Special Issue

Thermal Processes and Thermal Properties of Sustainable Polymeric Materials

Message from the Guest Editors

Natural polymers like wood, wool, and cotton cellulose have long been used by humans, providing heat through wood combustion. Sustainable polymeric materials have gained interest lately. Polymer processing involves mass transfer, heat transfer, flow, and deformation. Heating softens the polymer, while cooling or crosslinking sets the shape. The relationship between processing, structure, properties, and performance is a key focus in polymer science. Moreover, pyrolysis of biomass or polymeric waste offers new pathways for fuel, monomer, and chemical production. Thermal analysis techniques like DSC and TGA study polymer thermal properties and processes. Topics include but are not limited to:

- Thermal properties of polymers
- Thermal processes of polymers
- Thermal analysis of polymers
- Crystallization and melting of polymers
- Thermal degradation of polymers
- Thermo-oxidative degradation of polymers
- Thermal polymerization
- Pyrolysis of biomass or polymer wastes
- Thermochemical conversion of biomass
- Heat transfer
- Thermodynamics of polymer processing
- Thermochemical processes in biorefineries
- Combustion

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Message from the Editor-in-Chief

Thermo (ISSN: 2673-7264) is an international, peer-reviewed, and open access journal that publishes original research papers, reviews, and Special Issues dealing with experimental, theoretical, and applied thermal sciences. Both theoretical (simulation) and/or experimental research papers within our journal's scope are of particular interest, including satellite-related topics considering thermophysics, solubility phenomena, chemical thermodynamics, and chemical engineering. We encourage scientists to publish their results in as much detail as possible, and there is no restriction on the maximum length of papers. We greatly appreciate suggestions for enhancing the journal.

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