

SPE Meeting February 19th 2015



5600 Crooks Rd Ste. 106 Troy, MI 48098

5:00 to 6:00 PM – Optional Social Hour 6:00 PM – Italian Dinner 7:00 PM – Presentation Cost (including dinner): \$30 Receipt Available

Topic: Slugging in Pipelines: What You NEED to Know By Mona Trick

Mona Trick Schlumberger

Please RSVP by February 11th so Loccino can staff accordingly.

Jessica Thering, SSOE 2621 W. Wackerly Street, Ste. D Midland, MI 48640 tel: 989.941.0092

e-mail: <u>JThering@ssoe.com</u>

Society of Petroleum Engineers



Slugging in Pipelines: What You NEED to Know by Mona Trick Schlumberger

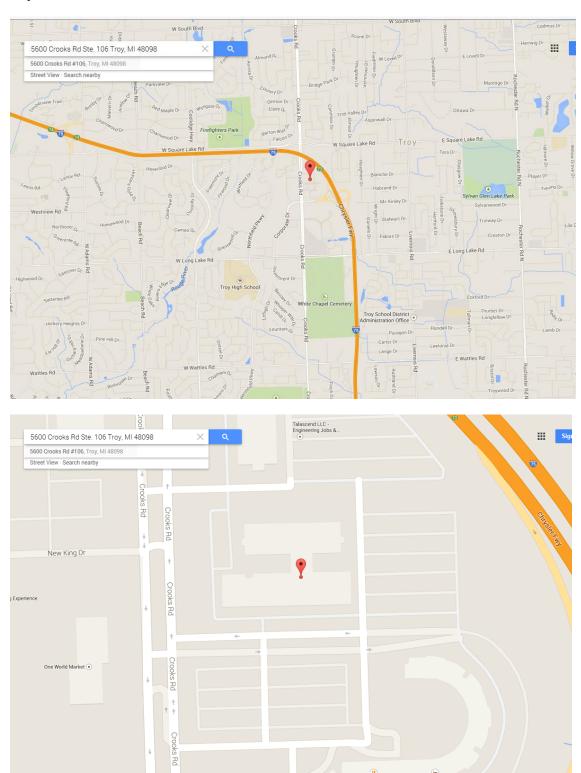
Abstract:

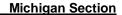
For the unprepared, liquid slugs in multiphase pipelines can have disastrous consequences ranging from increased corrosion, production impairment, and compressor damage to flooding of separators and damage to process equipment. The key to avoiding problems with slugging in pipelines is to determine the type and magnitude of the slug now and into the future. In this talk, the 4 different types of slugging phenomena will be described. These include hydrodynamic slugs, terrain-induced slugs, slugs caused by flow rate changes and slugs formed by pigging operations. Procedures for handling and modeling each type of slug will be outlined using both steady state and transient modeling tools. Videos of actual slug flow in pipelines will be shown to help give a better understanding of slug flow. The talk will also describe the current status of mechanistic slug modeling and areas of active research. Once the kind and size of slug is determined, then the appropriate steps can be taken to avoid problems.

Biography:

Mona Trick, P.Eng. is Advisor - Flow Software and works for Schlumberger Canada Limited. Throughout her 31-year career, she has been involved in the application of flow modelling to the design, analysis, and optimization of systems involving multiphase flow, including the identification and mitigation of challenges associated with slug flow. Her principle responsibility is the on-going development of FORGAS, Schlumberger's gas and oil field production forecasting software which is used for optimizing gas storage, gas production and oil production fields. She has been actively involved in modelling, analyzing and optimizing gas production and gas storage fields for clients, and supporting clients in their optimization efforts, for the past 31 years. She has written and presented more than 15 technical papers for the SPE and other professional organizations. She holds a B.Sc. degree in mechanical engineering from the University of Calgary, and is a registered professional engineer in Alberta, Canada, with 25 years as a member of the SPE.

Map to Loccino







MICHIGAN SECTION NEWS

http://connect.spe.org/Michigan/Home/

2014-2015 Michigan Section Officers

Chairperson: Sue Burla 248-205-7414 <u>susan_burla@transcanada.com</u>
Program Chair: Ben Updyke 313-235-1115 <u>updykeb@dteenergy.com</u>

Treasurer: TBD

Secretary: Jessica Thering 989-941-0092 <u>ithering@ssoe.com</u>

Scholarship Chair Boyan Makarenko 248-205-7536 <u>boyan_makarenko@transcanada.com</u>

SPE Michigan Section is actively seeking potential officers to serve on the executive committee for the 2014-2015 fiscal year. If you are interested in joining the Michigan Section executive committee, please contact any of the current committee members.

Membership Renewal Reminder

Do not forget to join or renew your membership with SPE for 2015! Visit www.spe.org for more information.

