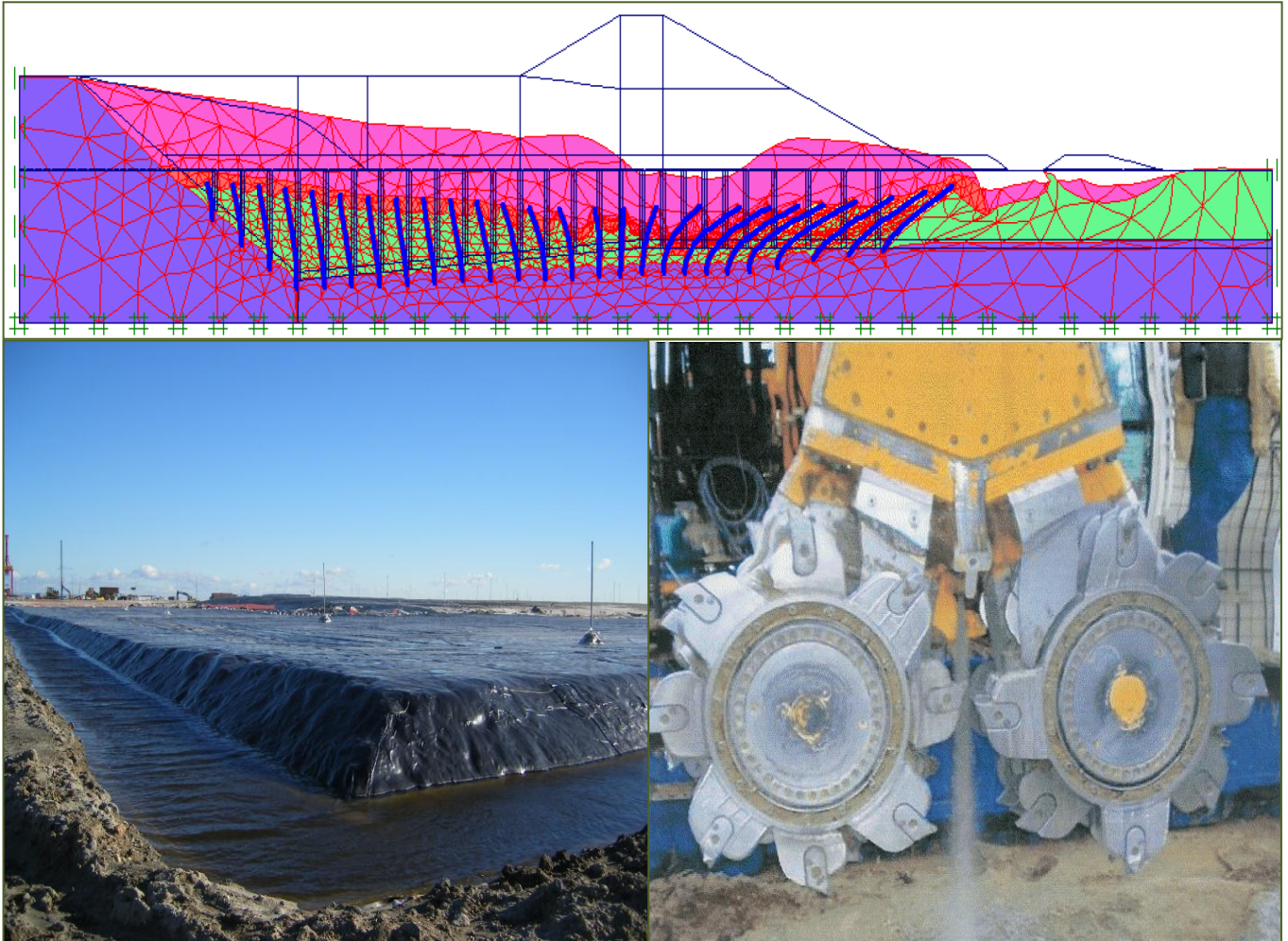


3rd announcement : Final programme

INTERNATIONAL SYMPOSIUM & SHORT COURSES

TC 211 IS-GI Brussels 2012



Recent Research, Advances & Execution Aspects of GROUND IMPROVEMENT WORKS

30 May – 1 June 2012, Brussels, BELGIUM

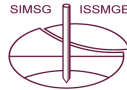
Organised by :

