

# WISE

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PRESENTED BY THE WATERLOO INSTITUTE  
FOR SUSTAINABLE ENERGY

Wednesday January 15, 2020

10:30 am – 11:30 am

DC 1302

## QUANTUM OIL REFINERY: A VIABLE PATH TO MEET THE PARIS TARGET

**Dr. Denis J. Gendron**, Technical Director, Claire Lasers Corporation

Dr. Gendron introduces a surprising discovery: the most efficient CleanTech to reduce GHG fast is to reinvent crude oil refining with Lasers and Quantum Mechanics. In fact, he will show that the gain in emission reduction is so large that it can meet and exceed Paris Target. Finally he will show how and why it is feasible to implement QOR within a decade.

### Biography



Denis J. Gendron earned a Physics B.Sc. Coop degree, with a specialization on microelectronics fabrication from U. de Sherbrooke in 1988. In 1997, he graduated with a Physics PhD from University of Waterloo, for his study of photodissociation and photo-ionization processes at the atomic and molecular-level with pulsed laser in supersonic jet. He contribute to the construction of the pulsed laser laboratory of Donna Strickland at UWaterloo (2018 Nobel Prize of Physics). He worked as a corporate laser scientist and engineer for national organizations and global corporations: NRC (Ottawa, ON), Fibertek Inc. (Herndon VA) Spectra-Physics Lasers Inc. (SPLI, Mountain View, CA), and Coherent-AMT (now Clarion Medical, Cambridge, ON). In 2003, Denis founded *Claire Lasers*, to solve key problems for manufacturing industries, and in 2016, he started *invitalize (shine a new light on life sciences)*, to advance phototherapy for cardiovascular, musculoskeletal and cerebral rehabilitation.

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