**Seminar Series:** 

# Produced Water Treatment and Reuse

# Did you know?

The largest volume by-product of oil and gas production is produced water. The average oil well in the U.S. produces over 9 barrels of water per barrel of oil.

Due to the high levels of salts and other contaminants contained by produced water, much of it is currently disposed. With treatment, this water could provide for future needs in the state, but current technologies are either too expensive or ineffective. To address these issues, university researchers across Oklahoma have been working to develop new technologies and treatment methods.

Updates on this research will be the focus of a new seminar series coordinated by the Oklahoma Water Resources Center at OSU, Oklahoma Water Survey at OU, OWRB Produced Water Working Group, and OK NSF EPSCoR program. Beginning in May, researchers from OSU, OU, OSU-Tulsa, and elsewhere will provide overviews of ongoing research and key findings on produced water treatment and reuse.

#### May 14, 2021, 10:00-11:30 a.m.

Hamidreza Shabgard, University of Oklahoma An Innovative Freeze-Desalination Technology for Beneficial Reuse of Oil and Gas Produced Water

Jhouly Osorio, University of Oklahoma

Produced Water Demulsification Using Maghemite Nanoparticles

Babu Fathepure, Oklahoma State University

Bioremediation of Produced Water by Halophilic Microorganisms

#### June 11, 2021, 10:00-11:30 a.m.

Kyle Murray, University of Oklahoma Mark Nanny, University of Oklahoma David Leavitt, Oklahoma State University

## July 9, 2021, 10:00-11:30 a.m.

Prem Bikkina, Oklahoma State University
Christine Watson, Oklahoma State University-Tulsa
Seokhin Kim, Oklahoma State University

## August 13, 2021, 10:00-11:30 a.m.

Tracy Quan, Oklahoma State University
Javier Vilcaez, Oklahoma State University
Stephen Polkowski, Oklahoma State University-Tulsa





