

Symposium Program

50th U.S. Rock Mechanics / Geomechanics Symposium
26 - 29 June, 2016, Houston, Texas

1 of 8

Friday, 24 June 2016	
TIME	EVENT
7:30 am - 10:00 am	<p style="text-align: center;"><i>Registration--West Alabama Foyer</i></p> <p style="text-align: center;">7:30 am - 8:00 am Pre-registered packet pick-up and onsite registration for Friday's workshops only 8:00 am - 10:00 am Pre-registration packet pickup and onsite registration</p>
8:00 am - 4:00 pm	<p style="text-align: center;"><i>Workshop 1--Plaza I</i></p> <p style="text-align: center;">ARMA/AAPG SedHeat Workshop on Successful Engineering of Sedimentary Geothermal Systems</p>
8:00 am - 4:00 pm	<p style="text-align: center;"><i>Workshop 2--Plaza II</i></p> <p style="text-align: center;">Workshop on Hydraulic Fracturing</p>
Saturday, 25 June 2016	
TIME	EVENT
7:30 am - 10:00 am	<p style="text-align: center;"><i>Registration--West Alabama Foyer</i></p> <p style="text-align: center;">7:30 am - 8:00 am Pre-registered packet pick-up and onsite registration for Saturday's workshop, short courses and technical tour only 8:00 am - 10:00 am Pre-registration packet pickup and onsite registration</p>
8:00 am - 4:00 pm	<p style="text-align: center;"><i>Workshop 1--Plaza II</i></p> <p style="text-align: center;">ARMA/AAPG SedHeat Workshop on Successful Engineering of Sedimentary Geothermal Systems (Cont)</p>
8:30 am - 5:15 pm	<p style="text-align: center;"><i>Workshop 3--Westchester</i></p> <p style="text-align: center;">Workshop on Geomechanics in Unconventionals for Asset Teams</p>
8:30 am - 5:00 pm	<p style="text-align: center;"><i>Short Course 1--Kirby</i></p> <p style="text-align: center;">Shale Gas GeoEngineering</p>
9:00 am - 5:00 pm	<p style="text-align: center;"><i>Technical Tour 1--Meet in Hotel Lobby (Street Level)</i></p> <p style="text-align: center;">Introduction to Oil Well Drilling and Visit to Ocean Star Offshore Drilling Rig & Museum</p>
12:30 pm - 6:00 pm	<p style="text-align: center;"><i>Workshop 4--Sage</i></p> <p style="text-align: center;">How Laboratory Geomechanics Testing Adds Value to Exploration and Production</p>

Symposium Program

50th U.S. Rock Mechanics / Geomechanics Symposium
26 - 29 June, 2016, Houston, Texas

2 of 8

Sunday, 26 June 2016	
TIME	EVENT
7:30 am - 9:00 pm	<p><i>Registration and Speakers Ready Room--West Alabama Foyer (Morning) & Galleria Foyer (Afternoon)</i></p> <p>7:30 am - 8:00 am Pre-registered packet pick-up and onsite registration for Sunday's workshop, short courses and technical tour only</p> <p>8:00 am - 9:00 pm Pre-registration packet pickup and onsite registration</p> <p><i>Delegate Bags Sponsored by Itasca Consulting Group, Inc.</i></p>
8:00 am - 5:30 pm	<p><i>Workshop 5--Westchester</i></p> <p>Workshop on Microseismic Geomechanics from Laboratory to Field Scale Across All Industries</p>
8:30 am - 5:00 pm	<p><i>Short Course 1--Kirby</i></p> <p>Shale Gas GeoEngineering (Cont.)</p>
8:30 am - 4:30 pm	<p><i>Short Course 2--Richmond</i></p> <p>Modeling of Coupled Hydro-Mechanical Deformation and Fracturing Processes in Geomechanics</p>
8:30 am - 4:00 pm	<p><i>ARMA Board of Directors Meeting--River Oaks</i></p>
10:00 am - 3:00 pm	<p><i>Special Activity 1--Meet in Hotel Lobby (Street Level)</i></p> <p>Johnson Space Center</p>
2:00 pm - 5:00 pm	<p><i>Exhibit Set Up--Galleria Foyer & Woodway Foyer</i></p>
3:00 pm - 5:00 pm	<p><i>Workshop 7--San Felipe</i></p> <p>ARMA Future Leaders/Students Open Discussion: "What's Your Problem?"</p>
4:00 pm - 5:00 pm	<p><i>Meeting of the Houston 2016 Organizing Committee--Bellaire</i></p>
4:00 pm - 5:00 pm	<p><i>ISRM Petroleum Geomechanics Commission Meeting--Sage</i></p>
5:00 pm - 5:45 pm	<p><i>Meeting of Symposium Student Assistants--Post Oak</i></p>
6:00 pm - 6:15 pm	<p><i>Opening Session--Galleria Ballroom</i></p>
6:15 pm - 6:30 pm	<p><i>Special Address--Galleria Ballroom</i></p> <p>Charles Fairhurst, Itasca Consulting Group, Inc., "Engineering in Fractured Rocks: Report on a NSF Symposium"</p>
6:30 pm - 7:15 pm	<p><i>MTS Lecture--Galleria Ballroom</i></p> <p>Peter Kaiser, Laurentian University</p>
7:15 pm - 9:00 pm	<p><i>Opening Reception and Exhibits--Galleria Foyer & Woodway Foyer</i></p> <p><i>Lecture and Reception Sponsored by MTS Systems Corporation</i></p>

