



MeetingPreview

SPRING MEETING AND GLOBAL CONGRESS ON PROCESS SAFETY APRIL 26–30 • AUSTIN, TX

The opportunities and implications of big data analysis and the emergence of unconventional crude oil are just two of the timely topics to be explored at AIChE's 2015 Spring Meeting and 11th Global Congress on Process Safety (GCPS). This year's conference is in Austin, TX, with programs taking place at the Hilton Austin and Austin Convention Center from April 26 through April 30. The Spring Meeting will offer more than 215 technical sessions that examine issues of importance to engineers across the chemical process industries (CPI). The complete program and registration information are available at www.aiche.org/spring.

Keeping pace with the rapid advance of technologies and the ever-changing needs of industries and the engineers that make them successful, AIChE's Spring Meeting and Global Congress on Process Safety continue to extend their reach and global impact. More than 2,000 participants from dozens of nations, representing industry, academia, and government



▲ Austin is the capital of the Lone Star State.
Photo by Brandon Seidel.

agencies, are expected to attend the Austin meeting. In addition to the educational opportunities presented by the one-of-a-kind topical conferences, the Spring Meeting and GCPS will allow attendees to stay on top of new technologies, share ideas, reconnect with colleagues and friends and make new acquaintances, and gain technical and professional information that they might not obtain elsewhere. Keynote speakers, receptions, exhibits, poster sessions, and social events round out the meeting experience.

Topical Conferences

The 2015 Spring Meeting features more than 800 presentations across eight topical conferences and a variety of timely program tracks.

Today's burgeoning availability of data presents opportunities to improve engineering and business practices, while creating new challenges in information capture, filtering, analysis, and processing. The new **Big Data Analytics Topical Conference** will introduce attendees to the concepts, challenges, and methodologies surrounding big data — incorporating perspectives from industry, vendors, and academia. Big data applications in business, upstream engineering, and smart manufacturing will be considered, and a panel discussion on Wednesday, April 29, is devoted to the technology, safety, and security aspects of big data implementation in the chemical, refining, and gas industries.

Building upon the 2014 Spring Meeting's Topical Conference on Shale Gas and Tight Oil, this year's meeting features an **Executive Panel on Opportunity Crudes in a Changing Market and Process Safety Considerations**. The panel, on Monday, April 27, will address the engineering, economics, and process safety considerations of unconventional crude oil. Panelists include Ted Wasserman, Product Manager, Tableau Software; Lloyd F. Colegrove, Fundamental Problem Solving Director, Dow Chemical Co.; Deborah Grubbe, President and Owner, Operations and Safety Solutions LLC; and Michael Firstenberg, Director of Industrial Security, Waterfall Security Solutions.

Several recently established topical conferences are returning to the Spring Meeting. The **Manufacturing**

The Spring Meeting shares the bill with the 11th Global Congress on Process Safety (GCPS). The Global Congress (described in the February 2014 issue of CEP and online at www.aiche.org/gcps) is the world's largest gathering of process safety practitioners and innovators. This year's GCPS, organized by AIChE's Center for Chemical Process Safety (CCPS) and Safety and Health Div., coincides with the 30th anniversary of CCPS. It incorporates the programming of the 30th CCPS International Conference, the 49th Loss Prevention Symposium, and the 17th Process Plant Safety Symposium, as well as the 4th Process Safety Management Mentoring (PSM²) Forum. New to the GCPS is a symposium organized by AIChE's Design Institute for Emergency Relief Systems (DIERS). The GCPS will also include Process Safety Spotlight sessions and three keynote luncheons, along with a selection of presentations conducted in Spanish, Portuguese, and Chinese to capture global perspectives on process safety progress.