2014-2015 SPE Michigan Section Meeting Schedule (Lansing, MI)

Mon Mar 02, 2015 Mohsen Achour

The Science and Engineering of Internal Corrosion Control in the Upstream

Petroleum Industry—Mainly About Managing Water

Mon Apr 20, 2015 Brian E. Toelle

Shale Sweet Spot Detection With Surface Seismic

2014-2015 SPE Northern Michigan Section Meeting Schedule (Traverse City, MI)

March 3, 2015 Jalal Abedi

Next Generation of Energy-Efficient, Low-Water Usage Heavy Oil Recovery

Methods

May 20, 2015 Joseph H. Frantz, Jr.

Shale Plays: How Technology, Governments, Regulators, Academia, and the Public Have Changed the World's Energy Supply and Demand Equation

Michigan Section SPE Scholarship

The Michigan Section of the Society of Petroleum Engineers (SPE) annually awards a scholarship of \$1,000 to a Michigan college student or an incoming college student who is pursuing a career in the petroleum and natural gas industry. For a detailed list of the requirements for the scholarship, please see http://connect.spe.org/Michigan/AboutUs/Scholarships/. Application deadline is in July for the following school year.

Request for e-mail addresses

If you received this newsletter by "snail mail", we do not have your valid e-mail address, which could be due to your choice to not receive email from SPE and requirements from the global privacy laws. If you would like to receive this newsletter via email, please send an e-mail to Jessica Thering. She will add you to the SPE Michigan chapter email list.

Michigan Basin Geological Society (MBGS) Meeting Schedule (www.mbgs.org)

May 31 – June 3, 2015: AAPG 2015 Annual Convention & Exhibition, Denver, Colorado http://ace.aapg.org/2015

SPE International Information

Upcoming SPE Events:

Date	Title	Location
23 - 25 Feb	SPE Reservoir Simulation Symposium (15RSS)	Houston, Texas,
24 - 25 Feb	SPE E&P Chemical Risk (15ASAN)	San Antonio, Texas
1 - 5 Mar	SPE Production and Operations Symposium	Oklahoma City, Oklahoma
	<u>(15POS)</u>	
3 - 5 Mar	SPE Digital Energy Conference and Exhibition	Woodlands, Texas
	(15DEC)	
6 - 7 Mar	SPE/AAPL Enhancing the Community	San Antonio, Texas
	Conversation From Acquisition Through	
	Production Workshop (15JSAN)	
16 - 18 Mar	SPE E&P Health, Safety, Security and	Denver, Colorado
	Environmental Conference- America's	
	<u>(15HSSE)</u>	
22 - 26 Mar	SPE Physics and Chemistry of Nanoscale Rocks	La Jolla, California
	(15FUS1)	
24 - 25 Mar	SPE Production Chemistry and Chemical	New Orleans,
	Systems (15ANE2)	Louisiana
24 - 25 Mar	SPE Coiled Tubing and Well Intervention	The Woodlands,
	Conference and Exhibition (15CTWI)	Texas
31 Mar - 1 Apr	SPE Production and Reservoir Performance	Dallas, Texas
	through Pressure Management (15ADLS)	
13 - 15 Apr	SPE International Symposium on Oilfield	The Woodlands,
	Chemistry (15OCS)	Texas

For information regarding the upcoming SPE conferences or exhibitions, visit the Society for Petroleum Engineers website at www.spe.org.

Continued Education

SPE understands the importance of continuing education for keeping skills up to date, improving expertise or learning new techniques.

You can grow your knowledge by attending short programs and courses, such as:

- SPE Training Courses http://www.spe.org/training/courses.php
- American Association of Petroleum Geologists (AAPG) Education programs http://www.aapg.org/education/
- Field trips with Michigan Basin Geological Society http://www.mbgs.org/field_trips.html
- Professional Engineer information: go to <u>www.ncees.org</u> or http://www.dleg.state.mi.us/bcsc/forms/eng/peexam.pdf for application process for Professional Engineers License in Michigan.

Other News

Michigan Association of Professional Landmen (MAPL) Winter Seminar on Thursday, February 19th, 11:30 am to 4:30 pm in Mount Pleasant: http://www.cvent.com/d/0rqjd9/1Q Please register by February 6th.

We are always looking for **guest speakers** for upcoming SPE meetings. If you have a talk on a geological or engineering topic, we can provide the audience.

If you are interested in **advertising** in the Michigan Section newsletter, please contact Jessica Thering. Proceeds from advertising go to the SPE scholarship program.

Comments? Questions? Concerns? How can your SPE section serve you better? To voice your opinion on any aspect of section membership, please contact any of the officers or grab their attention at the meetings.