

JOINT EVENT ON

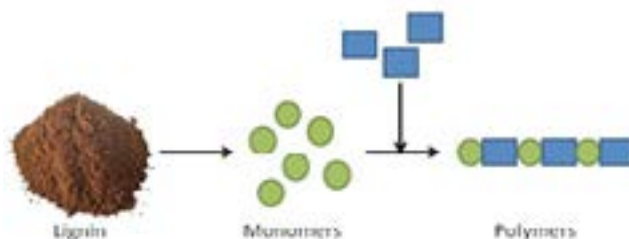
5th International Conference on Bioplastics and 6th World Congress on Biopolymers

September 07-09, 2017 | Paris, France

Synthesis and characterization of new biodegradable polymers with antiradical and antimicrobial activities

Amandine Flourat, Abderrahim Rekla, Tiphaine Clément, Bastien Kauffman and Florent Allais
Chaire ABI - AgroParisTech, France

Climate change and the depletion of fossil resources lead to a transformation of polymer industry. Now, demands are for sustainable polymers offering a wide range of applications. In this mood, we dedicated our self to the synthesis and the characterization of a new class of biobased aromatic polymers able to be degraded in aqueous media presenting a wide range of properties. To know about the potential field of application, we studied thermal stabilities, determined by ATG, which are higher than 270 °C, and glass transition temperatures. These ones are tunable depending of monomers' flexibility and hydrogen bonding but always superior at 100°C. Then antiradical activities are determined by DPPH scavenging test. Whereas antimicrobial properties are tested on Gram + and Gram - bacteria.



Biography

Amandine Flourat is a Researcher and Head of Chemistry department at Chaire ABI from 2012. The aim of Chaire ABI is the valorization of agricultural coproducts through microbiology, process engineering and green chemistry. Amandine Flourat develops new synthetic pathways using biocatalyst and biobased products to access high value molecules and new polymers.

amiranashvilela@gmail.com

Notes: