

## Special Issue

# Applications of Intelligent Models in the Petroleum Industry

### Message from the Guest Editors

The petroleum industry plays a critical role in the global energy landscape, supplying fuel and raw materials essential for modern economies. With the advent of advanced computing and data-driven technologies, intelligent models are revolutionizing petroleum exploration and production by offering more accurate, efficient, and adaptive solutions to complex problems. This Special Issue seeks high-quality research contributions that explore the integration of intelligent modeling techniques into various facets of petroleum engineering. Topics of interest include, but are not limited to, the following:

- Machine learning applications in reservoir characterization, such as permeability and porosity prediction, facies classification, and digital rock reconstruction;
- AI-driven production forecasting models for conventional and unconventional reservoirs, incorporating time-series analysis, deep learning architectures, and hybrid modeling approaches;
- Multimodal techniques that integrate tabular data, time-series, and images to enhance subsurface understanding and improve reservoir simulation models;
- ...

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### Guest Editors

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### Deadline for manuscript submissions

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## Processes

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