ISSMGE Technical Committee TC 211 Ground Improvement

Belgische Groepering voor Grondmechanica en Geotechniek
Groupement Belge de Mécanique des Sols et de la Géotechnique

Comité Français de Mécanique des Sols





INVITATION

The Technical Committee TC 211 "Ground Improvement" of the International Society for Soil Mechanics and Geotechnical Engineering ISSMGE has a major commitment towards collecting information concerning the design and execution of ground improvement.

The Committee has already organised workshops in Madrid (2007), Alexandria (2009) and Hong Kong (2011) and has now the pleasure to invite you to participate at the International Symposium & Short Courses "Recent Research, Advances on Execution Aspects of Ground Improvement Works" that will take place from 30 May to 1 June in Brussels, Belgium.

This symposium is organised under the auspices of the Belgische Groepering voor Grondmechanica en Geotechniek/ Groupement Belge de Mécanique des Sols et de la Géotechnique (BGGG-GBMS) & the Comité Français de Mécanique des Sols (CFMS).

LOCAL ORGANISING COMMITTEE

Chairmen : S. Varaksin & J. Maertens

Secretary : N. Huybrechts

Treasurer : G. Simon (GBMS)

Members :

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S. Bretelle (GDH)

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ISSMGE TC 211

Executive committee

S. Varaksin, TC 211 Chairman (France)

J. Maertens TC 211 Co-Chairman (Jan Maertens bvba & KULeuven, Belgium)

N. Huybrechts, TC 211 Secretary (BBRI)

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R. Essler (RD Geotech Ltd, United Kingdom)

M. Nozu (Fudo-Tetra Corp., Japan)

J. Sankey (The Reinforced Earth Company, United States)

J. Wehr (Keller Holding GmbH, Germany).

ISSMGE-TOC Liaison member

A. Gomes Correia (University of Minho, Portugal)

SYMPOSIUM VENUE & SHORT COURSES

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BELGIUM

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Website : www.crowneplazabrussels.be



OFFICIAL LANGUAGE

The official language of the symposium is English.

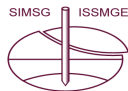
PROCEEDINGS

The participants of the international symposium will receive a hard copy of the proceedings as well as a digital version on CD-Rom. The students will receive only a digital copy on CD-Rom.

CONFERENCE WEBSITE: www.bbri.be/go/IS-GI-2012

REGISTRATION

Registration is possible via the conference website : www.bbri.be/go/IS-GI-2012 until 20 May 2012 or until the maximum capacity of 280 participants is reached.



GLOBAL PROGRAMME

Wednesday 30 May 2012	Registration, Parallel short courses, Welcome reception
Thursday 31 May 2012	Plenary sessions, Louis Ménard Lecture, Technical exhibition, Symposium dinner
Friday 1 June 2012	Plenary sessions, Technical exhibition
Saturday 2 June 2012	Technical visit

LOUIS MÉNARD LECTURE

During the International symposium, the Louis Ménard lecture, that has been attributed to the TC 211 Ground Improvement by the ISSMGE Board, will be held.

Louis Ménard has been a great engineer and inventor. The pressuremeter is known to all of you and the methods of calculating bearing capacity and settlement are widely accepted. Dynamic consolidation rotating plate anchors, annular vibro hammers were among his inventions. Dynamic replacement, vacuum consolidation, controlled modulus columns were brought to reality by his successors since he died prematurely.

EXHIBITION

An exhibition will be held in the lobby of the symposium venue, offering the opportunity for the Platinum en Gold sponsors of the symposium to present their products and services.

