

Conference Preview

SPE International  
Conference and Exhibition on

# FORMATION DAMAGE CONTROL

24–26 February 2016  
Lafayette Hilton  
Lafayette, Louisiana, USA  
[www.spe.org/go/RegisterFD](http://www.spe.org/go/RegisterFD)

Register now!



Society of Petroleum Engineers

## Welcome From the Chairperson

The SPE International Conference and Exhibition on Formation Damage Control takes place in Lafayette, Louisiana, USA, from 24–26 February 2016. It is the largest, most diverse event representing the latest technologies in preventing, diagnosing, and remediating formation damage. This year's program upholds the conference's reputation as the oil and gas industry's foremost event devoted to formation damage issues, production operations, and completion technologies.

At this event, you will

- Learn from technical presentations covering a wide range of topics
- Gain new insights into well productivity and longevity
- Network with leading experts in completion, workover, and remediation technologies
- Meet with colleagues from around the world
- Hear viewpoints from industry, public, and financial officials who influence the E&P industry
- Continue your education by attending a short course
- Acquaint your asset team members with what is important in completion and production by bringing them with you to this event

The conference organizing committee and the SPE Evangeline Section cordially invite you to attend. You will learn how the synergy of completion, reservoir engineering, formation evaluation, drilling, and production will affect the bottom line of your company operations.



**Ali Ghalambor**  
General Chairperson

## About the Event

The SPE International Conference and Exhibition on Formation Damage Control covers the range of challenges and remedies for all things related to the identification, prevention, and remediation of formation damage.

### Who Should Attend

- Completion engineers
- Drilling engineers
- Operations engineers
- Petroleum engineers
- Production engineers
- Reservoir engineers
- Research engineers and scientists
- Chemists
- Business development managers
- Executives
- Consultants
- Educators

### Topics Covered

- Formation damage
- Horizontal and multilateral drilling
- Sand control and management
- Well stimulation
- Injection wells damage characterization
- Damage cost assessment
- Completion and workover fluids
- Naturally occurring damage
- Screening criteria for completions
- Damage from wellbore fluids
- Source and magnitude identification of formation damage
- Water control
- Damage characterization in tight sands and shale reservoirs
- New developments and field experiences

## Thank You to Our Sponsors

(as of 30 November 2015)

### Diamond Sponsors



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## Committees

(as of 30 November 2015)

### Steering Committee

#### General Chairperson

**Ali Ghalambor**  
Oil Center Research  
International

#### Program

**Ali Ghalambor**  
Oil Center Research  
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Oil Center Research  
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#### Chairperson

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Hess Corporation

#### Jakob Monberg

Maersk Oil Qatar

#### Carl Montgomery

NSI Technologies

#### Dave Norman

NSI Technologies

#### Mehmet Parlar

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#### Hugues Poitrenaud

Total

#### Allan Twynam

BP

#### David Wagner

Chevron ETC

#### George Wong

Shell International E&P

### About the Society of Petroleum Engineers

The Society of Petroleum Engineers (SPE) is a not-for-profit organization. Income from this event will be invested back into SPE to support many other society programs. When you attend an SPE event, you help provide even more opportunities for industry professionals to enhance their technical and professional competence. Scholarships, certification, the Distinguished Lecturer program, and SPE's energy education program Energy4me® are just a few examples of programs supported by SPE.

## Schedule of Events

(as of 30 November 2015)

<b>Sunday, 21 February 2016</b>	
1700–1900	Advance Registration
<b>Monday, 22 February 2016</b>	
0700–0800	Training Courses Registration
0800–1700	Training Courses
<b>Tuesday, 23 February 2016</b>	
0700–0800	Training Courses Registration
0800–1700	Training Courses
1600–1900	Registration
1850–2030	Cajun Icebreaker Reception
<b>Wednesday, 24 February 2016</b>	
0700–0800	Authors' Breakfast
0800–1700	Registration
0800–1700	Exhibits
0900–1200	Technical Sessions
1200–1400	Welcome Luncheon
1400–1700	Technical Sessions
1600–1830	Poster Session
1830–2030	Welcome Reception
<b>Thursday, 25 February 2016</b>	
0700–0800	Authors' Breakfast
0800–1700	Registration
0800–1700	Exhibits
0830–1130	Technical Sessions
1030–1400	Poster Session
1130–1330	Closing Luncheon
1330–1630	Technical Sessions
1830–2200	Social Dine and Dance
<b>Friday, 26 February 2016</b>	
0830–1130	Open Forum
1130–1400	Delta Screens On-Site Product Exhibit and Luncheon

## 1-Day Training Courses

(as of 30 November 2015)

Monday, 22 February 2016

### 0800–1700 | Coiled Tubing and Its Applications

**Ed Smalley**

This course provides an introduction to coiled tubing (CT) as a tool for workover and drilling and completion services. It includes an overview of CT extended-reach operations, typical field applications, the properties of CT, its manufacture, surface equipment required for downhole deployment, as well as discussion of downhole CT tools. A significant portion of the course covers CT mechanical performance, including working limits, buckling, and fatigue. A discussion of CT drilling technology and hydraulics is also included.

