Special Issue

Carbon-Based Materials Catalysts for Biomass Conversions and Green Energy

Message from the Guest Editors

This Special Issue is dedicated to presenting cutting-edge developments in the utilization of carbon-based materials as catalysts for biomass conversion processes and sustainable energy solutions. These materials represent a promising avenue for the efficient transformation of biomass into valuable chemicals and fuels, attributed to their inherent sustainability, cost-effectiveness, and environmental compatibility. The utilization of carbon-based catalysts plays a crucial role in enhancing reaction efficiency and selectivity, concurrently minimizing energy consumption and waste generation. Advancing knowledge in carbon-based materials and catalysts for biomass conversion is vital for creating sustainable and efficient energy systems, aiding the shift to greener technologies. This Special Issue provides a platform for researchers to share findings and collaborate on developing carbon-based catalytic systems.

- heterogeneous catalysis
- carbon-based materials and adsorbents
- biomass valorization
- high-value chemicals
- green energy

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