

## A novel material concept for high strength cellulose composites (StrongComposite)



There is a strong need in our society to develop new materials that are produced in a sustainable way. These new materials will for example replace plastics that are produced from fossil raw materials and that form huge problems as they accumulate in nature. Cellulose is one of nature's best materials, but has limitations in the way we can process it and form different shapes from it. In this project we take the approach to start with wood pieces that are treated so that all lignin and hemicellulose are removed. This "delignified" wood is then impregnated again with adhesive molecules, i.e. different glues. As a result, we obtain a very strong materials that can be shaped into different forms by pressing. In the project we will be studying a variety of different natural adhesive molecules for this process. In this way we form fully biological materials fulfilling needs of sustainability and performance.

### **For further information:**

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