REGISTRATION – 2 EASY WAYS TO REGISTER!!
MAIL or FAX to:

Professional Activities Centre
Faculty of Engineering
National University of Singapore
9 Engineering Drive 1
Blk EA #05-34, Singapore 117576

Enquires: Please contact Ms. Lim Hui Leng for more information at
Tel : (65) 6874 5113
Fax : (65) 6874 5097 or
E-mail : englhl@nus.edu.sg

Fee: Singapore participants : SGD600.00 + SGD30.00 (5%GST)

Payment: Payment is required prior to the course. Crossed cheques should be
made payable to “National University of Singapore” and
mailed together with the registration form to the mentioned
address.

Discount: Ten percent (10% max) discount is applicable to:
Employees of the NUS Technology Associates registered with
INTRO (Industry and Technology Relations Office);
NUS Alumni members;
Organisations / Companies sending three or more participants.

Refunds and
Cancellations: A 50% refund will be made for withdrawals (received in writing) ten
working days before the commencement of the course. No refunds
will be made thereafter. However, a replacement will be accepted
upon prior arrangement at no extra cost. Please inform us of the
changes, if any, by fax. The Professional Activities Centre reserves
the right to cancel the course and fully refund the participants,
should unforeseen circumstances warrant it. Every effort will be
made to inform participants of any changes.

Closing Date: 4th April 2005

Website: http://www.eng.nus.edu.sg/PACentre/

DEEP EXCAVATION ANALYSIS
AND DESIGN WITH PLAXIS
(PDUs Accreditation available)
by
Dr. Harry Tan Siew Ann
Associate Professor
Department of Civil Engineering
National University of Singapore
19 – 20 April 2005
9 am – 5pm

Organized by:
Professional Activities Centre
Faculty of Engineering, NUS

Department of Civil Engineering
Faculty of Engineering, NUS

NUS in World Top 10
for IT and Engineering
The Straits Times
21 December 2004
COURSE OBJECTIVE

The use of PLAXIS in deep excavation projects in Singapore have increased by leaps and bounds. Many in the industry are using this tool without proper understanding of geomechanics, numerical and constitutive modeling of soils. The program is treated like a blackbox, and in some instances can lead to incorrect analysis, leading to either unsafe or overly conservative design. This course is aimed at providing some guidance on the use of PLAXIS in deep excavation, so that the user is aware of the advantages as well as the pitfalls of FEM based design in deep excavations.

COURSE OUTLINE

The course will cover the following:

- Concepts of Plasticity
- Undrained and Drained Soil Behavior and dependence on Constitutive models used
- Soil Parameters and its Determination
- Ground Water Considerations (Seepage and Consolidation) in Excavation
- Modeling of Struts, Anchors and Soil Nails
- Use of FEM for ULS Stability Checks
- Case Histories eg. New OG carpark and a 30m deep excavation in very soft clays

TARGET AUDIENCE

This course is designed for consultants, contractors, statutory boards like LTA, Jurong Engineering, Surbana, and PUB engineers involved in deep cut and cover excavation projects.

COURSE LECTURER'S PROFILE

A/Prof. Harry Tan Siew Ann was a Colombo Plan Scholar who graduated from Auckland University with First Class Honours BEng in 1977 as the top engineering graduate of the school. He joined NUS as a Senior Tutor and earned his MEng in 1982. He was awarded the NUS Overseas Graduate Scholarship to pursue his MSc and PhD degrees in geotechnical engineering at the University of California in Berkeley, which he completed in 1982 and 1985, respectively. He has been a staff member of the Department of Civil Engineering at the National University of Singapore since May 1980.

To date, A/Prof. Tan has published over 150 technical papers covering topics such as Applied Geosynthetics, Soft Clays, Land Reclamation, Excavations and Highway Materials Testing and Evaluation. He has won several awards for his research and has several patents on equipment for testing of porous roads.

Currently, A/Prof. Tan is serving in the SPRING working group on the CP for “Deep Excavations”. He has also served as a core committee member of several technical committees, including the TC9 (Earth Reinforcements) of the International Society of Soil Mechanics and Geotechnical Engineering, USA Transportation Research Board committee A2K06 on subsurface drainage in highway pavements, SPRING committee on earthworks and geotechnical engineering.

A/Prof. Tan was an active user of Plaxis since 1992. He was actively involved in teaching Plaxis courses in industry since 2000, in Singapore, Malaysia, Korea and the Netherlands. He is part of the scientific network of distinguished international researchers in geomechanics and numerical methods who supports the continuing development of Plaxis for use in the geotechnical engineering industry.

As a registered professional engineer since 1994, A/Prof. Tan has been involved in several consulting jobs in Singapore. His consultancy experience involves many deep excavation projects in Singapore, including New OG basement and One North/ Fusionpolis project. In recent past, he was appointed as one of the (MOM) State Expert witness on the Nicoll Highway Collapse Investigation from July 2004 till the end of the Inquiry in April 2005.
REGISTRATION FORM

Deep Excavation Analysis and Design with PLAXIS
19 – 20 April 2005

Venue: To be advised

Course Fee: □ S$ 600.00 + S$30.00 (5% GST)
 □ NUS Alumni
     S$540.00 + S$27.00 (5% GST)

*Membership No.: ________________________________

Participant's details:
Name: Dr/Mr/Ms: _______________________________________

Designation: ___________________________________________
(Please attached your name card if any)

Name of Organization: _________________________________

Contact Person: _______________________________________

Address: _____________________________________________

Email: _______________________________________________

Tel No (O): ______________________ Fax No: _________________

**Dietary Preference: Halal/Vegetarian

Payment Mode:
Cheque/Bank draft No: ___________________________ Amount (S$): _______

VISA/MSTR: _______________________________ Expiry Date: ___________

Authorised Signature/ Company Stamp: ________________________________

Closing Date:
Please send in your registration form together with your payment by 4th April 2005