### 0800–1700 | Horizontal Well Completions

**Sudiptya Banerjee and W. Aaron Burton**

This course develops strategies for completing horizontal wells. It covers both casedhole and openhole configurations, either with or without sand control. Participants will learn the applications and dynamics of horizontal wells, including drill-in fluids, hole displacement, cementing, perforating, and stimulation. They will also learn the guidelines for selecting stand-alone screens and executing horizontal gravel packs.

### 0800–1700 | Sand Screen Selection—Laboratory Studies: How To Understand the Results of Retention Tests and What the Variations in Particle Size Analysis Mean

**Steve Beare and Tracey Ballard**

This course covers the principles and practicalities of different methods of particle sizing—why different methods give different results, when these differences are legitimate, and when something may have gone wrong. The course is designed to provide attendees with an overview of what is involved in producing such measurements so that results can be viewed in a more informed way. The different methods of sand retention testing (including the problems inherent in such testing) and results interpretation will also be discussed. Finally, a variety of examples for sand control selection and details on how to commission a test matrix that gives meaningful results will also be given to make data interpretation more straightforward from both particle sizing and retention testing.

## 1-Day Training Courses

(as of 30 November 2015)

Tuesday, 23 February 2016

### 0800–1700 | Fracpacking for Sand Control

**Wm. David Norman**

This course is for both the novice and the experienced practitioner. It demonstrates why fracpack technology has become popular as a sand control method. This includes defining some basic terminology associated with the two technologies that lead to successful fracpacking. The course then covers basic information needed for designing and planning the execution of a fracpack sand control completion. It also covers selected topics on the technology for execution issues (e.g., TSO, NS-plots, and calibration testing) and evaluation of the installed completion. These include the definition of an execution scorecard and using this scorecard to define operating limits (e.g., event timing, annular pack assessment, mechanical integrity).

### 0800–1700 | Unconventional Completions—Wellbore Completions and Fracturing

**W. Aaron Burton and Sergey Kotov**

This course develops strategies for completing unconventional wells that require multistage hydraulic fracturing. It defines completions as both wellbore completion and hydraulic fracturing. Participants will learn the different types of wellbore completion options as well as the hydraulic fracturing options and how they compare in different applications. This includes plug-and-perf, ball-activated systems, coiled tubing-activated systems, fracturing fluids, proppants, additives, and general fracturing theory and design.

### 0800–1700 | Fracturing Optimization Using Frac Models and Simulation

**Tim Leshchyshyn**

This course covers the fundamental principles of multistage fractured horizontal well optimization for predictive, future looking planning of your field. Integrating the geology and engineering departments in an integrated effort is key to maximizing the accuracy and confidence of the final results. Calibration of the frac models will be demonstrated to achieve practical results. Whether in management, supervising, or working directly with the frac model software, it is crucial to understand the process flow and how to maximize the accuracy of the exercise. The types of optimization targets will also be reviewed.

## 2-Day Training Courses

(as of 30 November 2015)

Monday and Tuesday, 22–23 February 2016

### 0800–1700 | Advances in Formation Testing

**Hani Elshahawi**

Over the past two decades, formation testing has emerged as one of the most critical reservoir evaluation activities in petroleum exploration and production. As a result of increased drilling and testing costs in deepwater, high-pressure, high-temperature, environmentally sensitive, and other frontier areas, modern formation testing has become the primary—often only—source of information on fluid properties. Additionally, it has provided insights into reservoir architecture issues that were previously the sole territory of conventional well testing.

Course attendees will gain a good understanding of the state-of-the-art in formation testing and its changing role, vis-à-vis other disciplines. The fundamental applications and interpretations of formation testing and highlights of the advances made over the last decade will be reviewed. Examples will be shown to cement the learning and to highlight the merits of new technology and the value of integration.

### 0800–1700 | Understanding Inorganic Scaling—Mechanisms, Control, and Management

**Gordon M. Graham**

This two-day course is an introduction to inorganic scaling. It includes an overview of the different types of inorganic oilfield scales encountered during production, and the various methods used to control them. Field examples will illustrate the importance of an effective scale management strategy.

