

February 2015

SPWLA Houston Chapter Newsletter

Luncheon meetings in February 2015	
Northside Mon, Feb 02, 2015 Talisman Energy USA Inc. Suite 1200, 2445 Technology Forest Blvd, The Woodlands, TX 77381	Field Experience with the Raptor Pulsed Neutron Saturation Tool Dr. Darryl Trcka , Weatherford
Westside Wed, Feb 11, 2015 BP Plaza Westlake 4	Pitfalls in Comparing Core to Log Data in Unconventional Tight Oil Reservoirs Gary A. Simpson , Hess Corporation
Downtown Mon, Feb 16, 2015 Kinder Morgan	Alternative Nuclear-based Technologies to Mitigate Risks of Radionuclide Well Logging Sources: Their advantages and challenges Ahmed Badruzzaman Pacific Consultants and Engineers and University of California, Berkeley

Houston Chapter News

Save the Date!

SPWLA Houston Chapter Topical Conference will be held in Houston on May 13, 2015

Welcome our new Webmaster!

Please join us in welcoming Amir Rangwala as our new Webmaster.

Chicheng Xu thank you for your volunteering and hard work you've been doing during these past terms.

SPWLA Upcoming Events

SPWLA C.A.F.E. Chapter: CAFE Petrophysical Forum. [\[Link\]](#)

February 24-28, 2015

SPWLA 2015 Spring Topical Conference: Pore- scale imaging and digital rocks: Expanding the Petrophysical Toolkit | Skamania Lodge, Stevenson, WA, May 3-7th 2015 [\[Link\]](#)

SPWLA 56TH Annual Symposium | Long Beach, CA, July 18-22, 2015

SPWLA 57th Annual Symposium | Reykjavik, Iceland, June 26-30, 2016

Meet our Sponsors



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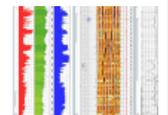


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**NMR Logging Course and
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E N E R G Y

President's Corner

Dear Chapter Members

Happy New Year and welcome back! The 2015 speaker sessions are well under way already. During January we had three speaker luncheons take place. On the Northside Mark Kittridge (Hess) presented his very well attended talk on the influence of pore shape and mineralogy on the velocity of carbonate rocks. On the Westside Hani Elshahawi (Shell) delivered a talk on the challenges and opportunities of deepwater exploration and production in the Gulf of Mexico and for the downtown session Lu Chi (A&M University) presented a talk about directional permeability assessment in formations with complex pore geometry using a new NMR based permeability model. Once again I would like to thank all of you who attended for your ongoing support of the chapter events and of course a big thank you goes out to our speakers.

In last month's newsletter we discussed the outstanding turnout of the December Software Show. I just wanted to let everyone know that this year we had 200 attendees, which is a record for this event! This is great news for the chapter and for the future success of the Software Show. We have looked through all the feedback forms and have taken notes of your comments. We will do our best to ensure that this year's show is even better than last years! Thanks again to all of you who attended.

Looking forward please mark May 13th in your calendars and save the date for the Spring Topical Conference. We are still finalizing the topic for this year's event and we will be announcing it shortly, along with the call for abstracts. The conference will take place in our regular location at the Chevron Auditorium downtown and will run all day. Details to follow!

As you may also have seen we are in the process of updating our membership lists and gathering some more information about our members. The first stage is to clean up the more than 2000 emails we have on record for chapter members to eliminate those that are no longer being used or those that no longer wish to be part of chapter activities. An email has been sent out asking everyone to validate the email address we have on file or to update it with a new one. Once that is done we will be sending around a voluntary survey to gather information on members, such as years in the industry and current role that we hope will allow us to improve our events and speaker sessions. Finally this is a friendly reminder to please join the SPWLA international organization if you are not already a member. Details can be found at www.spwla.org.

If you have any questions or comments about chapter activities then please feel free to contact me directly at president@spwla-houston.org.

