

Special Issue

Reactive Extrusion for Sustainable Biomaterials and High-Value Applications

Message from the Guest Editor

We cordially invite you to submit your original research articles, comprehensive reviews, and forward-looking perspective pieces, including but not limited to: (1) Fundamental Science & Engineering:

- Advanced In situ and Ex situ Characterization Techniques for Commercial Scale-Up
- Reaction Kinetics and Mechanisms in Solvent-Free Extrusion Environments

(2) Sustainable Materials & Composites:

- Advanced Biocomposites for Agriculture, Pulp and Paper, and Food Industries
- Creation of Eco-Friendly Packaging and Personal Care Products from Extruded Biomaterials
- Reactive Extrusion for Waste Biomass Conversion into High-Value Materials

(3) Circular Bioeconomy & Applications:

- Valorization of Biomass for Bioenergy and Clean Label Ingredients via Reactive Extrusion
- Integration of Reactive Extrusion in Circular Economy and Biorefinery Frameworks

(4) Techno-Economics & Impact Assessment:

- Life Cycle Assessment of Reactively Extruded Sustainable Products
- Techno-Economic Analysis and Industrial Implementation of REX Processes
- Scalability Challenges and Solutions for Continuous Reactive Extrusion

We look forward to receiving your esteemed contributions to this timely and impactful Special Issue.

Guest Editor

Dr. Ali Ayoub

College of Natural Resources, NC State University, Raleigh, NC 27695-8008, USA

Deadline for manuscript submissions

30 June 2026



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 7.7



mdpi.com/si/257351

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 3.3
CiteScore 7.7



[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)