



The Rock Record - September 2016

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Please contribute to the SGS
Newsletter

The SGS Newsletter is produced by the SGS executive. Letters, announcements, notices, comments, photos, news and information about SGS members, etc. are always welcome. Call an executive member or write to us at:

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Saskatchewan Geological Society Luncheon Talk

Thursday, September 15th, 2016

"Continuing Professional Development"

APEGS Professional Development Committee

VENUE:

The Artful Dodger, 1651 11th Ave

Lunch: 11:45 a.m.

Talk: 12:00-1:00 p.m.

For lunch the cost is:

No Lunch (Talk only): \$5.00

Members: \$15.00

Student Members: \$10.00

Non-Members: \$20.00

Please RSVP to Jason Cosford at cosford@jdmollard.com
before noon on Monday, Sept. 12, if you are going to have lunch.

DETAILS OF Sept 15th TALK – APEGS Professional Development Committee

ABSTRACT – “Continuing Professional Development”

This seminar will present changes to the APEGS Continuing Professional Development (CPD) Program. You will learn about what qualifies as CPD credits, what you require for credits on an annual basis and the importance of reporting your CPD activities. Attendees will also be led through how to report CPD credits by accessing your online profile through the APEGS website.

Attendance at this presentation qualifies for APEGS CPD credit.

***Note:** If you wish to follow along with the live demo, please bring your laptop and your APEGS user name and password. The Artful Dodger has a WiFi connection available.

DETAILS OF Sept 27th TALK – Evening of Sept. 27th, University of Regina (time and room to be determined):

AAPG Distinguished Lecture: “Cognitive Bias, The Elephant in the Living Room of Science and Professionalism” Peter R. Rose, Consultant, AAPG Ethics Lecturer

ABSTRACT –

Cognitive bias, in its many manifestations, is the major cause of geotechnical overestimation and faulty probability forecasts in petroleum geoscience. The five most prevalent cognitive biases in petroleum E&P are: Confirmation Bias; Overconfidence; False Analogs; Anchoring; and Motivational Bias. They are caused by premature selection of theory, personal hubris, lack of perspective, lack of imagination, laziness, and excessive self-interest. Important influences include the existing organizational reward system, economic pressure for objective geotechnical results, and the anticipated consequences of project reviews and evaluations. In fact, the field of E&P Risk Analysis emerged during the 1980s to help identify and reduce bias in assessing the value of new plays and prospects. Companies that routinely utilize disciplined methods of Risk Analysis tend to deliver on their E&P promises.

Pioneering work by Nobel laureate Daniel Kahneman, his late colleague Amos Tversky, and others since the 1970s has made scientists much more aware of the dangers that Cognitive Bias pose for the practice of objective, reliable science. Even so, increasing awareness of obvious agenda-serving scientific publications, slanted peer review (“pal-review”), withholding of codes and formulae, unreproducible experimental results, and scientific fraud indicate that procedures to identify and limit Cognitive Bias are not being appropriately utilized throughout the scientific community. This is probably because many of the organizational and economic pressures routinely experienced by E&P geoscientists are not as intensely or widely operative within academic and governmental organizations.



The late physicist and Nobel laureate Richard Feynman recognized (1974) the danger of Cognitive Bias: “the first principle is that you must not fool yourself – and you are the easiest person to fool.” Feynman knew that dedicated practice of the Scientific Method is the key to elimination of Cognitive Bias, recommending “a kind of scientific integrity, a principle of scientific thought that corresponds to a kind of utter honesty – a kind of leaning over backwards.” A practical research approach familiar to many geoscientists is T. C. Chamberlain’s “Method of Multiple Working Hypotheses”, introduced in 1890. Also important is the separation of E&P activity into two essential and complementary components – 1) play and prospect generation; and 2) play and prospect risk assessment. Professionalism constitutes the conscious honoring of such principles.

Sound and objective science is essential to the continued progress of Society. Is it possible that methods widely applied by Petroleum Geoscience to identify and counter Cognitive Bias might also be useful to other branches of Science?

SPEAKER BIO –

Pete Rose (Ph. D., Geology, University of Texas, Austin) has been a professional geologist for 56 years, specializing in Carbonate Stratigraphy, Petroleum Geology, Basin Analysis, E&P Risk Assessment, and Mineral Economics. In 1998, he founded Rose & Associates, LLP. Pete retired in 2005; the Firm continues as the global standard among consulting companies in the field of E&P Risk Analysis.

His 2001 AAPG book, Risk Analysis and Management of Petroleum Exploration Ventures, now in its 7th printing, is widely considered to be the "Bible" in its field, and has been translated into Japanese, Chinese, and Russian. He has authored or co-authored more than 80 published articles and over 300 presented papers on an extremely wide variety of topics (Micropaleontology to Petroleum Economics!). From 2001 to 2004 Pete wrote a regular column, "The Business Side of Geology", for The Explorer, AAPG’s monthly news magazine.

Pete received the coveted Parker Memorial Medal from the American Institute of Professional Geologists in 1998. In 2005 he became the 89th President of AAPG. He was co-chair of the 2007 Interdisciplinary Conference on Oil and Gas Reserves Definitions, held in Washington, D.C., which was instrumental in encouraging the U. S. Securities and Exchange Commission to modernize its rules on oil and gas reserves reporting, as occurred the following year. This facilitated the investment component of the “shale revolution” in the U. S. during the 2008-2015 development period. In 2013 he became the first American recipient of the prestigious Petroleum Group Medal of the Geological Society of London, and in 2014 AAPG honored him with its Halbouty Outstanding Leadership Award.

His many years of experience, helping thousands of geoscientists to improve their geotechnical performance by detecting and reducing bias in their prospect and play evaluations, have prepared Pete Rose well to address the broader effects of cognitive bias in science and professional matters, the subject of his distinguished lecture, "Cognitive Bias, the Elephant in the Living Room of Science and Professionalism".



