

Stanford | **NATURAL GAS INITIATIVE**
School of Earth, Energy & Environmental Sciences
and Precourt Institute for Energy

NGI Annual Affiliates Meeting and Research Review
18 & 19 October 2018
Tresidder Memorial Union

Stanford map: <https://campus-map.stanford.edu>

DAY 1 – October 18th

- 7:45 Light Breakfast
- 8:30 Welcome and Introduction: **Mark Zoback**, Stanford
- 8:45 Maintaining license to operate for the oil and gas industry: **Mike Ming**
- 9:15 Lifecycle assessment of Alberta natural gas exports to China for power generation and industrial heating: **Adam Brandt**, Stanford
- 9:45 Methane Emissions Session
 - 9:45 Seven Generations upstream LDAR study: **Adam Brandt**, Stanford
 - 10:00 Distribution system and residential methane leaks: **Rob Jackson**, Stanford
 - 10:15 Mobile Monitoring Challenge: **Adam Brandt**, Stanford
- 10:30 Break
- 10:50 Microfabricated gas sensors for continuous monitoring of infrastructure: **Ehsan Sadeghipour** and **Pierre-Alexander Gross**, Stanford
- 11:15 Advanced gas utilization technologies: **Ron Kent**, SoCalGas
- 11:45 Demystifying data science and what it means for engineering natural gas resources: **Jef Caers**, Stanford
- 12:10 Rigid polymer membranes for gas separation: **Holden Lai**, Stanford
- 12:30 Lunch
 - Lunchtime speaker: **Mark Zoback** on Industry Leadership on Climate Change

- 1:40 Unconventional Reservoir Session
- 1:40 Stanford's new Energy Frontier Research Center -- Center for Mechanistic Control of Water-Hydrocarbon-Rock Interactions in Unconventional and Tight Oil Formations: **Tony Kavscek**, Stanford
 - 1:55 Unconventional Reservoir Geomechanics: **Mark Zoback**, Stanford and **others**
 - 2:40 CO2 and unconventional; Hydraulic fracturing and enhanced recovery: **Tony Kavscek**, Stanford & **others**
 - 3:15 Risk quantification, sweet spot identification and completion optimization in the Eagle Ford: **Alex Bakay**, Stanford
- 3:40 Break
- 4:00 Methane Conversion Session
- 4:00 Enzyme-inspired, hybrid materials for methane conversion: **Andrew Riscoe**, Stanford
 - 4:20 Investigation of 2D Confinement Effect on Methane Reforming: **Xiaolin Zheng**, Stanford
 - 4:40 Research talk #3
 - 5:00 Research talk – **Craig Criddle** and/or **Bob Weymouth**, Stanford
- 5:20 Industry presentation: **Simon Bittleston**, Schlumberger
- 6:00 Reception
- 7:30 Reception Concludes

****Day 2 (October 19th) Agenda on Next Page****

DAY 2 – October 19th

7:45 Light Breakfast

8:30 Welcome: **Brad Ritts**, Stanford NGI

8:40 The role of natural gas in the energy transition: providing energy for growth: **Tisha Schuller**, Stanford

9:10 Session on Distributed and Small Scale Energy

9:15 Enabling small-scale LNG import and use: **Ajay Khandelwal**, Chi Energy

9:45 Capturing value from stranded gas: **Chris Orms**, GTUIT

10:05 LPG strategies in Africa: **Fausto Marcigot**, Paygo Energy

10:25 Break

10:50 Natural gas to distributed computing: **Cully Cavness**, Crusoe Energy

11:10 Closing Keynote: LPG for distributed energy: **Kimball Chen**, Global LPG Partnership

11:45 Concluding Remarks and Discussion: **Mark Zoback**, Stanford NGI

12:15 Light Lunch/Lunch To Go

1:30 Governing Board Informal Meeting