

Message from the Guest Editor

One of the great challenges of this century involves the transition from fossil-fuel-based feedstocks towards the exploitation of renewable and bio-based sources. Increasing the supply of renewable energy would allow us to replace carbon-intensive energy sources and significantly reduce global warming emissions, ozone depletion, and the adverse effects of greenhouse-gas emissions on the environment.

Using biomass is an extremely delicate operation since the interaction with the food production and structure of ecosystems is extremely tied. Moreover, the quantities of traditional biomass available are limited: the intent to access sources of alternative materials, is driving the transition from 1st-generation technologies to 2nd- and 3rd-generation technologies, exploiting materials that are suitable for the recovery of renewable resources.

We invite original papers, communications, and reviews on sustainable chemical technologies and processes for biomass characterization and fractionation, biomass exploitation for energy and fuels, biomass valorization as a source for bio-based platforms, and biobased molecules as starting materials for fine chemicals and polymers synthesis.

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