

# Decarbonization of Oil & Gas Operations

**Date:** Monday, September 9, 2024

**Time:** 8:00 am – 4:30 pm

Breakfast: 8:00 am – 9:00 am

Workshop Begins: 9:00 am

Coffee Break: 10:30 am

Lunch Break: 12:00 pm – 1:00 pm

Coffee Break: 3:00 pm

Workshop Concludes: 4:30 pm

**Location:** Fairmont Hotel Macdonald, Edmonton Canada

**Cost:** \$795 (includes breakfast, coffee breaks, lunch and workshop materials)

## Agenda:

### 1. Introduction

Introduction to Greenhouse Gas (GHG) Carbon Dioxide (CO<sub>2</sub>) emission, impact and control Methods

### 2. Engineering and Project Management

- a) Introduction and type of engineering projects
- b) Project management basics
- c) Carbon capture project phases: from the technology evaluation and selection to EPC phase and Operation

### 3. Process Simulation with ProTreat®

- a) Introduction of OGT and its software (ProTreat®, SulphurPro®, & ProBot™)
- b) ProTreat®, Rate-Based Process Simulator for carbon capture applications

### 4. Acid gas removal technology

- a) Process Design & Configurations
- b) Case study # 1 – natural gas conditioning

### 5. Post-combustion carbon capture technology

- a) Process Design & Configurations
- b) Case study # 2 – Steam Generator in Heavy Oil Operations

**6. Pre-Combustion carbon capture technology**

- a) Process Design & Configurations
- b) Case study # 3 – Hydrogen Plant - Steam Methane Reformer

**7. Plant Performance & Evaluation**

**8. Carbon Capture Plant Simulation with ProTreat® Hands-on**

**9. Discussion**