



an Open Access Journal by MDPI

Energetic Challenges and Perspectives in Advanced Technologies of Hydraulic Systems

Guest Editors:

Dr. Marian Janusz Łopatka

Faculty of Mechanical Engineering, Military University of Technology, Kaliskiego 2, 00-908 Warsaw, Poland

Dr. Arkadiusz Rubiec

Faculty of Mechanical Engineering, Military University of Technology, Kaliskiego 2, 00-908 Warsaw, Poland

Dr. Piotr Patrosz

Faculty of Mechanical Engineering and Ship Technology, Gdansk University of Technology, ul. Gabriela Narutowicza 11/12, 80-233 Gdańsk, Poland

Deadline for manuscript submissions: closed (31 August 2023)



mdpi.com/si/100290

Message from the Guest Editors

This Special Issue will deal with new advances in energy saving technologies of hydraulic systems, which can be used in many areas of applications. Topics of interest for publication include, but are not limited to:

- Experimental investigations, modeling and simulations of hydraulic components' and system energetic efficiency;
- Theoretical, numerical and experimental research on new concepts of control of hydraulic systems;
- Influence of working loads and speed on the efficiency of hydraulic systems;
- Influence of hydraulic system dynamics on energetic efficiency;
- Efficiency of hydraulic systems in various machinery applications;
- Impact of hydraulic systems on the efficiency of machine operation;
- Selection of hydraulic units from the energy point of view;
- Efficiency of hybrid drives in hydraulic systems;
- Efficiency of hydrostatically driven manipulators;
- Efficiency of micro-hydraulic systems;
- Influence of the selection of working fluids on the efficiency of the system;
- Optimization of the operation of hydraulic systems;
- Influence of Artificial Intelligence (AI) and Neural Networks (NN) on the energetic efficiency of hydraulic system.

ecial





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

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.

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 (Engineering (miscellaneous))

Contact Us

Energies Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies_mdpi