

Nithiwat Siripatrachai

123 West Nittany Ave. Apt 10, State College, PA 16801
1 (281) 725-8714 • nxs298@psu.edu

Education	Ph.D. in Petroleum and Natural Gas Engineering The Pennsylvania State University – University Park, PA <ul style="list-style-type: none">• Areas of Specialization: Reservoir Simulation and Enhanced Oil Recovery• Dissertation: Development of a Multi-mechanistic, Triple-porosity, Triple-permeability Compositional Model for Unconventional Reservoirs• Advisors: Drs. Turgay Ertekin and Russell Johns• GPA: 3.87/4.00	<i>Expected August 2016</i>
	M.S. in Petroleum and Natural Gas Engineering The Pennsylvania State University – University Park, PA <ul style="list-style-type: none">• Thesis: Alternate Representations for Numerical Modeling of Multi-stage Hydraulically Fractured Horizontal Wells Completed in Shale Gas Reservoirs• Advisor: Dr. Turgay Ertekin• GPA: 3.96/4.00	<i>August 2011</i>
	B.S. in Mechanical Engineering with Honors University of California, Davis, CA <ul style="list-style-type: none">• Areas of Specialization: Heat Transfer, Thermodynamics, and Energy System• GPA: 3.77/4.00	<i>June 2009</i>
Related Experience	The Pennsylvania State University – University Park Energy and Mineral Engineering Department, Research Assistant <ul style="list-style-type: none">• Research and develop an advanced multi-mechanistic, triple-porosity, triple-permeability compositional reservoir simulator for unconventional reservoirs• Researched and developed expert systems for multi-stage hydraulically fractured horizontal well in shale gas reservoirs• Conducted reservoir simulation studies of CO₂ injection for enhanced gas recovery in shale gas reservoirs (2010)	<i>August 2009- Present</i>
	Halliburton, Houston, Texas, U.S.A. Reservoir Management Department, Summer Intern <ul style="list-style-type: none">• Evaluated formulas used for inter-porosity transmissibility in dual-porosity systems• Derived transfer functions for inter rock type flows in unconventional reservoirs• Proposed improvements to existing formulas and extended the formulas to multi-porosity systems• Completed intermediate Nexus reservoir simulation training	<i>June-August 2014</i>
	Chevron Corporation, Bangkok, Thailand Petroleum Engineering Department, Summer Intern <ul style="list-style-type: none">• Collaborated with earth scientists to create reservoir models• Conducted waterflood reservoir simulation study for the assigned reservoir• Recommended production optimization alternatives• Established a case study for future waterflood projects	<i>May-August 2010</i>
	Chevron Corporation, Bangkok, Thailand Drilling and Completion Department, Summer Intern <ul style="list-style-type: none">• Developed drilling fluid selection guideline for 3-string horizontal drilling• Trained drilling operations at the drilling rig in the Gulf of Thailand• Analyzed offset-well drilling data in support for offshore drilling operations	<i>June-August 2009</i>

-
- Publications**
- **Siripatrachai, N.**, Ertekin, T., and Johns, R.T.: “Compositional Simulation of Discrete Fractures Incorporating the Effect of Capillary Pressure on Phase Behavior.” SPE Improved Oil Recovery Conference. Tulsa, Oklahoma, U.S.A. 11-13 April 2016.
 - **Siripatrachai, N.**, Rana, S., Bodipat, K., and Ertekin, T.: “An Effective Coupling of Type Curves and Expert Systems for Evaluating Multi-stage Hydraulic Fractured Horizontal Wells in Composite Dual-porosity Shale Gas Reservoir.” SPE Annual Technical Conference and Exhibition. Amsterdam, The Netherlands. 27-29 October 2014.
 - Nojabaei, B., **Siripatrachai, N.**, Johns, R., and Ertekin, T.: “Effect of Saturation Dependent Capillary Pressure on Production in Tight Rocks and Shales with a Compositional Extended Black Oil Formulation.” SPE Eastern Regional Meeting. West Virginia, U.S.A. 21-23 October 2014.
 - **Siripatrachai, N.**, Bodipat, K., and Ertekin, T.: “Expert Systems for Gas Production from Hydraulically Fractured Horizontal Wells Based on Different Hydraulic Fracture Representations.” American Association of Petroleum Geologists Annual Convention & Exhibition. Pennsylvania, U.S.A. 19-22 May 2013.
 - **Siripatrachai, N.** and Ertekin, T.: “Alternate Representations in Numerical Modeling of Multistage Hydraulically Fractured Horizontal Wells in Shale Gas Reservoir.” SPE Western North American Regional Meeting. California, U.S.A. 19-23 March 2012.
 - Uzoh, C., Han, J., Hu, L., **Siripatrachai, N.**, Osholake, T., and Chen, X.: “Economic Optimization Analysis of the Development Process on a Field in the Barnett Shale Formation.” University Park, PA: Pennsylvania State University, 2010.

-
- Field Related Skills**
- Computer Modeling Group suite (CMG)
 - Landmark suite – Nexus Reservoir Simulation Software
 - Chevron In-House Reservoir Simulator (CHEARS)
 - C++
 - MATLAB

-
- Selected Honors**
- ConocoPhillips Graduate Scholarship (2010)
 - ConocoPhillips Scholarship in Petroleum and Natural Gas Engineering (2009)
 - Chevron Outstanding Academic Achievement Award (2008)
 - Chevron Recognizing Excellence Achievement (REACH) Scholarship (2007)
 - UC Davis Engineering Dean’s Honor List (2007, 2008, 2009)
 - UC Davis First Year Scholar (2007)

-
- Professional Activities and Memberships**
- Technical Reviewer, Journal of Petroleum Exploration and Production Technology (2014-Present)
 - Member, Society of Petroleum Engineers (2009-Present)
 - Vice President, Thai-American Student Association at UC Davis (2009)
 - Fundraising Chairperson, Thai-American Student Association at UC Davis (2009)

-
- Related Courses**
- Steady State Flow in Porous Media
 - Hydrocarbon Phase Behavior
 - Natural Gas Engineering
 - Numerical Reservoir Simulation
 - Principal of Well Testing and Evaluation
 - Formation Evaluation
 - Design of Miscible Recovery Projects
 - Chemical and Thermal Enhanced Oil Recovery
 - Reservoir Analysis and Secondary Recovery
 - Research and Geostatistics Methods
-