Special Issue

Research Progress of Chemical Flooding for Enhanced Oil Recovery

Message from the Guest Editors

Chemical flooding for enhanced oil recovery (cEOR) is one of the most deployable and extensively researched EOR technologies for improving hydrocarbon extraction from reservoirs at all stages of production.

Traditionally, researchers have focused more on the development of chemical reagents, including surfactants, polymers, and alkaline to either reduce the oil-water interfacial tension or to improve the displacing-displaced phase mobility ratio. Major advances have resulted from designing more efficient surfactants, increasing oil-water interactions, and extending the applicability of polymers to more severe reservoir conditions, as well as through clever process design. Articles covering research on new chemistries, mechanisms and flooding designs are welcome. In addition, simulation, pilot, and field-wide studies demonstrating the value of new approaches are encouraged. This Special Issue concentrates on progress attained in cEOR that offers a new window of opportunity to deploy cEOR technologies.

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