

# WISE

WATERLOO INSTITUTE  
FOR SUSTAINABLE ENERGY



## LECTURE SERIES

FREE ADMISSION | OPEN TO THE PUBLIC

BUILDINGS | CARBON CAPTURE AND STORAGE | FUEL CELLS | NUCLEAR | POLICY | PLANNING  
RENEWABLES | SMART GRID | STORAGE | SUSTAINABLE MOBILITY | SUSTAINABILITY ANALYSES

PRESENTED BY THE WATERLOO INSTITUTE  
FOR SUSTAINABLE ENERGY

**Tuesday April 24, 2018**  
**10:00 – 11:00 am**  
**DC 1304**

## OTSG IN POWER GENERATION AND ENERGY IN CANADA

**Alex Berruti**, Senior Product Engineer, Enhanced Oil  
Recovery for Innovative Steam Technologies (IST)

Use of Once Through Steam Generators (OTSG) in power plants offers several unique advantages over traditional drum boilers which include smaller footprint, high turndown, fast start and simplified operator control. Commonly OTSGs are equipped with duct burners for additional steam capacity and emissions control equipment. When OTSGs are designed to operate in dry mode, the plant has maximum flexibility to match steam demand to process requirements. OTSGs are also used in Enhanced Oil Recovery applications and in Organic Rankine Cycle low temperature waste heat recovery. This presentation will look at the OTSG technology and peripheral equipment such as burners and emissions equipment.

### Biography



Alex Berruti is a Senior Product Engineer, Enhanced Oil Recovery for Innovative Steam Technologies (IST). While at IST he has gained 20 years of extensive design and operations experience of OTSG's. He has held positions of Project Engineer and Design Engineer with focus on mechanical design, structural analysis, water quality, acoustic analysis, CFD and FEA. In his current position, his responsibilities include the development and enhancement of OTSG's for EOR/SAGD applications. He holds a Bachelor of Applied Science Degree from the University of Waterloo and is a Licensed Professional Engineer.

**ALL ARE WELCOME!**

VISIT  
[WISE.UWATERLOO.CA/EVENTS](http://wise.uwaterloo.ca/events)  
FOR MORE DETAILS

REGISTER VIA EVENTBRITE