venue

East Midlands Conference Centre
University of Nottingham
Nottingham
NG7 2RJ
Map & directions at:
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registration form

Case Histories of Numerical Methods in Geotechnical Engineering No. of places required ☐

21 February 2012 • East Midlands Conference Centre • Nottingham, UK

Non Members Price £199** | Members of NAFEMS FREE* (see notes below) or £70.00** | Members of I.C.E £70.00**

*Free places are subject to your available seminar credits. **UK VAT will be added for all delegates at the current rate

Please register online at www.nafems.org/geo12

I am unable to attend but would like to receive further information on:

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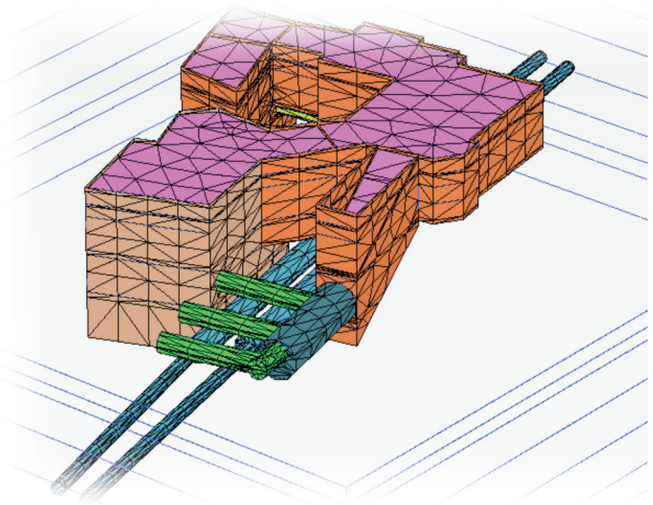
NAFEMS seminar

Case Histories of Numerical Methods in Geotechnical Engineering

21 February 2012
East Midlands Conference Centre
Nottingham, UK



co-organised by

East Midlands Geotechnical Group

www.nafems.org/geo12

NAFEMS seminar

Case Histories of Numerical Methods in Geotechnical Engineering

co-organised by East Midlands Geotechnical Group

Numerical analysis using finite element and finite difference methods has transformed from a niche to a mainstream design tool within geotechnics in the last decade. This is due to the development of sophisticated yet accessible 2D and 3D programs that model the ground and adjacent structures, together with increased training in the use of this technology.

Many lessons are learned through hindsight. Looking at case histories is not only a great way to understand post design behaviour of the structures installed; there are also significant benefits in learning from what others have done, through both their positive and negative experiences. This seminar will highlight successes, near misses and failures in geotechnical engineering when involving the use of numerical analysis.

Two eminent geotechnical engineering professionals who have helped pioneer the development and application of these programs will give keynote lectures during morning and afternoon sessions. There will also be presentations by a number of leading geotechnical engineering companies on their experiences using numerical analysis.

www.nafems.org/geo12

Who Should Attend?

- Geotechnical engineers and analysts, from newly qualified to experienced, who are already using or considering undertaking numerical analysis
- Stakeholders who commission geotechnical works
- Equipment manufacturers who develop geotechnical instrumentation
- Software developers who provide geotechnical software to the industry.

Objectives

Attendance at the seminar will enable the delegates to:

- Appreciate the potential impact that numerical methods have on the geotechnical design
- Recognise and understand the various benefits from numerical methods through the presentations of case studies
- Understand how to improve the use of geotechnical numerical analysis by learning from practitioners within the industry
- Realise the future direction for geotechnical design using numerical methods.

The event will also provide an opportunity to network with other delegates and share knowledge and experiences in applying numerical analysis within geotechnics.

agenda

am

09:15 Coffee & Registration

Welcome & Introduction
Tim Morris, NAFEMS
Asharaf El-Hamalawi, EMGG
Peter Scott, NAFEMS GC

Keynote Lecture 1
Brian Simpson, Arup

Presentations chaired by:
David Potts and Brian Simpson

High Rise Using Pile Assisted Raft, Including Pile Tests, Specialist SI and Back Analysis Based on Monitored Data
Peter Scott & Jonathan Dewsbury, Buro Happold

Calibrated Numerical Model for Assessment of Safe TBM Operating Pressures
Yu Sheng Hsu, Mott MacDonald

13:00 Lunch break

pm

Keynote Lecture 2
Tony O'Brien, Mott MacDonald

Presentations Chaired by:
Andrew Chan and Tony O'Brien

A Practical Application of FEA to Derive Soil Displacements and Investigate the Effects on Piles from Jack-up Installation
Nigel Kee and Lindsey Cubbon, Fugro

Basal Instability Adopting Conventional and FE (Utilising Different Material Models)
Alex Nikolic and Angelo Fasano, Buro Happold

Closing Remarks
Peter Scott, Chairman of the NAFEMS Geotechnical Committee

17:15 Close

exhibition

Please contact Jo Davenport at NAFEMS
tel: +44 (0)1355 225688 email: jo.davenport@nafems.org
if you would like more information.

co-organiser

East Midlands Geotechnical Group

A sub-group of the ICE (Institution of Civil Engineers) East Midlands region. The main objectives of the committee are to provide a focal point for geotechnical interests in the East Midlands and to offer CPD opportunity to civil engineers.

The committee maintains links and organises joint meetings with other local organisations with similar or complementary interests, such as the British Geological Society, the Permanent Way Institution, the International Geosynthetics Society and the Institution of Highways and Transportation.

Please note that members of ICE can attend this co-sponsored event for the discounted fee of £70, plus VAT.

Engineers rely on computer modelling and simulation methods and tools as vital components of the product development process. As these methods develop at an ever-increasing pace, the need for an independent, international authority on the use of this technology has never been more apparent.

NAFEMS is the only worldwide independent association dedicated to this technology.

Companies from numerous industries and every part of the globe have invested heavily in engineering technologies such as Finite Element Analysis and Computational Fluid Dynamics. But how do they ensure they get the best return from their investment? How do they develop and enhance their capabilities? How do they know they are using the technology in the most effective way?

NAFEMS is uniquely placed to help answer these questions.

Members receive free places at NAFEMS seminars, discounts on courses, free subscription to benchmark magazine, a unique library of analysis publications and much more.

If you work with simulation, you should be part of NAFEMS.

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