### 0800–1700 | Formation Damage Prevention

**Michael Byrne**

This independent course provides participants with a unique insight into formation damage through the practical integration of regional, core, well and drilling data. Theory and principles are reinforced by the extensive use of real field examples from throughout the world. The course aims to demystify the subject of formation damage and promote a formation damage awareness culture, encouraging participants to challenge convention and think about the implications of damage throughout a field or well life cycle – from drilling to production.

## 2-Day Training Courses

(as of 30 November 2015)

Monday and Tuesday, 22–23 February 2016

### 0800–1700 | Introduction to Managed Pressure Drilling (MPD) and Underbalanced Drilling (UBD)

**Deepak M. Gala**

This 2-day course provides an introduction and overview of the current underbalanced and managed pressure drilling technology. The course explains how and why UBD or MPD is carried out, highlights the differences between the two, and includes the variations of MPD technologies such as dual gradient drilling and continuous circulation methods. It provides a basic understanding of the equipment used in both drilling operations. The course highlights the relevant issues that need to be addressed in well planning and design as well as the well integrity and well control aspects for both UBD and MPD.

### 0800–1700 | Cement Evaluation and Remediation

**James Smolen and William K. (Bill) Ott**

This course examines methods for detecting fluid channels, voids and leaks, and how to repair them. It also covers the logging tools and technologies use to evaluate the integrity of the cement prior to initial completion or anytime during the life of the well. The first day of class is dedicated to evaluating cement and the second day to repairs.

### 0800–1700 | Formation Damage in Waterflooding, EOR, and Produced Water Re-Injection

**Pavel Bedrikovetsky, Paul van den Hoek, and Pacelli L.J. Zitha**

This course provides an awareness-level overview of common issues in produced water re-injection (PWRI), with a focus on subsurface-related topics such as well injectivity and sweep. PWRI is used not only for disposal purposes but also for voidage replacement and sweep in waterfloods. It is widely acknowledged that if injection under fracturing conditions is allowed, injection water quality specifications can be relieved significantly. On the other hand, induced fracturing creates its own challenges with regard to areal and vertical sweep, and (potential) loss of containment. Moreover, injection under induced fracturing conditions does not resolve all injectivity issues.

### 0800–1700 | Overview of Well Stimulations

**Alfred Jennings**

Enhancement and optimization of oil and gas production is a challenge faced by everyone in the industry involved with improving, maintaining, or re-establishing production from oil and gas wells. This Course provides information concerning the impact of formation damage and flow restrictions on well production and offers guidelines concerning when and where matrix acidizing, acid fracturing, and hydraulic fracturing with proppant can best be used to improve well production. Recent advances in well stimulation technology will also be briefly discussed.

## Special Events

(as of 30 November 2015)

### Cajun Icebreaker

**T** Requires separate ticket

Tuesday, 23 February • 1830–2030

Enjoy an evening with friends, hors d'oeuvres, and cocktails at the DoubleTree by Hilton Lafayette.

Sponsored by: Halliburton

### Authors' Breakfast

Wednesday, 24 February • 0700–0800

Thursday, 25 February • 0700–0800

Sponsored by: Schlumberger

### Welcome Luncheon

Wednesday, 24 February • 1200–1400

Speaker: S. Hossein Adeli, Gas Exporting Countries Forum

Sponsored by: Superior Energy

### Poster Sessions

Wednesday, 24 February • 1600–1830

Thursday, 25 February • 1030–1400

Network with colleagues and talk with authors while enjoying drinks and refreshments.

Refreshments sponsored by: Weatherford

### Welcome Reception

**T** Requires separate ticket

Wednesday, 24 February • 1830–2030

“Laissez Les Bons Temps Rouler!” Come pass a good time with an evening of food and fun at Lafayette's RiverOaks.

Sponsored by: Baker Hughes

### Closing Luncheon

Thursday, 25 February • 1130–1330

Speaker: Kevin Lacy, PetroSkills

Sponsored by: Shell

### Social Dine and Dance

**T** Requires separate ticket

Thursday, 25 February • 1830–2200

Dance Spot for Cajun food, music, and dancing. Attendance is limited to the first 50 reservations.

Sponsored by: SPE Evangeline Section

### Open Forum

Friday, 26 February • 0830–1130

Completing Wells in a Peanut-Price Oil Market

Moderators: Jakob Monberg, Maersk Oil Qatar and Niall Fleming, Statoil

This open forum will review the cost/benefit efficiency measures versus well productivity in a low oil price environment. The session seeks to debate the merits and assessment of methods being employed to reduce costs for better well completion efficiency and/or production.