Symposium Program
50th U.S. Rock Mechanics / Geomechanics Symposium
26 - 29 June, 2016, Houston, Texas

3 of 8

Monday, 27 June 2016				
TIME	EVENT			
7:00 am - 6:45 pm	Pre-registration packet pickup, onsite registration and Speakers Ready Room--Galleria Foyer <i>Delegate Lanyards Sponsored by Rocscience</i>			
7:00 am - 7:50 am	Speaker's Breakfast--Monarch Room (24th Floor)			
	Track A - Mining & Civil	Track B - Fracturing and Fractures	Track C - Petroleum	Track D - Interdisciplinary
8:00 am - 9:30 am	Technical Session 1-Galleria III	Technical Session 7-Woodway II	Technical Session 11-Woodway III	Technical Session 15-Woodway I
	<i>Geomechanics in Geothermal Processes 1</i>	<i>Modeling Rock Mass Fracturing Processes</i>	<i>Sand Control and Management</i>	<i>Laboratory and Field Measurements - Methods</i>
8:30 am - 4:30 pm	Exhibits Open--Galleria Foyer & Woodway Foyer			
9:30 am - 10:00 am	Coffee Break, Exhibits--Galleria Foyer & Woodway Foyer <i>Sponsored by Golder Associates</i>			
10:00 am - 10:50 am	Keynote Address--Galleria Ballroom Jean-Claude Roegiers, University of Oklahoma			
11:00 am - 12:30 pm	Technical Session 2-Galleria III	Technical Session 8-Woodway II	Technical Session 12-Woodway III	Technical Session 16-Woodway I
	<i>Geomechanics in Geothermal Processes 2</i>	<i>Fracture Mechanics - Physics and Models</i>	<i>Drilling Geomechanics 1</i>	<i>Geology in Geomechanics</i>
12:30 pm - 2:00 pm	Exhibitor Grab and Go Box Lunch <i>Grab a box lunch and go visit our exhibitors</i>			
12:30 pm - 2:00 pm	Lunch Meeting of the ARMA Publications Committee--San Felipe			
12:30 pm - 2:00 pm	Lunch Meeting of the ARMA Website Committee--Kirby			
1:00 pm - 2:00 pm	ASCE Rock Mechanics Committee Meeting--Richmond			
1:00 pm - 4:30 pm	Special Activity 2--Meet in Hotel Lobby (Street Level) Museum of Natural Science/Museum of Fine Arts			
continued next page				

Symposium Program

50th U.S. Rock Mechanics / Geomechanics Symposium
26 - 29 June, 2016, Houston, Texas

