

## Special Issue

# Catalytic Gasification and Reforming Processes for Chemical Engineering

### Message from the Guest Editors

This Special Issue, entitled “Catalytic Gasification and Reforming Processes for Chemical Engineering”, will be devoted to the last advances in catalytic gasification. The scope of this Special Issue includes, but is not limited to, the following topics:

Catalytic gasification of biomass;  
Catalytic gasification of plastics waste;  
Catalytic gasification reactor: feedstock and design;  
Gasification process design, simulation and optimization;  
Gas conditioning by catalytic means: tar cracking, tar reforming;  
Co-gasification of biomass + coal, plastics + coal;  
Catalytic experimental studies: catalyst screening, catalyst design, catalyst characterization, catalyst coking and poisoning;  
Reaction kinetics studies related to the main gasification network and to the chemistry of tar cracking and tar reforming, plastics pyrolysis, cracking and reforming;  
Catalytic gasification of biomass: catalysts, thermodynamics and kinetics;  
Comparative analysis of biomass gasification and reforming technologies for syngas production and power generation.

### Guest Editors

Dr. Carlos Vera

Dr. Mariana Busto

Prof. Dr. Enrique Tarifa

### Deadline for manuscript submissions

15 August 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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