

# Juanes Research Group AGU 2019 Itinerary

**Monday, 9 December 2019**

**08:00 - 12:20**

MR11C-0048 Assessing the Potential for CO<sub>2</sub> Migration along Fault Zones during Geologic Carbon Storage: A Computational Model of Offshore-Texas Sedimentary Formations

*Luis Salo*

*Moscone South - Poster Hall*

**10:20 - 12:20**

U12C-14 Motile Bacteria in Viscous Fingering Flows

*Jane Chui*

(Invited)

*Moscone South - eLightning Theater II*

**13:40 - 18:00**

Comprehensive comparison of pore-scale models for multiphase flow in porous media

*Benzhong Zhao*

*Moscone South - Poster Hall*

**13:55 - 14:10**

MR13A-02 Modeling CO<sub>2</sub> Storage in a Gulf of Mexico Reservoir Using Coupled Flow and Geomechanics

*Josimar Alves da Silva Junior*

*Moscone South - 152, Upper Mezz.*

**Tuesday, 10 December 2019**

**10:35 - 10:50**

S22B-02 Experimental Study on the Seismic Behavior of Fault Gouge under Large Shear Strain

*Wei Li*

*Moscone South - 159, Upper Mezz.*

## **Wednesday, 11 December 2019**

**08:00 - 12:20**

Impact of fault permeability on the nucleation, mode-of-rupture and magnitude of injection-induced earthquakes

*David Santillán*

*Moscone South - Poster Hall*

**13:40 - 18:00**

Extending Lenormand's diagram to arbitrary wettability: a "moving capacitor" dynamic pore-network model and microfluidic experiments

*Bauyrzhan Primkulov*

*Moscone South - Poster Hall*

Roughness-induced Residual Fluid Redistribution in Fractured Media

*Yu Qiu*

*Moscone South - Poster Hall*

**15:10 - 15:25**

T33A-07 Understanding Rate Effects in Injection-induced Seismicity

*Maryam Alghannam*

*Moscone South - 157, Upper Mezz.*

## **Thursday, 12 December 2019**

**08:00 - 12:20**

Harvesting Elastic Potential from Interfacial Energy

*Shengyu Zhang*

*Moscone South - Poster Hall*

OS41B-1654 Xenon Hydrate as an Analog of Methane Hydrate in Geologic Systems Out of Thermodynamic Equilibrium

*Xiaojing Fu*

*Moscone South - Poster Hall*

**08:15 - 08:30**

H41E-02 Bubble Breathing during Dissolution in Partially Wetting Pores

*Ke Xu*

*Moscone West - 3018, L3*

**09:15 - 09:30**

H41E-06 Three-dimensional simulation of two-phase multicomponent displacements at the pore scale

*Luis Cueto-Felgueroso*

*Moscone West - 3018, L3*

**10:50 - 11:05**

H42E-03 Impact of Wettability on Multiphase Flow and Granular Mechanics: Experiments, Modeling and Theory

*Ruben Juanes*

(Invited)

*Moscone West - 3018, L3*

**11:35 - 11:50**

H42E-06 DEM Modeling of Coupled Multiphase Flow and Granular Mechanics: Wettability Control on Fracture Patterns

*Yue Meng*

*Moscone West - 3018, L3*

**Friday, 13 December 2019**

**09:45 - 10:00**

H51E-07 An experimental study of gravity fingering during water infiltration coupled to evaporation in a 3D porous medium

*Rebecca Liyanage*

*Moscone West - 3018, L3*

**13:40 - 18:00**

H53N-2001 Impact of Gravity Fingering on Deep Drainage in Arid Environments

*Ruben Juanes*

*Moscone South - Poster Hall*

**13:55 - 14:10**

H53D-02 Mixing Dynamics during Radial Viscous Fingering

*Jane Chui*

*Moscone West - 3018, L3*

**17:30 - 17:45**

S54A-07 A deep-learning framework for inference in geomechanics

*Ehsan Haghighat*

*Moscone South - 158, Upper Mezz.*