



COMPANY NAME

Foundation

- Kompetenzzentrum Holz GmbH

Turnover

- 10 million €

Employees

- 115

Branches

- Chemical industry
- Wood working industry
- Pulp and Paper industry
- Polymer industry
- Automotive industry

Key materials

- Wood and natural fibres
- Carbon fibres
- Thermoplastics
- Thermosets

Key products

- Natural Fibre Composite
- Wood Polymer Composite
- Fibre Reinforced Polymer
- SiC Ceramics

WOOD KPLUS

Company

The Kompetenzzentrum Holz GmbH (Wood K plus) is a leading research institute in the area of wood and wood-related renewable resources in Europe. Our core competences are materials research and process technology along the complete value chain – from raw material to finished products. We develop methods and basics and perform applied research on the economy-science interface.

Service

In the division “Wood Polymer Composites”, the research is focused on composites from renewable resources based on more than 15 years’ experience. Both thermoplastic as well as thermoset polymers are used as matrices. As reinforcements, natural fibres and wood, but also inorganic and synthetic fibres and fillers, are employed. Numerous different products can be made from those composites via processes like extrusion (compounding, foaming, co-extrusion, filaments), injection moulding or 3D-printing. Besides the manifold options for shaping these materials, it is also possible to tailor their property profiles. With our unique know-how, we can even produce complex parts from high-tech SiC-ceramics based on renewable resources.

R&D projects from the lab up to the pilot plant scale can be realized. The necessary infrastructure for compounding, extrusion, injection moulding and high temperature processes up to pilot plant scale is available. Also the mechanical, optical, thermal and physical characterisation of composite materials and raw materials can be conducted.





COMPANY NAME

Contact

Kompetenzzentrum Holz GmbH

Altenberger Straße 69
4040 Linz / Austria
www.wood-kplus.at

Contact person



Dr. Andreas Haider

Area Manager

Phone: +43 732 2468 6771

Fax: +43 732 2468 6755

@: a.haider@kplus-wood.at

WOOD KPLUS

Our research topics are:

- Optimisation of the material performance by development of formulations
- Usage of
 - Biopolymers
 - Recycling materials (post production, post-consumer)
 - Various Natural Fibres
- Development of Hybrid Materials
- Process optimisation
 - of Compounding
 - of Profile Extrusion (also Foaming and Co-extrusion)
 - of Injection Moulding
 - for the production of Filaments for FLM (Fused Layer Modelling)
- Complex 3D-Ceramics based on biogenic Raw Materials
- Carbon Materials based on biogenic Raw Materials

The research services of the division “**Wood Polymer Composites**” range from small testing / characterisation jobs over medium term research appointments up to long term R&D projects:

- Raw material analysis (lignocelluloses and polymers)
- Material testing, component testing (mechanical, weathering, ...)
- Material (formulation) and process development
- Compounding trials, extrusion trial, injection moulding trials

Development of carbon and ceramic materials from thermoset based WPC

