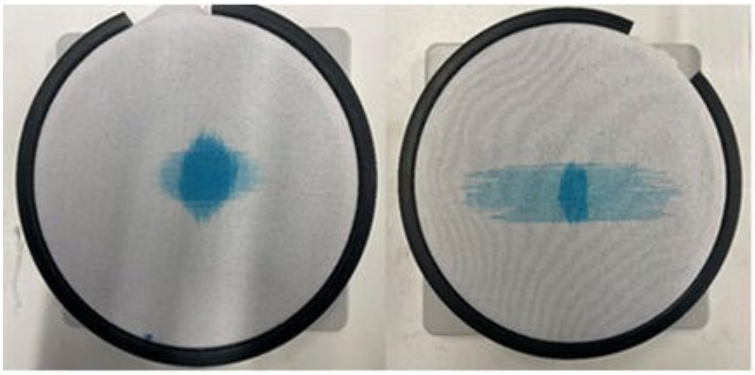

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des Deutschen Bundestages

GeFuTex - Novel odour-inhibiting functional textiles

In the part of the project “Development of the chitosan-based functionalization solution and an application process” of the ZIM project “GeFuTex”, textiles were functionalized with an odour-inhibiting finishing at the FTB. The aim of this finish was to increase the useful life of tea towels, laundry bags or machine cleaning cloths, for example, so that the textiles need to be washed less frequently. The biopolymer chitosan, which is completely biodegradable and approved for use in the food industry, served as the basis for the finishing in the project. Different types of chitosan were applied to textiles in the course of process and recipe optimization. Important properties such as absorbency, washability and odour inhibition as well as dyeability were investigated and optimized.

Some of the project results have been published:

M. H. Hoque et al., Evaluation of chitosan based pretreatment for cotton and linen dyeing with direct dyes and reactive dyes. CDAPT2023, 4 (2), 187-200. DOI 10.25367/cdatp.2023.4.p187-200.
K. Klinkhammer et al., Functionalization of Technical Textiles with Chitosan. Textiles2024, 4, 70–90. DOI 10.3390/textiles4010006.

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Duration

01.06.2021-30.11.2023 (after cost-neutral extension)

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