### Delta Screens On-Site Product Display and Luncheon

Friday, 26 February • 1130–1400

Delta Screens will have a display of their new sand control screen product line onsite at the DoubleTree by Hilton Lafayette.

Sponsored by: Delta Screens

### Live Broadcast

The technical sessions will be available via the Internet to SPE sections outside the US. For arrangements, contact Ali Ghalambor at aghalambor@gmail.com.

**T** Requires separate ticket.

## Technical Program

(as of 30 November 2015)

Wednesday, 24 February 2016 | 0900–1200

### 01 Sand Control: Laboratory Evaluation and Modeling

*This session will cover the modeling and laboratory aspects of various sand control techniques.*

Session Chairpersons: Dave Wagner, Chevron ETC; Dave Norman, NSI Technologies

### 02 Non-Obvious Sources of Formation Damage

*This session will detail the identification of formation damage mechanisms not often considered or recognized.*

Session Chairpersons: Leonard Kalfayan, Hess Corporation; Buck Houchin, BlueFin

### 03 Perforating: Recent Advances and Case Histories

*This session will highlight recent experimental and modeling work as well as case histories relevant to perforating.*

Session Chairpersons: Mark Brinsden, Shell International E&P; Paul McElfresh, Consultant

Wednesday, 24 February 2016 | 1400–1700

### 04 New Hydraulic Fracturing Applications and Insights

*This session will include new studies and case histories for advancing hydraulic fracturing.*

Session Chairpersons: Harold Brannon, Baker Hughes; Mahmoud Asadi, Praxair

### 05 Formation Damage Attributed to Drilling Practices

*Drilling operations can be a primary cause of formation damage. This session will present laboratory and field studies and examples related to drilling damage prediction and prevention.*

Session Chairpersons: Hugues Poitrenaud, Total; Michael Byrne, Senergy

### 06 Well Stimulation: Carbonate Reservoirs

*This session will present new and unique methods, along with fluids and additives for enhancing production in carbonate reservoirs.*

Session Chairpersons: Yenny Christanti, Schlumberger; Jakob Monberg, Maersk Oil Qatar

Wednesday, 24 February 2016 | 1600–1830

### 07 Poster I

*Poster sessions will offer an interactive environment to promote valuable discussions.*

Session Chairperson: Mojtaba Pordel Shahri, Weatherford International

## Technical Program

(as of 30 November 2015)

Thursday, 25 February 2016 | 0830-1130

### 08 Sand Control: Case Histories

*This session will feature case histories of various sand control techniques from around the world.*

Session Chairpersons: Mehmet Parlar, Schlumberger; George Wong, Shell E&P

### 09 Formation Damage Characterization

*This session will cover laboratory modeling and field studies characterizing formation damage in different operations and formation types.*

Session Chairpersons: Carl Montgomery, NSI Technologies; Pavel Bedrikovetsky, University of Adelaide

### 10 New Development in Well Stimulation and Remediation Chemistries

*This session will present new chemical technologies and applications to mitigate formation damage potential in completion, stimulation, and production environments.*

Session Chairpersons: Istvan Lakatos, University of Miskolc; Pacelli Zitha, Delft University of Technology

Thursday, 25 February 2016 | 1030-1400

### 11 Poster II

*Poster sessions will offer an interactive environment to promote valuable discussions.*

Session Chairpersons: Mojtaba Pordel Shahri, Weatherford International

Thursday, 25 February 2016 | 1330-1630

### 12 Formation Damage: New Development and Field Studies

*This session will highlight a variety of case studies on new technology applications involving topics from oil-based mud imaging to concentric fluid loss devices and fracturing diverters.*

Session Chairpersons: Niall Fleming, Statoil; Mike Hecker, ExxonMobil

### 13 Well Stimulation: Sandstone Reservoirs

*Session topics include novel fluids for sandstone stimulation and measurement, as well as damage from steam and breaker for filtercake in gravel pack.*

Session Chairpersons: Richard Hutchins, Schlumberger; Lewis Ledlow, ConocoPhillips

### 14 Formation Damage Attributed to Wellbore Completion and Workover Fluids

*This session will present experimental and modeling aspects of formation damage attributed to wellbore completion and workover fluids, as well as relevant case histories.*

Session Chairpersons: Allan Twynam, BP Exploration; Xiuli Wang, Baker Hughes

## Exhibitors

(as of 30 November 2015)

- Ametek Chandler
- Constien and Associates
- Corex
- Delta Screens
- FTS International
- Grace Instruments
- Halliburton
- M-I SWACO
- OFI
- Scaled Solution
- Senergy
- Wavefront
- Weatherford

### Exhibitor Information

Take advantage of this excellent opportunity to connect with current and potential new customers. Reserve your exhibit booth space today! Introduce new products and services.

