Special Issue

Advanced Strategies in Enhanced Oil Recovery: Theory and Technology

Message from the Guest Editors

Water flooding is recognized as one of the most common secondary oil recovery techniques, after the primary production period, which has been widely applied for different reservoirs. However, as reservoirs enter the late development stage, reservoir heterogeneity becomes serious and the distribution of the remaining oil becomes more scattered, and traditional water flooding recovery methods have been unable to satisfy the demand for enhanced oil recovery. In view of different reservoir types, including mature water flooding reservoirs, low-permeability reservoirs, heavy oil reservoirs, and so on, different strategies in enhanced oil recovery have been developed. This Special Issue focuses on all aspects the above challenges, particularly the following:

- Improve oil recovery strategies for water flooding reservoirs, including water shutoff, conformance control, and so on;
- Chemical-enhanced oil recovery strategies, including polymer flooding, surfactant flooding, combined flooding, and so on;
- CO2 flooding and storage strategies for different reservoirs;
- Heavy oil recovery strategies.

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