

2012 AADE FLUIDS TECHNICAL CONFERENCE AND EXHIBITION

American Association of Drilling Engineers

TECHNICAL PROGRAM

- Breakfast: 7:00 – 8:30 am
- Student Posters during breaks

Tuesday, April 10

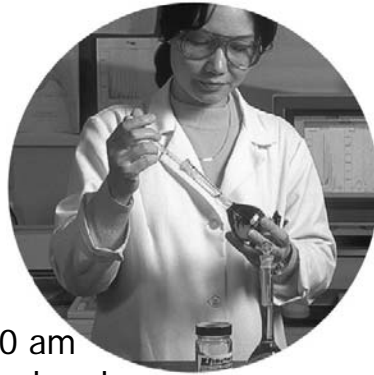
- Opening: David Breeden and Tom Geehan, Conference Chairs, 8:15 am
- Keynote Address: Terry Engelder, Penn State Univ
"Natural Hydraulic Fracturing in Gas Shales"
- Plenary Panel: Richard Haut, Moderator
"Water Management in Unconventional Developments"
- AADE Drilling Fluids Hall of Fame Induction, Class of 2012
- Technical Papers: 1:30 – 5:30 pm
- Student Presentations: 1:30 – 5:30 pm (Galileo 1 Room)
- Cocktail Reception: 5:30 – 6:30 pm (AADE NEXT Group Challenge)

Wednesday, April 11

- Technical Papers: 8:00 am – 5:30 pm
- Student Interactive with AADE Professionals: 8:00 am – 10 am (Galileo 1 Room)
- Luncheon Speaker: Michael Economides, Univ of Houston
"Energy Geopolitics"
- AADE Awards Presentation
 - Sandy Purdy Gold Medal for Best University Student Poster
 - Wayne Bryant AADE Service Award
 - Best Exhibitor Award

AADE
AMERICAN ASSOCIATION
of DRILLING ENGINEERS

The Premier Fluids
Conference



April 10-11, 2012
Hilton Houston North
12400 Greenspoint Dr.
Houston, Texas 77060

Registration booth opens at 7:00 am each morning.



