

serving science & profession

Speakers: Simon Price University of Cambridge

Andreas Charalambous Hydrolaw Limited

Date: Wednesday 18<sup>th</sup> July 2018

Meeting timings: Tea/coffee 17:15 Simon Price 18:00 Andreas Charalambous 19:00

Post talk refreshments available

#### Location: Fugro House, Wallingford, Oxfordshire, OX10 9RB.

Free to attend

#### Other:

This event will not be livestreamed or recorded; you will need to attend in person to view the talks

For further information please contact the event convenor: Chris Coleman,

c.coleman@fugro.com

# Britains Icy Past: Implications for Ground Engineering & The fossil Ram sandstone aquifer of Jordan

## A joint meeting by the Engineering Group (EGGS) and the Thames Valley Regional Group of The Geological Society

# Talk 1: Simon Price (18:00)

This talk explores geotechnical variability in lowland British tills and bedrock of the Oxford Clay Formation around the margin of a former Middle Pleistocene ice margin of the British Ice Sheet (BIS). The talk will explore variations in index properties, undrained shear strength, stiffness and compressibility and compare them with the spatial distribution of Quaternary Provinces and Domains. The degree to which geotechnical variability can be explained because of glacial and/or periglacial history will be discussed. The talk will conclude with discussion of the potential implications for ground investigation, and the selection of geotechnical design parameters.

## Talk 2: Andreas Charalambous (19:00)

This talk is on the Ram Sandstone aquifer. The Ram Sandstone is a large transboundary aquifer of Cambro-Ordovician age, shared between Jordan and Saudi Arabia. It is 500 to more than 4,000 m thick and stores fossil groundwater 10,000 to 35,000 years old. Modern recharge is probably insignificant and the aquifer has been in a state of depletion since at least the last humid interludes of 5,000 to 10,000 years ago. The talk explores how Exploitation in Jordan has been mainly in the Southern Desert, where groundwater levels and well depths are relatively modest. And looks at how in the past, irrigation was the predominant use with smaller amounts supplying the coastal city of Aqaba.

