Special Issue

Combustion Engine Advances and Testing

Message from the Guest Editors

The use of combustion engines is faced with problems more than ever before. Some of these are global warming, fossil fuels depletion, unpredictable pricing and harmful combustion products. However, even if there are advances in alternative energy sources for some niches, there is no universal alternative to combustion engines. Hence, they will remain with us for an undetermined period and is our duty to continue their development in order to further improve their environmental characteristics. Some of the new trends are related to new fuels and their blends, alternative combustion processes as well as exhaust gas aftertreatment. This Special Issue is open to articles that feature the experimental approach to the innovative combustion engine features but also the advances in the simulation and experimental measurement techniques. Topics include, but are not limited to, the following domains:

- Pollutant formation reduction strategies;
- Cogeneration applications;
- Emissions legislation development;
- Hybrid power systems;
- Hydrogen combustion engines;
- HCCI internal combustion engines;
- Alternative fuels combustion:
- Synthetic fuels;
- Exhaust gas treatment advances.

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Deadline for manuscript submissions

closed (30 November 2023)



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About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

