


**COST ACTION FP1006  
BRINGING NEW FUNCTIONS  
TO WOOD THROUGH SURFACE  
MODIFICATION**

**WG2: Wood Interface modification and  
understanding of the wood-treatment  
interface interactions**

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**Specifications of WG2**

Scope  
Find out methods for the improvement of wood binding ability.

Target  
Carry out fundamental studies of wood interface modification which allows eco-friendly, self-binding, or wood to wood binding.

Focus  
On studies of non-toxic interface modification methods for wood and wood products.


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### *Areas of interest*

- Adhesion generated by bacterial.
- Adhesion improvement by enzymatic pre-treatment.
- Investigation of wood interface modification, in order to create adhesion or adhesion improvement.
- Interface modification through friction, heat and pressure, coupling agents.
- Investigation of liquefied wood as a bonding coating material.
- Improve self-bonding properties like joining of wood using linear friction welding processes.

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### *Methods of study*

- ➔ Spectroscopy (FTIR, Ramman, NIR, 13C/Mass NMR),
- ➔ Microscopy
- ➔ Other Analysis

The results will be used as data input parameters and model validation for the research carried out in WP3.

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## Expected results – Deliverables - Application

Expected results

- ⇒ Enhanced adhesion properties for adhesives, paints, varnishes or the wood itself.
- ⇒ Increased surface density
- ⇒ Dimensional stability
- ⇒ Easier maintenance of wood and its products

Deliverables

State-of-the-art in the field and a collection of new methods justified by analytical measurements.

Applications

Numerous indoor an outdoor applications: parquets, kitchen cabinets, furniture, fences, etc.

Dissemination activities

Communication with national researchers, institutes, universities, organizations, authorities, associations, etc.  
 Publications in peer review journals, magazines, etc.  
 Presentations at workshops relative with WP2 subject

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## Members

35 members from 18 countries!

Name	Country
Dr. Stefanie Wieland	Austria
DI (FH) Boris Forsthuber	Austria
Dr Anand Sanadi	Denmark
Mr Søren Poulsen	Denmark
Dr. Erik Larnøy	Norway
Dr Benedetto Pizzo	Italy
Prof. Giovanni Predieri	Italy
Tomasz Krystofiak	Poland
Prof. Piotr Beer	Poland
Ms. Electra Papadopoulou	Greece
Prof. Dr. Chrissafis Konstantinos	Greece
Dr. Graham Ormondroyd	UK
prof. dr. Milan Šernek	Slovenia
prof. dr. Marko Petrič	Slovenia
Luisa Carvalho	Portugal
João Ferra	Portugal
Marie-Pierre Laborie	Germany
Dr. Susanne Bollmus	Germany
Prof. Dr. Ir. Joris Van Acker (MC)	Belgium
Ir. Inge Wuijters (substitute MC)	Belgium
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Prof. Dr. Bogdan C. Simionescu	Romania
Prof. Dr. Nicolae Hurdac	Romania
Dr. Ivana Gavrilovic-Grmusa	Serbia
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Prof. Philippe Gerardin	France
Prof. Mark Hughes	Finland
Vincent Roucoules	France
Dr Bruno Andersons	Latvia
Mr Gintaras Keturakis	Lithuania
Dr. Kristina Ukvalbergiene	Lithuania
Dr. Thomas Volkmer	Switzerland

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Thank you for your attention!

Further details on WG2 activities: <http://cost-fp1006.fh-salzburg.ac.at/index.php?id=46>

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