

## Special Issue

# Petroleum Engineering: Production Forecasting, Process Design, and Implementation, 2nd Edition

### Message from the Guest Editors

This Special Issue aims to collect high-quality original research articles and review papers from the fields of production forecasting, process design, and implementation in petroleum engineering. Topics of interest for this Special Issue include, but are not limited to, the following:

- Production forecasting for various enhanced oil recovery (EOR) methods;
- Design and field implementation of various EOR processes;
- Machine learning applications in petroleum engineering;
- Production forecasting for simulated horizontal wells with multi-stage hydraulic fractures;
- Modeling and optimizing multi-stage hydraulic fractures;
- Advanced optimization algorithms for production forecasting;
- Experimental and numerical modeling of single- and multiphase flows in oil and gas reservoirs;
- Design and field implementation of water shutoff technologies and conformance control treatments;
- Design and field implementation of CO<sub>2</sub> utilization and storage;
- Reservoir evaluation of unconventional oil and gas reservoirs;
- Reservoir characterization of unconventional oil and gas reservoirs.

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### Guest Editors

Dr. Wei Zhou

Dr. Hongbin Yang

Dr. Martin Ma

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### Deadline for manuscript submissions

31 August 2026



## Applied Sciences

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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