

## Special Issue

# Innovative Drilling and Extraction Techniques for the Future of Oil and Gas

### Message from the Guest Editor

Advances in modern oil and gas technology are transforming the industry through four key areas: intelligent automation, environmental protection, cost-effectiveness, and flexible solutions. By combining artificial intelligence and robotic systems, drilling equipment relies on real-time data analysis to improve accuracy and predict maintenance needs. Meanwhile, strategies to combat climate change are reducing carbon emissions through better monitoring and integration with renewable energy sources. This Special Issue, titled "Innovative Drilling and Extraction Techniques for the Future of Oil and Gas", seeks high-quality works focusing on cutting-edge advancements in exploration and production. Topics include, but are not limited to, the following:

- Intelligent drilling technology for complex downhole challenges;
- Efficient solutions for downhole drilling;
- Design, analysis, control, and optimization in oil and gas extraction;
- Simulation techniques, software, algorithms, or other tools for modeling and simulation, or other.

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### Guest Editor

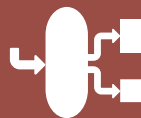
Prof. Dr. Jialin Tian

School of Mechanical Engineering, Southwest Petroleum University,  
Chengdu 610500, China

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### Deadline for manuscript submissions

31 December 2025



## Processes

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[processes@mdpi.com](mailto:processes@mdpi.com)

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Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

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