Special Issue

Bio-Materials in a Bark Biorefinary Context

Message from the Guest Editor

I am very pleased to invite you to contribute to a Special Issue of the Journal of Applied Sciences, "Bio-Materials in a Bark Biorefinary Context". There is huge potential for converting bark into value-added products due to its complex and highly heterogeneous chemical composition. However, this chemical upgrade, in a biorefinery context, is somewhat limited and challenging. Barks fractionation into divisions with distinctive polarity can be achieved through successive extractions applying a combination of organic solvents and hot water. Lignin and polysaccharides are analyzed by a first extraction with aqueous alkali solutions, followed by hydrolysis of the extractive-free bark by sulfuric acid to give Klason lignin and acid insoluble residue contents. Developing new processes that can extract, isolate, and purify these high value chemicals and other products is the main focus of research within a "Green Biorefinery" context.

Guest Editor

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Deadline for manuscript submissions

closed (31 August 2021)



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

Editor-in-Chief

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