

## **Sustainable Innovation 2021**

*Accelerating Sustainability in Fashion, Clothing, Sportswear & Accessories*

23<sup>rd</sup> International Conference

Online Conference: 15<sup>th</sup>-21<sup>st</sup> March 2021

Business School for the Creative Industries

University for the Creative Arts

Epsom, Surrey, UK

## **Innovative Material Making & Biophilic Inspired Design**

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As we progress into an era which geologists are debating should be known as the Anthropocene/The Age of Humans “a proposed epoch dating from the commencement of significant human impact on the Earth's geology and ecosystems” we need to rethink how we create, manufacture and dispose of materials. One of the challenges of this century is to transform our current economy into an eco-friendly and self-sustaining system. Most of the materials used in our manufacturing processes are part of a linear production system where materials are extracted, manufactured, used and disposed of with little thought given to the environmental impact. Biophilia, a term defined by social psychologist Eric Fromm and biologist Edward Wilson, describes the innate human need to connect with nature and the natural environment, a love of life and all living systems. It's been suggested that an overdependence of the human species on technology and enclosed sterile, artificial spaces from cars, to homes, to workplaces, has created a disconnect from the natural world resulting in a decreased appreciation for the diversity of life forms that support human survival. Perhaps a rediscovery of biophilia is the key to unlocking a brighter future for all of us where the protection and sustainability of people, plants, animals and the natural environment become a vital part of who we are and what we do as designers and humans. Sharing knowledge, learning from traditional and historical approaches as well as embracing current knowledge and technology could potentially give us the answers we need to live and work in a way that is more thoughtful, respectful, considerate of and connected to the natural world we inhabit.

- The research paper presents background methodology and results of 3 separate collaborative, practice based, 'future materials' research projects undertaken in short 2 week periods in 2017, 2018, and January 2020.
- Students were set the following challenges and asked to respond through innovative and collaborative design thinking, problem solving and hands on material making :
  - 2017 Ocean Pollution: How do we re-use/repurpose non recyclable Plastics?
  - 2018 Can Plants save the World? Can materials be nutritive?
  - 2020 Is Biophilia the answer?
- A mixed staff team of Textile Surface Design, Medical Device Design, Product Design and Jewellery and Objects, lecturers and technicians worked with Collaborative groups of cross disciplinary students from Textile Surface design, Product Design, Fashion, Jewellery and Objects and Graphic Design.