



GEOTECHNICAL SEMINAR

JOINTLY ORGANIZED BETWEEN
GEOTECHNICAL SOCIETY OF SINGAPORE (GEOSS)
& CENTRE FOR SOFT GROUND ENGINEERING



Instrumentation for Large Projects: Project Monitoring, Data Analysis and Interpretation

by

Dr Richard Bassett

**Head of Geotechnics
University College London, UK**

Date:	Monday, 23 June 2008
Time:	6:30pm Reception 7:00pm Seminar
Venue:	Engineering Auditorium Faculty of Engineering National University of Singapore

SYNOPSIS

The lecture will discuss the philosophy behind the process of successfully monitoring large engineering projects. Dr Richard Bassett will look at the parameters that require instrumentation, why the accurate monitoring of these parameters is essential to the success of a project and the methods of effectively extracting data. Drawing on his vast experience in the field and laboratory, Dr Bassett will discuss the various problems encountered when undergoing any large construction, above or below ground, and demonstrate the effectiveness of instrumentation in offering better understanding of the projects progress and needs.

Dr Bassett will then discuss correct methods of interpretation of data gained from the instrumentation. It will be demonstrated how effective monitoring can be in assisting the safety and efficiency of large engineering projects when installed and analysed appropriately. The aim of the talk is to give the listener a fuller understanding of the benefits gained from instrumentation systems, and the lessons that can be learned from not interpreting the collected data in reference to prior data.

THE SPEAKER

Since 1959, Dr Bassett has worked on the design of a number of large dams in Hong Kong, Iraq and North Wales including early instrumentation of soft foundations. He has also worked on numerous dam, road, defence and power station projects, developing a speciality in field instrumentation and testing. In 1962 he returned to Cambridge to undertake a PhD on the fundamental behaviour of soils under the late Professor Roscoe.

Dr Bassett is currently the Head of Geotechnics, University College London, UK. During more than 30 years at London University, his research has continued to be dominated by the investigations of deformations and failure mechanisms, covering areas as diverse as embankments, reinforced earth, ground anchors, road cuttings and tunnels. He is also an instrumentation and geotechnical consultant with Mott MacDonald.

Dr Bassett developed an expertise in electrolevel monitoring systems, developing the Bassett Convergence System as a result of his experiences at Heathrow Express tunnels. He is currently continuing to develop automated electrolevel systems for 2 and 3 dimensional deformation measurement in association with ITM Ltd.

For catering purpose, please confirm your attendance by reply e-mail to: geoss@nus.edu.sg

***** Admission is free for members of Geoss. Non-members may register as members (S\$60 per annum) on the spot *****

Visitors may park their cars at the cashcard operated Car Park 2A opposite Blk E3A. Alternatively, free parking is available at the Car Park at Kent Vale. Free shuttle bus services are provided to transfer commuters from this location to their campus destinations. The location of the seminar venue is indicated on the Engineering campus map.