- Showcase your company's expertise in advanced technologies and services
- Personally interact with potential clients and current customers
- Establish and reinforce your marketing message and relationships with key buyers in the industry

Please email Glynn Williams at [eg.williams@comcast.net](mailto:eg.williams@comcast.net) with any questions or to request a contract.

### Advertising and Sponsorship Opportunities Still Available

SPE offers unique and customized sponsorship and advertising opportunities to enhance your company image and showcase your products and services throughout the event. Over 500 engineers, scientists, and other technical E&P professionals gathered for the 2014 event.

For more information, contact:

Mike Burger  
+1.337.989.3581  
[mike.burger@chevron.com](mailto:mike.burger@chevron.com)

## Conference Registration

### Registration

Register now.  
[www.spe.org/go/RegisterFD](http://www.spe.org/go/RegisterFD)

Register by 27 January 2016 and save USD 100 on full registration.

Conference participants can register via the Internet, mail, or fax. Advance registrants may pay in US dollars by check or credit card. Checks are acceptable from US bank checking accounts only and should be written for the amount of purchase only. SPE accepts American Express, Visa, MasterCard, and Diners Club credit cards. Payment can also be made by wire transfer; contact [registration@spe.org](mailto:registration@spe.org) for bank details.

You may contact SPE at +1.972.952.9393, ext 216 or [registration@spe.org](mailto:registration@spe.org) to receive a printed registration form via mail, fax, or email.

### Badge Pickup

All domestic and international attendee badges will be held for pickup on-site during the registration hours at the registration counter. **Please be prepared to show photo ID (passport or driver's license) in order to pick up your conference badge.**

### Cancellation Deadline

To receive a full refund, all cancellations must be received in writing no later than **27 January 2016**. Cancellations made after 27 January 2016 will not be refunded. Send cancellation requests by email to [registration@spe.org](mailto:registration@spe.org); by fax to +1.866.460.3032 (toll-free US/Canada) or +1.972.852.9292; or by mail to SPE Registration, PO Box 833836, Richardson, TX 75083.

### Questions?

Contact us by email ([registration@spe.org](mailto:registration@spe.org)) or by phone (+1.972.952.9393, ext 216).

## Registration Prices

All prices are listed in US dollars (USD).

Registration Type	By 27 January	After 27 January
<b>Full Registration<sup>1</sup></b>		
Member	USD 650	USD 750
Nonmember	USD 750	USD 850
<b>1-Day Training Courses<sup>2</sup></b>		
Member	USD 750	USD 950
Nonmember	USD 950	USD 1,150
<b>2-Day Training Courses<sup>2</sup></b>		
Member	USD 1,400	USD 1,600
Nonmember	USD 1,800	USD 2,000
<b>Additional Ticketed Items</b>		
Social Events Ticket, Guest—Cajun Ice Breaker Reception		USD 50
Social Events Ticket, Guest—Welcome Reception		USD 50
Social Events Ticket, Guest—Dinner		USD 50
Friday Forum (member/nonmember)		USD 175
Proceedings (member/nonmember)		USD 75

<sup>1</sup>The Full member or nonmember registration includes: Conf. registration fee, proceedings, 1 ticket to each of the luncheons, social events, and the Friday Forum.

<sup>2</sup>Training courses are not included in the conference registration fee.

### Copyright Information

All SPE sessions are protected by US and International copyright laws. Photography and video/audio recording of any kind are strictly prohibited in the sessions and throughout the exhibition area.

### Accommodations

Rooms have been reserved for the SPE International Symposium on Formation Damage Control at the DoubleTree by Hilton Lafayette. Visit [www.spe.org/events/fd](http://www.spe.org/events/fd) to make your housing arrangements online or call +1.800.222.8733 or +1.337.235.6111. When calling, please reference the SPE group to receive the conference rate (USD 131 for a standard double room). All reservations must be received by 5 February 2016 to be guaranteed at the conference rate.

**Conference Preview**

**SPE International  
Conference and Exhibition on**

# **FORMATION DAMAGE CONTROL**

**24-26 February 2016**

**Lafayette Hilton**

**Lafayette, Louisiana, USA**

**[www.spe.org/go/RegisterFD](http://www.spe.org/go/RegisterFD)**

**Register now!**



**Society of Petroleum Engineers**  
222 Palisades Creek Drive  
Richardson, TX 75080 USA