



## GREEN CYCLES

14. SYMPOSIUM  
CORPORATE SOCIAL  
RESPONSIBILITY IN THE  
TEXTILE CYCLE



## MATERIAL ISSUES — INTERNATIONAL CHALLENGES

DIGITAL FRIDAY, 24/11/2023  
10:00 - 13:00 HAMBURG TIME

**« We are potentially on the brink of a materials revolution that could help rebalance our relationship with our planet and reshape society for the better. Up to now, we have relied on a supply of natural raw materials that we transport to large factories and turn into products. We then ship those products around the world, where we enjoy them all too briefly and discard them when we no longer require them. This model is reaching its physical limits. We are running out of raw materials and creating enormous quantities of waste. We cannot continue to race through our planet's finite resources; indeed, all the evidence suggest that if we continue at our current rate, we'll soon need a second planet. »**

QUOTE **RADICAL MATTER –  
RETHINKING MATERIALS** for a  
sustainable future  
Kate Franklin and Caroline Till  
Thames & Hudson, 2018

## GREEN CYCLES

An ongoing narrative GREEN CYCLES as thinktank and platform is embracing design approaches, industry and business concepts, looking at the different stages of circularity: From design research and methodology, growing and winning material, small scale manufacturing and largescale industry production, marketing, consumer options and the end of the textile cycle within the textile and clothing context.

Research into the possibilities of the material used for textiles and clothing is a major starting point for innovative and sustainable intervention, which may be locally grounded with positive impact and empowerment in the community context or may be acting within the frames and challenges of global consideration and implementation. Re-discoveries of traditional materials in the textile and clothing sector which include natural and synthetic fibers are being extended into the development of textile materials such as pre- and post-consumer textile and fashion waste material. Recent developments in biodesign are exploring chances and challenges in the textile design and clothing context internationally. With looking at the diversity and differences of cultural contexts, refined concepts of cultural sustainability and proposals of degrowth as well as the non-negotiability of equitable collaborations, GREEN CYCLES is opening up debate and discourse for a better understanding of these relevant global issues.

**PROF. RENATA BRINK MA**  
Textile Design  
HAW Hamburg

**PROF. PATRICK KUGLER**  
Garment Engineering  
HAW Hamburg

## AGENDA

### 10<sup>00</sup> WELCOMING ADDRESS

Prof. Dorothea Wenzel  
Dean of the Faculty Design/Media/Information DMI  
HAW Hamburg

### MODERATION

Prof. Renata Brink  
Textile Design  
HAW Hamburg

Prof. Patrick Kugler  
Garment Engineering & Marketing  
HAW Hamburg

### 10<sup>15</sup> FROM FOOD WASTE TO GARMENT

Alicia Valdés  
BA Textile Design / HAW Hamburg

### 10<sup>30</sup> POST-CAPITALIST BIODESIGN: CHALLENGES AND OPPORTUNITIES

Bea Brückner MA RCA  
Designer, Artist, Researcher / London, Hamburg

### 11<sup>00</sup> EQUITABLE COLLABORATIONS FOR CULTURAL SUSTAINABILITY

Laya Chirravuru  
Design Researcher / Leipzig, Germany

### 11<sup>40</sup> – 11<sup>50</sup> BREAK

### 11<sup>50</sup> CHALLENGES OF UPCYCLING STRATEGIES IN THE GARMENT INDUSTRIES

Janina Lewitz MA

### 12<sup>20</sup> INDUSTRY FRAMEWORKS FOR A SUSTAINABLE IMPLEMENTATION OF USED TEXTILES AS FUTURE MATERIAL

Thekla Wilkening MA

### 12<sup>50</sup> PANEL DISCUSSION

All speakers and participants

## REGISTRATION



**Registration and participation is free of charge. You will receive further information about our online conference tool and the access details via mail.**

Please register via our website:  
**[www.green-cycles.de/register](http://www.green-cycles.de/register)** until  
22.11.2023. Please state your University,  
organization or company.

### CONTACT

Prof. Renata Brink  
Tel. +49 (0) 40 4 28 75 46 87  
renata.brink@haw-hamburg.de  
<https://www.haw-hamburg.de>  
@textil.design\_hawhamburg

Prof. Patrick Kugler  
Tel. +49 (0) 40 4 28 75 46 45  
patrick.kugler@haw-hamburg.de

Hochschule für Angewandte Wissenschaften  
Fakultät Design, Medien & Information  
Department Design  
Armgartrasse 24  
D-22087 Hamburg

