Transferkolleg 2014 - Advanced Wood Technologies

Wood is one of the most significant renewable raw materials. As a multifunctional material, it has tremendous potential as a substitute in applications so far dominated by oil and other non-renewable resources. Forests in Switzerland are underutilised. With adequate sustainable provisioning and the management of wood as a resource across its life cycle, aided by new technologies, processes and applications much wider and more intelligent use of the resource wood is feasible.

The challenges addressed include the following fields:

- Advancements in timber constructions: the development of a new generation of wood components, new and innovative composite materials as well as new ways of combining wood with other materials, alternative surface, gluing, bonding, protection and modification processes and industrial manufacturing.
- Bio-refinery: converting low quality, leftover and recycled wood into fuels, energy, chemicals, and materials.
- New materials: new applications and uses for innovative wood-based materials.

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Project team

- Barbara Flückiger (NRP 66)
- Oreste Ghisalba (SATW / Ghisalba Life Sciences GmbH)
- Daniel Gygax (SATW / Fachhochschule Nordwestschweiz)
- Esther Koller-Meier (SATW)
- Thomas Näher (S-WIN)
- Evelyn Pöhler (S-WIN)
- Martin Riediker (NRP 66)
- Marcus Textor (ETH Zurich)
- Willi Schwotzer (Nolax AG)
- Hansruedi Zeller (SATW / President Transferkolleg)
- Fabian Zwick (Glas Trösch AG)