



The Department of Geological Sciences & Geological Engineering
Distinguished Speaker Program presents:

Dr. Bradley Hayes

President, PETREL ROBERTSON CONSULTING LTD.



AAPG Visiting Geoscientists Program

“Unconventional Oil and Gas in Canada”

Monday, February 12, 2018

6:30 pm – 12:30 pm

Dupuis Hall, Room 210

All are welcome to attend!

Bio:

Brad Hayes is President of Petrel Robertson Consulting Ltd., a geoscience consulting firm addressing technical and strategic issues concerning conventional and unconventional hydrocarbon exploration and development. Under Brad's direction, PRCL has developed particular geoscience expertise in unconventional hydrocarbons, including oil sands, tight reservoirs, and shale plays.

Brad earned a PhD in geology from the University of Alberta, and a BSc from the University of Toronto. He joined PRCL in 1996 after 15 years of exploration experience in operating companies, including Shell Canada and Canadian Hunter. Brad is an active member of AAPG and CSPG, and served as CSPG President in 2001. He is currently a Board member with the Canadian Society for Unconventional Resources (CSUR), and is serving his second three-year term as a Councillor for the Association of Professional Engineers and Geoscientists of Alberta (APEGA). Brad was recently appointed an Adjunct Professor in the University of Alberta Department of Earth and Atmospheric Sciences.

Abstract:

“Unconventional” oil and gas resources have rapidly evolved in Canada over the past two decades, to the point that they dominate hydrocarbon production in our country today.

We'll start with First Principles – what makes an “unconventional” oil or gas play? Focus will be on low-permeability reservoirs, leaving discussion of oil sands to another time. We'll review geological principles of some of the major unconventional plays in Canada, including world-leading reservoirs in the Montney and Duvernay formations of western Canada.

All credible forecasts of future energy consumption demonstrate that Canadian oil and gas – and therefore unconventional oil and gas – will be in ever-increasing demand over the coming decades. Producers will need to address a variety of issues in maintaining and increasing production – environmental and community issues, transportation infrastructure, and a variety of technical issues in the field. Digging a little deeper into the technical issues, we'll see that continued technological improvements will be required as we widen the “sweet spots” in each play that can be developed economically.