



Vancouver Geotechnical Society

A Local Section of the
Canadian Geotechnical
Society

www.v-g-s.ca

Chair	- Aran Thurairajah (WSP/Golder)
Past-Chair	- Olga Kosarewicz (Rio Tinto)
Program Director	- Intisar Ahmed (Thurber), Tyler Southam (Tetra Tech)
Treasurer	- Jared Whitehead (Kontur)
Secretary	- Muin Ahmed Alif (Aecon)
Registrar	- Thushara Jayasinghe (UBC), Ali Jahanfar (Stantec)
Web Manager	- Tajinder Singh (Hatch)
CGS Director	- Marc Bossé (Thurber)
Student Representative	- Yulia Hung (UBC)
Symposium Co-Chairs	- Jared Whitehead (Kontur), Mahdi Shahrabi (WSP/Golder)
Member-at-Large	- Eryn Alexander (BGC), Emir Hot (Arya Engineering)

NOTICE OF UPCOMING TECHNICAL PRESENTATION

Tuesday, 29 November 2022

TOPIC: **Sustainable Practices for Geotechnical Engineering**
Canadian Geotechnical Society Cross Canada Lecture Tour (CCLT) – Fall 2022

SPEAKER: **Catherine Mulligan, PhD – Professor, Concordia University.**

Dr. Catherine N. Mulligan obtained her B.Eng. and M. Eng. in chemical engineering and PhD in geoenvironmental engineering from McGill University. She worked for the Biotechnology Research Institute of the National Research Council of Canada and SNC Research Corp. Of SNC Lavalin before joining Concordia University in 1999. She held a Concordia Research Chair in Geoenvironmental Sustainability (Tier I) and is a full professor in the Dept. of Bldg., Civil and Environmental Engineering. She has authored more than 130 refereed papers in various journals, co-authored or edited 8 books, holds 3 patents and has supervised to completion more than 70 graduate students. She is the founder and director of the Concordia Institute of Water, Energy and Sustainable Systems. The Institute trains students in sustainable development practices and performs research in new systems, technologies and solutions for sustainability. Her research is on the treatment of contaminated soils, water, sediment, and mining residues with biosurfactants and other treatment techniques, in addition to energy production via anaerobic treatment and pressure-reduced osmosis. She is a Fellow of the Canadian Society for Civil Engineering (CSCE) and its current Past President and currently the chair of the Sustainable Geotechnics Committee for the CGS. She is also a Fellow of the Engineering Institute of Canada (EIC), the Canadian Academy of Engineering (CAE), and Royal Society of Canada and was a winner of the John B. Sterling Medal of the EIC.

CONTENT: Due to depletion of natural resources, increased natural disasters, waste, greenhouse gas emissions, pollutant generation, and environmental deterioration, and loss of biodiversity, geotechnical engineers are facing new challenges. While it is generally believed that the concepts of sustainable development must be followed for protecting future generations, it is much easier said than implemented. Therefore, the focus of this talk will be to focus on the application of the principles of sustainable geoengineering to projects and processes. Some tools and frameworks for evaluating and implementing sustainable practices will be presented. The use of environmental, social and economic indicators for measuring and comparing design options will be demonstrated. Best practices in carrying out Indigenous engagement and consultation will be highlighted. Finally, case studies and examples of sustainable practices in design in addition to the challenges and needs for the future will be included. The role of geotechnical engineers in sustainable development has been undervalued but is critical for future generations.

DETAILS: **Location:** Centennial Room, Executive Hotel, 4201 Lougheed Highway, Burnaby, BC V5C 3Y6
Social Hour: 5:30 PM to 6:30 PM (drinks available at the hotel bar)
Technical Presentation: 6:30 PM to 7:30 PM (No need to RSVP)
Dinner: 8:00 pm (\$20 will be charged for dinner). If you would like to stay for dinner, please RSVP to Thushara Jayasinghe (thushjay@mail.ubc.ca) and Ali Jahanfar (ali.jahanfar@stantec.com) via email or at the door.



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The VGS would like to thank the following companies (in alphabetical order) for sponsoring this Cross Canada Lecture Tour:

- BGC Engineering
- Klohn Crippen Berger
- Tetra Tech
- Thurber Engineering

The Cross Canada Lecture Tour is organized by the Canadian Geotechnical Society and its various local sections, and funding is provided by the Canadian Foundation for Geotechnique.