15 AIChE

Spring Meeting, Austin, TX

for the 21st Century Conference will examine case studies, operating strategies, and approaches for maximizing chemical plant stability and profitability, including new designs for heat exchangers and considerations of big data applications and smart manufacturing. The **Emerging Technologies in Clean Energy in the 21st Century Conference** covers a gamut of topics, including developments in the hydrogen energy sector; advances in fuel cells, biofuels, and materials; natural gas and shale gas handling; energy storage; and process innovation through computation. The **3rd International Conference on Upstream Engineering and Flow Assurance** focuses on innovative engineering projects both onshore and offshore, with technical discussions of multiphase flow, hydrates, and waxes and asphaltenes.

At the **15th Topical Conference on Gas Utilization**, sessions focus on technologies and safety considerations in the field of liquefied natural gas, as well as the latest techniques in gas conversion, CO₂ capture and sequestration, and gas process design and operations. As part of this conference, on Wednesday, April 29, Joseph H. Cho, a senior technology consultant for SK E&S gas and power projects, will discuss South Korea's energy and natural-gas picture during a keynote luncheon speech.

At this year's **Kister Distillation Symposium** — recently renamed for renowned “Tower Doctor” Henry Kister — attendees will learn about the latest innovations in distillation, including packed tower design, plant operations, and troubleshooting techniques,

while also recognizing the legacy of Elzear Lemieux Sr., who devoted his career to separations engineering. The **27th Ethylene Producers' Conference** includes sessions that discuss new industry regulations, critical flare system design, and operating experiences in ethylene plants, along with new trends in petrochemical plant technology. In addition to processing techniques for shale and unconventional oil, the **18th Topical Conference on Refinery Processing** will review strategies for energy conservation and energy efficiency, developments in fluid catalytic cracking and hydroprocessing, fouling and corrosion in refineries, and environmental standards aimed at improving air quality.

Special Events

The Spring Meeting and GCPS program opens on Monday morning, April 27, with a Keynote Address by Marvin O. Schlanger, Chairman of the Board and former CEO of CEVA Group, PLC, and former Chairman of the Supervisory Board of LyondellBasell Industries, N.V. After his speech, entitled “Chemical Engineering: Is this the Golden Age?,” Schlanger will be honored with the 2015 AIChE Government and Industry Leaders (AGILE) Award (see article on p. 78.)

The **Fuels and Petrochemicals Div. Welcome Session** (Monday morning, April 27) features a keynote speech by David A. Rosenthal, Reliability Consultant and Owner at Reliability Strategy and Implementation Consultancy LLC, and AIChE's 2012 President.

The **Process Development Div.'s Plenary Session** (also on Monday morning) features the how-tos of process development. Jonathan H. Worstell, professor of chemical engineering at the Univ. of Houston, starts the session with a discussion of similarity and model theory in process development. Christina M. Borgese,

Director of Development at ProProcess, will explain how to take process development from idea to commercialization in her talk, “Building a First of Its Kind Technology.” Finally, William Hollar, Chief Scientist at Saudi Basic Industries Corp. (SABIC), will describe “Tools for Successful Process Development.”

Another highlight of the Spring Meeting is its luncheons, most of which feature keynote speakers. At the Tuesday, April 28, luncheon, Markus Scheller, Director and Site Manager at BASF, will present his talk, “Never Underestimate the Importance of People.” The Wednesday, April 29, luncheon is co-sponsored by the Global Congress on Process Safety, with a keynote speech by Al Sacco, NASA astronaut and Dean of the Edward Whitacre Jr. College of Engineering at Texas Tech Univ. Sacco, a payload specialist on the Space Shuttle Columbia, will share his unique perspectives on process safety in his talk, “You Think You Have Safety Concerns! The Flight of STS-73.”

Additional networking opportunities include a dual-format poster session and cocktail reception, jointly sponsored by the Spring Meeting and Global Congress on Process Safety, on Monday, April 27.

Other events serve a diversity of interests, and include a Young Professionals Mixer (Sunday evening, April 26), a luncheon hosted by the Women's Initiatives Committee (April 27), a Chinese-American Chemical Society Banquet (April 27), and an AIChE Fellows Breakfast (April 28), to name just a few activities.

REGISTER NOW

Register online for AIChE's Spring Meeting and 11th Global Congress on Process Safety at www.aiche.org/spring.



