

Petroleum Engineering: Ph.D. Dissertation Topics

2016 Dissertation Titles

 History Matching for Fractured Reservoirs with Hough-Transform-based Parameterization

2015 Dissertation Titles

- Pore Scale Characterization and Fluid Flow Simulation: Application of Lattice Boltzmann Method for Conventional and Unconventional Rocks
- An Extended Finite Element Method Based Modeling of Hydraulic Fracturing
- Uncertainty Quantification and Data Assimilation via Transform Process for Strongly Nonlinear Problems
- Assisted History Matching for Fractured Reservoirs with Hough Transform Based Parameterization

2014 Dissertation Titles

- Coarse-scale Simulation of Heterogeneous Reservoirs and Multi-fractured Horizontal Wells
- The Role of Saturation Functions in the Modeling and Simulation of Subsurface Flows
- Mixing and Mass Transfer in Multicontact Miscible Displacements