Special Issue

Multiphase Flow Through Complex Production Systems

Message from the Guest Editors

The recent exploration and exploitation of unconventional natural resources, including shale gas/oil, natural gas hydrate, coal bed methane, etc., have encouraged the state-of-the-art development of multiphase flow theory to be applied to complex production systems, e.g., deep water and/or stratum regions. Assisted by modern modeling and simulation technologies, investigations on multiphase flow have been conducted extensively. The Special Issue, "Multiphase Flow Through Complex Production Systems", tackles the most recent advances in theoretical modeling, experimental investigation, numerical simulation, and data analytics methods and techniques for multiphase flow in geo-energy. Keywords

- multiphase flow modeling
- complex production systems
- drilling and completion simulation
- multiphase wellbore flow simulation
- multiphase, and multicomponent flow in porous media
- modeling and simulation of hydraulic fracture
- flow simulation within artificial lift equipment
- flow assurance analysis and modeling
- numerical simulation of unconventional oil/gas reservoirs

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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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