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Daniel Nguyen, P.E. Mechanical Integrity Considerations in LNG Depressurization

Jordi Dunjó, Ph.D. Risk Ranking Criteria for Catastrophic Vessel Failures Due to Fire Exposure. Vessel Wall Dynamics and Consequence Analysis

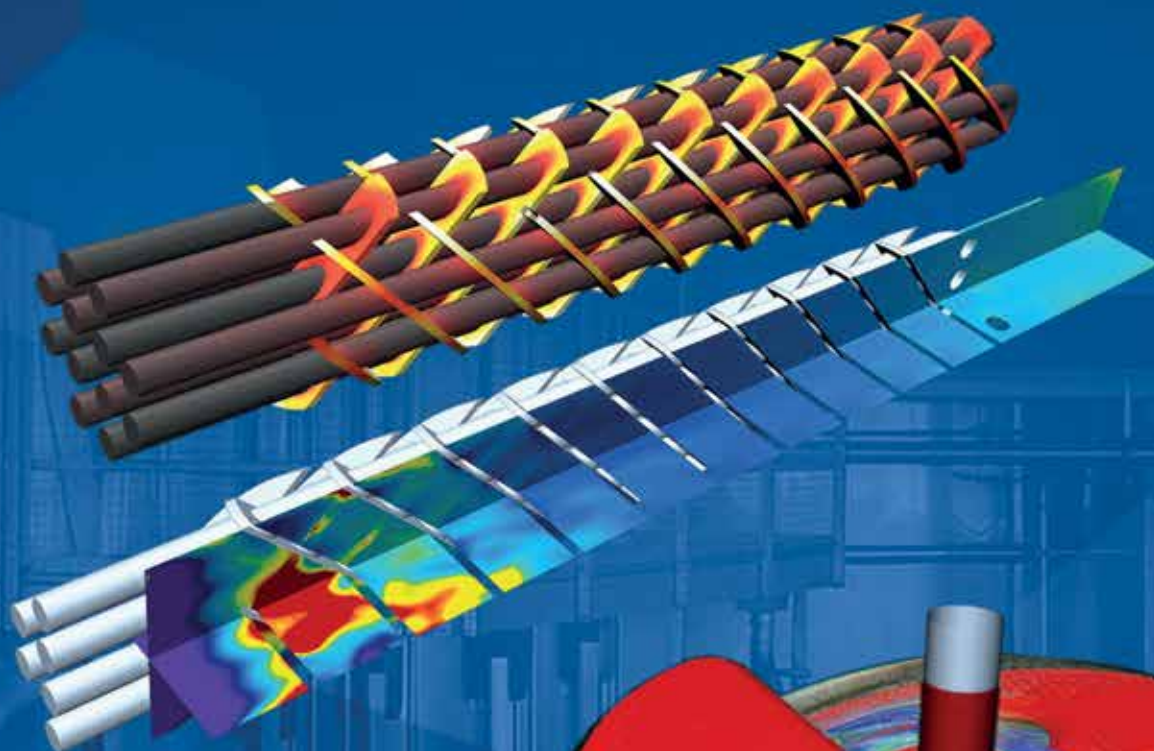
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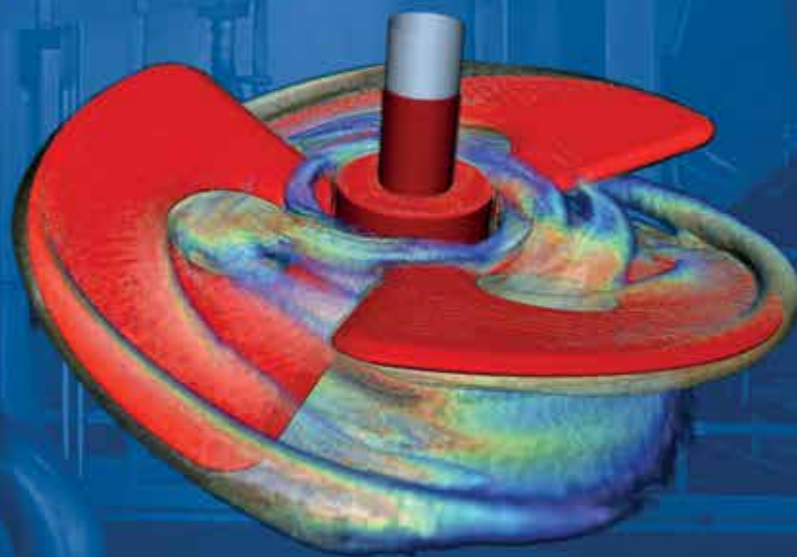
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T1C – 49th Annual Loss Prevention Symposium (LPS)					
Day	Time	Session #	Session Title	Property	Room
Monday	10:30 AM	11	Fires and Explosions I	Conv. Ctr.	19AB
Monday	1:30 PM	31	Fires and Explosions II	Conv. Ctr.	19AB
Monday	1:30 PM	39	Process Safety in LNG and LPG I*	Conv. Ctr.	Ballroom E
Monday	3:30 PM	60	Fires and Explosions III	Conv. Ctr.	19AB
Monday	3:30 PM	66	Process Safety in LNG and LPG II*	Conv. Ctr.	Ballroom E
Tuesday	8:00 AM	79	Combustible Dust Hazards	Conv. Ctr.	19AB
Tuesday	10:15 AM	110	Facility Siting and Consequence Analysis I	Conv. Ctr.	19AB
Tuesday	1:30 PM	134	Facility Siting and Consequence Analysis II	Conv. Ctr.	19AB
Tuesday	1:30 PM	137	LNG Plant Safety and Protection I*	Conv. Ctr.	14
Tuesday	1:30 PM	139	Process Safety in Upstream Operations I*	Conv. Ctr.	Ballroom E
Tuesday	3:30 PM	153	Facility Siting and Consequence Analysis III	Conv. Ctr.	19AB
Tuesday	3:30 PM	157	LNG Plant Safety and Protection II*	Conv. Ctr.	14
Wednesday	8:00 AM	176	Process Safety in Upstream Operations II	Conv. Ctr.	19AB
Wednesday	10:15 AM	189	Reactive Chemicals	Conv. Ctr.	19AB

