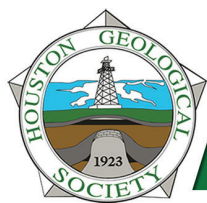


Applied Geoscience Conference

November 8–9, 2017

Oral Presentations – Wednesday, November 8, 2017

7:00	Registration and Coffee	
8:00 - 8:10	Welcome and Opening Remarks: Robert Hurt, <i>Pioneer Natural Resources</i> ; Umesh Prasad, <i>Baker Hughes, a GE company</i> ; John Adamick, <i>TGS, HGS President 2017-2018</i> ; Ron Hayden, <i>SWN Vice President of Technology</i>	
Session 1: Geomechanical Characterization Chairs: Shihong Chi, <i>ION E&P Advisors</i> ; Farid Reza Mohamed, <i>Schlumberger</i>		
8:10 - 8:45	A Novel Geomechanical Characterization Methodology for Quantifying Fine Scale Heterogeneity	Jesse Hampton, <i>New England Research</i>
8:45 - 9:20	Brittleness and Fracability in Stimulating Shale Reservoirs	Mao Bai, <i>Independent Geomechanics Consultant</i>
9:20 - 9:40	Coffee, Posters, Exhibits	
9:40 - 10:15	The Relationship between Natural Fracture Distribution and Elastic Mechanical Properties in the Subsurface: Measurement and Calibration	Ron Nelson, <i>Broken N Consulting, Inc.</i>
10:15 - 10:50	A Novel Way to Characterize Biot’s Coefficient in Unconventionals	Munir Aldin, <i>MetaRock Laboratories</i>
10:55 - 11:55	Open Floor Discussion & Posters	
11:55 - 1:00	Lunch, Posters, Exhibits	
12:15 - 1:00	Keynote: What Maintains High Pore Pressure in Gas Shale During Exhumation, Long After Thermal Maturation Ceases?	Terry Engelder, <i>The Pennsylvania State University</i>
Session 2: Engineering Applications Chairs: See Hong Ong, <i>Baker Hughes, a GE company</i> ; Cem Ozan, <i>BHP Petroleum</i>		
1:05 - 1:40	Complex Fracture Network Creation in Stimulation of Uncoventional Reservoirs	Ahmad Ghassemi, <i>The University of Oklahoma</i>
1:40 - 2:15	Hydraulic Stimulation in the Presence of Fractures	Tobias Hoeink, <i>Baker Hughes, a GE company</i>
2:15 - 2:35	Coffee, Posters, Exhibits	
2:35 - 3:10	Holistic Approach to Geologic and Geomechanical Modeling in Unconventional Reservoirs PART 1	Ewerton Araujo, Sebastian Bayer, Marcus Wunderle, <i>BHP Petroleum</i>
3:10 - 3:45	A Holistic Approach to Geologic and Geomechanical Modeling in Unconventional Reservoirs PART 2	Ewerton Araujo, Sebastian Bayer, Marcus Wunderle, <i>BHP Petroleum</i>
3:45 - 4:45	Open Floor Discussion & Posters	
5:00 - 8:00	Social Hour	



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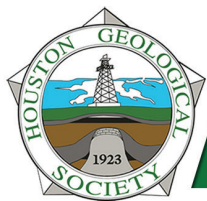
November 8–9, 2017

