GREEN TECHNOLOGIES IN THE VALORIZATION OF AGROFOOD WASTES IN THE FRAME OF THE BIOREFINERY CONCEPT

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Food production results in the generation of residues at different step of the production chain. A great part of the residues is generated at the agricultural part of the process. Although some of these residues may have already an application as for example feed or bedding, however more energetically and economically efficient use is desirable. Especially that this kind of residues are low-cost bulky feedstock and renewable carbon source, which can be processed and valorised to produce fine chemicals and bio-based commodities fulfilling the requirement of biorefinery concept. However, considering the globally occurring changes, the valorisation of residues made in the frame of biorefinery concept must be done in the green fashion. This way the broadly understood sustainability and bio-based economy requirements can be satisfy.

This work will show some examples of valorisation of food production chain residues using greener methods. The aim of this work is to demonstrate the diverse application methods of ionic liquids and high density fluids in direct integrated valorisation of biomass towards value-added chemicals.

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