Petroleum Engineering: Ph.D. Dissertation Topics

2019 Dissertation Titles

- A Coupled Poromechanics-Damage Mechanics Approach to Model Fracturing in Multiphase Flow, Principal Investigator (P.I): Birendra Jha, Assistant Professor
- Continuum Modeling of Reservoir Permeability Enhancement and Rock Degradation During Pressurized Injection, Principal Investigator (P.I): Fred Aminzadeh, Adjunct Professor
- Seismic Wave Induced Fluid Flow, P.I: Fred Aminzadeh, Adjunct Research Professor
- A Method for Characterizing Reservoir Heterogeneity using Continuous Measurement of Tracer Data, P.I: Fred Aminzadeh, Research Professor

2018 Dissertation Titles

- Stochastic Oilfield Optimization Under Uncertain Future Development Plans, P.I: Behnam Jafarpour, Associate Professor

2017 Dissertation Titles

- Integration of Multi-Physics Data into Dynamic Reservoir Model with Ensemble Kalman Filter, P.I: Behnam Jafarpour, Associate Professor
- Subsurface Model Calibration for Complex Facies Models, P.I: Behnam Jafarpour, Associate Professor
- Assessing Induced Seismicity Rate Increase based on Deterministic and Probabilistic Modeling, P.I: Fred Aminzadeh, Research Professor
- Geothermal Resource Assessment and Reservoir Modeling with an application to Kavaklidere Geothermal Field, Turkey, P.I: Fred Aminzadeh, Research Professor
- Modeling and Simulation of Complex Recovery Processes, P.I: Kristian Jessen, Associate Professor