2012 AADE Fluids Technical Conference & Exhibition
“The Premier Fluids Conference”
Wednesday, April 11, 2012

		Technical Sessions – Room C	Technical Sessions – Room D
7:00 - 8:30	Breakfast sponsored by Drilling Specialties Company		
8:30 – 10:00	Student Interactive with AADE Professionals in Galileo 1		
8:00 – 10:00	Hydraulics II		Drilling Fluids
	<i>Session Chairs:</i> Jason Maxey, Halliburton and Greg Mullen, Baker Hughes.		<i>Session Chairs:</i> Kim Burrows, Halliburton and Jim Friedheim, M-I SWACO.
8:00	<i>A R&D Network on Drilling Hydraulics to Address Offshore Well Construction Challenges</i> – André Martins and Raphael Santos, Petrobras; P. Varges, PUC-Rio; R. Moreno, UNICAMP; B. Loureiro, UCL; A. Teixeira, UTFPR; E. Padilla, UFU; and S. Magalhães, UFRRJ. [#43]		<i>Micronised Ilmenite - A New, Intermediate Weight Material for Drilling Fluids</i> – Christopher Steele and Mohamed Al Bagoury, Elkem Silicon Materials. [#12]
8:30	<i>Single PDC Cutter Studies of Fluid Heat Transfer and Cutter Thermal Mortality in Drilling Fluid</i> – Michael Freeman, M-I SWACO; and Yuelin Shen and Youhe Zhang, Smith Bits. [#38]		<i>Influence of Mud Properties by Microbial Contaminates of an Environmentally Friendly Water-Based Mud System</i> – James Gaertner, Eddie Shadix, Dwight Campbell, Russell Stewart, and Grant Peterson, Conquest Drilling Fluids. [#30]
9:00	<i>Mathematical Model for Pressure Transmission in Drilling Fluids</i> – Gabriel Oliveira, Cezar Negrão, and Admilson Franco, Federal University of Technology – Paraná; and Rodrigo Silva and André Martins, Petrobras. [#45]		<i>Halide-Free, Clay-Free Invert Emulsion Fluids</i> – Vikrant Wagle and Shadaab Maghrabi, Halliburton. [#33]
9:30	<i>Mathematical Model for Transient Simulation of Surge & Swab in Wells With Cross-Section Variation</i> – João Fedevjcky, Silvio Junqueira and Cezar Negrão, UTFPR; and Rodrigo Silva and André Martins, Petrobras. [#48]		<i>Measuring PVT Characteristics of Base Oils, Brines, and Drilling Fluids under Extreme Temperatures and Pressures</i> – Mario Zamora, Felix Enriquez, Sanjit Roy and Michael Freeman, M-I SWACO. [#44]
10:00 – 10:30	Break – Sponsored by Baker Hughes Exhibits and Student Poster Session Open		
10:30 – 12:00	HTHP		Environmental & Waste Management
	<i>Session Chairs:</i> Bonsall Wilton, Chevron and Carl LaCombe, NOV.		<i>Session Chairs:</i> Paul Scott, ConocoPhillips and Ron Morrison, Derrick Equipment.
10:30	<i>Drilling Challenges Due to the Disparity Between Reservoir and Seal Pressure Gradients: Based on Case Histories from the Gulf of Mexico</i> - Selim Shaker, Geopressure Analysis Services (G.A.S.). [#66]		<i>Flowback Treatment in the Marcellus Shale</i> – Yves Pollart, Rettew Flowback. [#08]
11:00	<i>How We Learned to Drill the Pressured Shale in the Gulf of Mexico: One Person's Recollection</i> – Bill Rehm, consultant. [#34]		<i>A New Waste Management Method Utilizing a Compact Lightweight Solids Control System Reducing Waste Volume and Improving Filtration</i> – Jan Vasshus, Asbjorn Kroken and Jan Eia, Cubility. [#18]
11:30	<i>Meeting the Ultra-HTHP Fluid Challenge</i> – Emanuel Stamatakis, Steve Young and Guido De Stefano, M-I SWACO. [#51]		<i>Mesophase Chemistry for Enhanced Cleaning of Oil-Based Sediments</i> – Qusai Darugar, Anuradee Witthayapanyanon and Jonathan Brege, Baker Hughes. [#55]
12:00 – 1:30	Awards Presentations AADE Houston Chapter Luncheon Luncheon Speaker – Michael Economides, University of Houston, “Energy Geopolitics” Lunch sponsored by HTK Consultants, Speaker sponsored by Newpark Drilling Fluid		
1:30 – 3:00	Sag		Reservoir Drilling Fluids
	<i>Session Chairs:</i> Fred Growcock, Oxy and Mario Zamora, M-I SWACO.		<i>Session Chairs:</i> Carl Thaemlitz, Halliburton and Juan Pinzon, Oxy.
1:30	<i>Hindrance Effect on Barite Sag in Non-Aqueous Drilling Fluids</i> – Sandeep Kulkarni, Sharath Savari, Kushabhau Teke, Robert Murphy and Dale Jamison, Halliburton. [#23]		<i>Modified Wax LCM for the Reservoir: Effective Seal and Simple Removal</i> – Matthew Miller, Halliburton. [#21]
2:00	<i>An Effective Way to Prevent Sag in Low-Gravity, Solids-Free Invert Emulsion Fluids</i> – Dhanashree Kulkarni, Vikrant Wagle and Shadaab Maghrabi, Halliburton. [#25]		<i>Specialized Surfactant Technology Applications Enable Project Successes</i> – Patricia Ullauri, Carlos Toro, Cesar Guerra, Tom Jones and Lirio Quintero, Baker Hughes. [#53]
2:30	<i>What Happens to Invert Mud Left Behind the Casing?</i> – John Lee, Ken Slater, Steve Young, Mario Zamora and James Stark, M-I SWACO. [#47]		<i>Investigating Fluid Invasion into Formations Using Exponential Shear</i> – Jason Maxey and Ryan van Zanten, Halliburton. [#20]
3:00 – 3:30	Break – Exhibits and Student Poster Session Open		

