Special Issue

3D Printing of Lignocellulosic Materials: Preparation, Characterization and Applications

Message from the Guest Editors

Although Three-dimensional (3D) printing technology was patented in 1986, it has only been in the last decade that the use of lignocellulosic biomass and its components in 3D printing has garnered particular attention. Lignocellulosic materials are the most abundant renewable resource in the world, are highly biocompatible and possess tunable mechanical properties, which make them ideal for a wide range of applications. Nevertheless, lignocellulosic components such as cellulose and its derivatives, hemicellulose or lignin are difficult to melt for the extrusion and injection moulding processes, unlike many synthetic polymers from fossil fuels. Thus, the development of new products from lignocellulosic components using 3D-printing technology is still a challenge. This Special Issue will address new developments in the area of lignocellulose□based 3D-fabricated materials, covering a wide range of products and applications, such as biomedical or packaging applications, among many others. Original research papers and review articles are welcomed.

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