. Bajraktari, A. (B. Thaci, B. Pira) - Forest area in Kosovo and its capacity to fulfill the needs for wood
2. Liampas, G.A. (V. Drosos, A.K.G. Doucas) - Bioclimatic wooded forest constructions
3. Correal-Mòdol, E. (C. Iglesias-Rodríguez) - Potential strength class of the glulam made of *Castanea sativa* from Catalonia
4. Young, T. (K.K. Grasser) - A mill siting study for cross laminated timber in the United States
5. Vay, O. (C. Hansmann, A. Teischinger, U. Müller) - Thermal conductivity of hollow chamber sandwich boards
6. Erdinler Emine Seda (H.T. Yildirim) - Furniture industry – forestry relationship and a scenario on future

Session 4: Wood Drying Technologies (Chair: A. Teischinger, Room E13)

1. Skuratov, N. (I. Sapozhnikov, A. Protasova) - Methods of evaluation of residual stresses and timber drying quality
2. Oliveira, L. - Kiln drying in Western Canada
3. Zweiler, R. (K. Paar, M. Goritschnig, M. Pomper): Energy efficiency of drying units
4. Ünsal, Ö. (C. Güler, B. Dilek) - Drying performances of industrial high frequency and microwave driers for hardwoods

5. Neuhäuser, A.E. (C. Hansmann, T. Hobel, A. Teischinger) - Effect of surface incising on the drying time of Norway spruce
6. Huber, H. (T. Wimmer, T. Schnabel, A. Petutschnigg) - Analysis of the tension in wood during the drying process: an experimental approach

14:45-15:30 Coffee Break + Poster presentation (Room E15)

15:30-17:00 Plenary Session with Experts from Industry (Chair: M.C. Barbu, Room E17)

15:30-16:00 Schattdecor Co. (K. Hummel) - Industrial production of decor paper

16:00-16:30 Ikea Co. (M. Germann) - Light furniture developments

16:30-17:00 Scheuch Co. (E. Altmann): Clean air in the wood industry

17:10-18:00 Tour of FHS facilities (Kuchl)

17:15-18.30 **Working group Meetings** (only for COST FP 1006 members)

Working group 1 (Room E17)

Working group 2 (Room E13)

Working group 3 (Room 111)

18:30-22:00 Come Together Dinner (Gemeindeamt Kuchl)

Thursday, September 25: Conference, Day 2

08:00-09:00 **Steering Committee Meeting** (only for COST FP 1006 members, Room 1.11)

Plenary Session (Chairman: A.Petutschnigg, Room E17)

09:00-09:20 Keynote 5: Wood Modification (H. Militz, GAUG)

09:20-09:40 Keynote 6: Recycling of wood products (A. Teischinger, BOKU)

09:40-10:00 Coffee Break (Room E16)

10:00-12:10 Parallel Sessions

Session 5: Wood Modification Processes - Part 1* (Chair: H. Militz, Room E17)

1. Bak, M. (R. Németh, D. Novák, P. Gulyás) - Sorption and diffusion properties of oil-heat-treated poplar wood
2. Choowang, R. (A. Sanpruksin, P. Fikhao) - Effect of moisture content and microwave pre-heating on the thickness swelling of hot pressed oil palm wood
3. Biçak, S. (M.H. Akyldiz, M. Atar) - Effects of heat-treatment and wood preservative on combustion resistance of oak wood
4. Mitani, A. (I. Barboutis) - Influence of the thermal treatment on mechanical properties of fir wood
5. Varga, D. (L. Tolvay, A. Csiszar, R. Nemeth) - Colour modification of scots pine, larch and spruce wood by steaming
6. Griebeler Gomes de Oliveira, Carolina (C. Iglesias-Rodríguez, G.I.B. de Muñiz) - Color changes of thermally modified Eucalyptus grandis wood after weathering
7. Cirule, D. (B. Andersons, I. Andersone, A. Meija-Feldmane, J. Grinins) - Weathering and protection peculiarities of hydrothermally modified aspen
8. Belloncle, C. (M. Irle, J-B. Aurel) - Artificial and natural weathering of fire-proofed wood cladding
(* - in the frame of COST Action FP 1006)

Session 6: Wood based Composites - Part 1 (Chair: M. Šernek, Room E13)

