



DONGJU LEE MEMORIAL LECTURE

Department of Civil Engineering and Engineering Mechanics
Columbia University

ADVANCED LABORATORY TESTING IN RESEARCH AND PRACTICE (recasting the Bishop Honour Lecture)

Prof. Richard Jardine

Department of Civil and Environmental Engineering
Imperial College London

October 29, 2013 (2:30-3:30 pm) 313 Fayerweather



This lecture will demonstrate the special capabilities and practical value of Advanced Laboratory Testing, focusing on its application in advancing the understanding and prediction of how driven piles function and perform in sand. Emphasis is placed on integrating laboratory research with analysis and field observations, drawing principally on work by the Author, his colleagues and research group. The laboratory studies include highly instrumented static and cyclic stress-path triaxial experiments, hollow cylinder and ring-shear interface tests and micro-mechanical research. Soil element testing is combined with model studies in large laboratory calibration chambers, full-scale field investigations and numerical simulations to help advance fundamental methods for predicting pile behaviour that have important implications and applications, particularly in offshore engineering. The lecture was presented first on 2nd September 2013 as an ISSMGE Honour Lecture at the Paris ICSMGE.

About the Speaker: Prof. Richard Jardine took his three degrees at Imperial College London, joining the staff in 1984, becoming Professor of Geomechanics in 1998 and Dean/College Consul for Engineering in 2012. His research covers offshore geotechnics, soil characterisation, field instrumentation, soft ground engineering, geohazards and recently, climate change impact on permafrost. His current international work with INP Grenoble and Zhejiang (China) involves experimental studies of pile ageing and cyclic loading. He has published over 200 papers and sits on six International Committees, including ISSMGE TC-101, which he chaired from 2001-2009. Recent keynotes have covered micro-mechanical behaviour (IS-Shanghai 2010), deep foundations (Mong Lecture, Hong Kong 2011), Offshore Geotechnics (London 2012) and Advanced Soil behaviour (Zeng Lecture China 2008, Tunisia 2012 etc) and the Bishop Honour Lecture (Paris ISSMGE September 2013).

Richard is a Royal Academy of Engineering Fellow (from 2002) and has won a dozen National and International research prizes. He has been a visiting Professor in Singapore, Japan and now China as a Ministry of Education Overseas Distinguished Professor. He has consulted on many major International and UK projects.

The Dongju Lee Memorial Lecture was established with a generous contribution from the Lee Family. DJ, as Dongju preferred to be called, passed away on February 26, 2003 while he was a student working toward the doctoral degree. We would like to express our gratitude to DJ's father, Prof. Yong-won Lee, for his support in establishing the Lecture and an Award. DJ obtained his Master's and Professional degrees from Columbia University.