

Material Research for Sustainable Design: An Exploration Towards the Application of Foam into Textile and Fashion Design

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Abstract : Though fast fashion and consumption do boost the economy and push the progress of the industry, they have also caused a mass of waste, which has led to great pressure on the environment. This project mainly focuses on how to develop new sustainable textile and fashion design through recycling, upcycling, and reusing. Substantial field researches were implemented from the very beginning, including collecting reusable material from recycling centers. Hot-pressed composite materials, hand-cutting, and weaving were finally selected as the core material/method of this project after attempts and experiments. Four pieces of menswear, as well as hats and other decorative products made from wasted foams and fabrics, were successfully manufactured. Results show that foam is not only possible for furniture but also for clothing. It helps people to realize that foam is warm, heatproof, anti-slippery, and crease-resistant. So, all advantages could inspire people that even common materials could have new usage and are worthy of upcycling.

Keywords : sustainable design, foam, upcycling, life cycle, textile design

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