XUE Liang

Ph.D., Associate Professor

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Education

Ph.D., Hydrology, University of Arizona (United States), 2007M.S., Environmental Engineering, China University of Geosciences - Beijing (China), 2005B.S., Environmental Engineering, China University of Geosciences - Beijing (China), 2001

Research Areas and Interests

Subsurface flow and transport in porous and fractured media Automatic history matching Machine Learning Stochastic analysis and optimization

Teaching

Fluid mechanics in porous media Professional English for petroleum engineering Academic writing for petroleum engineering

Professional Experiences

2007-2011, University of Arizona, Research Assistant
2012-2014, College of Engineering, Peking University, Postdoc
2014-2015, Assistant Professor, Department of Petroleum Engineering, China University of
Petroleum-Beijing, China
2015-present, Associate Professor, Department of Petroleum Engineering, China University of
Petroleum-Beijing, China

Other Professional Affiliations

Member of American Geophysical Union Member of Society of Petroleum Engineering

Selected Publications

- 1. Cheng Dai, *Liang Xue*, Weihong Wang, Xiang Li. Analysis of the influencing factors on the well performance in shale gas reservoir. Geofluids, 2016.12, 0 (0) : 1~12
- Liang Xue, Diao Li, Cheng Dai, Tongchao Nan, Characterization of Aquifer Multiscale Properties by Generating Random Fractal Field with Truncated Power Variogram Model Using Karhunen–Loève Expansion, Geofluids, 2017.12, 0 (0): 1~15
- Liang Xue, Cheng Dai, Lei Wang, Development of a General Package for Resolution of Uncertainty-Related Issues in Reservoir Engineering, Energies, 2017.2.10, 10 (2): 197~212

- 4. Xuan Liu, Cheng Dai, *Liang Xue*, Bingyu Ji, Estimation of fracture distribution in a CO2 EOR system through Ensemble Kalman filter, Greenhouse Gases Science & Technology, 2017.10.10, 0: 1-22
- 5. Cheng Dai, *Liang Xue*, Dongxiao Zhang, Alberto Guadagnini, Data-worth analysis through probabilistic collocation-based Ensemble Kalman Filter, Journal of Hydrology, 2016.6.21, 540: 488~503
- Liang Xue, Application of the Multimodel Ensemble Kalman Filter Method in Groundwater System, Water, 2015.2, 7 (2): 528~545
- 7. *Xue, L.*, Zhang, D., Guadagnini, A., & Neuman, S. P. (2014). Multimodel Bayesian analysis of groundwater data worth. Water Resources Research.
- Xue, L., Dongxiao Zhang. A multimodel data assimilation framework via the ensemble Kalman filter. Water Resources Research. 2014.05, 50(5): 4197-4219.
- Lu, D., M. Ye, S.P. Neuman, and *L. Xue* (2012), Multimodel Bayesian analysis of data-worth applied to unsaturated fractured tuffs, Advances in Water Resources, 35, 69-82, DOI: 10.1016/j.advwatres.2011.10.007.
- Neuman, S.P., *L. Xue*, M. Ye, and D. Lu (2012), Bayesian analysis of data-worth considering model and parameter uncertainties, Advances in Water Resources, 36, 75-85, doi:10.1016/j.advwatres.2011.02.007.