



Artificial Intelligence (AI) in Enhanced Oil Recovery

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Message from the Guest Editors

In recent years, the oil and gas industry has been undergoing a transformative shift towards incorporating cutting-edge technologies to optimize and improve various processes. One of the prominent areas benefiting from this technological revolution is enhanced oil recovery (EOR). EOR techniques play a crucial role in maximizing hydrocarbon extraction from reservoirs, thereby extending the productive life of oilfields.

This Special Issue seeks to provide a comprehensive platform for researchers, engineers, and practitioners to present and discuss the latest advancements, challenges, and opportunities in the field of AI-driven enhanced oil recovery.

Contributions to this Special Issue can include, but are not limited to, the following topics:

- Machine learning and deep learning applications in EOR;
- AI-based reservoir simulation and history matching;
- Predictive analytics for reservoir performance;
- Integration of IoT and AI in reservoir management;
- Genetic algorithms and optimization techniques for EOR design;
- AI-driven uncertainty quantification in reservoir modeling;
- Big data analytics for EOR decision-making;
- AI-driven optimization of chemical and thermal EOR methods.





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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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