



Sean Sanders, PhD PEng
Professor and
NSERC Industrial Research Chair - Pipeline
Transport Processes
Dept. of Chemical & Materials Engineering
University of Alberta
Edmonton CANADA

Dr. Sean Sanders is an award-winning educator and researcher whose scientific interests intersect with his concern for the environmental aspects of resource extraction. He has the rare ability to be equally at home in a mine's control room speaking with operators, delivering a lecture on fluid mechanics to an auditorium full of students, or conducting demonstrations on energy utilization with primary school-aged children.

Sanders received his BSc in Chemical Engineering in 1990 from the University of Saskatchewan. After completing his PhD at the University of Alberta, Sanders joined Syncrude Canada Ltd. and held a number of technical and leadership positions within the company's Research and Operations' divisions over the next 9 years. Sanders joined the University of Alberta's Department of Chemical and Materials Engineering in 2006 and received the student-nominated Faculty of Engineering Undergraduate Teaching Award that year. He has since received the Provost's Award for Excellence in Undergraduate Teaching.

In 2008, the NSERC Industrial Research Chair in Pipeline Transport Processes, a multimillion dollar research collaboration among the University, industry and Canadian government was established, under Dr. Sanders' direction. The research programme specifically addresses important multiphase flow and process commercialization questions in heavy oil production, flow assurance, mining and mineral processing. In 2012, he received the Alberta Science and Technology (ASTech) Award for Innovation in Oil Sands Research.

As Scientific Advisor for numerous international oil and gas, mining and pipeline companies, Sanders has provided technical support for development, scale-up and commercialization of many multiphase fluid processing and transport projects. In addition, Sanders teaches a series of professional development courses on the design and operation of multiphase flow pipelines. Since April 2006, about 500 practicing engineers have attended these courses. In that time he has also contributed to public policy forums on energy use and GHG emissions.