Matt Blyth
Houston SPWLA Chapter President



Matt Blyth
Houston Chapter President
president@spwla-houston.org

SPWLA Houston Chapter Officers 2014 – 2015

President Matthew Blyth, Schlumberger president@spwla-houston.org	Treasurer Zhipeng (Z) Liu, Kinder Morgan CO2 treasurer@spwla-houston.org
Vice President – Northside Robin Slocombe, Schlumberger northvp@spwla-houston.org	Editor Irina Borovskaya, ConocoPhillips editor@spwla-houston.org
Vice President – Westside Rohollah Abdollah-Pour, BP America westvp@spwla-houston.org	Event Coordinator Gerardo Gonzalez, Schlumberger events@spwla-houston.org
Vice President – Downtown David Diaz, Schlumberger downtownvp@spwla-houston.org	Webmaster - Outgoing Chicheng Xu, BHP Billiton webmaster@spwla-houston.org
Secretary Lucy Plant, FEI secretary@spwla-houston.org	Webmaster Amir Rangwala, BHP Billiton webmaster@spwla-houston.org

Useful links

Sign up for the Houston Chapter Mailing List
[\[Link\]](#)

[Houston Chapter spwla-houston.org](http://www.spwla-houston.org)

[SPWLA International spwla.org](http://www.spwla.org)

[Join SPWLA – become a member](http://www.spwla.org/member)
<http://www.spwla.org/member/join>

[Houston Chapter LinkedIn page](#)

[SPWLA Symposium 2015](#)

Northside Luncheon Meeting

Monday, Feb 02, 2015 | Lunch: 11:30 | Talk: 12:00

Field Experience with the Raptor Pulsed Neutron Saturation Tool

Dr. Darryl Trcka, Weatherford

The Raptor is the latest generation of pulsed neutron technology from Weatherford and is currently being introduced worldwide. Greater depth of investigation, greater sensitivity to formation fluids and gas, and a calibrated response characterization are the foundations of the Raptor behind-casing saturation and formation evaluation products. This presentation will introduce the Raptor technology and examine some of the recent experiences from the field.

Dr. Darryl Trcka, a senior research physicist at Weatherford Wireline R&D, the principal Raptor scientist, and the manager of advanced product development for the Raptor services

Venue Details Northside

Talisman Energy USA Inc.
*Suite 1200, 2445 Technology
Forest Blvd, The Woodlands, TX
77381*

Parking: Parking Garage adjacent to the Talisman building. Visitor Parking available in 5th floor and above.

Reservations:
Email [Robin Slocombe](mailto:Robin.Slocombe@spwla-houston.org)
northvp@spwla-houston.org

RSVP by noon, Jan 29.

Cost: \$30.
Lunch is included.
Please use PayPal
([click this link to pay](#))

Student discount rate \$15
([Students use this link](#))

Westside Luncheon Meeting

Wednesday, Feb 11, 2015 | Lunch: 11:30 | Talk: 12:00

Pitfalls in Comparing Core to Log Data in Unconventional Tight Oil Reservoirs

Gary A. Simpson, Hess Corporation

As petrophysicists, we routinely scrutinize well log data as to its validity and quality of measurements. Rarely, do we apply the same level of scrutiny with core analysis data. Comparison of logging measurements and core analysis is an essential component in understanding unconventional reservoirs. However, in comparing log data with core measurements in unconventional tight oil reservoirs certain pitfalls can exist that could trip up a petrophysicist when making these comparisons. Core measurement protocols that were developed for coal bed methane, tight gas and shale gas don't always apply to tight oil reservoirs and may require that new protocols be developed.

This presentation will show examples of log and core measurements showing comparisons with XRD and XRF measurements and where differences can exist. In addition, problems with protocols used for Dean Stark and retort water saturation measurements will be discussed.

Gary Simpson is Senior Petrophysical Advisor at Hess Corporation, Houston Texas. He is a member of the Unconventional Resource Technology team advising business unit asset teams on research and development projects for unconventional reservoirs. He has more than 36 years of industry experience. Prior to joining Hess, he held operating company positions for Shell, ConocoPhillips and Forest Oil Corporation.

Gary's early experience was in the oil field service sector holding positions with Halliburton, Computalog Inc.(now part of Weatherford), and Perf-O-Log (now part of Schlumberger). He's worked in field engineering, sales, interpretation development, petrophysics, technical marketing and as a global product champion for pulsed neutron tools. Gary has authored more than 20 technical papers and articles, primarily relating to the development of interpretation methods and logging techniques for measurements made with pulsed neutron, carbon oxygen and gamma ray spectroscopy tools. He is a member of the SPWLA and SPE. Gary is a 1978 graduate from Texas A&M University.

Venue Details Westside

BP Plaza Westlake 4
Room 107
501 Westlake Park Blvd
Houston, TX 77079

Reservations:

[Register online Here](#)

RSVP by noon, Feb 10

Cost: Free

Lunch: not provided, bring your own or purchase in the BP cafeteria

Parking:

Visitor parking is available at Westlake 4 overflow lot

Sign In Process:

You can proceed directly from the BP reception to the meeting room.

