Special Issue

Development and Application of Intelligent Drilling Technology

Message from the Guest Editors

With the rapid development of artificial intelligence, the application of machine learning in oil and gas drilling engineering is increasing day by day. Through the application of automated surface drilling rigs, intelligent downhole executive agency, intelligent monitoring, and decision-making technology, drilling operations can achieve advanced detection, closed-loop control, precision guidance, and intelligent decision-making. This Special Issue will delve into the latest research, application cases, and future trends in machine learning technology in the field of drilling. We will invite professional researchers, engineers, and industry leaders from around the world to share their unique insights and experiences in the field. Keywords:

- intelligent well trajectory optimization
- intelligent controlled pressure drilling
- intelligent optimization of the drilling rate
- intelligent monitoring and decision-making
- intelligent guided drilling
- downhole closed-loop control
- intelligent drilling pipe
- intelligent drilling fluid
- machine learning
- drilling technology
- intelligent rig
- intelligent bit

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Deadline for manuscript submissions

closed (20 May 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/185867

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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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