# Special Issue

# Biomass Supply Chain Logistics (BSCL): Advances in Bioenergy Engineering to Address Biomass Quality and Quantity Issues

## Message from the Guest Editors

The success of biofuel and biochemical industries relies on an economical and reliable biomass supply that meets quality standards. Addressing these issues is critical for productive and sustainable biorefinery operation. Unit operations in biomass supply chain logistics (BSCL), including harvesting methods and pretreatment technologies, improve biomass properties for conversion. Mechanical preprocessing like size reduction and densification is crucial for meeting specifications. Energy-efficient technologies can address storage and handling challenges. High-temperature drying and thermal methods enhance biomass properties. Ash content poses challenges and requires cost-intensive removal. Chemical pretreatment modifies ash composition and aids in mechanical preprocessing. Research on BSCL is in early stages, and capturing advances is crucial. This Special Issue focuses on technology, unit operations, and their impact on quality and cost in BSCL scenarios. It highlights challenges in supplying quality biomass to biorefineries for efficient and sustainable operation.

## Guest Editors

Dr. Jaya Shankar Tumuluru

Southwestern Cotton Ginning Research Laboratory, United States Department of Agriculture, USDA-ARS, Las Cruces, NM 88005, USA

Dr. Igathinathane Cannayen

Department of Agricultural and Biosystems Engineering, North Dakota State University, Fargo, ND 58102, USA

## Deadline for manuscript submissions

closed (17 April 2024)

**Energies**

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/188628

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

mdpi.com/journal/energies

# Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

# About the Journal

## Message from the Editor-in-Chief

*Energies* is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

## Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

## Author Benefits

**Open Access:**

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

**High Visibility:**

indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:**

CiteScore - Q1 (Control and Optimization)

MDPI