# **Special Issue**

# Next-Generation Biomass Gasification and Resource Recovery: Driving Sustainability and Circularity

## Message from the Guest Editors

This Special Issue will center on advancing biomass gasification technologies and resource recovery strategies to enhance efficiency, scalability, and environmental sustainability. It will emphasize the integration of these technologies into circular economy frameworks to minimize waste, reduce carbon emissions, and promote sustainable resource use. The scope of this Special Issue encompasses a wide range of topics related to biomass gasification and resource recovery, including, but not limited to, the following:

- Advanced biomass gasification techniques and technologies;
- Process optimization and integration for improved efficiency and sustainability;
- Life cycle assessment and environmental impact analysis in biomass gasification systems;
- Policy and regulatory frameworks supporting biomass gasification and resource recovery;
- Economic analysis and market potential of nextgeneration biomass gasification technologies;
- Case studies and pilot projects demonstrating practical applications and outcomes;
- Synergies between biomass gasification and other renewable energy systems.

### **Guest Editors**

Dr. Seyedeh Azadeh Alavi Borazjani

Department of Environment and Planning, University of Aveiro, 3810-193, Portugal

Prof. Dr. Luís Tarelho

Department of Environment and Planning, University of Aveiro, 3810 Aveiro, Portugal

### Deadline for manuscript submissions

31 January 2026



# Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/212564

Sustainability Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 sustainability@mdpi.com

mdpi.com/journal/ sustainability





## Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



# **About the Journal**

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

#### Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

#### **Author Benefits**

### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

### **High Visibility:**

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

