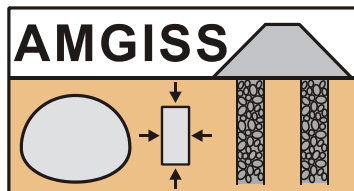


2nd International Workshop on Soft Soils Focus on Ground Improvement

**University of Strathclyde, Glasgow, Scotland,
3-5 September 2008**

**Venue: John Anderson Building
(see the map)**

Tentative Programme Version 2



For details about registration etc., see <http://www.iwgss.org/>

Tuesday September 2, 2008

Registration & Ice Breaker 17.00-19.00

Wednesday September 3, 2008

Registration 8.00-9.00

Opening session 9.00-9.30

Session 1 9.30-11.00

Chair: Prof. Simon Wheeler

Theme: Modelling structured geomaterials

Modelling the influence of density and bonding on geomaterials (keynote)
T. Nakai, F. Zhang, H. Kyokawa, M. Kikumoto & H.M. Shahin

Modelling destructuration and anisotropy of Bothkennar clay
K. McGinty, M. Karstunen & S.J. Wheeler

An experimentally-based constitutive model for deep-mix stabilized quick clay
P.M. Bujulu, G. Grimstad, S. Nordal & L.O. Grande

Influence of curing temperature on the strength of cement-stabilised artificial clays
I.P. Marzano, A. Al-Tabbaa & M. Grisolia

Coffee break 11.00-11.30

Session 2 11.30-13.00

Chair: to be confirmed

Theme: Modelling time-effects

Enhanced viscoplastic modelling of soft soils (keynote)
L. Laloui & S. Chalindar

Validation of Anisotropic Creep Model for soft soils
M. Leoni, P.A. Vermeer & M. Karstunen

Numerical creep analysis of the Treporti test embankment
V. Berengo, P. Simonini, M. Leoni & P.A. Vermeer

Numerical modelling of a test embankment on soft clay improved with vertical drains
T. Stapelfeldt, P. Vepsäläinen & Z.-Y. Yin

Lunch **13.00-14.00**

Session 3 **14.00-15.30**

Chair: Dr Ronald Brinkgreve

Theme: Preloading and vertical drains

Modelling of soft ground consolidation via combined surcharge and vacuum preloading (keynote)

B. Indraratna, C. Rujikiatkamjorn, & A. Ghandeharioon

Three-dimensional analyses of PVD-improved soft soils

A. Yildiz & M. Karstunen

Acceleration of the consolidation process of a clayey soil by preloading and vertical drains: field measurements and numerical predictions

E. Cascone, V. Bandini, A. Galletta & G. Biondi

Consolidation of extremely soft mud for the AIRBUS A-380 assembly factory in Hamburg

J.-L. Chaumeny , J. Kirstein & S. Varaksin

Coffee **15.30-16.00**

Session 4 **16.00-17.30**

Chair: Prof. Pieter Vermeer

Theme: Embankments

Settlement predictions of embankments on organic soils in engineering practice (keynote)

C.J. Dykstra, F.A.J.M. Mathijssen & F. Molenkamp

Construction of a lightweight dam on organic soils – FE-analyses and practical experiences

H. Schuller & P. Krameter

Veda trial embankment – comparison between measured and calculated deformations and pore pressure development

R. Müller & S. Larsson

Construction of an embankment on and with an improved soft industrial sludge
P.H. Yonatan, J. Tennekoon, D. Van Gemert, J. Maertens, J. Houtmeyers & M. Goorden

Welcome Reception (City Chambers) – time to be confirmed

Thursday September 4, 2008

Session 5 9.30-11.00

Chair: Prof. Sarah Springman

Theme: Vibro replacement stone columns

Installation effects of vibro replacement stone columns in soft clay (keynote)

D. Egan, W. Scott & B. McCabe

Soil improvement with vibrated stone columns— influence of pressure level and relative density on friction angle

I. Herle, J. Wehr & M. Arnold

Influence of stone column deformation on surrounding soil consolidation

J. Castro & C. Sagaseta

Numerical modelling of small-scale geogrid encased sand column tests

J. Gniel & A. Bouazza

Coffee break 11.00-11.30

Session 6 11.30-13.00

Chair: Prof. Cesar Sagaseta

Theme: Vibro compaction and replacement

Comparison of vibrocompaction methods by numerical simulations (keynote)

M. Arnold, I. Herle & J. Wehr

Laboratory experimental analysis of radial consolidation around a stone column

A. Cimentada & A. Da Costa

Centrifuge modelling to compare ground improvement techniques on double porosity clay landfills

E.J. Pooley, S.M. Springman, J. Laue & J. Najser

Numerical modelling of stone columns in soft clay under an embankment

T.M. Weber, S.M. Springman, M. Gäb, V. Racansky & H.F. Schweiger

Lunch 13.00-14.00

Session 7 **14.00-15.30**
Chair: Dr Jimmy Wehr
Theme: Vibro replacement stone columns

