

RESEARCH THEME

XXXVIII cycle – a.y. 2022/2023

Title of the doctoral research

Alternative Circular Materials for product and fashion design

Proponent professor

Valentina Rognoli

Abstract

The world of materials and technologies is always in continuous evolution. It is because the materials and processes used to transform them have ever been used by humans for their economic and socially productive purposes. Therefore, they have never stopped investigating its possibilities, potential, and future solutions.

Today, more than ever, Design is responsible for finding alternative circular material solutions to respond to humans' needs and desires and the problems created in the shared living environment.

The doctoral investigation aims to describe the situation of the existing materials, update the traditional classification as much as possible, and add or create new classes of materials. Once the current panorama has been analysed and reported through cases studies and best practices, it will proceed using the appropriate tools and methods to shape possible and preferable future visions for the development of alternative materials using sustainable and innovative strategies.

The focus will be on traditional, modern, new, and futuristic resources, processes, and practices related to the potential development of alternative circular material ideas able of procuring meaningful materials experiences.

In particular, the invitation is to look at the materials obtained from the exploitation of scrap and waste at specific moments in the distinct chain and to consider these new solutions as circular. Furthermore, a novel approach to urban mining with the potential to maximise resource recovery within the anthroposphere for product and fashion applications will be conceptualised.

Conclusively, with this proposal, which will have both a theoretical and practical approach (research through design), we want to propose a research path that takes into consideration the DIY-Materials approach, and their expressive-sensorial reconfiguration thanks to tinkering and experimentation both autonomous that with the collaboration of companies.

The topic of material narrative and storytelling will be an essential aspect. The research path should end with projects aimed at the application of alternative materials capable of creating preferable scenarios.

Keywords

Made of waste, Biofabricated materials, DIY-Materials approach,