

3D Printing with renewable materials



Trailer loading-panel made from hemp-flax

Are you interested in...

- Bilateral R&D
- Funded research projects (National science funds, EU, regional funds,)
- Fundamental research projects?

...then please contact us!



Dynamic-Vapor-Sorption Analysis



Melt-flow-index measurements

BioKunststoff Technologie Universität für Bodenkultur Wien IFA-Tulln, Institut für Umweltbiotechnologie Konrad Lorenz Straße 20 3430 Tulln / Austria Telefon: +43 (0)1 47654 97404 <u>office.bkt@boku.ac.at</u> <u>https://boku.ac.at/ifa-tulln/bkt</u>



# Value from Natural Materials & Residues





https://boku.ac.at/ifa-tulln/bkt

ANDREAS MAUTNER

### **Innovations with Nature**



Eco-button 100% bio-based and recyclable

#### **Our Vision**

Conducting research and development of innovative materials & technologies by using bio-based / natural materials, as well as residues and wastes.

Our vision is to work together with our partners towards solutions for new materials and technologies, which should also reach market readiness.



3D-printed real wood structure

## Pilot-plant and scale-up facilities

As key technologies we are running injection molding, profile extrusion, 3D printing, carding machines for non-wovens, fleece bonding, and press-molding.

Our available facilities cover essential production processes and raw material preparation. We also offer analytics and material characterization.



Profile-extrusion with co-extrusion using natural materials / residues



SPIKE -air-laid natural fibre fleeces

## From research to applications

With our complete and up-to-date infrastructure, we ensure science-based approaches along with efficient and industry –relevant implementation of bilateral research tasks. Basic research, education and teaching are completing the range of activities.

Core-Competences:

- Wood-Polymer Composites (WPC)
- Paper-Polymer-Composites (PPC)
- Products made from residues / waste materials
- Biopolymer products
- Natural foams
- Natural fibre- nonwoven moldings
- Insulation materials
- Characterisation (mechanical, thermal, sorptive)