PLAY PARADIGMS
OPEN ELECTIVE 2022

MAKER SPACE FOR BIOMATERIALS

OE2233

INSTRUCTOR

ANIRUDDH VERMA

centre for environment education

Aniruddh is a NID Ahmedabad graduate. One of the founding members of Prayog collective, currently working at CEE Ahmedabad as a project manager. He has been exploring many fields in design with core practice around design thinking, systems and circular economy. Culture, art, music are areas of his interests.

CO - INSTRUCTOR

AKASH KUMAR

Prayog Collective

Akash is a material enthusiast currently working at Welspun Flooring. He has been one of the founding members of Prayog Collective, an initiative working at the intersection of Material innovation, sustainability and Design thinking. Prayog has been working on developing biomaterials using waste. Akash also teaches design to school children.

https;//prayogcollective.wordpress.com/

OVERVIEW

In this workshop, Students will be making material explorations. They will be given a brief introduction about the biomaterials, material trends, and introduced to various techniques, methods of material making. The students will research existing materials as well as think of alternatives biomaterials. The key learning of this workshop is to change the perspective towards biowaste and innovate methods to use biowaste to create new materials.

OBJECTIVE

The workshop will enable students to research, inquire, experiment and play with natural organic materials. It will focus on learning by doing and reflecting on the process. The sense of sustainability will be a key aspect of the workshop through which students will explore possibilities of new materials.

METHODOLOGY

Material, Medium and Methods of PLAY Over two weeks, students will begin researching vernacular usage of existing biomaterials within their home cities. This will involve archiving the existing and vanishing practice within their local spaces. They will be given an introduction to various material making approaches. A detailed understanding of various types of substrate, binders and finishes will be given. They will be playing around with the material-making processes which can be done within the campus or off-campus. The students will be required to select one material. They will research, experiment and play with its physical and chemical properties to create new material possibilities. They will do the SWOT analysis to assess the material properties. Using the ‘What if’ toolkit they will speculate the possible usage of these materials. They will also use ‘life cycle assessment’ to analyse the life journey of the material. They will also be given an introduction to material testing processes and cost assessment methods.

KEYWORDS

Biomaterials, Innovation, Vernacular, Bio Design

WORKSHOP MODE

Online

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openelective.nid.edu

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