Wednesday Program continued on next page



2012 AADE Fluids Technical Conference & Exhibition
“The Premier Fluids Conference”
Wednesday, April 11, 2012

Technical Sessions – Room C		Technical Sessions – Room D
Wellbore Stability		Fluid Processing
3:30 – 5:30	<i>Session Chairs:</i> Kalyan Singamshetty, ConocoPhillips and Mark Alberty, Hess.	<i>Session Chairs:</i> Tyler Stegeman, Derrick Equipment and Leon Robinson, retired.
3:30	<i>Geomechanical Wellbore Stability Analysis for Deviated Wells based on Vertical Exploration Data</i> – Steven Hilgedick and Runar Nygaard, Missouri Univ of Science and Technology; and Svein Hellvik and Espen Hoel, Lundin Petroleum Norway. [#37]	<i>Imparting Hydraulic Shear in Invert Emulsion Drilling Fluids</i> – Tim Harvey and Randy Istre, Halliburton. [#03]
4:00	<i>Is Your Mud a Fracturing Fluid or a Non-Fracturing Fluid? – Preventing Induced Mud Losses by Controlling Spurt Losses</i> – Max Wang, Sharp-Rock Technologies. [#14]	<i>Shale Shaker Screen Designation</i> – Leon Robinson, retired; and Shannon Stocks, Chevron. [#05]
4:30	<i>Shear Degradability of Granular Lost Circulation Materials</i> – Fred Growcock, Oxy, Ramy Mahrous and Richard Flesher, M-I SWACO. [#27]	<i>Invert Emulsion Drilling Fluid Recovery</i> – Anuradee Witthayapanyanon, Lirio Quintero, Chandrakanth Mallampalli and Martin Gilbert, Baker Hughes. [#54]
5:00	<i>Achieving Wellbore Stability using Black Powders: Understanding the Mechanism</i> – Sharath Savari and Arunesh Kumar, Halliburton. [#22]	<i>Computational Modeling and Experiments on Shale Shaker Performance</i> – Vidya Raja and George Chase, University of Akron; Bradley Jones and Tom Geehan, M-I SWACO. [#58]

Alternates:

<i>Bioremediation Process: Application Of Gravel Generated In Oil Well Drilling in Native Soil Quality</i> – Mario Santos, Roque Silva, Fernando Vieira, Manoel Filho, Lillian Brandão and Mario Echevarria, Carboflex; and Luiz Prezotti, Incaper. [#09]
<i>Versatile Hydrogen Sulphide Scavenger Facilitates Improved Safety when Dealing with Sour Wells</i> – Eric Davidson, Nelson McMillan and Alexandra Morrison, Halliburton. [#24]
<i>Streamline Mud Reporting and Management</i> – Yuan Yao, Pegasus Vertex; and Chuck Light, Anchor Drilling Fluids USA. [#28]
<i>Results Obtained with PWDa – A Real-Time Drilling Operational Parameters Analyzer</i> – Roni Gandelman and André Martins, Petrobras; and Rafael Neto (ESSS). [#41]
<i>Novel Technology Reduces Water Usage 44% While Increasing Drilling Efficiency in the Permian Basin</i> – Jeff Redmon, Bill Wittwer and Doug Gust, Q’Max. [#60]
<i>Maximizing Drilling Operations by Implementing an Advanced Drilling Fluid Technology</i> – Armando Navarro and Phil Hastings, Eco Global Solutions; Joe Chuang and Max Chuang, EGS Universal. [#67]

* [xx] refers to the paper number. The full paper number is AADE-12-FTCE-xx. This will make it easier to access the full text paper on the CD or AADE website.



Student Posters

Posters will be in the Exhibit area; Student Presentations will be in Galileo 1 on Tuesday from 1:30 to 5:30

