

Special Issue

Experiments and Mechanistic Modeling of Multistage ESP Performance

Message from the Guest Editors

The electric submersible pump (ESP) is the artificial lift technology within the oil and gas industry. ESP system is more tolerant to gas and solid flow conditions, making them more widely used in shale oil wells. Advancements in this field will facilitate comprehension of the flow mechanisms within ESP stages, and contribute to improved pump design and efficient performance prediction, and eventually reduce the overall design, testing, and operational costs associated with ESP implementation in the oil and gas industry.

This Special Issue aims to attract researchers to showcase recent advancements and technologies in the aforementioned areas in the hopes to shed light on the future trends concerning the testing and modeling of ESP flows within the oil and gas industry.

Keywords

- electric submersible pump
- mechanistic fluid flow
- artificial lift
- data analytic
- oil and gas production
- gas-liquid flow
- solid erosion

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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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