

Innovation through cooperation

New applications for cotton

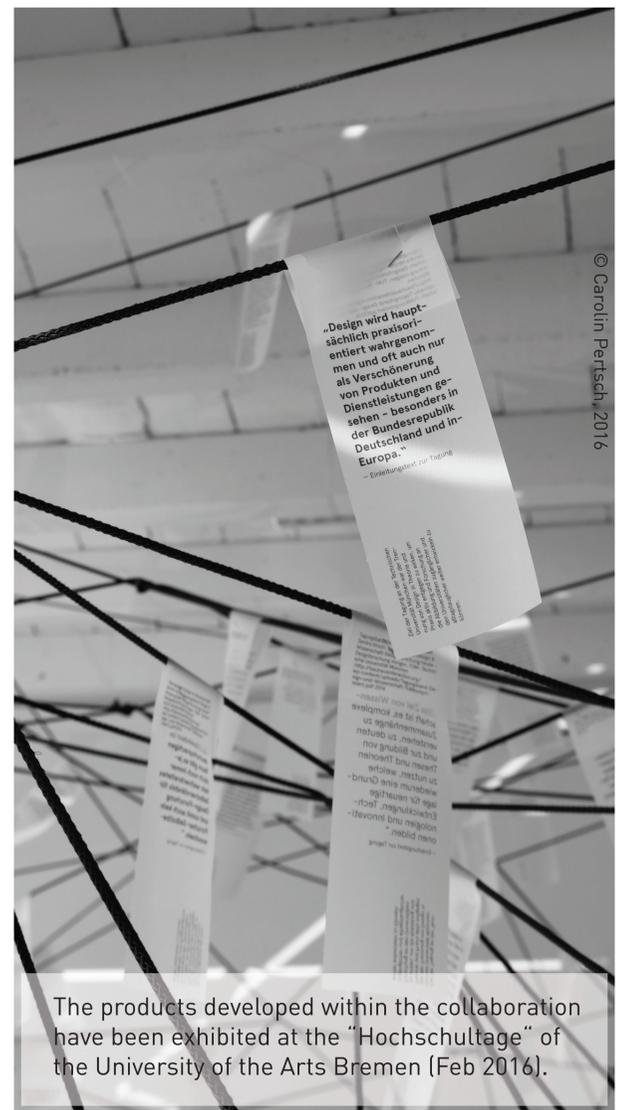
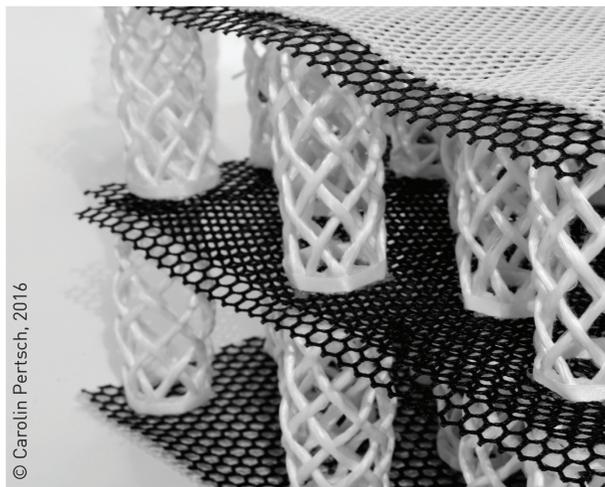


A collaboration of various disciplines can inspire, enrich and help to develop innovative products. With the aim of finding new applications for the natural fiber cotton, students from the Masterstudio Material & Technology (University of the Arts Bremen) have developed together with students of the degree course Industrial Engineering (University of Bremen), the Bremen Fibre Institute and the Bremen Cotton Exchange within a cooperation the projects which are presented here.

The innovation of the products is that a material combination of cotton fibers and PLA (polylactide) is used. PLA is a thermoplastic polymer that can be synthesized from renewable resources and is biodegradable.

A fiber-reinforced plastic made of polylactide as thermoplastically processable matrix and the flexible cotton fibers enables new manufacturing processes and thus new applications.

Aspects such as the sustainable use of resources, innovative manufacturing processes and a design that meets the requirements of the cotton/PLA material properties play an important role for the individual products.



The products developed within the collaboration have been exhibited at the "Hochschultage" of the University of the Arts Bremen (Feb 2016).

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