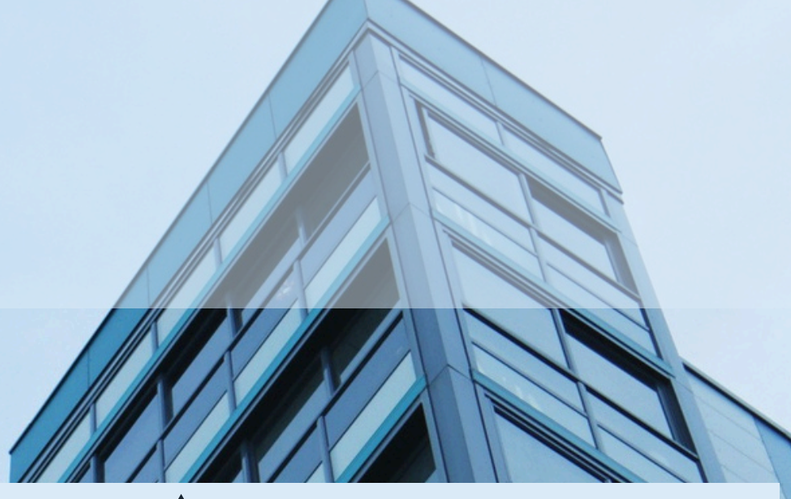
香港科技大學
THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

土木及環境工程學系
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING



SEMIANR

Towards A Quantitative Assessment of Landslide Risk: Challenges and Perspectives

Speaker

Dr Zhongqiang LIU

Norwegian Geotechnical Institute, Oslo, Norway

Abstract

Landslides represent a major threat to human life, property and constructed facilities, infrastructure and natural environment in most mountainous and hilly regions of the world. This talk summarizes the key aspects of quantitative landslide risk assessment and exemplifies these with applications in practice. New challenges and perspectives reside in integrating the emerging technologies, for example new models, new testing, remote sensing, and artificial intelligence solutions, into practical risk assessment. The talk concludes with learnings from landslide risk assessments and suggests that the approach should be implemented more widely than before in practice.

Biography

Dr Zhongqiang Liu is Principal Scientist at Norwegian Geotechnical Institute (NGI), Oslo, Norway, with expertise in risk and hazard assessment for geohazards, machine learning in geotechnics. His major fields of work are related to geohazards, assessment of uncertainties, statistical and machine learning methods, risk and reliability analysis, and offshore foundation engineering. He initiated and is now Chair of Technical Committee 309 of ISSMGE: "Machine Learning and Big Data in Geotechnics". He is Chair-Elect of "Geotechnical Safety Network (GEOSNet)" since 2022. Dr Liu is Guest lecturer at Norwegian University of Science and Technology (NTNU), at University of Oslo (UiO), and at Oslo Metropolitan University (OsloMet). He is Technical Lead of Research Group – GeoRisk at NGI. His research has earned several international recognitions, including Best Paper Award of Journal Georisk in 2015, OTC ASCE Best Paper Award in 2019, GEOSNet Young Researcher Award in 2019 and Best Paper Award of JZUSA in 2023.

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10:30 am - 12:00 pm

Room 3584A (via Lift 27/28), Academic Building, HKUST

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