

PROGRAM OVERVIEW

Technical sessions take place in Lawrence Welk Room

Time	Session	Speaker(s)
Wednesday, October 31, 2012		
5:00pm	Registration Opens in Mezzanine Corridor	
6:00pm - 7:30pm	Welcome Reception at Bob and Dolores Hope	
Thursday, November 1, 2012		
8:00am - 8:30am	Registration and Continental Breakfast in Bob and Dolores Hope	
8:30am - 8:45am	Welcoming Remarks and Workshop Overview	Dan Mueller, <i>Zephyr Environmental</i>
8:45am - 9:45am	Keynote Address: Hydraulic Fracturing Demands Technology and Innovation	Jeffrey Daniels, <i>Ohio State University</i> Cal Cooper, <i>Apache Corporation</i>
9:45am - 10:15am	Coffee Break	
10:15am - 11:45am	Session I: Water Sourcing and Logistics Session Chair: <i>Dan Mueller, Zephyr Environmental</i>	
	A Regulatory Perspective of Water Sourcing	Mary Ellen Ternes, <i>McAfee & Taft</i>
	Regulating Water Sources for Shale Gas Development in the Susquehanna River Basin	Paula Ballaron, <i>Susquehanna River Basin Commission</i>
	Emphasizing Water Reuse and Repurposing When Identifying Water Sources for Well Drilling and Completions	Sam Bacon, <i>Encana Energy</i>
11:45am - 1:15pm	Lunch at Bob and Dolores Hope	
1:15pm - 3:15pm	Session II: Water Treatment Session Chair: <i>Al Sacco, Texas Tech University</i> ; Session Co-chair: <i>Audra Morse, Texas Tech University</i>	
	Purification and Recycling of Shale Produced Waters - Holistic vs. Selective Target Approaches	Tor Palmgren, <i>M-I SWACO, A Schlumberger Company</i>
	Contrasting Water Treatment Facilities from Produced and Saline Sources West Texas and British Columbia	Cal Cooper, <i>Apache Corporation</i>
	The Oasys™ Forward Osmosis Membrane Brine Concentrator: Commercialization of FO Technology for Brine Minimization	Nathan Hancock, <i>Oasys Water Inc.</i>
	Treating and Reusing Flowback and Produced Water	John Lucey, <i>Heckmann Corporation</i>
3:15pm - 3:45pm	Coffee Break	

Time	Session	Speaker(s)
3:45pm - 5:45pm Session III: Wastewater Disposal Session Chair: <i>Mark Wilson, GE Power and Water</i> ; Session Co-chair: <i>Lee Lundberg, Veolia Water</i>		
	Sorbents to Extract Value from Flow Back Water and Produced Water: Reversible Capture of Organics and Rare Earth Elements	Dr. Paul Edmiston, <i>ABS Materials</i>
	Unconventional Gas Wastewater Treatment	Harish Acharya, <i>GE Water</i>
	Advanced Technologies for Produced Water Treatment and Reuse	David Burnett, <i>Texas A+M</i>
	Sustainable Solutions for Flowback/Produced Water Challenges in Oil and Gas Fields	Chip Cagle, <i>Veolia Water</i>
6:00pm - 7:30pm	Networking Reception at Bob and Dolores Hope	
Friday, November 2, 2012		
8:00am - 8:30am	Registration and Continental Breakfast in Bob and Dolores Hope	
8:30am - 9:00am	Day Two Opening Remarks: Water Management for Hydraulic Fracturing	Danny Reible, <i>University of Texas at Austin</i>
9:00am - 11:00am	Session IV: Water Reuse and Recycle Session Chair: <i>Jessica Gray, Eastern Research Group</i> ; Session Co-chairs: <i>Tracy Young, Dow</i> ; <i>Martin Abraham, Youngstown State University</i>	
	Water Management Trends in Shale Energy Development	David Yoxtheimer, <i>Penn State Marcellus Center for Outreach and Research</i>
	Water Treatment Technologies for Water Reuse in Hydraulic Fracturing	Aaron Johnson, <i>Dow Water & Process Solution</i>
	Examples of Successful Recycle/Reuse Produced Water/Flowback Water Projects	George Kast, <i>Produced Water Solutions</i>
	Strategic Decision-Making for Water Management Applied to Unconventional Gas	Tekla Taylor, <i>Golder Associates Inc.</i>
11:00am - 11:30am	Coffee Break	
11:30am - 12:30pm	Session V: Panel Discussion Moderator: <i>Danny Reible, University of Texas at Austin</i>	

TECHNICAL ADVISORY COMMITTEE

Workshop Chair

Dan Mueller, *Zephyr Environmental*

Technical Advisory Committee

Patricia Brush, *Air Liquide*

Todd Ennenga, *Purestream Technology*

Ralph Exton, *GE Power & Water*

Jessica Gray, *Eastern Research Group*

David Klanecky, *Dow*

Lee Lundberg, *Veolia Water*

Wendy Young Reed, *Chemstations*

Danny Reible, *University of Texas*

Al Sacco, *Texas Tech University*

Randy York, *Chevron*

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**AIChE and A&WMA
thank you for attending
this year's workshop.**

**We look forward to seeing you
at our future meetings!**



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