World Academy of Science, Engineering and Technology International Journal of Social and Business Sciences Vol:17, No:08, 2023

Bio-Based Processes for Circular Economy in the Textile Industry

Authors: Nazanin Forouz

Abstract : The textile industry faces increasing criticism due to its resource-intensive nature and the negative environmental and societal impacts associated with the manufacturing, use, and disposal of clothes. To address these concerns, there is a growing desire to transition towards a circular economy for textiles, implementing recycling concepts and technologies to protect resources, the environment, and people. While existing recycling processes have focused on chemical and mechanical reuse of textile fibers, bio-based processes have received limited attention beyond end-of-life composting. However, bio-based technologies hold great promise for circularizing the textile life cycle and reducing environmental impacts.

Keywords: textile industry, circular economy, bio-based processes, recycling, environmental impacts **Conference Title:** ICFTLM 2023: International Conference on Fashion Trends, Lifestyle and Media

Conference Location: Amsterdam, Netherlands

Conference Dates: August 03-04, 2023