

WEDNESDAY, 28 SEPTEMBER 2016

THE UNIVERSITY OF SHEFFIELD

**4 PM – SIR FREDERICK MAPPIN BUILDING
LECTURE THEATRE 9**

**"Internal Erosion Phenomena in Earth Dams:
Knowledge Gaps in the New Zealand Setting"**

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This talk considers the present state-of-practice in New Zealand dam engineering, and outlines some of the unique challenges faced by practising engineers regarding the management of aging earth dams in a seismic environment. Empirical methods for the assessment of erosion susceptibility are examined for two distinct phenomena: (1) internal instability and (2) filter compatibility. In all cases, significant shortcomings exist in the applicability of existing screening methods, particularly with regard to New Zealand soil types and the need to assess the long-term performance of soils in a seismic environment. Finally, this talk will outline the long-term research strategy at the University of Canterbury and describe the specification of new laboratory testing equipment designed to address particle migration in earth dam infrastructure.