1. Langthaler, G. (T. Stern, P. Schwarzbauer) - Diffusion of Innovation: Key factors influencing market development of natural fibre-reinforced composites
2. Segovia, C. (A. Sauget, A. Besserer, R. Kueny, A. Pizzi) - Evaluating of mold growth in tannin-resine and flax fiber composites
3. Tondi, G. (M. Link, C. Kolbitsch, R. Lesacher) - Sandwich panels with 100% natural tannin-furanic foam core
4. Lenz, S.(M. Kohlmayr, G. Zuckerstätter, A. Kandelbauer) - On the Suitability of Natural Polyols as Resin Components for Paper-Based Laminates

5. Rindler, A. (P. Solt, T. Schnabel, M.C. Barbu) - Comparison between HB and HDF made from waste leather
6. Michaud, F. (C. Delisse, J. Moreau, M. Irle) - Eco-design and multi-objective optimization of insulating wood fiber based materials
7. Medved, S. (B. Lesar, E. Tudor, M. Humar) - Thermal insulation panels from cellulosic fibres
8. Kain, G. (M.C. Barbu, K. Richter, A. Petutschnigg, B. Plank) - Use of tree bark as insulation material

12:10-13:10 Lunch Break (FHS canteen)

13:10-15:30 Parallel Sessions

Session 7: Wood Modification Processes - Part 2* (Chair: H. Militz, Room E17)

1. Šernek, M. (M. Kitek Kuzman, M. Kariž) - Bonding of thermally modified wood with pvac, epi, pur and muf adhesives
2. Can, A. (H. Sivrikaya) - Effects of zinc oxide based paint on weathering performance of coated wood
3. Vitkeviciute, I. (M. Noel, T. Volkmer) - Water vapor sorption behaviour of wood modified with bio-(co)polyesters
4. Banaszak, A. (W. Perdoch, M. Broda, B. Mazela) - Protein polymers as IPBC stabilizing factors
5. Muszyńska, M. (T. Krystofiak, P. Bekhta) - Adhesion of eva copolymer to pine veneer after thermo-mechanical modification
6. Tondi, G. (J. Hu, M.F. Thevenon) - Advanced tannin-based wood preservatives
7. Meints, T. (M. Müller, C. Hansmann, J. Delis, V. Malinina, F. Liebner) - ³¹P NMR studies of siloxane modified wood using supercritical carbon dioxide as solvent
8. Huber, H. (T. Schnabel) - Electron beam irradiation of wood: an experimental parameter study

(* - in the frame of COST Action FP 1006)

Session 8: Wood based Composites - Part 2 (Chair: S. Medved, Room E13)

1. Papadopoulou, E. (C. Markessini, P. Tsirogiannis, K. Siamos) - Wood based panels with improved surface properties
2. Chupin L. (B. Charrier, A. Pizzi, F. Charrier) - Particleboard adhesive without formaldehyde emission
3. Klimek, P. (R. Wimmer) - In-situ imprinting of particleboards to create locally-shaped density and alter internal bonding
4. Medved, S. (N. Čuk, M. Kunaver) - Behavior of liquefied wood bonded particleboards
5. Andre, N. (T.M. Young) - Real-time process modeling of oriented strand board panels
6. Semple, K. (G. Smith) - Theoretical models for bamboo strand width distribution
7. Reh, R. - Decorative veneer properties of sweet chestnut
8. Monteiro, S. (A. Dias, L. Carneiro, J. Ferra, J. Martins, L. Carvalho) - Low density polyester particles for lightweight wood based composites

15:30-16:00 Coffee Break + Poster Dismantling (Room E15)

16:00-17:20 Parallel Sessions

Session 9: Finishing Technologies* (Chair: E. Papadopoulou, Room E17)

1. Csanady, E. (G. Sitkei) - A new Method for Wood Color Determination
2. Beikircher, W. (H. Gasser, J. Kögl) - Temperature profile of wood coated with intumescent fire protective coatings tested in the cone calorimeter
3. Csiha, C. (E. Papp) - Surface tension measurement of differently rough sanded oak surfaces
4. Rozanska, A. (J. Sandak) - Resistance to scratches tests with 3D methods
5. Jocham, C. (M. Badila, T. Schmidt, C. Mayer, A. Blatter, T. Schwarz, P. Hauber, D. Lücke, U. Müller, A. Kandelbauer, B. Letsch, K. Rehm) - Developments and trends in powder coating of heat-sensitive substrates

(* - in the frame of COST Action FP 1006)

Session 10: Emissions of Wood Products (Chair: M. Weigl, Room 1.11)

1. Young, T. (J. Otjen, N. André) - Quantifying the natural variation of formaldehyde emissions for wood composite panels
2. Weigl, M. (C. Fürhapper, M. Nohava, D. Stratev, E. Habla, K. Joerg, M. Pain, W. Pichler) - Processing pellets towards low emissions