## FROM FOOD WASTE TO GARMENT

10<sup>00</sup> Alicia Valdés  
BA Textile Design / HAW Hamburg

The project „From Food Waste to Garment“ evolves around the investigation of integrating non-avoidable domestic food waste into leather-like biomaterial for clothing production. The biggest shortcoming of biomaterials currently on the market is their relative lack of waterproofness. This research focusses on making the material water-resistant and durable whilst remaining 100% biodegradable and compostable. Upcycling unavoidable food waste from households and restaurants, such as egg and orange peelings and coffee grounds, into a bio-based leather alternative can ultimately be made into clothing. The food scraps are dried and pulverised and then added to the self-developed biomaterial based on pectin and cellulose, which is then poured into large boxes built for this purpose and dried with solar radiation. Natural fabrics such as silk or organic cotton are used as a carrier material for the mixture. Many companies solve the problem of water repellency by adding polyurethane (PU). The material developed in this work does not require the addition of plastic. And by crosslinking and subsequent coating with oil and wax, a material was created, that is water-repellent and thus suitable for everyday use.



© ALICIA VALDÉS  
PHOTOGRAPHY / LIGHT: IBRAHIM CAVAS

## POST-CAPITALIST BIODESIGN: CHALLENGES AND OPPORTUNITIES

10<sup>90</sup> Bea Brücker MA RCA  
Designer, Artist, Researcher / London, Hamburg

Bea Brücker’s practice-based research explores the development of biomaterials from algae, bacteria and circular production processes. She investigates how biodesign and computational design can create a holistic, climate-positive and post-capitalist fashion system, guided by natural ecosystems. Working with algae, other living organisms and digital art, she explores the relationship between humans, capitalism and the threat of ecological collapse, and demonstrates the urgency of systemic change. She designs post-capitalist futures in which humans live in symbiosis with nature.

Our rivers and oceans suffer from eutrophication and biodiversity loss. There are more and more harmful algal and cyanobacteria blooms. This leads to almost oxygen-free zones, where marine life is almost impossible. Agricultural runoff and wastewater from the textile industry contribute strongly to these hypoxic zones. However, algae are not only the problem but could be part of the solution. Some algae species can regulate the nutrient content of the water and thus could prevent dead zones. Bea Brücker is researching the cultivation and processing of these algae species and uses them to develop a cruelty-free leather-like material.

## EQUITABLE COLLABORATIONS FOR CULTURAL SUSTAINABILITY

11<sup>00</sup> Laya Chirravuru  
Design Researcher  
Leipzig, Germany

In the ongoing discourse of sustainability and degrowth, cross-cultural design collaborations emerge as a promising strategy to bridge the global economic disparities. They simultaneously offer to address the longstanding issue of cultural appropriation that came with the rise of modern fashion consumerism. But to comprehensively analyze the problems of cultural appropriation, it is essential to understand the relevance of “culture” within creative communities that have largely practiced sustainability much before the popularization of the term itself.

This talk serves as an introduction to the nuances of cultural sustainability with particular focus on India’s handmade industry. In a country with a vast population, a diverse craft and textile heritage, a complex colonial history, and the pursuit for a postcolonial identity to integrate with the global economy – the issues surrounding ethical, equitable, and sustainable fashion are multifaceted. This practice-based research seeks to foster a constructive dialogue to navigate the intricacies between modern fashion and the rich cultures of artisanal craftsmanship, to encourage possibilities for equitable international cross-cultural design exchanges.



© LAYA CHIRRAVURU

## CHALLENGES OF UPCYCLING STRATEGIES IN THE GARMENT INDUSTRIES

11<sup>50</sup> Janina Lewitz MA

Janina Lewitz looks at the possibilities for implementing upcycling fashion in an industrial context, questions a realistic implementation for high-turnover companies and examines its meaningfulness in the face of greenwashing as well as the economic added value.

Accompanied by excessive consumption in today’s throwaway society, it is inevitable to look at alternative design approaches to reduce textile waste in the face of the strong growth of fast fashion. One possible answer is post-consumer upcycling, which aims to ensure the reuse of existing resources. But can post-consumer upcycling fashion be implemented in the competitive and sales-driven fashion industry? A wide variety of companies have already tackled the issue, suggesting that post-consumer upcycling in the industry is a challenge that brings individual advantages and disadvantages.

## INDUSTRY FRAMEWORKS FOR A SUSTAINABLE IMPLEMENTATION OF USED TEXTILES AS FUTURE MATERIAL

12<sup>30</sup> Thekla Wilkening MA

Thekla Wilkening investigates the reactions of different stakeholders in the textile sector to the competition for the raw material used textile (Alttextilien). Further questions within the scope of the research touch on questions of how to maximise the value creation from the raw material used textile economically, socially and ecologically and the potentials of regulatory measures to effectively demand a circular-based textile industry.



© BEA BRÜCKER AND JOHANN SPINDLER