

Senior Process Engineer – Direct Air Capture

At Carbon Engineering (CE), our vision is to lead the world in the large-scale removal of carbon dioxide from the atmosphere and advance our shift to a sustainable carbon-neutral society. Based in the outdoor recreation hub of Squamish, BC, this role will be a great fit for a technically apt, curious and hands-on individual who feels passionately about this vision and wants to be a part of a fast-paced culture.

Position Scope

This is a senior technical role for a Chemical, Mechanical or Process Engineer who understands industrial processes, operations, equipment and laboratory analytics. The ideal candidate will have experience developing, refining and optimizing chemical process plants with a focus on water treatment, pulp and paper or similar plant operations.

- Reporting to the Pilot Plant Engineer - Direct Air Capture (DAC).
- Drive process characterization and optimization.
- Mentor junior process engineers, technicians and operators.

Responsibilities

- Identify process and equipment characterization opportunities across CO₂ capture, purification, compression and storage operations.
- Mentor junior process engineers, technicians and operators in process optimization, experiment design, plant performance improvement and data analysis.
- Design and execute test campaigns to deliver equipment and process cost/efficiency enhancements.
- Guide junior engineers and operators in the development and QC of test plans as well as protocols for test campaigns.
- Analyze test data, develop conclusions and communicate recommendations to plant design team.
- Research process equipment and liaise with vendors to arrange on-site pilot testing.
- Identify CE's process Key Performance Indicators (KPIs) and develop an operating approach based on Statistical Process Control (SPC).
- Make use of appropriate Quality Management tools and techniques to ensure that all learning and development opportunities are identified and exploited.
- Maintain and update Standard Operating Procedures (SOPs) and develop future pilot plant operating philosophy.
- Collaborate with CE's engineering team to define future plant control narratives and philosophies based on pilot plant operating experience.

Qualifications and Experience:

Education: MSc Chemical Engineering, Mechanical Engineering or Chemistry specialization.

Experience: 8+ years of experience developing, refining and optimizing chemical processes.

- Specific plant operations experience in water treatment, pulp and paper or similar industry.
- Background in industrial plant design and development is highly desirable.
- Hands on operational experience with chemical process equipment would be an asset.
- Lab experience as it relates to process control and monitoring.
- Experience and comfort working in an R&D environment.

In addition to technical skills, the right fit will:

- Be a self-starter with the ability to work independently towards multiple deadlines with minimum supervision in a fast-paced environment.
- Thrive on doing things that have not been done before (explorer mindset).
- Strong analytical, technical writing and problem-solving skills.

If this seems like the dream job for you, send your resume to careers@carbonengineering.com and quote "Senior Process Engineer - DAC" in the subject line.