

BIO-BASED ECONOMY CASE STUDIES AT UNIVERSITY OF SOPRON

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ABSTRACT

Forest-based sector plays a significant and inseparable role through transition and implementation of 'bioeconomy', 'bio-based economy', 'circular economy' concepts and strategies. This paper aims to report few bio-based economy case studies conducted at the University of Sorpon, and is divided in three parts. The first part describes the investigation efforts on utilization of bark residues as a raw material for manufacturing of thermal insulation panels. The second part is focused on delignification of agricultural residues through an alkaline-hydrodynamic cavitation, and it examines their exploitation in paper and bioenergy production. Finally, the third part presents studies related to fabrication of nanocellulose films and composites for various purposes.

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