

## Special Issue

# Advanced Control and Fault Detection Techniques in Hydraulic Machines and Systems

### Message from the Guest Editor

Advanced control and fault detection techniques play a vital role in enhancing the performance, efficiency, and reliability of hydraulic machines and systems. With their wide application in various industries, such as manufacturing, construction, aerospace, and automotive, hydraulic systems are crucial for transmitting power and controlling motion. Hydraulic machines and systems play a vital role in various industries, and their optimal operation is crucial for productivity, safety, and cost-effectiveness. However, these systems often face challenges related to nonlinear dynamics, external disturbances, and component failures, leading to decreased efficiency and potential downtime. The aim of this Special Issue is to bring together cutting-edge research and innovative developments in the field of "Advanced Control and Fault Detection Techniques in Hydraulic Machines and Systems". The primary focus of this Special Issue is to explore novel approaches, methodologies, and technologies that advance the control and fault detection strategies employed in hydraulic systems to achieve superior performance, efficiency, and reliability.

### Guest Editor

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### Deadline for manuscript submissions

closed (1 January 2025)



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### 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.

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Prof. Dr. Antonio J. Marques Cardoso  
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