

DONG Xiaohu

Ph.D., Assistant Professor

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Education

Ph.D., Petroleum Engineering, China University of Petroleum - Beijing, 2014

B.S., Petroleum Engineering, China University of Petroleum - Beijing, 2009

Research Areas and Interests

Thermal and non-thermal heavy oil recovery; Phase behavior modeling in unconventional resources; Flow modeling in shale nanoporous media.

Teaching

Development and Exploitation of Complex Structure Well; Academic Writing in Petroleum Engineering; Reservoir simulation

Professional Experiences

2016.09-present, Assistant Professor, Department of Petroleum Engineering, China University of Petroleum, Beijing.

2014.11-2016.08, Postdoctoral Fellow, Department of Chemical & Petroleum Engineering, University of Calgary, Canada.

2009.09–2014.10, Research Assistant, Department of Petroleum Engineering, China University of Petroleum, Beijing.

Other Professional Affiliations

Member of Society of Petroleum Engineers (SPE).

Guest editor of Geofluids.

Reviewer for peer-reviewed journals: Energy, Engineering, Applied Energy, Fuel, Energy & Fuels, Fluid Phase Equilibria, ACS Advances, Journal of Petroleum Science and Engineering, Industrial & Engineering Chemistry Research etc.

Honors and Awards

Excellent Ph.D dissertation, China University of Petroleum, Beijing, 2016.

Scientific & technological progress award, China Petroleum and Chemical Industry Federation (CPCIF), 2013.

Selected Publications

1. Zhang Z., Liu H., Dong X., Qi P. Unified model of heat transfer in the multiphase flow in Steam Assisted Gravity Drainage process. *Journal of Petroleum Science and Engineering*. 2017, 157, 857-883.
2. Wu K., Chen Z., Li J., Li X., Xu J., Dong X. Wettability effect on nanoconfined water flow. *PNAS (Proceedings of the National Academy of Sciences)*. 2017, 114 (13), 3358-3363.

3. Xu J., Chen Z., Dong X., Zhou W. Effects of Lean Zones on Steam-Assisted Gravity Drainage Performance. *Energies*, 2017, 10(4), 471.
4. Dong X., Liu H., Zhang Z., Wang L., Chen Z. Performance of Multiple Thermal Fluids Assisted Gravity Drainage Process in Post SAGD Reservoirs. *Journal of Petroleum Science and Engineering*. 2017, 154, 528-536.
5. Dong X., Liu H., Chen Z. Mathematical Modeling of heat transfer and pressure drops in single- and dual-pipe horizontal well. *Journal of Thermal Science and Engineering Applications*. 2017, 9(1), 011016-10.
6. Dong X., Liu H., Guo W., Hou J., Chen Z., Wu K. Study of the confined behavior of hydrocarbons in organic nanopores by the potential theory. *Fluid Phase Equilibria*. 2016, 429, 214-226.
7. Wu K., Chen Z., Li X., Dong X. Methane storage in nanoporous material at supercritical temperature over a wide range of pressures. *Scientific Reports*. 2016, 6, 33461.
8. Dong X., Liu H., Chen Z. The effect of capillary condensation on the phase behavior of hydrocarbon mixtures in the organic nanopores. *Petroleum Science and Technology*. 2016, 34(17-18), 1581-1588.
9. Dong X., Liu H., Wang C., Lu C., Yan F. Polymer-Enhanced Foam Injection Process: An Improved-Oil-Recovery Technique for Light Oil Reservoirs after Polymer Flooding. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*. 2016, 38(3): 354-361.
10. Dong X., Liu H., Hou J., Wu K., Chen Z. Phase Equilibria of Confined Fluids in the Nanopores of Tight and Shale Rocks Considering the Effect of Capillary Pressure and Adsorption Film. *Industrial & Engineering Chemistry Research*. 2016, 55 (3), 798-811.
11. Wang C., Liu H., Zheng Q., Liu Y., Dong X., Hong C. A New High-Temperature Gel for Profile Control in Heavy Oil Reservoirs. *ASME Journal of Energy Resources Technology*. 2016, 138(2), 022901.
12. Dong X., Liu H., Hou J., Zhang Z., Chen Z. Multi-thermal Fluid Assisted Gravity Drainage Process: A New Improved-Oil-Recovery Technique for Thick Heavy Oil Reservoir. *Journal of Petroleum Science and Engineering*. 2015, 133, 1-11.
13. Dong X., Liu H., Gao Z. Experimental investigation of miscible gas injection with different gases in petroleum reservoirs. *International Journal of Oil, Gas and Coal Technology*. 2015, 9(3), 280-295.
14. Dong X., Liu H., Wang C. Flow and Heat Transfer Characteristics of Multi-thermal Fluid in a Dual-String Horizontal Well. *Numerical Heat Transfer, Part A: Application*. 2014, 66(2), 185-204.
15. Dong X., Liu H., Zhang Z., Wang C. The flow and heat transfer characteristics of multi-thermal fluid in horizontal wellbore coupled with flow in heavy oil reservoirs. *Journal of Petroleum Science and Engineering*. 2014, 122, 56-68.