

## Special Issue

# Integrated Process Design and Development of Biorefinery

### Message from the Guest Editors

Nowadays, the world is facing numerous difficulties in guaranteeing sustainable life in society and, therefore, feasible strategies from technical, economic, and environmental points of view are needed to overcome these problems. In this sense, renewable feedstock as biomass combined with optimum conversion pathways and methods can play a fundamental role for circular economy approaches. In fact, two key conversion processes, thermochemical and biological, can be used to produce energy and products from biomass, approaching the biorefinery concept. Thus, the major challenges facing design systems are minimizing energy consumption and potential environmental impacts through life-cycle assessment and process integration/optimization between different conversion platforms. This Special Issue is focused on methods and applications, combining techno-economic and life-cycle assessments for biorefining processes, which allows the optimum design and management of biorefineries. Furthermore, special attention will be given to multiproduct biorefinery applications, as well as future developments and trends.

### Guest Editors

Prof. Dr. Leandro V. A. Gurgel

Dr. Oscar Fernando Herrera Adarme

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### Deadline for manuscript submissions

closed (15 December 2024)



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