Reza Rahmani – Louisiana State University	<i>A New Look at Bit Balling Mechanisms, Impacts, and Diagnosis</i>
Vidya Raja – University of Akron	<i>Computational Modeling and Experiments on Shale Shaker Performance</i>
Mehdi Mokhtari – Colorado School of Mines	<i>Time-Dependent Instability of Wellbores in Shale Formations and How Casing Drilling Can Help</i>
Ali Reza Edrisi – Louisiana State University	<i>Modeling Foam Flow in Pipes Using Two Foam-Flow Regime Concept in Drilling Application</i>
Feifei Zhang – University of Tulsa	<i>Investigation of Cuttings Transport in 30 to 60 degree Inclined Wells</i>
Shen Zheng – Texas A&M University	<i>Wellbore Stress and Temperature Characterization Induced by Completion Fluids Circulation</i>
Mojtaba Pordel Shahri – University of Tulsa	<i>Modeling of Fracture Ballooning in Naturally Fractured Reservoir: More General Approach</i>
Arash Shadravan – Texas A&M University	<i>Rheological Properties of Invert Emulsion Drilling Fluid under Extreme HPHT Conditions</i>
John DeMallie – University of Alaska Fairbanks (undergraduate)	<i>Drilling Fluid Characteristics and Formation Damage in Umiat Field, Alaska</i>
Charlie Hall - West Virginia University	<i>A Study of Marcellus Shale Properties from a West Virginia Well</i>
Idowu T. Dosunmu – University of Oklahoma	<i>Evaluation of Friction Factor Correlations and Equivalent Diameter Definitions for Pipe and Annular Flow of Non-Newtonian Fluids</i>
Kirtland McKenna – Colorado School of Mines (undergraduate)	<i>Micro Drilling Rigs: The Value of Hands-On Experience as Part of Undergraduate Petroleum Engineering Education</i>
Yahya Hashemian – University of Tulsa	<i>Accurate Predictions Of Velocity Profiles And Frictional Pressure Losses in Annular YPL Fluid Flow</i>

A Special AADE "Thank You" to All those who made the Conference possible

Student Sponsors

Derrickman (\$\$):

Marathon

Roughneck (\$):

Occidental Oil & Gas Corp (Oxy)

Drilling Specialties

M-I SWACO

Halliburton

ConocoPhillips

Event Sponsors

SANO - Sistemas Ambientales del Noreste

Drilling Specialties Company

Dow Oil & Gas

Newpark Drilling Fluids

Baker Hughes

National Oilwell Varco

HTK Consultants

Lanyards

OFI Testing Equipment Inc.

CDs

Baker Hughes

AADE Conference Steering Committee

Conference Chairs:

David Breeden, Newpark

Tom Geehan, M-I SWACO

Program Chairs:

Ed Malachosky, Chevron

Lindsay Fraser, Newpark

Committee Members:

Adrian Angove-Rogers, ConocoPhillips

Kim Barrow, Halliburton

Carolyn Berry, AADE

Tom Carlson, Shrieve Chemical

Bernita Chavis, AADE

Mary Dimataris, M-I SWACO

Dennis Goldwood, Drilling Specialties

Fred Growcock, Oxy

John Hall, Halliburton

George Hanst, Wayne Enterprises

Burney Lee, consultant

Jason Maxey, Halliburton

Khai Nguyen, M-I SWACO

Janyce Parmer, The JP Companies

Leon Robinson, retired

Mel Schmidt, OFITE

Carl Thaemlitz, Halliburton

Bonsall Wilton, BP

Don Whitfill, Halliburton

Mario Zamora, M-I SWACO

Exhibitors

American Gilsonite Company

Anchor Drilling Fluids

Anton Paar USA

Baker Hughes

BICO Drilling Tools, Inc.

Conquest Drilling

Derrick Equipment Company

Dril-Quip, Inc.

Eco Global Solutions, Inc.

Energy Search Associates

Fann Instrument Company

Force Well Services

Grace Instrument Co.

Halliburton

Impact Fluids Solutions, LLC

Lake Oilfield Services

M-I SWACO

National Oilwell Varco

Newpark Drilling Fluids

OFI Testing Equipment, Inc.

Pegasus Vertex, Inc.

PQ Corporation

Prime Eco Research & Development, LLC

Q'Max America Inc.

R360 Environmental Solutions

SANO - Sistemas Ambientales del Noreste

Sharp-Rock Technologies, Inc.

Turbo Chem International, Inc.

Vortex Ventures, Inc.

CEU – Continuing Education Units are available. Contact the AADE registration booth for information.

Save the Date:

**AADE 2013 National
Technical Conference
Oklahoma City
Feb 26-27**