

Séminaire

Mardi 10 janvier 2023 à 10h30
Amphithéâtre Henri Benoît et visio

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Frugal Agromaterials: heat-pressing of biomass streams into biodegradable materials

The simultaneous climate and biodiversity crises call for a radical change in how we produce and consume, both in terms of energy and matter¹. Therefore, the development of alternative materials, harmless to humans and their environment at each step of their lifecycle, is a massive challenge. And to prevent rebound effects², technological innovation has to go hand in hand with social and economic innovation.

Agromaterials, biopolymers processed without any chemical modification to preserve their biodegradability³, are a promising materials category for the ecological transition. More specifically, using robust processes such as heat-pressing makes possible the transformation of agri-food by-products into fully bio-based and biodegradable materials⁴. Materials that are obtained can be described as frugal, or « low-tech », as they are an elementary technological block for a post-transition society, that is sustainable, fair and convivial⁵.



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4. Rouilly, A.; Rigal, L.; Vandenbossche, V. Process for manufacturing an eco-compatible solid material and eco-compatible solid material obtained. 2012.
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