

## **BIOGRAPHY – Joule Bergerson, HBS, MEng, MS, PhD**

Dr. Joule Bergerson is an Associate Professor in the Department of Chemical and Petroleum Engineering and was recently awarded the Tier 2 Canada Research Chair in Energy Technology Assessment. Dr. Bergerson was also recently nominated to the Royal Society of Canada College of New Scholars, Artists and Scientists.

Dr. Bergerson directs an interdisciplinary and highly collaborative research team in the development of new methods for energy technology assessment. Dr. Bergerson has advanced the assessment of energy technologies by developing novel simulation tools, extending of life cycle assessment methods, and dynamic systems modelling, which have provided new insights into the economic and environmental performance of emerging technologies and thereby better informed decision making in both the public and private sector. Dr. Bergerson's research has demonstrated significant societal, industry and policy impact. She has developed an oil sands research consortium to support and inform her research on Life Cycle Assessment of Oil Sands Technologies in collaboration with Dr. Heather MacLean at the University of Toronto, 9 oil companies, 2 technology companies/consortiums, and 3 government agencies (federal and provincial). The impact of this work continues to grow including highly cited papers (e.g., 183 citations in one paper published in *Environmental Research Letters*) and the adoption of their results directly into policies such as California's Low Carbon Fuel Standard and policy relevant tools (e.g., U.S. GREET model).

Dr. Bergerson has 43 published or accepted publications in the top journals in her field of energy systems analysis (22 in the past four years), including a recent paper in *Proceedings of the National Academy of Sciences* (impact factor (IF) = 9.4) and 11 papers in *Environmental Science and Technology* (IF = 6.2). Dr. Bergerson has received several awards and recognitions associated with her research, including a best paper award in the top journal in her field, *Environmental Science and Technology*, and numerous invited presentations. Her unique expertise in energy technology assessment is also in great demand nationally and internationally: she served as an expert panel member on a 2015 Council of Canadian Academies study titled "Potential for New and Emerging Technologies to Reduce the Environmental Impacts of Oil Sands Development". Dr. Bergerson has also been consulted by industry and academic organizations across Canada and the U.S., providing expert review and contract research on assessment of energy technologies.