



COST FP 1006 WG1 Meeting

Wood surface modification and functionalization

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Scope of WG1



- new treatments to bring enhanced or new functionality on wood surfaces
- micro-mechanisms of surface modification
- understanding of material's behaviour for explaining the mode and mechanisms of action
- collect user needs and preferences
- development of new surface modification processes
- investigate possibilities of eco-friendly treatments

Properties to be reached:



- Protection against decay
- Fire protection
- Stabilisation against UV-light
- Dimensional stabilisation
- Enhanced adhesion properties

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Methods to be discussed



- Chemical modification of surfaces
- Physical approaches (Temp., plasma, corona, ..)
- Biological approaches (enzymes, fungi..)
 - Modification technology
 - Fundamental studies
 - Process development
 - Analytical methods

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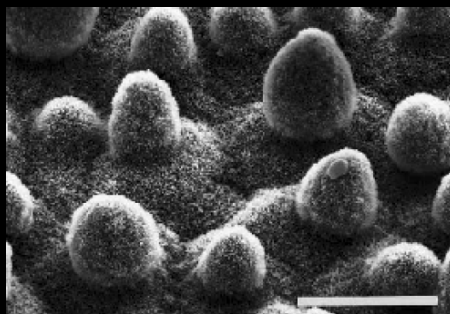
Leaf of the lotus flower



Planed larch wood

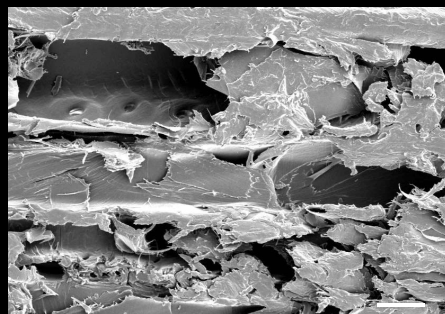


Leaf of the lotus flower



Bartholott und Neinhuis (1997)

Planed larch wood



Programme at conference:



-Session 1: today 11.00 – 11.40/ 13.00 – 14.40

- Antimicrobial coatings
- Plasma
- Confocal microscopy/ raman imaging of cell wall impregnation
- Surface properties heat treated wood
- Plant polyphenolics
- How to tailor wood surface properties
- Silane based coatings
- Weathering performance of glutaraldehyde modified wood
- Lignocellulosic biomass for surface finishes

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6th ECWM Conference



www.ecwm6.si

16-18. Sept. 2012

Ljubljana, Slovenia

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