Special Issue

Enhanced Oil Recovery: Numerical Simulation and Deep Machine Learning

Message from the Guest Editors

Enhanced Oil Recovery (EOR) is pivotal in maximizing hydrocarbon extraction, meeting rising energy demands. Traditional EOR methods, though effective, have limitations in cost, environmental impact, and efficiency. The integration of numerical simulation and deep machine learning offers significant potential to overcome these challenges. Numerical simulation is key for planning and optimizing EOR, enabling detailed reservoir modeling and fluid flow prediction. However, geological complexities can hinder simulation accuracy. Deep machine learning excels in managing vast datasets and identifying complex patterns, enhancing predictive capabilities and optimizing operations in EOR. This Special Issue highlights the convergence of numerical simulation and deep machine learning in EOR. We seek contributions that showcase the integration of these technologies, including advancements, methodologies, and case studies. Our goal is to foster innovation in EOR for greater efficiency and sustainability.

Guest Editors

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Deadline for manuscript submissions

10 November 2025

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/210059

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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.

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