

# Geosynthetics and waste valorization for environmental resilience

Record number : OPR-871

## Overview

### RESEARCH DIRECTION

Vanessa Di Battista, Professeure -  
Department of Civil and Building  
Engineering

### INFORMATION

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### ADMINISTRATIVE UNIT(S)

Faculté de génie  
Département de génie civil et de génie du  
bâtiment

### LEVEL(S)

2e cycle  
3e cycle

### LOCATION(S)

Campus de Sherbrooke

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## Project Description

Seeking graduate students (MAsc or PhD) for experimental research to develop an innovative approach to landfill cover design through the use of contaminated soils, road sweepings, and similar waste products as final cover materials. Using waste materials and geosynthetics, it is proposed to develop the circular economy of waste products and decrease associated greenhouse gases. Laboratory study of the materials aims to explore the potential of using waste materials as subgrades for geosynthetic clay liners and numerical modelling will estimate reductions in greenhouse gas emissions.

### Requirements:

Excellent academic record

Background in civil or environmental engineering, geology, or a related field with background in soil science.

Basic French language competence

Located in Canada, in the Province of Quebec, the Université de Sherbrooke is a French-speaking institution that offers you the opportunity to benefit from an academic education that is recognized and valued around the world. The Université de Sherbrooke is host to more than 31 700 students from more than 80 countries (Source UdeS).

Interested candidates should send their CVs, academic transcripts, and an exemple of technical writing (e.g., journal/conference article) to Pre. Vanessa Di Battista with the subject line "waste valorisation + GCLs". Only selected candidates will be contacted

## Discipline(s) by

### sector

Sciences naturelles et génie

Génie civil

## Funding offered

Yes

The last update was on 12 March 2024. The University reserves the right to modify its projects without notice.