

Special Issue

Recent Advances in Biofuels Production and Usage: Challenges and Solutions—2nd Edition

Message from the Guest Editor

Biofuels, such as bioethanol and biodiesel, are renewable transport fuels that can lower greenhouse gas emissions and improve energy security. Ethanol is the most widely produced, while biodiesel—mainly from oil crops and waste oils—has broad use, especially in Europe. Algae- and cyanobacteria-based “third-generation” biodiesel shows promise but remains economically challenging. This Special Issue welcomes research on emerging technologies for biofuel production, including thermochemical, biochemical, and (photo)electrochemical conversion. Interdisciplinary approaches combining modeling and experiments are encouraged, with emphasis on holistic evaluations covering technical, economic, and environmental aspects. Studies on resource efficiency, process integration, and intensification strategies are also within scope. Sustainability-focused works, such as techno-economic analysis and life cycle assessment, are invited. In addition, case studies at different scales and policy recommendations are welcome.

Guest Editor

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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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