

Special Issue

Biomass and Solid Wastes to Renewable Fuel, Value-Added Chemicals, and Functional Materials

Message from the Guest Editors

In this Special Issue, original research articles and reviews are welcome. We will gather leading experts from a variety of disciplines to share their recent knowledge on fundamental and practical strategies for CO₂ utilization, resource recovery from biomass, and uses for solid waste to achieve a sustainable environment. We look forward to receiving your contributions. The topics include, but are not limited to, the following:

- **Feedstocks and Processing.**
- Biomass thermochemical conversion (pyrolysis, gasification, hydrothermal processes, etc.).
- Waste processing (MSW, plastics, sludge, agricultural residues, etc.).
- **Fuels, Biochemicals, and Functional Materials Production.**
- Biofuels (bio-oil, syngas, SAF, hydrogen, etc.).
- Platform chemicals and biochemicals, etc.
- Functional materials (Carbon materials, MOF materials, zeolite, etc.)
- **Advanced reaction systems and process integration.**
- Catalytic upgrading of biomass and waste-derived products.
- Co-valorisation of solid waste with CO₂, CH₄, or industrial off-gases for carbon mitigation.
- **Applications and Sustainability.**
- End-use performance and compatibility.
- Techno-economic and life-cycle assessments.

Guest Editors

Dr. Ye Wang

Dr. Xudong Liu

Dr. Fuhuan Wang

Dr. Chao Sun



Sustainability

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.9



mdpi.com/si/268105

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

[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)





Sustainability

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.9



[mdpi.com/journal/
sustainability](https://mdpi.com/journal/sustainability)



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)