Agenda for Annual Meeting of MSRL
April 1-4, 2019
Austin, Texas

Core Workshop

Monday, April 1, 8:30 AM – 3:30 PM

Tentative Core list
Barnett (Mississippian) Ft. Worth Basin: Ko
Bone Spring (Leonardian), Delaware Basin: Loucks et al
Wolfcamp, Delaware Basin: Ruppel
Wolfcamp, Delaware Basin: Janson
Wolfberry, Midland Basin: Hamlin
Tuscaloosa Fm. (upper Cretaceous), Louisiana: Loucks et al
Eagle Ford (upper Cretaceous), South Texas Shelf: Larson

Oral Presentations:

Tuesday, April 2, 8:00 AM – 3:00 PM

Regional Stratigraphy

- 3D modeling of the Delaware and Midland Basins: Dommisse
- Sequence stratigraphy and facies architecture of the Wolfcamp in the Delaware Basin: Ruppel
- Defining platform to basin sediment pathways in the Delaware Basin: Janson
- Integrated 3D geomodel for the Eagle Ford Shale: Dommisse

Reservoir Architecture and Attributes

- Quartz in siliciclastic mudstones—micro-authigenic versus silty textures and their possible influence on rock brittleness: Examples from the Barnett, Woodford and Wolfcamp Shales: Reed
- Defining facies and facies architecture in the Wolfcamp of the Delaware Basin: an integrated approach: Hamlin, Ruppel, Dommisse
- Eagle Ford core chemostratigraphy. Integrating large geochemical datasets with statistical methods: Larson
- Lithofacies characterization of the Wolfcamp in the Delaware Basin: Larson
- Introduction to the micropetrography of the Austin Chalk; Texas-Mexican border to central Louisiana: Loucks
- Louisiana Austin Chalk characterization based on core analysis: Loucks et al.

Pores, Porosity, Permeability

- Preliminary Pore Systems and SEM Lithology from the Permian Wolfcamp Shale from the Delaware Basin, Texas: Reed
- A Semi-analytic solution for temporal pressure and production rate in a shale reservoir with non-uniform distribution of induced fractures: Javadpour
- Dynamic porosity and apparent permeability in porous organic matter: Javadpour
- Relative permeability for mudrock: direct laboratory measurement and implications: Peng
- Using digital techniques to define three-dimensional and anisotropic permeability in the Eagle Ford: Javadpour

**Hydrocarbon chemistry**
- Organic geochemical characterization of source difference between Wolfcamp A and B Units, Midland Basin: Sun
- Evidence for episodic oil expulsion in Wolfcamp shale, Midland Basin: insight of hydrocarbon composition changes: Sun
- Chemical and carbon isotopic gas compositions from the Wolfcamp in Midland Basin and their significance as geochemical tracers for well completion: Zhang
- Defining pore size distributions and oil storage mechanism by N$_2$ adsorption in the Midland Basin Wolfcamp: Zhang

**Poster Presentations**
- Refining XRF Lithofacies with SEM Analysis for the Permian Wolfcamp Shale from the Delaware Basin, Texas: Reed
- Bridging the gap between molecular- and macro-scale water flow in nanotubes: Zhang and Javadpour
- Multi-scale multi-modal imaging for complete characterization of pore systems in unconventional reservoir rocks: TBA (FEI)
- Tracer-guided dominant pore network characterization: Peng
- Effect of pore fluids on methane adsorption in organic-rich Lower Bakken mudrocks: Zhang
- Eagle Ford Shale – a compartmentalized reservoir? insights from a noble gas study: Larson
- Core characterization work flow. Developing internally consistent geochemical databases: Sivil
- Advanced X-ray fluorescence techniques: Integrating XRF data from multiple scales: Knapp (Bruker)

**Thursday, April 4, 8:00 AM – 5:00 PM**

**Title:** Mudrock systems: attribute characterization, porosity, permeability, and fluid flow

**Instructors**
- Dr. Lucy Ko
- Dr. Toti Larson
- Dr. Bob Loucks
- Dr. Farzam Javadpour
- Dr. Sheng Peng
- Dr. Steve Ruppel