4 of 8

Monday, 27 June 2016 (Continued)				
TIME	EVENT			
	Track A - Mining & Civil	Track B - Fracturing and Fractures	Track C - Petroleum	Track D - Interdisciplinary
2:00 pm - 3:30 pm	Technical Session 3-Galleria III	Technical Session 9-Woodway II	Technical Session 13-Woodway III	Technical Session 17-Woodway I
	<i>Rock Excavation, Breaking, Dynamic Loading</i>	<i>Rock Mass, Fault Zone, and Fractured Rock Characterization 1</i>	<i>Subsurface Stress Modification</i>	<i>Coupled Processes - Flow and Thermal Responses</i>
3:30 pm - 4:30 pm	Technical Session 4 and 5: Civil and Interdisciplinary Posters--Galleria Foyer & Woodway Foyer Coffee Break, Exhibits Sponsored by MetaRock Laboratories Ballroom Foyer			
4:30 pm - 6:00 pm	Technical Session 6-Galleria III	Technical Session 10-Woodway II	Technical Session 14-Woodway III	Technical Session 18-Woodway I
	<i>Coal Mining Ground Control</i>	<i>Fracture Modeling - Initiation and Propagation</i>	<i>In Situ Stress and Pore Pressure</i>	<i>Numerical Modeling of Salt and Soft Rock</i>
7:00 pm - 9:30 pm	Texas Barbeque & Lab Tour--Meet in Hotel Lobby (Street Level) Sponsored by MetaRock Laboratories			
7:30 pm - 9:45 pm	ARMA Fellows Dinner--Houston Club			

Symposium Program

50th U .S. Rock Mechanics / Geomechanics Symposium
26 - 29 June, 2016, Houston, Texas

5 of 8

Tuesday, 28 June 2016				
TIME	EVENT			
7:00 am - 6:30 pm	Pre-registration packet pickup, onsite registration and Speakers Ready Room--Galleria Foyer <i>Symposium Proceedings Sponsored by MetaRock Laboratories</i>			
7:00 am - 7:50 am	Speaker's Breakfast--Monarch Room (24th Floor)			
	Track A - Mining & Civil	Track B - Fracturing and Fractures	Track C - Petroleum	Track D - Interdisciplinary
8:00 am - 9:30 am	Technical Session 19-Galleria III	Technical Session 25-Woodway II	Technical Session 29-Woodway III	Technical Session 33-Woodway I
	<i>Slope Stability, Foundations, and Dams</i>	<i>Hydraulic Fracturing Case Studies</i>	<i>Near-wellbore Processes 1</i>	<i>Geophysics in Geomechanics</i>
8:30 am - 4:30 pm	Exhibits Open--Galleria Foyer & Woodway Foyer			
9:30 am - 10:00 am	Coffee Break, Exhibits--Galleria Foyer & Woodway Foyer <i>Sponsored by Golder Associates</i>			
10:00 am - 12:00 noon	Special Activity 3--Meet in Hotel Lobby (Street Level) Houston City Double Decker Bus Tour			
10:00 am - 10:50 am	First ARMA Distinguished Lecture--Galleria Ballroom Richard Goodman, Univ Calif, Berkeley (Emeritus), "Comments and Observations on the Analysis of Discontinuous Rock Masses in Rock Engineering"			
11:00 am - 12:30 pm	Technical Session 20-Galleria III	Technical Session 26-Woodway II	Technical Session 30-Woodway III	Technical Session 34-Woodway I
	<i>Numerical Modeling in Mining</i>	<i>Fracture Mechanics - Diagnostics and Measurement</i>	<i>Integrated Reservoir Geomechanics 1</i>	<i>Laboratory and Field Measurements - Analysis</i>
12:30 pm - 2:00 pm	Lunch on your own			
12:30 pm - 2:00 pm	Lunch Meeting of the ARMA Future Leaders--San Felipe Guest Speaker: Ali Daneshy, "Stress-Related Geomechanical Challenges in Hydraulic Fracturing"			
2:00 pm - 3:30 pm	Technical Session 21-Galleria III	Technical Session 27-Woodway II	Technical Session 31-Woodway III	Technical Session 35-Woodway I
	<i>Slope Stability in Mines</i>	<i>Rock Heterogeneity Across Length Scales</i>	<i>Drilling Geomechanics 2</i>	<i>Hazards, Risks, and Induced Seismicity</i>
continued next page				

Symposium Program
50th U.S. Rock Mechanics / Geomechanics Symposium
26 - 29 June, 2016, Houston, Texas

