Special Issue

Ionic Liquid Applications in Sustainable Biomass Processing

Message from the Guest Editors

Central to our discussion is the innovative use of ionic liquids in the pretreatment and fractionation of lignocellulosic biomass. Ionic liquids, highly tunable solvents known for their unique properties such as low volatility and recyclability, have revolutionized the field of biomass processing. Over the past decade, the technology surrounding ionic liquids offers more efficient, environmentally friendly, and economically viable solutions for biomass pretreatment. This has opened new horizons in biomass processing, enhancing the efficiency of converting biomass into valuable biofuels and biochemicals. This Special Issue welcomes high-quality studies regarding the most recent advances in sustainable biomass processing with ionic liquid. Topics include, but are not limited to, the following:

- Biomass pretreatment and/or fractionation with ionic liquids;
- Fermentation products from ionic liquid biomass processing (ethanol, butanol, lactic acid, etc.);
- Pyrolysis products from ionic liquid biomass processing (furfural, levoglucosan, etc.);
- Lignin-derived products from ionic liquid biomass processing;
- Cellulose-derived products from ionic liquid biomass processing.

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Editor-in-Chief

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