Field trial for a foundation supported by floating stone columns - measurements and numerical analysis (AMGISS feature lecture)
H.F. Schweiger & M. Gäb

Evaluation of ground improvement by groups of vibro stone columns using field measurements and numerical analysis
F. Kirsch

A review of field trials investigating the performance of partial depth vibro stone columns in a deep soft clay deposit
C.J. Serridge & R.W. Sarsby

Soil improvement by vibro replacement and preloading for the foundation of a shopping centre on weak marine deposits
C. Wiltafsky & R. Thurner

Coffee break **15.30-16.00**

Session 8 **16.00-17.30**
Chair: Prof. Helmut Schweiger
Theme: Developments in numerical modelling

Frictional contact formulation for large deformation analyses in geomechanics (keynote)
Y. Yuan , L. Beuth & P. A. Vermeer

Application of volume averaging technique in numerical modelling of deep mixing
U. Vogler & M. Karstunen

Modelling piled foundation by means of embedded piles
H.K. Engin, E.G. Septanika, R.B.J. Brinkgreve & P.G. Bonnier

Predicting horizontal deformations depending on the construction scheme using artificial intelligence
R. van der Meij

Workshop Banquet at the Barony **19.30-23.00**

Friday September 5, 2008

Session 9 **9.30-11.00**
Chair: Prof. Buddhima Indraratna
Theme: Piles & rigid inclusions

3D numerical modelling of the behaviour of large buildings founded on Mexico City soft clays (keynote)

J.F. Rodríguez, N.P. López-Acosta & G. Auvinet

On the numerical analysis of piled embankments

S. Satibi, M. Leoni, P. A. Vermeer & R. van der Meij

Countermeasures against settlement of embankment on soft ground with PFS (Partial Floating Sheet-Pile) method

N. Harata, J. Otani, H. Ochiai, K. Onda & Y. Okuda

Design and construction of a sludge lock trench to prevent extrusion beneath an embankment

C. J. Currie & M. Mackay

Coffee break **11.00-11.30**

Session 10 **11.30-13.00**
Chair: Prof. Pauli Vepsäläinen
Theme: Deep mixing

Some experiences from full-scale test embankments on floating lime-cement columns (keynote)

M. Olsson, T. Edstam & C. Alén

Deep stabilised test embankment at the Suurpelto area in Espoo, Southern Finland

T. Stapelfeldt, M. Lojander, H. Tanska, A. Ojala & J. Forsman

On the difficulty of characterizing the properties of mixed materials obtained from soil-cement columns

A. Le Kouby, S. Guédon & I. Petkovski

Automated ground improvement process

L.K. Korkiala-Tanttu & M.A. Juvankoski

Lunch **13.00-14.00**

Session 11 14.00-15.30 Chair: Prof. Lars Grande Theme: Soil reinforcement & special techniques
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Soil fracturing of soft silty clays for the reinforcement of a bell tower foundation (keynote)

G. Gottardi, L. Cavallari & M. Marchi

Model studies of circular foundations on soft soils

A. Demir, M. Ornek, M. Laman, A. Yildiz & G. Misir

Finite element simulation of mandrel penetration in a normally consolidated soil

C. Rujikiatkamjorn, A. Ghandeharioon & B. Indraratna

Evaluation of the effect of face bolting on tunnel construction using X-ray CT

D. Takano, J. Otani & T. Mukunoki

Coffee break 15.30-16.00
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Session 12 16.00-18.30 Chairs: Dr Minna Karstunen & Dr Martino Leoni
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Introduction of papers in poster session	16.00-17.00
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Poster session & whisky tasting	17.00-18.15
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Room 1:

Numerical analysis of a floating stone column foundation using different constitutive models

M. Gäb, H.F. Schweiger, D. Kamrat-Pietraszewska & M. Karstunen

Strength and permeability characteristics of cement stabilized soft Finnish clay

M.M. Hassan & O. Ravaska

Collapse and deformation behaviour of alluvial loess soils from Afghanistan

C. Meier, C.Boley & Y. Zou

A unified method to describe the influences of intermediate principal stress and stress history in constitutive modelling

M. Kikumoto, T. Nakai, H. Kyokawa, F. Zhang & H.M. Shahin

A rotational hardening bubble surface model for modelling cyclic behaviour of clay

Nallathamby Sivasithamparam & Minna Karstunen

Room 2:

Design based on in-situ and laboratory tests in soft glacial soil

W. Steiner

Characterization and modelling of consolidation and seepage behaviour of soft sediment at low stress levels

J.S. Melton & R.A. Prieto

Comparison of numerical analysis and measured ground movements on a live rail tunnel due to proposed earthwork development

C. MacDiarmid & R. Mung

Numerical modelling of embankment on PVD-improved soft alluvium- Limerick Southern Ring Road Phase II

