

FIBER & TEXTILE AUXILIARIES

FUNCTIONALITY MEETS FASHION

Waste becomes fiber. Plants become color.
Biopolymers become comfort.



ZSCHIMMER & SCHWARZ

RETHINKING FASHION

Fast fashion produces clothing at unprecedented speed – and leaves growing mountains of textile waste behind. Over-consumption and resource depletion show that the textile industry urgently needs more sustainable solutions.

Yet responsible fashion carries the stereotype that it cannot be as functional, stylish and appealing to a broad audience. Real progress, however, will happen when sustainable products inspire not just a niche market, but many people.

WHAT IF INNOVATION, SCIENCE AND DESIGN JOINED FORCES?

This project explores exactly that idea. By combining expertise in natural dyes, biopolymers and textile chemistry, partners from different fields created an outfit that demonstrates what is already possible today.

LET'S COLLABORATE!

Combining natural dyes, biopolymers and textile chemistry shows how existing resources can be transformed into resource-efficient textile solutions. Let's collaborate and turn innovative ideas into real textile applications.



BioLog Hepppe has developed technologies to produce standardized chitin and chitosan biopolymers which can be processed to sizing agents or finishes for textiles.
www.biolog-hepppe.de



ZSCHIMMER & SCHWARZ

Zschimmer & Schwarz has developed the wicking agent HYDROSET ECO-DRY and formulates dye-fixing agents using Hepppe's polymers to optimize the performance of NIG's dyes.
www.zschimmer-schwarz.com



NIG GmbH has developed a wide range of natural dyes with unique standardized qualities for industrial textile dyeing.
www.nig-naturaldyes.com



THE OUTFIT – FROM IDEA TO MATERIAL

The outfit combines sportswear performance with everyday comfort. Innovative technologies transform existing resources into functional materials and fashion.

The sports bustier is made from ECONYL® polyamide sourced from discarded fishing nets. Naturally dyed with Mexican logwood (HEMA-COLOR) and finished with HYDROSET ECO-DRY based on chitosan biopolymers, the fabric provides effective moisture management, quick drying, breathability and odor control.

The linen pants are dyed with WAU-COLOR pigments derived from locally grown reseda. A bio-based pretreatment using chitosan as a biomordant enables brilliant plant-based color while also providing UV-protective properties.

The garment design follows principles of resource-conscious pattern cutting inspired by »Zero Waste Nähen« by Stefanie Kroth.

Photo: Sylvia Pudel