President's Message

Believe it or not, summer has come and gone and September is upon us already! I hope you all had an enjoyable and productive summer. The majority of mine was spent doing fieldwork in northern Saskatchewan, though I was able to spend a few terrific days towards the end of August with my family in the Cypress Hills. Somewhat unbelievably, this was my first time visiting this part of Saskatchewan – truly a fantastic part of the province, not to mention geologically fascinating. The few days we had there were certainly not enough to explore all of the wonders of the park and we definitely plan on heading back in the near future.

As is typical, the summer months were relatively quiet for the Society. The main exception was the annual field trip, which visited the Jasper area from August 18th-22nd. This year there were 14 participants on the trip and several sites were visited around the National Park. I unfortunately was unable to attend because of my fieldwork obligations but the initial reports I've received are that it was a great trip and a good time was had by all. I would like to extend a big thanks to John Lake, Gavin Jensen and the rest of the field trip planning committee for their efforts in organizing the trip and to Ben Rostron from the University of Alberta for leading it.

As we head into fall there are several Society events on the horizon that you can book into your calendar. These are described throughout this newsletter but I'll briefly reiterate here. The first, taking place on September 9th, is the annual SGS Golf Tournament and BBQ. This event is always a lot of fun and the MacDougalls have graciously stepped up to host the BBQ again this year, so it should be another great one. The only question remaining now is whether the 'Morelli-Maxeiner' duo can maintain the momentum from winning the 2016 curling bonspiel and also take the golf title this year. Though unless the 'Kreis-Kelley' half of our team has been doing a lot of practicing since last year, there's really no hope of that happening. But I'm digressing here.

Other upcoming events include a lunch seminar on Thursday, Sept. 15th on the topic of Continuing Professional Development. This seminar, kindly volunteered by members of the APEGS Professional Development Committee, will provide instruction to participants on the requirements and reporting procedures for professional development activities, and will allow participants to work along on your own laptops during the presentation. This is an important topic for all professional geoscientists in the province, and – if you're like me - one that some further instruction on will be greatly beneficial. We're also excited to have Pete Rose, one of the 2016 AAPG Distinguished Lecturers, coming to give a presentation on "Cognitive Bias" (see description above). This talk will take place on the evening of Sept. 27th at the University of Regina (room to be determined). It seems like it will be a bit "outside of the box" of our typical Society talks but looks to me like it will be quite eye-opening. Geared towards petroleum geoscience, the abstract alludes to the fact that sometimes as scientists we can sometimes (unintentionally) lose sight of the requirement of objectivity in our work. I, for one, am very much looking forward to both of these presentations. Hope to see you there!

Ryan Morelli



OTHER NEWS AND EVENTS

Membership Renewals PLEASE

If you haven't already done so, it's time to renew your membership for 2016. The most convenient way to renew your membership is to do it online and pay by Paypal; you do not need a PayPal account to do this: <http://sgshome.ca/membership>.

30th Annual SGS Golf Tournament & BBQ

The annual golf tournament and BBQ is coming up on Friday, Sept. 9th. If you've registered for the BBQ, make sure you've emailed Maria.velez@uregina.ca with number of people attending and provided payment. Tee times and other details for golf will be sent out in an email in the near future. Please be on time for your tee-off. The BBQ will take place at the MacDougalls at 3730 McTavish Street; doors open at 5pm and food will be served starting around 6pm. Please bring lawn chairs to the BBQ if you're able. Both the golf and BBQ will go ahead, rain or shine, but hopefully we'll have good weather. Looking forward to seeing you there!

Request for Volunteers

We are in need of volunteers to represent the Society at display booths for two upcoming events. The first is at a trade show for new APEGs members, taking place on Friday Sept. 9th from 5:00-6:30 pm. We are looking for 1-2 people for this event. Note that this is the same day as the golf tournament, so ideally it would be someone who is not involved in that event (or is willing to come late to the BBQ). The second event is the 2016 Sciematics provincial conference for elementary and secondary science educators, which is to be held at the University of Regina on Friday, Oct. 14th and Saturday, October 15th. We are still waiting for details on this event, but will likely need several volunteers to do ~ 2-hour shifts on Saturday (15th) only. If you are able to help out at either event, please email us at sask.geol.soc@hotmail.com with the subject heading "Volunteer" and indicate which event(s) you're available for. No specific prior knowledge is required for either event.

Upcoming Talks

Here is what's in the works for the months to come, submitted by Jason Cosford and Mike Thomas:

List of Some Upcoming Speakers (dates tbd):

- Cees van Staal, Geological Survey of Canada
- Colin Card, SK Geological Survey
- Dave Thomas, Cameco
- Peter Hill, SK Geological Survey
- Jessica Flynn, SK Geological Survey
- Chris Johnson, South Dakota School of Mines

Suggestions for other potential speakers are always welcome. Please contact either Jason Cosford or Mike Thomas with your ideas.



News from the D.M. Kent Club

The D.M. Kent Club is once again getting excited for the beginning of a new year. We have many exciting events planned for fall including our annual Meet and Greet. Happening September 23rd from 5-11 pm, we'd like to invite everyone to stop by, say hello, and meet the future geoscientists of Saskatchewan. Our second major event is our Student-Industry Geoscience Roundtable on October 21st, where we are hoping to introduce young students to the broad possibilities a career in geoscience offers. We are looking for volunteers to participate in the event, by acting as industry representatives, sharing their experiences, and answering any questions that may come up. If you are interested in hearing more about the event or volunteering, please contact John Kelley at 306-596-5231 or send an email to the club at dmkentclub@gmail.com. We hope to see you at our events!



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