D.Kamrat-Pietraszewska, F. Buggy & M. Karstunen

Numerical investigation on the factors affecting pullout resistance of driven nails in pyroclastic silty sand

G. Di Fonzo, A. Flora, M.V. Nicotera, G. Manfredi & A. Prota

<i>Closure</i>	<i>18.15-18.30</i>	<i>Closure</i>
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Sponsors:

EC FP6 Marie Curie Actions (Contract MRTN-CT-2004-512120)

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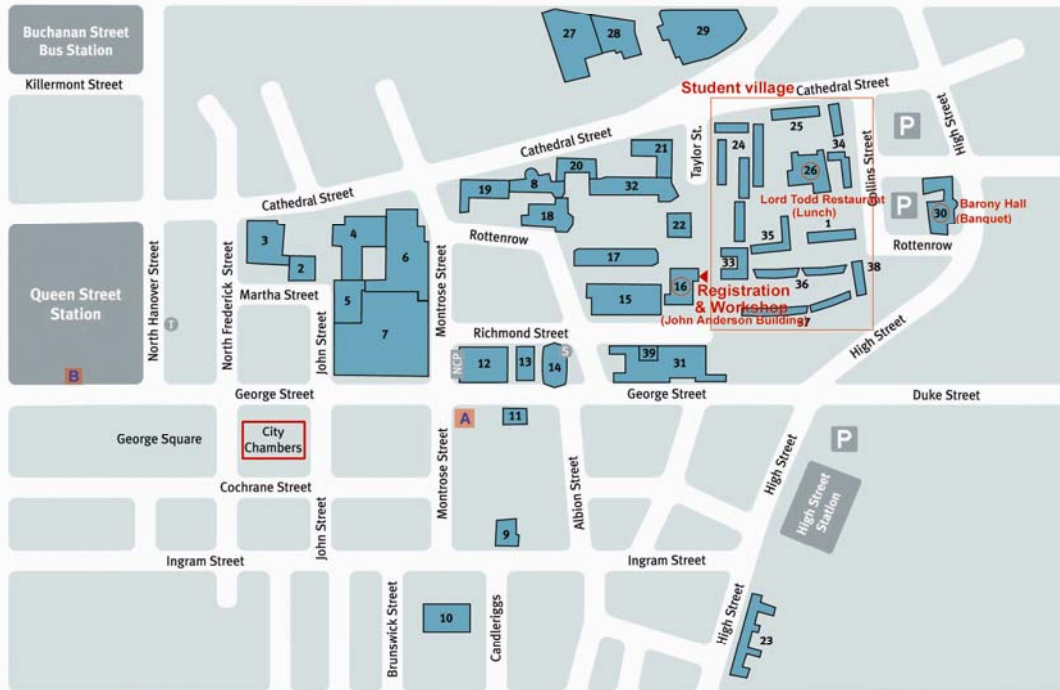
Wilde FEA Ltd

Scottish Geotechnical Group

John Anderson Campus

The John Anderson Campus is a few minutes' walk from the heart of the city centre. All the campus buildings are in easy walking distance of Queen Street Station and George Square. Approaching by motorway, take junction 15 off the M8 and approach the campus via Cathedral Street.

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|-----------------------------------|--|---------------------------------|--------------------------|
| 1 James Goad Hall | 12 McCance Building | 23 Andrew Ure Hall | 34 Murray Hall |
| 2 St Paul's Building | 13 Collins Building | 24 Birkbeck Court | 35 Forbes Hall |
| 3 Centre for Sport and Recreation | 14 Livingstone Tower | 25 Garnett Hall | 36 Thomas Campbell Court |
| 4 Thomas Graham Building | 15 Colville Building | 26 The Lord Todd/Village Office | 37 James Blyth Court |
| 5 Students' Union | 16 John Anderson Building | 27 181 St James Road | 38 James Young Hall |
| 6 James Weir Building | 17 Architecture Building | 28 Lord Hope Building | 39 Accommodation Office |
| 7 Royal College Building | 18 Sir William Duncan Building | 29 Curran Building/Library | 5 24 Hour Security |
| 8 Graduate School of Business | 19 Henry Dyer Building | 30 Barony Hall | 1 Taxi |
| 9 Ramshorn Theatre | 20 Stenhouse Building | 31 Graham Hills Building | NCP National Car Park |
| 10 Patrick Thomas Court | 21 Todd Wing of John Arbuthnott Building | 32 John Arbuthnott Building | |
| 11 Alexander Turnbull Building | 22 Wolfson Centre | 33 Chancellors Hall | |



- Hotels:**
- A Premier Travel Inn
 - B The Millenium Hotel
 - C Jury's Inn (not in the map, 15 min walk)

- Lines from airports:**
- Glasgow International airport
 - > Bus to Buchanan Bus Station
 - > Taxi about £25 (depending on traffic)
 - Prestwick airport
 - > Train to Glasgow Central (not in the map, 15 min walk)