6 of 8

Tuesday, 28 June 2016 (Continued)				
TIME	EVENT			
3:30 pm - 4:30 pm	<i>Technical Sessions 22 and 23: Mining and Petroleum Posters--Galleria Foyer & Woodway Foyer</i> <i>Coffee Break, Exhibits</i> <i>Ballroom Foyer</i>			
	Track A - Mining & Civil	Track B - Fracturing and Fractures	Track C - Petroleum	Track D - Interdisciplinary
4:30 pm - 6:00 pm	Technical Session 24-Galleria III	Technical Session 28-Woodway II	Technical Session 32-Woodway III	Technical Session 36-Woodway I
	<i>Numerical/ Analytical/DEM Modeling in Geomechanics</i>	<i>DFN Fracture Characterization</i>	<i>Waste Disposal and CO2 Sequestration</i>	<i>Coupled Processes: Chemical/Thermal/Biologic Influences on Geomechanics</i>
4:30 pm - 5:30 pm	<i>Meeting of the ARMA Technical Committee Chairs--Westchester</i>			
6:30 pm - 7:20 pm	<i>Student Career Reception--Monarch Room (24th Floor)</i>			
7:30 pm - 9:30 pm	ARMA Awards Banquet--Galleria Ballroom <i>Sponsored by Agapito Associates, Inc.</i>			

Symposium Program
50th U.S. Rock Mechanics / Geomechanics Symposium
26 - 29 June, 2016, Houston, Texas

7 of 8

Wednesday, 29 June 2016				
TIME	EVENT			
7:00 am - 2:00 pm	Pre-registration packet pickup, onsite registration and Speakers Ready Room--Galleria Foyer			
7:00 am - 7:50 am	Speaker's Breakfast--Monarch Room (24th Floor)			
	Track A - Mining & Civil	Track B - Fracturing and Fractures	Track C - Petroleum	Track D - Interdisciplinary
8:00 am - 9:30 am	Technical Session 37-Galleria III	Technical Session 41-Woodway II	Technical Session 45-Woodway III	Technical Session 49-Woodway I
	<i>Mining Geomechanics</i>	<i>Fracture Mechanics - Fluid and Proppant</i>	<i>Near-wellbore Processes 2</i>	<i>Induced/Triggered Seismicity</i>
9:30 am - 10:00 am	Coffee Break--Galleria Foyer & Woodway Foyer <i>Sponsored by Golder Associates</i>			
10:00 am - 10:50 am	Keynote Address--Galleria Ballroom William Ellsworth, Stanford University			
11:00 am - 12:30 pm	Technical Session 38-Galleria III	Technical Session 42-Woodway II	Technical Session 46-Woodway III	Technical Session 50-Woodway I
	<i>Computational Advances in Geomechanics</i>	<i>Interaction of Induced and Natural Fractures</i>	<i>Numerical Modeling in Petroleum Geomechanics</i>	<i>Laboratory and Field Measurements -Results</i>
12:30 pm - 2:00 pm	Lunch on your own			
12:30 pm - 2:00 pm	Lunch Meeting of the Houston 2016/SF 2017 Organizing Committees--Sage			
2:00 pm - 3:30 pm	Technical Session 39-Galleria III	Technical Session 43-Woodway II	Technical Session 47-Woodway III	Technical Session 51-Woodway I
	<i>Underground Storage and Structures</i>	<i>Fracturing and Brittleness</i>	<i>Depletion Induced Surface Subsidence</i>	<i>Subsurface Integrity</i>
3:30 pm - 4:00 pm	Coffee Break--Galleria Foyer & Woodway Foyer			
4:00 pm - 5:30 pm	Technical Session 40-Galleria III	Technical Session 44-Woodway II	Technical Session 48-Woodway III	Technical Session 52-Woodway I
	<i>Rock Properties for Underground Excavation</i>	<i>Rock Mass, Fault Zone, and Fractured Rock Characterization 2</i>	<i>Integrated Reservoir Geomechanics 2</i>	<i>Coupled Processes - Mechanical Responses</i>
5:30 pm - 5:45 pm	Closing Session--Galleria Ballroom			

Symposium Program

50th U.S. Rock Mechanics / Geomechanics Symposium
26 - 29 June, 2016, Houston, Texas

8 of 8

Thursday, 30 June 2016	
TIME	EVENT
8:00 am- 6:00 pm	<i>Technical Tour 3--Meet in Hotel Lobby (Street Level)</i> Spindletop