



Geological and Engineering Problems in the Development of Unconventional Oil and Gas Reservoirs

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Message from the Guest Editors

This Special Issue focuses on the new advances relating to unconventional oil and gas resources in the hydrocarbon enrichment mechanism, resource assessment, reservoir characterization, flow mechanism, drilling engineering design, and development scheme optimization in geological and engineering aspects. Potential topics include but are not limited to the following:

- Mechanism of oil and gas accumulation;
- Reservoir rock mechanics;
- Resource assessment;
- Geological and engineering sweet spot prediction;
- Multi-scale flow mechanism;
- Formation evaluation and geologic modeling;
- Characterization of multi-scale fractures;
- Oil and gas rate analysis and prediction;
- Heavy oil and oil sand thermal recovery;
- Heavy oil enhanced oil recovery;
- Reservoir monitor and evaluation by electrical resistance tomography (ERT);
- Natural gas hydrates flow behavior using electrical tomography;
- Drilling, completion, hydraulic fracturing techniques;
- Enhanced oil recovery theory;
- Application of big data and machine learning techniques;
- Management, economic and risk assessment.





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Message from the Editor-in-Chief

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