Repute hands-on
One-day training course

Dr Andrew Bond

Theory can safely be ignored

"...theoretical refinements in dealing with pile problems, such as attempts to compute the distribution of load among the piles in a group by means of the theory of elasticity, are completely out of place and can safely be ignored. Even conclusions based on the results of small-scale model tests may be far from reliable." Karl Terzaghi and Ralph Peck (1967)

Programme for the day

09.15 Introduction

Learning how to use Repute
09.30 Explaining Repute's design workspace
10.15 Workshop – linear analysis of pile group
11.00 Coffee

Explaining pile group analysis
11.30 Understanding the boundary element method
11.45 Workshop – non-linear analysis of pile group
13.00 Lunch

Parameter selection
14.00 Choosing appropriate pile-soil interaction parameters
14.45 Workshop – back-analysis of pile test data
15.30 Tea

Advanced case studies
16.00 Effects of pile rake
16.20 Re-distributing loads between piles
16.40 Workshop – optimising the pile group layout

17.30 Close

Dr Andrew Bond MA MSC PhD DIC MICE CEng

- Current employment
  - Managing Director, Geocentrix
  - Director, Geomantix
  - Consultant, Atkins Geotechnics
  - Associate Lecturer, Surrey University
- Career summary (recent)
  - Geotechnical Consulting Group, 1989-99 (Director, 1995-9)
  - Imperial College, 1983-9 (Research Assistant, 1985-9)
- Geotechnical consulting
  - Over 25 years' experience in pile design and retaining wall design
  - UK delegate on CEN TC250/SC7 (Eurocode 7 committee)
- Software development
  - Developer of design programs ReWaRD, ReActiv, Repute, & Renown
- Teaching/training
  - Co-author of CPD courses in pile design and Eurocode 7 for Kingston University, IStructE, and Thomas Telford
  - Co-author of Chapter 7 of PP1990 (Guide to the Structural Eurocodes)

Presentations

Repute's design workspace
Workshop – linear analysis
Boundary element method
Workshop – non-linear analysis
Pile-soil interaction parameters
Workshop – pile-test data
Effects of pile rake
Re-distributing load
Workshop – pile group optimization

Incorporate science in our practice

"Despite adverse comments by some of the pioneers of soil mechanics, there is a significant role for scientific methods in pile design... we must incorporate such science in our teaching and our practice, using empirical approaches to validate and calibrate, but not replace, scientific theory" Mark Randolph, 43rd Rankine Lecture (2003)

Repute hands-on

www.geocentrix.co.uk/repute