

## Special Issue

# Advanced Technologies in Biomass and Waste Conversion for Sustainable Energy and Materials

### Message from the Guest Editor

Energy production has always been closely coupled with human development. However, this sector is also one of the primary sources of anthropogenic GHG emissions, significantly contributing to climate change and its respective consequences. Motivated by their availability, widespread, abundance, and environmental concerns, solid biomass and wastes have become a competitive option to diversify both electricity production and direct heat among renewable energy resources. However, their conversion technologies still require further research since it is related to low efficiency and pollutants emissions. This Special Issue aims to publish a comprehensive overview of research papers addressing the recent progress in solid biomass thermochemical conversion. The Special Issue covers the following solid biomass topics but is not limited to the following:

- Experimental Studies of Biomass Conversion
- Waste-to-energy solutions
- Bio-energy and environmentally friendly materials/products
- Characterization of the Physicochemical and Thermal Properties of Solid Biomass and Wastes;
- Low-quality fuels;
- Machine learning techniques.

### Guest Editor

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