SHORT COURSES (30 May 2012)

Short Course nr	Themes	Co-ordinators
SC 1	Marine Ground Improvement Vertical drains, vacuum consolidation, vibrocompaction of hydraulic fills, rapid impact compaction and underwater deep mixing	M. VAN DEN BROECK, <i>DEME, Belgium</i> S. BRETELLE, <i>GHD, Australia</i> PH. LIAUSU, <i>Ménard, France</i>
SC 2	Deep Mixing Applications of deep mixing in contaminated soils, deep mixing equipment, deep mixing research, deep mixing design, deep mixing monitoring and case studies	J. MAERTENS, <i>Jan Maertens bvba & KULeuven, Belgium</i> N. DENIES, <i>Belgian Building Research Institute, Belgium</i> N. HUYBRECHTS, <i>Belgian Building Research Institute, Belgium</i>
SC 3	Rigid Inclusions and Soil Reinforcement Piled embankments (applications, geosynthetic reinforcement, design), stone columns, soil reinforcement (mechanically stabilized earth – MSE, inextensible versus extensible reinforcement for MSE, combination MSE and ground improvement) and soil nailing.	T. DURGUNOGLU, <i>Zetas Zemin Teknolojisi A.S., Turkey</i> B. SIMON, <i>TERRASOL, France</i> J. SANKEY, <i>The Reinforced Earth Company, USA</i>

The short courses are organised in parallel, each of them taking a full day. The detailed programme of the short courses is available on the symposium website in a separate document.

SOCIAL PROGRAMME (31 May and 1 June 2012)

The organizing committee has provided a social programme for accompanying persons.

The social programme on 31 May 2012 starts at 09:00 at the registration desk in the symposium venue (Crown Plaza Brussels – Le Palace) and consists in:

- half a day bus tour through the city ending at 13:00 in the city center, lunch in the city centre
- guided walk back to the symposium venue. The end is provided at 16:00

The social programme on 1 June 2012 starts at 09:00 at the registration desk in the symposium venue and consists in

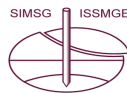
- tour with the tram to Laken (Royal Palace) and the Atomium
- visit of the Atomium
- lunch
- back to the symposium venue at 14:00.

Participants have only to bear the costs for the lunches. Registration by mail to carine.godard@bbri.be. More details will be available at the registration desk of IS-GI-Brussels 2012.



CONFERENCE TIME SCHEDULE

Wednesday 30 May 2012	
08:30 - 17:30	Registration for the short courses (<i>LOBBY, ground floor level</i>)
09:30 - 17:30	Parallel short courses (detailed program – see separate document)
	SC1 - Marine Ground Improvement (<i>Venue : SERENITY, 2nd floor</i>)
	SC2 - Deep Mixing (<i>Venue : VISION, 8th floor</i>)
	SC3 - Rigid Inclusions and Soil Reinforcement (<i>Venue : INFINITY, 2nd floor</i>)
13:30 – 20:00	Registration for the international symposium (<i>LOBBY, ground floor level</i>)
18:00 - 20:00	Welcome reception (<i>KLIMT, ground floor level</i>)
Thursday 31 May 2012	
08:30 - 17:30	Registration (<i>LOBBY, Ground floor level</i>)
09:00 - 09:30	Opening of the Symposium <i>J. Maertens (TC211 co-chairman); F. De Cock (BGGG-GBMS Chairman); C. Jacquard representing Ph. Mestat (CFMS chairman); A. Gomes Correia (ISSMGE-TOC); J. Vyncke (Director BBRI)</i>
09:30 - 11:00	SESSION S1 – VIBRO & IMPACT COMPACTION <i>General Reporter : J. KIRSTEIN, BVT Dyniv GmbH, Germany</i> <i>Chairmen : F. DE COCK, Geo.be, Belgium & chairman of BGGG-GBMS</i> <i>C. JACQUARD, Fondasol, France</i>
09:30 - 09:35	Introduction by the session chairmen
09:35 - 10:05	Presentation of the General Report, <i>J. Kirstein</i>
10:05 - 10:15	Presentation of the selected papers
10:05 - 10:15	Lessons learned from millions of square metre of ground improvement <i>B. Hamidi, S. Varaksin</i>
10:15 - 10:25	Sand compaction pile technology and its performance in both sandy and clayey ground <i>H. Kinoshita, K. Harada, M. Nozu, J. Ohbayashi</i>
10:35 - 10:45	Ground improvement tank terminal, The Netherlands <i>J.W. Dijkstra, A.H. Nooy van der Kolff</i>
10:35 - 10:45	Quantifying the zone of influence of the impact roller <i>M. Jaksa, B.T. Scott, N.L. Mentha, A.T. Symons, S.M. Pointon, P.T. Wrightson, E. Syamsuddin</i>
10:45 - 11:00	Discussion
11:00 - 11:30	Coffee break
11:30 - 12:30	LOUIS MÉNARD LECTURE by Dr. ir. P. Mengé, <i>DEME, Belgium</i> , introduced by S. Varaksin co-chairman TC 211
12:30 - 14:00	Lunch
14:00 - 15:30	SESSION S2 – VERTICAL DRAINS, VACUUM CONSOLIDATION & PRELOADING <i>General Reporter : B. INDRARATNA, University of Wollongong, Australia</i> <i>Chairmen : Ph. LIAUSU, MENARD, France</i> <i>M. VAN DEN BROECK, DEME, Belgium</i>
14:00 - 14:05	Introduction by the session chairmen
14:05 - 14:35	Presentation of the General Report, <i>B. Indraratna</i>
14:35 - 14:45	Presentation of the selected papers
14:35 - 14:45	Performance and prediction of surcharge and vacuum consolidation via prefabricated vertical drains with special reference to highways, railways and ports <i>B. Indraratna, Cholachat Rujikiatkamjorn, Geng Xueyu</i>
14:45 - 14:55	Use of temporary water drawdown for site improvement <i>R.A. Jewell</i>
14:55 - 15:05	Back analysis of a trial embankment settlement based on CPTu and oedometric test results <i>T. Mateos</i>
15:05 - 15:15	Finite element modelling of vacuum consolidation using drain elements and unsaturated soil conditions <i>R. Witasse, J. Racinais, F. Maucotel, V. Galavi, R. Brinkgreve, C. Plomteux</i>
15:15 - 15:30	Discussion
15:30 - 16:00	Coffee break