3. Höllbacher, E. (C. Rieder-Grading, T. Ters, E. Srebotnik) - Using a small-scale testing tool (μ -cte) for rapid prediction of VOC from wood products

Session 11: Service Life and User expectations* (Chair: J. Sandak, Room E13)

1. Grigsby, W. (J.E. McDevitt) - Comparative life cycle assessment of bio-based and petrochemical adhesives used in fiberboard production
2. Bülbül, Z. (M.Ö. Kuşcuoğlu, S.D. Sofuoğlu) - Hazards in kids furniture
3. Sandak, J. (M. Riggio, A. Sandak, I. Santoni) - What is superb wood surface? Defining user preferences and service life expectations
4. Hesser, F. - Pitfall of carbon accounting of bio-based materials in b-2-b communication
(* - in the frame of COST Action FP 1006)

17:20-18:30 **Management Committee Meeting** (only for COST FP 1006 members, Room E17)

17:30-18:15 *Visit of HTK facilities (Kuchl)*

18:30-22:00 *Farewell Dinner at HTK (Kuchl) (no dress code)*

Posters:

1. Angelski, D.H. (P. Vitchev) - Influences of some factors on adhesion strength between PVC foil and MDF
2. Bae, H.J. (E.J. Cho, S.J. Lee) - Effective Wood Biomass Bioconversion to Bio-sugar by BRC Advanced Pretreatment
3. Bajraktari, A. (K. Cukaj, B. Pira) - Research on the physical and technological properties of turkey oak (*quercus cerris*)
4. Bestani, B. (N. Benderdouch) - The use of wood-based activated carbon for organic pollutants removal
5. Borja de la Rosa, A. (M. Fuentes, E. Cruz, V. Mariles, D.Vargas, D. Ayerde, F. Solares, M. Gomez, S. Orosco, J.F. Castellanos, V. Serrano) - Technological characteristics of wood *Bursera linanoe*, a species of tropical deciduous forest Oaxaca, México
6. Carvalho, L. (R. Lopes, C. Coelho, J. Martins) - Influence of wood raw-material on formaldehyde release from wood-based panels
7. Czajka, M. (M. Józwiak) - Emissions of volatile organic compounds (voc) from the surface of wood finished
8. Fernández Galiote D.L. (R. Machuca, A. Borja) - Wood anatomy of *Pithecellobium leucocalix* and *Pterocarpus hayseii*, Ocosingo, Chiapas, México
9. Giannoulas, V. (V. Drosos, A.-K. G. Doucas) - Dimensioning of wooden roofs in the mountainous area of Greece
10. Hernández, E.R. (S. Kuljich, C. Blais) - Effect of cutterhead diameter on size distribution of chips produced by a chipper-canter
11. Hernández, H.O.J. (A. Borja, R. Machuca) - Wood anatomy of *L. Belotia mexicana* gaerth AND *Spondias mombin* L, OCOSINGO, CHIAPAS, MEXICO
12. Jones, D. (A. Östlund, J. Schmid) - COST Actions run by SP Wood Technology
13. Józwiak, M. (M. Czajka) - VOC emissions from pine veneer and pine wood
14. Labidi, J. (P.S.B. Dos Santos, S.H.F. Da Silva, G.F.R. Paganotto, D.A. Gatto) - Characterization of kraft lignin with XRD
15. Lenz, S. (M. Reiner, O. Moser, E. Zikulnig-Rusch, U. Müller, A. Kandelbauer) - Individualization of melamine-formaldehyde-based laminates in batch size one
16. Machuca, R. (A. Borja) - Determination of power calorific of species Mexican wood
17. Medved, S. (V. Jambreković) - Creep behavior of wood-based composites
18. Möttönen, V. (J. Marttila, H. Heräjärvi, K. Luostarinen) - Density profile and set-recovery of sawn wood after industrial scale THM processing
19. Palijski, T. (M. Jaić, A. Šučur, J. Dobić) - The impact of wood properties affected by sanding on the gloss of lacquered surfaces
20. Pichler, W. (M. Weigl and A. Weidenhiller) - Development of model-based process control for biomass processing
21. Rattanapun, W. (T. Manop) - Effect of thermal modification on termite resistance and performance properties of rubberwood
22. Rebollar, S. (P.J. Herrera) - Wood quality and uses of two tropical species from Quintana roo, México.
23. Salca, E.A. - Surface quality of black alder wood during longitudinal milling