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Production and Valorization of Nano Lignins by Organosolv and Steam Explosion

Authors : V. Girard, I. Ziegler-Devin, H. Chapuis, N. Canilho, L. Marchal-Heussler, N. Brosse

Abstract : Lignocellulosic biomass is made up of the three polymeric fractions that are cellulose, hemicellulose, and lignin, which are highly entangled. In this project, we are particularly interested in the under-valued lignin polymer, which is mainly used for thermal valorization. Lignin from Macro to Nanosize (LIMINA) project will first focus on the extraction of macro lignin from forestry waste (hardwood and softwood) by the mean of eco-friendly processes (organosolv and steam explosion) and then the valorization of nano lignins produced by using anti-solvent precipitation (UV-blocker, cosmetic, food products).

Keywords : nanolignin, nanoparticles, organosolv, steam explosion
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