Special Issue

Sustainable Bioprocesses for Valorization of Food Industry Waste: Microbial and Enzymatic Innovations and Reactor Design

Message from the Guest Editors

This Special Issue focuses on cutting-edge biotechnological solutions that harness microbial and enzymatic processes to convert waste streams into valuable products, promoting circular economy principles. Key areas to be addressed include the following:

- **Microbial and Enzymatic Innovations:** Exploration of novel microbial strains, enzymatic catalysts, and metabolic engineering approaches that enhance the efficiency of product recovery and bioconversion processes.
- **Bioreactor Design:** Advances in reactor configurations, optimization strategies, and process control mechanisms that improve scalability and performance at industrial level.
- **Sustainability and Environmental Impact:** Assessing the ecological benefits, economic feasibility, and lifecycle analyses of these bioprocesses in achieving a sustainable food sector.

By integrating bioprocess engineering, microbiology, and enzyme technology, this Special Issue aims to provide transformative insights into waste valorization strategies that support global sustainability goals, with interest for researchers, industry professionals, and policymakers.

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