Θέση PhD με υποτροφία – Civil Engineering, University of Nottingham

PhD Studentship: Characterization of Pile Driving Induced Ground Motions

Application details

The position is available to start in October, December, February, April or July (subject to date of application)

Duration: 3 years

Closing date: open until filled

Project description

Pile installation is a complicated, energy intensive process where codes and regulatory standards provide some guidance, but little is understood about coupling and transmission of pile driving energy into and through the ground in the form of vibrations. These vibrations can cause direct structural damage and damage due to settlement of granular soils.

This project aims to:

- Validate a Finite Element code based on ground vibration monitoring data from full-scale and reduced-scale pile driving tests
- Supplement the existing data with experimental testing to be conducted at the Nottingham Centre for Geomechanics' centrifuge
- Characterize the pile driving vibration environment
- Develop a formula predicting the energy dissipation into the ground

Eligibility

Applicants should have, or expect to obtain, a 1st class or 2.1 honours degree (or international equivalent) in Civil Engineering, Materials Science, Physics or a related subject. A relevant Master degree in these areas would be advantageous.

If English is not your first language, you must provide evidence that you meet the University's minimum <u>English Language requirements</u>.

Students with experience or a willingness to learn software such as MATLAB, Plaxis and Abagus are encouraged to apply.

Due to funding restrictions this position is **only available for UK or EU candidates.**

Funding

Eligible for Home / EU candidates. This project will include the payment of tuition fees as well as a stipend equivalent to RCUK rates (currently at £15,009 p.a. tax free for 2019/20) awarded to the suitable candidate.

How to apply

Informal contact can be sent to Dr Athina Grizi (<u>A.Grizi@nottingham.ac.uk</u>) before submitting an online application. Please send a cover letter and a copy of your CV with your up to date relevant experience.

Online application can be made via http://www.nottingham.ac.uk/pgstudy/how-to-apply.aspx. Please quote the studentship reference and Dr Athina Grizi.

When applying for this studentship, please include the reference number (beginning ENG) within the personal statement section of the application. This will help in ensuring your application is sent directly to the academic advertising the studentship.

Contact details (Informal enquiries in Greek or English)

Name: Dr Athina Grizi (Αθηνά Γκρίζη)

Email: a.grizi@nottingham.ac.uk

Please see <u>here</u> for the international equivalent for students from Greece for admission to the University of Nottingham.