

91st Annual Convention of the Gas Processors Association 2012

Mapping Mistream's Future

**New Orleans, Louisiana, USA
15 -18 April 2012**

ISBN: 978-1-62748-557-9

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2012) by the Gas Processors Association
All rights reserved.

Printed by Curran Associates, Inc. (2013)

For permission requests, please contact the Gas Processors Association
at the address below.

Gas Processors Association
625 East 60th Street
Tulsa, Oklahoma 74145

Phone: (918) 493-3872
Fax: (918) 493-3875

gpa@gpaglobal.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

How Do You Assure an Operations and Maintenance Workforce is Being Developed?	1
<i>Walter Jackson</i>	
Troubleshooting CO₂ Issues Using a Simulator: A Case Study	15
<i>Robert Dotson</i>	
How Do Published Standards / Regulations for Alarm and Control Room Management Impact the Gas Processing, Storage, and Transportation Industry?.....	39
<i>Kevin Brown</i>	
Frack to the Future: The Influence of Shale Development on the Petrochemical Industry	49
<i>Carlo Barrasa</i>	
Comparative H₂S Economics for Shale Gas	65
<i>Al Compton</i>	
Turbo Expander Design Considerations for Cryogenic Natural Gas Plants Without Molecular Sieve Application for Dehydration.....	72
<i>Reza Agahi, Behrooz Ershaghi</i>	
Solubility Measurements of Solid N-Hexane in Liquid Methane at Cryogenic Temperature.....	88
<i>Paolo Stringari, Pascal Theveneau, Christophe Coquelet, Gerhard Lauermann</i>	
BTEX Emissions from Ethylene Glycol Circulation in Natural Gas Refrigeration Plants: A Process Simulation Study.....	108
<i>James Holoboff, Alberto Alva-Argaez, Mohammad Khoshkbarchi</i>	
Preparing Solubility Data for Use by the Gas Processing Industry: Updating Key Resources.....	127
<i>Darryl Mamrosh, Kevin Fisher, Jeff Matthews</i>	
Acid Gas Dehydration – Why? How Much? Is There a Better Way?	166
<i>Wayne McKay, James Maddocks</i>	
IPORSM for NGL Recovery in the Marcellus Shale	183
<i>Robert Huebel, Michael Malsam</i>	
Controlled Freeze ZoneTM Commercial Demonstration Plant Advances Technology for the Commercialization of North American Sour Gas Resources.....	196
<i>Srinivas Moorkanikkara, Robbie Denton, Russ Oelfke, Jaime Valencia, Chuck Mart</i>	
Outlook for US Ethane: “Always Climbing a Wall of Worry”.....	205
<i>Peter Fasullo</i>	
North American Natural Gas Challenges and Opportunities	218
<i>Gregory J. Shuttlesworth</i>	
Creative Debottlenecking Project.....	230
<i>Govind Kasturi, Hesham Elshafei, Ahmed Adel</i>	
Application of the Safety Life Cycle for Gas Plant Process.....	240
<i>Prasad Goteti</i>	
Use of Catalytic De-Richment to Maximise Shale Gas Production	251
<i>Matthew Humphrys, Peter Carnell</i>	
Design Approaches to Enhance LNG Production	262
<i>Pradeep Pillai, Dave Messersmith, Cyrus Meher-Homji</i>	
Advanced Cooling Technology for Total Heat Removal from Base Load LNG Plants	281
<i>Peter Demakos</i>	
Technological Developments in Clamp-On-Ultrasonic Flow Measurement Methods as they apply to Oil & Gas Midstream Operations	304
<i>Claus Huebel, Peter Baldwin</i>	
Volatile Organic Compound (VOC) Analyzer for Detecting Cooling Tower/Heat Exchanger Leaks.....	327
<i>Wes Kimbell, Charles Kimbell</i>	
Shale Gas - How Do We Protect It's Future?	334
<i>James Tramuto</i>	
The Role of Regulation in Oil and Gas Pipeline Development.....	346
<i>Kirk Morgan</i>	
Eagle Ford Shale Where Are All Those Liquids Gonna Go?	357
<i>Lesa Adair, Susan Starr</i>	
Gas-To-Liquids: Now a Viable Alternative Gas Processing Strategy	370
<i>Horace Hobbs, Lesa Adair, Susan Starr</i>	
Author Index	