

Special Issue

Modelling, Analysis, and Design of Positive Displacement Machines: Papers Presented at the 4th Forum on CFD in Positive Displacement Machines

Message from the Guest Editors

Following the success of three previous forums/short courses on CFD in Positive Displacement Machines (PDM) held at City, University of London, in which there was strong participation from the compressor industry, CFD software providers, this Special Issue and the 4th short course are dedicated to advanced topics of modelling, analysis, and the design of Positive Displacement Machines for industrial and research use. The main topics include, but are not limited to the following:

- Advances in grid generation, CFD tools, and new techniques for PD machine analysis.
- Modelling of leakage flows and conjugate heat transfer.
- Prediction of clearance gap sizes during operation and the application of modern FSI computations.
- The stability and accuracy of multiphase flow calculations in PD machines.

Participants from academia and industry are invited to prepare journal publications with results from their research and analysis and present them in the forum.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Designs (ISSN 2411-9660) is a peer-reviewed and open access journal which provides a unifying research framework for a wide range of engineering designs of disciplines and industrial applications, including mechanical engineering, electrical engineering, civil engineering, mechatronics, aerospace engineering, bioengineering, energy engineering, industrial engineering and manufacturing systems are of interest. We would like to invite you to contribute to the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.3 days after submission; acceptance to publication is undertaken in 4.6 days (median values for papers published in this journal in the first half of 2025).