



## Energy-Efficient Chemistry

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### Message from the Collection Editors

Dear Colleagues,

This Special Issue will stress the current knowledge regarding the most recent innovations, emerging technologies, and strategies to be employed for energy-efficient chemical production.

- Technical improvements and innovations within the green chemistry framework, to achieve further energy savings and decreased impacts;
- Innovations and novel procedures to manufacture chemicals from renewable feedstocks as well as by means of renewable energy;
- “Green” extraction of bioactive compounds and/or platform chemicals from agro-industrial residues and the organic fraction of urban waste;
- Production pathways based on the biorefinery concept, with a special focus on material and energy diversity and efficiency;
- Environmental and sustainability assessment methodologies, including life cycle assessment, energy, exergy and energy analysis, carbon footprint, social LCA and life cycle costing among others, and their integration/application to bio-based production systems;
- Energy and environmental implications of bio-based production chains at global scale;
- Relation of bio-based economy, cumulative energy demand and environmental integrity.





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## Message from the Editor-in-Chief

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