Dr. Jean Hutchinson Department Head for Geological Sciences and Geological Engineering Queens University

Transformative developments in remote monitoring applied to rock slope stability and risk management

Abstract:

Linear infrastructure adjacent to rock slopes is subject to damage and capacity loss as a result of rock instability events. Over the past decade, newly developed remote monitoring techniques have transformed our ability to assess the potential hazards, to detect change on these slopes, to track the development, mechanism and deposition of failure events, and in some cases to provide forewarning of potential events. The various remote sensing techniques and their optimal application will be reviewed. Case histories demonstrating our ability to use these techniques to improve risk based evaluation will be provided.

