

## Special Issue

# Advances in Biomass Pyrolysis Processes

### Message from the Guest Editors

This Special Issue aims to highlight cutting-edge developments in pyrolysis technology, emphasizing the transition from laboratory-scale innovations to industrial applications. It will cover recent advancements in reactor engineering, including novel configurations and autothermal systems designed for enhanced heat transfer and process intensification. Contributions exploring the optimization of process parameters—temperature, heating rate, and residence time—through advanced control systems and process integration are encouraged. The issue will also feature studies involving in and ex situ catalytic pyrolysis, reactive catalytic pyrolysis, catalytic hydropyrolysis and bio-oil hydrodeoxygenation for reducing the content of oxygenates in resulting bio-oils, along with the development of novel catalysts tailored to specific biomass and/or bio-oil compositions. The goal is to foster deeper insights into the complexities of pyrolysis systems, supporting the industrial scale-up of efficient, low-emission biomass valorization pathways.

### Guest Editors

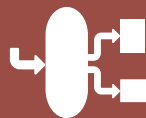
Dr. Güray Yıldız

Dr. Jiawei Wang

Dr. Gartzzen Lopez

### Deadline for manuscript submissions

15 May 2025



## Processes

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### Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

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