Signing in at the security in not required.

Please sign in on the attendance sheet in the meeting room.

For questions only: [Email Rohollah Abdollah-Pour](#)



Downtown Luncheon Meeting

Monday, Feb 16, 2015 | Lunch: 11:30 | Talk: 12:00

Alternative Nuclear-based Technologies to Mitigate Risks of Radionuclide Well Logging Sources: Their advantages and challenges

Ahmed Badruzzaman

Pacific Consultants and Engineers and University of California, Berkeley

Radioisotope-based nuclear logging tools are critical for reservoir characterization and related completion and production decisions. But these sources are small, mobile and often used in politically unstable regions of the world. Thus, they and similar sealed sources pose the risk of being utilized in a radiological dispersal device (RDD), despite their lower radioactivity content relative to sources used in other industries and the multiple layers of protective features built-in. This concern was heightened by the tragedy of 9/11, recent stolen/missing source incidents, attempts at malevolent use, and existence of a black-market on sources.

Consequently, in addition to decades-long industry effort to develop non-nuclear and nuclear-based alternative logging technologies, governments, international agencies, and national labs are actively assessing measures and technologies to mitigate risks of such sources.

The presentation will first briefly survey recent source incidents, associated risks, and approaches being assessed to mitigate these risks: use of alternatives, electronic tagging of sources and use of enhanced security protocols. It will then examine in some detail the state of nuclear-based alternatives recently reported to replace radionuclide logging sources. D-T neutron generators have been the primary switchable-source alternative to ^{241}Am -Be sources for neutron porosity and mineralogy tools, wireline or LWD. Two switchable alternatives to ^{137}Cs -based density, the most accurate estimator of porosity were reported. These are from a LINAC X-ray wireline tool successfully tested in the 1980s, but not commercialized, and from the interpretation method implemented in an LWD tool utilizing gamma-rays from inelastic interactions of high-energy neutrons from a D-T generator. The latter concept, denoted as inelastic n-gamma density (INGD) or as "sourceless" density by some, was initially developed in the 1990s as a cased-hole density indicator. Results of nuclear alternatives, in general, have not been as accurate as those from radionuclide sources. The talk will discuss the underlying physics causes of the inaccuracies, the resulting tool design and petrophysical interpretation complexities, and the ongoing effort to address these, including research on novel generators with the potential to directly replace ^{241}Am -Be and ^{137}Cs sources. The talk will conclude by briefly exploring implications for the industry of the various mitigation approaches being deliberated and how it can participate in these efforts to help set the direction of nuclear logging for years to come.

Venue Details Downtown

Kinder Morgan

1st Floor Conference Rm
1001 Louisiana St
Houston, TX 77002

Reservations:

Email to [David Diaz](mailto:David.Diaz@downtownvp@spwla-houston.org)
downtownvp@spwla-houston.org

RSVP by noon, Feb 12

Cost: \$30. Lunch is included.
Please use PayPal
([click this link to pay](#))

Students discounted rate
\$10 ([Link for students](#))

Parking: closest options:

- Travis Garage across milam, in front of Kinder Morgan
- Open Air parking between Kinder Morgan and Shell N 2

Ahmed Badruzzaman has spent over 30 years studying downhole nuclear techniques for both characterization and monitoring during his tenure at Chevron Energy Technology, Sandia National Laboratories, and Schlumberger-Doll Research. He also developed and taught a graduate course on the subject from 2001-2009 at University of California, Berkeley. In addition, he has studied nuclear power, small energy systems for developing societies, and energy/ climate issues. He has been the primary industry discussant on logging source safety challenges and their mitigation. Currently a consultant at Pacific Consultants & Engineers in California, he provides consultation to the US Department of Energy on these topics. He was an official reviewer of the 2008 U.S. National Academy of Science report to Congress, Radiation Source Use and Replacement. During 2011-2012, he was a consultant to the International Atomic Energy Agency on their draft source safety guide, Radiation Protection and Safety in Well Logging, currently under review for international deployment.



Ahmed holds a Ph. D in Nuclear Engineering and Science from Rensselaer Polytechnic Institute, Troy, NY. He is the author of over 40 papers, holds two US patents, and is a Fellow of the American Nuclear Society. He is the Chairman of SPWLA Nuclear Logging SIG, a recipient of several professional society awards, a past Distinguished Lecturer of SPE, and a past and current Distinguished Speaker of SPWLA. He is a Visiting Scholar at U C Berkeley.