

Special Issue

Alternative Fuels in Future Energy System

Message from the Guest Editor

Progressive climate changes caused, among others, by emissions of carbon dioxide and by the drastically decreasing resources of fossil fuels make it necessary to look for other, renewable energy sources, including alternative fuels and environmentally friendly methods of their use. Technologies for the production of advanced alternative fuels are at research stages with various levels of their development and haven't found widespread industrial use yet. Therefore, it is important to conduct research and publish their results in terms of the possibility of waste-free use of waste materials, including industrial ones (in BtL and WtL processes). In terms of searching for universal energy carriers, there are two views. One of which concerns the recognition of hydrogen as such a carrier, and the other – the treatment of synthesis gas as such a carrier. For this reason, it is important to research on the development of technologies for obtaining hydrogen from various sources with the limitation of energy-consuming water electrolysis processes as well as limiting the use of water as a scarce resource.

Guest Editor

Prof. Dr. Krzysztof Biernat

Łukasiewicz R&D Network - Automotive Industry Institute, 03-301
Warszawa, Poland

Deadline for manuscript submissions

closed (10 February 2025)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/84926

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

mdpi.com/journal/

[appls](https://appls.mdpi.com)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, 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, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)