Special Issue

Utilization of Biomass towards a Climate-Neutral and Sustainable Steel Sector

Message from the Guest Editors

The steel industry is one of the most important industrial sectors also one of the largest energy- and coal-consuming sectors. The use of biomass in iron- and steelmaking has been acknowledged as one possible solution to decrease CO2 emissions.

This Special Issue welcomes articles related to the application of biofuels in iron- and steelmaking systems, and the formats include but are not limited to original research articles, research reports, reviews, minireviews, perspectives, etc.

Research themes include but are not limited to:

- Clean and efficient biomass upgrading technology
- Quantum chemistry research on the mechanism of biomass upgrading
- Biomass utilization in blast furnace ironmaking processes
- Technology of adding biomass to the coking process
- Technology of using biomass as fuel in the sintering and pelleting processes
- Application of biomass in non-blast-furnace ironmaking processes
- Biomass utilization in steelmaking processes and other metallurgical processes
- Life cycle analysis of the application of biomass in iron- and steelmaking systems

Guest Editors

Dr. Chuan Wang

Swerim AB, Box 812, SE-97125 Luleå, Sweden

Prof. Dr. Guangwei Wang

School of Metallurgy and Ecological Engineering, University of Science and Technology Beijing, Beijing 100083, China

Prof. Dr. Yaowei Yu

State Key Laboratory of Advanced Special Steel, Shanghai Key Laboratory of Advanced Ferrometallurgy, School of Materials Science and Engineering, Shanghai University, Shanghai, China

Deadline for manuscript submissions

closed (26 February 2023)



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/99814

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)

