# Special Issue

# The Sustainability of Energy Production from Biomass and Biofuel Technologies

## Message from the Guest Editor

As global challenges related to climate change and environmental sustainability intensify, the need for innovative biological solutions is more urgent than ever. Biological CO2 conversion, along with advances in microorganism cultivation and bioreactor technologies, offers promising pathways to reduce greenhouse gas emissions and produce valuable substances for various industrial applications. Breakthroughs in large-scale cultivation, photocatalysis, and bioprocess optimization present new opportunities for scaling sustainable production systems. This Special Issue will highlight the latest research on biological CO2 conversion, sustainable bioprocesses, and the production of high-value substances through biotechnology. We invite contributions exploring novel approaches and techniques across applications, including environmental management, bio-based products, and bioreactor optimization. Topics of interest include CO2 conversion, microorganisms in biotechnology, photocatalysis, and bioreactor integration with renewable energy. This Special Issue will provide a platform to share innovative research and sustainable industrial solutions.

## Guest Editor

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## Deadline for manuscript submissions

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## 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.

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