OUR STORY

17 Academic Faculty
49 Master's Students
30 PhD Candidates
20 research laboratories
Core Research Facility- opening Sept. 2019

ABOUT US
We take pride in involving students in intellectually challenging geoscience research supported by external funding and enabled by modern research facilities, with strong backing of the School's alumni and the administration.

RESEARCH SUPPORT
Active external support from the Department of Energy, National Science Foundation, and other federal and state agencies, as well as industry partners.

FINANCIAL SUPPORT
Through donations of alumni, industrial sponsors, the College of Arts and Sciences, the Graduate College and research grants, we offer competitive financial support in the form of research and teaching assistantships, fellowships and tuition waivers.

FIND OUT MORE

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Boone Pickens School of Geology
105 Noble Research Center
Stillwater, OK 74078
405-744-6358
RESEARCH AT OSU

Petroleum Geosciences
Multicomponent Exploration Geophysics Laboratory
Carbonate Reservoir Characterization Laboratory
Siliciclastic Reservoir Research Laboratory

Water | Environment | Climate
Hydrogeology Research Laboratory
Environmental Problems Research Laboratory
Climate Research Laboratory

Earth Structure and Dynamics
Structure Research Laboratory
Tectonics Research Laboratory
Dynamics Research Laboratory

Computational Geosciences
Computational Research Laboratory
Big Data Analytics Research Laboratory
Geoscience Modeling Research Laboratory

Research in our school includes using multi-scale digital image analysis to capture different pore parameters such as porosity and permeability found in rocks.

Our students also use computerized tomography (CT) scanning to evaluate pore types and pore systems in three dimensions.

Artificial Neural Networks (ANN) have also been used to predict rock facies from core and log data to create "pseudo cores" across a large study area with limited facies data.

Geostatistical models have been used to model facies and porosity variability in complex heterogeneous systems.

FACULTY

Dr. Camelia Knapp, Professor and Department Head
Research: Geophysics, Energy Resources, Carbon Sequestration

Dr. Mohamed Abdelsalam, Professor and Pickens Chair
Research: Structural Geology, Tectonics and Applied Geophysics

Dr. Michael Grammer, Professor and Chesapeake Energy Chair of Petroleum Geology, Director of Petroleum Development
Research: Carbonate Sedimentology and Petroleum Geology

Dr. Jay Gregg, Professor and Monnett Chair of Petroleum Geology
Research: Carbonate Petrology and Sedimentary Geochemistry

Dr. Ashley M. Burkett, Assistant Professor
Research: Micropaleontology, Biostratigraphy, and Biogeochemistry

Dr. Todd Hallahan, Professor
Research: Hydrogeology and Hydrogeophysics

Dr. Brendan Hanger, Teaching Assistant Professor
Research: Mantle and Igneous Petrology, Geoscience Education

Dr. Mary Hileman, Visiting Assistant Professor
Research: Petroleum Geology and Siliciclastic Stratigraphy

Dr. Ahmed Ismail, Assistant Professor
Research: Multicomponent Seismic Exploration, Near-surface Geophysics

Dr. Priyank Jaiswal, Associate Professor
Research: Seismology, Petroleum Geophysics and Gas Hydrates

Dr. James H. Knapp, Professor and Pickens Distinguished Chair of Geoscience
Research: Structural Geology, Tectonics, Geophysics, Petroleum Geology

Dr. Daniel Laó Dávila, Associate Professor
Research: Structural Geology, Fault Analysis and Caribbean Geology

Dr. Jack Pashin, Professor and Devon Chair of Basin Research
Research: Unconventional Reservoirs and Carbon Sinks

Dr. Jim Puckette, Associate Professor
Research: Petroleum Geology and Unconventional Reservoirs

Dr. Tracy Quan, Associate Professor
Research: Isotope Geochemistry and Organic Geochemistry

Dr. Natascha Riedinger, Assistant Professor
Research: Sedimentary Geochemistry, Biogeochemical Processes

Dr. Javier Vilcaez, Assistant Professor
Research: Computational Modeling, Earth Resources and Environment