Special Issue

Advanced and Improved Biofuels for Enhanced Engines Performance

Message from the Guest Editors

As passenger cars are responsible for a significant amount of greenhouse gas emissions worldwide each year, substantial improvements are needed in the fuels. In order to improve the efficiency of the internal combustion (IC) engine maintaining high ecological performance, the researchers' research scope includes a wide variety of fuel combinations to obtain better engine performance. This Special Issue aims to introduce and disseminate the latest achievements in the use of advanced and improved biofuels in engines, with applications in various sectors. Topics of interest for publication include, but are not limited to:

- Analysis of combustion process in IC engines
- Fuel suitability for IC engines
- Fuel properties modeling
- Fuel quality improvement
- Modeling of emissions and energy use from biofuelfueled vehicles
- Emissions from IC engines
- Performance of IC engines with biofuels
- Biofuel vehicle compatibility
- Identification of sources of wasted energy
- modifications to the fuel used
- reducing CO2 emissions
- Impact of biofuel application in urban cities
- Various applications of biofuels, including off-road applications

Guest Editors

Prof. Dr. Ruslans Smigins

Faculty of Engineering, Latvia University of Life Sciences and Technologies, J. Cakstes Blvd. 5, LV3001 Jelgava, Latvia

Dr. Dimitrios Tziourtzioumis

Laboratory of Energy Systems, Department of Industrial Engineering and Management, International Hellenic University, Alexander University Campus, 57400 Sindos, Greece

Deadline for manuscript submissions

20 March 2026



Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/255843

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



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)