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* This session is co-sponsored by one or more programming groups.

This overview of the technical program is accurate as of February 13, 2015 and is subject to change. For the latest information on paper titles, authors, times, locations and more, visit www.aiche.org/spring.

T1G – Design Institute for Emergency Relief Systems (DIERS) Symposium

Day	Time	Session #	Session Title	Property	Room
Monday	10:30 AM	9	Effective Scenario Identification for Pressure Relief and Effluent Handling Systems	Conv. Ctr.	Ballroom F
Monday	1:30 PM	40	Relief Considerations for Low Pressure Storage Tanks	Conv. Ctr.	Ballroom F
Monday	3:30 PM	58	Effectively Deal with Evolving Codes, Standards, and RAGAGEP for Pressure Relief Systems	Conv. Ctr.	Ballroom F
Tuesday	8:00 AM	87	Initial Design and Managing Ongoing Operation of Pressure Relief Systems	Conv. Ctr.	Ballroom F
Tuesday	10:15 AM	105	Development of Engineering Analysis Methods and Tools for Pressure Relief Valve Stability and Relief Pipe Reaction Forces	Conv. Ctr.	Ballroom F
Tuesday	1:30 PM	136	How to Measure the Right Data for Reaction Systems	Conv. Ctr.	Ballroom F
Tuesday	3:30 PM	159	Practical Methods for Two Phase Flow Estimates	Conv. Ctr.	Ballroom F
Wednesday	8:00 AM	175	New Developments in Fire Exposure and Depressuring Systems Design and Evaluation	Conv. Ctr.	Ballroom F
Wednesday	10:15 AM	192	Unique Aspects of Pressure Relief Systems Design and Evaluation for Reaction and Flare Systems	Conv. Ctr.	Ballroom F

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