MONASH University

Department of Civil Engineering

2 PhD Scholarships in Geotechnical and Geoenvironmental Engineering

Two scholarships funded by an ARC Linkage grant are available for study commencing as soon as possible. The scholarships will provide support for 3 years on a full time basis for a research project leading to a PhD. The project is aimed at developing a full understanding of the fundamental mechanisms causing failures of geosynthetic clay liners (GCLs) due to solar radiation and seasonal climate induced thermal cycling. This is conducted in collaboration with Geofabrics Australasia Pty. Ltd. and the Geoengineering Centre, Queen's University, Canada. PhD 1 will focus on the evaluation of temperature effects on the water retention curves (WRC) of GCLs and investigation of volume and moistures changes under thermo-hydro-mechanical (THM) conditions. PhD 2 will combine laboratory and field investigations to quantify the effect of daily thermal cycles on transient suctions in the GCL and the relationship with initial hydration and subsequent shrinkage and the potential for net downslope migration of subgrade moisture under daily thermal cycles for GCLs installed on a slope.

Applicants should have an Honours 1 or 2A degree in engineering or science and an interest in analytical and experimental research. The scholarship value is $26,500 p.a (tax-free), with the possibility of a top-up depending on academic standing and/or experience. Potential for further earning is also possible through tutoring.

For further information, contact A/Prof. Malek Bouazza, Department of Civil Engineering, Building 60, Monash University, Vic. 3800, Australia (Tel: 03-9905 4956; Fax: 03-9905 4944; Email: malek.bouazza@eng.monash.edu.au). Applications including a curriculum vitae, copy of academic transcript, names and contact details of at least two referees should be sent to A/Prof Malek Bouazza at the above address. The search will continue until the positions are filled.