

Special Issue

Pyrolysis Applications in Plastic Waste and Biomass Valorization

Message from the Guest Editor

Plastic materials have been crucial to the development of science, technology, and almost all aspects of modern progress since the mid-twentieth century. However, the increasingly unsustainable culture of plastic consumption and the accumulation of plastics in landfills, oceans, and broader ecosystems have also caused negative and potentially irreversible environmental impacts. In recent decades, scientists and engineers have spent significant time and resources searching for more effective plastic waste management techniques based on thermochemical routes such as pyrolysis. On the other hand, biomass is a renewable source and potentially sustainable fossil fuel replacement due to its availability, lower processing cost, high conversion, and lower life cycle carbon emissions. Pyrolysis can also be used to convert biomass into high-quality liquid fuels and chemicals. Pyrolysis can be improved by the use of catalysts, which can reduce the temperature and reaction time and allow the production of chemicals with a higher added value.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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