Special Issue

Hydrothermal Biomass Processing for Energy and Water Recovery

Message from the Guest Editor

This Special Issue aims to advance the science, engineering, and sustainability of hydrothermal processing technol-ogies—including hydrothermal liquefaction (HTL), hydrothermal carbonization (HTC), supercritical water pro-cesses, and integrated wet-biomass conversion pathways.
Key areas of interest include fundamental and applied studies on feedstock conversion, reaction mechanisms, cata-lyst development, reactor design, and optimization of process parameters. The Special Issue also welcomes research on the upgrading and separation of product fractions; valorisation of by-products such as hydrochar for soil or material applications; nutrient, chemical, and water re-covery from aqueous phases; and treatment or reuse strategies for process water. We further encourage contributions on techno-economic analysis (TEA), life-cycle assessment (LCA), process inte-gration with biological or thermochemical platforms, hybrid systems, and pilot- or demonstration-scale case studies. The overall aim is to accelerate the transition toward circular bioeconomy solutions by converting biomass and wet wastes into higher-value energy carriers, chemicals, materials, and water resources.

Guest Editor

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST
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