Unconventional shale gas and tight oil plays in the United States currently produce about 65 billion cubic feet per day of natural gas (70% of total U.S. dry gas production) and about 7 million barrels per day of crude oil (60% of total U.S. oil production). In Argentina, Vaca Muerta shale oil production soared 52% and gas production increased by 193% in 2018, as did shale gas production in the Sichuan Basin in China. Despite the success of horizontal drilling and multi-stage hydraulic fracturing in extracting these resources, recovery factors remain stubbornly low (typically less than 10% for tight oil and around 25% for dry gas).

In this context, the Stanford Natural Gas Initiative supports an unconventional reservoirs focus area to conduct research that will address improving recovery and optimizing development in these critically important reservoirs.

**Topics to be Addressed Include:**

1. Reservoir Characterization and Play Delineation
2. Unconventional Reservoir Geomechanics
3. Utilization of Machine Learning and Data Analytics
4. Reservoir Simulation and Physics of Flow
5. Reducing the Risk of Earthquakes Induced by Hydraulic Fracturing

For more information or an invitation to this event, please contact NGI Managing Director Naomi Boness (Naomi.Bones@stanford.edu)
The industrial affiliate program of the Natural Gas Initiative (NGI) is a membership-based consortium that supports and participates in research and other programs of the initiative. Membership is available to all interested companies and other organizations wishing to participate in the open, honest pursuit of knowledge to help deliver on NGI’s goal of maximizing the benefits and minimizing the costs of natural gas production and use.

Membership options range from $35,000/year to $250,000/year. To learn more about supporting NGI or becoming a member of the industrial affiliates program, please contact NGI Managing Director Naomi Boness (Naomi.Boness@stanford.edu)

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