Oral Presentations – Thursday, November 9, 2017

7:00	Registration and Coffee	
8:00 - 8:10	Welcome and Opening Remarks: Robert Hurt, <i>Pioneer Natural Resources</i> ; Umesh Prasad, <i>Baker Hughes, a GE company</i> ; John Adamick, <i>TGS, HGS President 2017-2018</i>	
Session 3: Surveillance and Diagnostics Chairs: Robert Hurt, <i>Pioneer Natural Resources</i> ; Kim Hlava, <i>Statoil</i>		
8:10 - 8:45	Validating Completion Design Using Monitoring of Offset Wells	Erica Coenen, <i>Reveal Technologies</i>
8:45 - 9:20	DAS Microseismic Monitoring and Integration with Strain Measurements in Hydraulic Fracture Profiling	Dan Kahn, <i>Devon Energy</i>
9:20 - 9:40	Coffee, Posters, Exhibits	
9:40 - 10:15	Focal Mechanism Solutions of Microseismic Events from Hydraulic Fracture Monitoring: A Case Study of the Eagle Ford Shale	Rongmao Zhou, <i>BHP Petroleum</i>
10:15 - 10:50	Integration of DAS Fiber-Based Strain and Microseismic Data for Monitoring Horizontal Hydraulic Stimulations – Midland Basin Texas Examples	Rob Hull, <i>Pioneer Natural Resources</i>
10:55 - 11:55	Open Floor Discussion & Posters	
11:55 - 1:00	Lunch, Posters, Exhibits	
12:15 - 1:00	Keynote: Optimized Recovery from Unconventional Reservoirs: How Nanophysics, the Micro-Crack Debate, and Complex Fracture Geometry Impact Operations	Lans Taylor, <i>Energy and Geoscience Institute (EGI) at the University of Utah</i>
Session 4: Case Studies Chairs: Joel Walls, <i>Ingrain, a Halliburton service</i> ; BJ Davis, <i>Baker Hughes a GE company</i>		
1:05 - 1:40	Quantifying the Impact of Induced Asymmetric Fracturing from Horizontal Development Wellbores; a Geostatistical Perspective	Doug Walser, <i>Halliburton</i>
1:40 - 2:15	Efficient Well Delivery in Shale Plays – Examples from the Marcellus and Permian	Julie Kowan, <i>J. Kowan Consulting, LLC</i>
2:15 - 2:35	Coffee, Posters, Exhibits	
2:35 - 3:10	Characterization of Fractures from Borehole Images	Sandeep Mukherjee, <i>Halliburton</i>
3:10 - 3:45	Lateral Characterization and Fracture Optimization Solution with Case Studies	Sergey Kotov, <i>Baker Hughes, a GE company</i>
3:45 - 4:45	Open Floor Discussion & Posters	
Closing Comments and Invitation to Posters		

Poster Session

Invited Presentations from Graduate Students • Open during Coffee and Lunch Breaks



Applied Geoscience Conference

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Posters – November 8-9, 2017

Poster Session Chair: Mike Effler		
University	Student Name	Poster Topic
Georgia Institute of Technology	Ming Lui and Haiying Huang	A Poroelastic Solution of Rigid Sphere Indentation into a Compressible Half-Space
Texas A&M University	Anusarn Sangnimnuan and Jiawei Li, Kan Wu	Development of an Efficient Coupled Fluid Flow and Geomechanics Model to Predict Stress Evolution in Unconventional Reservoirs with Complex Fracture Geometry
Texas A&M University	Arash Shadravan and Behrouz Haghgouyan	Geomechanical Cement Sheath Finite Element Modeling to Achieve Enhanced Zonal Isolation
Texas A&M University	Edith Sotelo Gamboa and Richard L. Gibson	Fracture Compliance: Relationship with Fracture Conductivity and effect on Wave Propagation
Texas A&M University	Guangjian Xu , Judith Chester and Fred Chester	Developing a Mechanical Stratigraphic Model of the Eagle Ford Formation
The University of Oklahoma	Ishank Gupta , Carl Sondergeld and Chandra Rai	Water Weakening: Case Study from Marcellus, Woodford and Eagle Ford
The University of Oklahoma	Alex Vachaparampil and Ahmad Ghassemi	Failure Characteristics of Three Shales under True-Triaxial Compression
The University of Oklahoma	Zhi Ye and Ahmad Ghassemi	Mechanical Properties and Permeability Evolution of Shale Fractures under Triaxial Loading
The University of Texas	Matthew Ramos , D.N. Espinoza, C.I. Torres-Verdín, K.T. Spikes and S.E. Laubach	Stress-Dependent Dynamic-Static Transforms of Anisotropic Mancos Shale
University of Calgary	Bram Komaromi , Dr. Per Kent Pedersen and Dr. Paul MacKay	Facies-Controlled Fracture Stratigraphy in Organic-Rich Petroleum Systems, Turonian Second White Specks Formation, Southwestern Alberta
University of Houston	Ismot Jahan , John Castagna, and Michael Murphy	Characterization of Faults Using Seismic Attributes From 3D Seismic Data in the Bakken Formation
University of Houston	Ali Rezaei	Effect of Pore Pressure Depletion on Horizontal Stresses and Propagation of New Fractures during Refracturing Process

Participating Schools

Georgia Institute of Technology • Texas A&M University

The University of Oklahoma • The University of Texas

University of Calgary • University of Houston

Open During Coffee and Lunch Breaks