# Imperial College London





### Unsaturated soil slopes: from theory to practice

### A half day seminar at Imperial College

## 1:00 – 4:30 pm 20<sup>th</sup> March 2013, followed by Rankine lecture at 5:30pm

#### Chair:

Prof. David Potts, Imperial College

Session 1		1:00 – 2:30
Rainfall effects on natural slopes	Prof. Eduardo Alonso UPC Barcelona, Spain	1:00 – 1:25
Climate effects on slopes: field observations	Prof. David Toll University of Durham, UK	1:30 – 1:55
Laboratory and field measurements on compacted London Clay: the behaviour of infrastructure embankments	Dr. Andrew Ridley Geotechnical Observations Ltd., UK	2:00 – 2:25
Coffee break		2:30 – 3:00
Session 2		3:00 – 4:30
Numerical analysis of unsaturated soil slopes	Dr. Lidija Zdravkovic Imperial College London, UK	3:00 – 3:25
Quantifying geotechnical risk in unsaturated cut slopes	Dr. Katerina Tsiampousi Imperial College London, UK	3:30 – 3:55
Address from the ISSMGE President (International Society for Soil Mechanics and Geotechnical Engineering)	Prof. Jean-Louis Briaud Texas A&M University, USA	4:00 – 4:15

The majority of slope failures around the world, be they natural or man-made slopes, involve unsaturated soils. Even in the UK, not normally associated with arid conditions, slope failures often occur during heavy rainfall following periods of dry weather. International research efforts in this field over the past 20 years have improved significantly our understanding of unsaturated soil behaviour and have enabled successful application of complex theories to practical engineering problems. This seminar presents some examples of these advances.

In the closing part of the seminar the ISSMGE President Prof. Jean-Louis Briaud will address the audience with an overview of ISSMGE's recent activities. This address is part of his presidential visit to British Geotechnical Association.

#### Venue:

Imperial College London, Department of Civil & Environmental Engineering Skempton Building, London SW7 2BU

#### Main room:

LT 164 – ground floor, Skempton Building

#### Overflow room:

LT 201 – first floor, Skempton Building