

## Meeting Highlights

- Permian Basin – Delaware and Midland Basin pore systems, organic matter characterization, biomarker studies, and facies architecture
- Eagle Ford and Austin Chalk basin modeling and facies architecture
- Gas, water, and oil permeabilities, liquid slip flow and wettability
- Haynesville shale gas studies

**RSVP Here**

## Meeting Agenda

Breakfast and Introductions 7:30 – 8:00am

### Day 1: Thursday, April 13<sup>th</sup>, 8:00 AM – 2:30 PM Technical Session

VR room – Bureau of Economic Geology

#### Technical presentations I - Reservoir Architecture and Attributes in the Permian Basin

- 8:00 – 8:30 Upscaling high-resolution core-based facies to subsurface basin-scale stratigraphic models for Wolfcamp A and B, and Third Bone Spring Sand, Delaware Basin - *Toti Larson*
- 8:45 – 9:15 Comparison of Wolfcamp A and B and Third Bone Spring Sand facies from northern Reeves to Pecos Counties, Delaware Basin - *Lucy Ko, Toti Larson*
- 9:30 – 10:00 Implication of pore size distributions measured from N<sub>2</sub> adsorption on fluid saturation in Wolfcamp A and B from Eddy, Reeves, and Pecos Counties, Delaware Basin – *Tongwei Zhang*
- 10:15 – 10:45 Pore system characterization including SEM imaging and MICP measurements from laminated siltstones in the Third Bone Spring Sand, Delaware Basin – *Rob Reed, Toti Larson, and James Greene*
- 11:00 – 11:45 Applying biomarkers in organic source and depositional condition of Wolfcamp A and B, Delaware Basin – *Xun Sun*
- 11:45 – 12:00 Recap and discussion of the Delaware basin project
- 12:00 – 1:00pm Lunch
- 1:00 – 1:30 Facies characterization of Wolfcamp D along a transect from the Eastern Shelf to the Midland Basin – *Toti Larson and Rob Reed*
- 1:30 – 2:00 Thermal maturity and organic-rich net and gross thickness of the Wolfcamp D (Cline Shale) across the Midland Basin – *Lucy Ko and Toti Larson*
- 2:00 – 2:30 Organic matter source type and thermal maturity in the Spraberry Formation, Midland Basin – *Tongwei Zhang*

**Core workshop** - Permian Basin cores that include Woodford, Barnett, and Wolfcamp D intervals. Eagle Ford Group core from Dewitt County highlighting East Texas Eagle Ford Facies.

2:45 – 4:30 Core workshop - Bevo Viewing Room, BE3 PRC206

Core 1: Reliance Triple Crown (RTC), API: 42371377900000, Pecos County

Woodford and Barnett Shale (Depths 12,345' – 12,622' and 12,730' – 13,100')

Core 2: Pan Am Paul Walker #1, API: 420792002200, Cochran County

Woodford (Depths: 11,650' -11,685')

Core 3: Adoue 1H, API: 42335357390000, Mitchel County

Wolfcamp D (Depths 7135' – 7423')

Core 4: Powell EL 1, API: 42173102040000, Glasscock County

Wolfcamp D (Depths 9600' – 9725')

Core 5: Medina, API: 42123338730000, Dewitt County

Eagle Ford Group (Depths 12,453 – 12,694')

### **Happy Hour and Posters**

4:30 – 6:30pm - Stoneburner Family Rock Garden

Poster 1: Pore systems and SEM lithology of the Wolfcamp D (Cline) from the Midland Basin – *Rob Reed*

Poster 2: Shale wettability and implications on EOR – *Sheng Peng*

Poster 3: Revisiting the Haynesville Formation. Geologic controls on shale gas production

Poster 4: Pore imaging with Atomic Force Microscopy – *Priyanka Periwal*

Poster 5: Midland basin produced oil geochemistry – *Tongwei Zhang, Xun Sun*

Poster 6: New high pressure and high temperature gas adsorption system – *Tongwei Zhang, Xiaoqiang Li*

### **Day 2: Friday, April 14<sup>th</sup>, 8:00 AM – 2:30 PM Technical Session**

VR room – Bureau of Economic Geology

#### **Technical presentations II - Fluid flow and permeability in mudrock systems**

8:00 – 8:30 Liquid slip flow and nanoconfinement effect on viscosity in shale – *Sheng Peng*

8:45 – 9:15 Liquid permeability in shale and comparison with gas permeability – *Sheng Peng*

9:30 – 10:15 Water and oil flow and CO<sub>2</sub> EOR in shale – *Sheng Peng*

10:15 – 10:45 Revisiting the Barnett Shale in the Fort Worth Basin, Wise and Denton Co., Texas: lithofacies, porosity, and permeability variation from condensate to dry gas window – *Lucy Ko and Sheng Peng*

#### **Technical presentations III – Eagle Ford and Austin Chalk Reservoir Architecture and Attributes**

- 11:00 – 11:30 Austin Chalk – Rock facies distributions modeled from core to wireline integrations across the Maverick Basin to Webb County – *Toti Larson*
- 11:30 – 12:00 Eagle Ford Group – Dewitt County. East Texas influence on Lower Eagle Ford Group facies – *Evan Sivil*
- 12:00 – 1:00pm Lunch and Discussion
- 1:00 – 1:30 Organic geochemistry parameter-refined basin modeling of Eagle Ford Group, South Texas – *Xun Sun*
- 1:30 – 2:00pm Revisiting the Haynesville Formation. Geologic controls on shale gas production – *MSRL research team*
- 2:00 – 2:30pm Gas geochemistry and thermal maturity of the Haynesville Formation – *Tongwei Zhang*
- 2:30 – Meeting adjourns**

**Field Trip** - Saturday, April 15<sup>th</sup>, 8am – 1pm Eagle Ford Group field trip. Outcrops in Austin, TX