16:00 - 17:30	SESSION S3 – SOIL MIXING 1 – SOIL STABILIZATION (surface mixing and laboratory mixtures) General Reporter : A. AL-TABBAA, <i>Cambridge University, United Kingdom</i> Chairmen : A. GOMES CORREIA, <i>University of Minho, Portugal & ISSMGE TOC</i> D. VERASTEGUI, <i>Ghent University, Belgium</i>
16:00 - 16:05	Introduction by the session chairmen
16:05 - 16:35	Presentation of the General Report, <i>A. Al-Tabbaa</i>
16:35 - 16:45	Presentation of the selected papers Nucleation centres in lime stabilised soils <i>P. Beetham, T. Dijkstra, N. Dixon,</i>
16:45 - 16:55	Effect of fabric on elastic properties of lime treated clayey sand <i>B. Sonon, M.A. Hashemi, J.C. Verbrugge, B. François, T.J. Massart</i>
16:55 - 17:05	Influence of specimen preparation on unconfined compression strength of cement-stabilized kaolin clay <i>M. Kitazume</i> Laboratory study on the applicability of molding procedures for the preparation of cement stabilised specimens <i>M. Grisolia, M. Kitazume, E. Leder, I.P. Marzano, Yoshiyuki Morikawa</i>
17:05 - 17:15	Laboratory study of the workability of the deep soil-mixing material and in situ applications <i>F. Szymkiewicz, F.S. Tamga, A. Le Kouby, Ph. Reiffsteck, J.L. Tacita</i>
17:15 - 17:30	Discussion
18:30	Departure from symposium venue for conference dinner (15 minutes walk)
19:00 - 23:00	Symposium dinner in the Belgian Comic Strip Center, a gem of Art Nouveau by grand master Victor Horta
Friday 1 June 2012	
08:30 - 17:30	Registration (<i>LOBBY, Ground floor level</i>)
09:00 - 10:30	SESSION S4 – SOIL MIXING 2 – DEEP MIXING General Reporters : N. DENIES, <i>Belgian Building Research Institute Belgium</i> G. VAN LYSEBETTEN, <i>KU LEUVEN, Belgium</i> Chairmen : M. ROOVERS, <i>Fondedile, Belgium & chairman of ABEF</i> W. MAEKELBERG, <i>TUC RAIL, Belgium</i>
09:00 - 09:05	Introduction by the session chairmen
09:05 - 09:35	Presentation of the General Report, <i>N. Denies</i>
09:35 - 09:45	Presentation of the selected papers Soil mix technology for integrated remediation and ground improvement: field trials <i>A. Al-Tabbaa, M. Liska, R. McGall, C. Critchlow</i>
09:45 - 09:55	Design of in-situ soil mixing <i>M. Topolnicki, P. Pandrea</i>
09:55 - 10:05	Long-term performance of CSM walls in slightly overconsolidated clays <i>D. Bellato, A. Dalle Coste, F.W. Gerressen, P. Simonini</i>
10:05 - 10:15	Design, construction and monitoring of a test section for the stabilization of an active slide area utilizing soil mixed shear keys installed using cutter soil mixing <i>S. Gaib, B. Wilson, E. Lapointe</i>
*10:15 - 10:30	Discussion
10:30 - 11:00	Coffee break
11:00 - 12:30	SESSION S5 – RIGID INCLUSIONS & STONE COLUMNS General Reporter : B. SIMON, <i>Terrasol, France</i> Chairmen : M. ALMEIDA, <i>University of Rio de Janeiro, Brasil</i> A. LE KOUBY, <i>IFSTTAR, France</i>
11:00 - 11:05	Introduction by the session chairmen
11:05 - 11:35	Presentation of the General Report, <i>B. Simon</i>



