Workshop on global grand challenges for engineered slopes

Reykjavik, 1 September 2019

In this session we discuss what our response should be to two of the greatest technical challenges faced in current slope stability practice: i) the impact of climate and climate change on slope stability, and ii) addressing the risk of static liquefaction in landslide and tailing storage facility flow failures.

13:00-13:05	**Introduction & welcome** *Andy Take, Queen's University, Canada & Chair of TC208*

Invited Theme Lectures: Impact of climate and climate change on slope stability

13:05-13:20	**Weather-induced deterioration of infrastructure slopes: and overview of the ACHILLES research programme** *Stephanie Glendinning, Newcastle University, UK*
13:20-13:35	**Modelling the deterioration of infrastructure slopes** *Peter Helm, Newcastle University, UK*
13:35-13:50	**Deterioration of Soil Slopes due to Environmental Cycles** *David G. Toll & Paul N. Hughes, Durham University, UK*
13:50-14:05	**Shifting perspective: How thaw slumps and permafrost degradation will impact infrastructure in Canada's North** *Ryley Beddoe, Royal Military College of Canada*
14:05-14:35	**Open Discussion: What is a reasonable design life for considering climate change? What should the role of the slope stability community be?** *Facilitator: Elisabeth Bowman, Sheffield University, UK, & Secretary of TC208*
14:35-14:45	Break

Theme 2: Static liquefaction in tailing storage facilities

14:45-15:00	**Current research on tailings dam failures in Canada (CanBreach project) & Australia (TALLIQ project)** *Andy Take, Queen's University, Canada, on behalf of CanBreach & TALLIQ teams*
15:00-15:15	**To be confirmed (TBC)** *TBC*
15:15-15:45	**Open Discussion: To what degree is the high frequency of tailings dam failures driven by technical, regulatory, education, or economic factors? What should the role of the slope stability community be?** *Facilitator: Elisabeth Bowman, Sheffield University, UK, & Secretary of TC208*
15:45-16:15	**ISSMGE TC208 Committee Meeting**