

Special Issue

Advanced Drilling, Cementing, and Oil Recovery Technologies

Message from the Guest Editor

The Special Issue explores cutting-edge developments and innovations in the oil and gas industry, focusing on three critical areas, namely drilling, cementing, and oil recovery. As the global demand for hydrocarbons persists, there is an increasing need to enhance the efficiency, safety, and environmental sustainability of oil and gas extraction processes. This Special Issue delves into advanced drilling technologies that improve the accuracy and speed of wellbore creation. In parallel, this Issue emphasizes innovations in cementing formulations, which play a pivotal role in ensuring well integrity and zonal isolation. Novel materials, including nano-enhanced cements and environmentally friendly additives, are explored for their potential to improve the durability and performance of cementing operations under challenging conditions. The third focus area is oil recovery technologies, particularly enhanced oil recovery (EOR) methods that maximize hydrocarbon extraction from reservoirs. The Issue reviews advancements in chemical, thermal, and gas injection techniques, as well as the integration of digital technologies and data analytics in optimizing oil recovery processes.

Guest Editor

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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.

Editor-in-Chief

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