11:35 - 11:45	Presentation of the selected papers Full scale instrumented load test for support of oil tanks on deep soft clay deposits in Louisiana using controlled modulus columns <i>B. Buschmeier, F. Masse f, S. Swift, M. Walker</i>
11:45 - 11:55	Critical height of column-supported embankments from bench-scale and field-scale tests <i>M. McGuire, J. Sloan, J. Collin, G. Filz</i>
11:55 - 12:05	Basal reinforced piled embankments in the Netherlands, field studies and laboratory tests <i>S. van Eekelen, A. Bezuijen</i>
12:05 - 12:15	Numerical modelling of stone column installation in Bothkennar clay <i>J. Castro, D. Kamrat-Pietraszewska, M. Karstunen</i>
12:15 - 12:30	Discussion
12:30 - 14:00	Lunch
14:00 - 16:00	SESSION S6 – SOIL REINFORCEMENT IN FILL AND IN CUT <i>General Reporters : T. DURGUNOGLU, Zetas, Turkey</i> <i>J. SANKEY, The Reinforced Earth Company, USA</i> <i>Chairmen : J.L. BRIAUD, Texas A&M University & President of ISSMGE</i> <i>M. BOTTIAU, Franki Foundations, Belgium</i>
14:00 - 14:05	Introduction by the session chairmen
14:05 - 14:35	Presentation of the General Report, <i>T. Durgunoglu & J. Sankey</i>
14:35 - 14:45	Presentation of the selected papers Performance of multi-anchor walls under cyclic transient flooding <i>Y. Miyata, R. Bathurst, T. Konami, K. Dobashi</i>
14:45 - 14:55	Laboratory study of displacements in a geogrid reinforced soil model under lateral earth pressures <i>L. Ruiz-Tagle, F.A. Villalobos</i>
14:55 - 15:05	Realisation of integrated steep landscape slopes within existing railway embankments <i>J. Verstraelen, C. Lejeune, E. De Clercq</i>
15:05 - 15:15	Ice-soil composites created by method of cryotropic gel formation: a preliminary report of direct shear and permeability tests <i>N.K. Vasiliev, A. Ivanov, V. Sokurov, I. Shatalina, K. Vasilyev</i>
15:15 - 15:30	Discussion
15:30 - 16:00	SPECIALTY LECTURE “Design of MSE Wall Reinforcement and Barriers against Truck Impact” <i>Prof. J.L. Briaud, President ISSMGE</i>
16:00 - 16:30	Coffee break
16:30 - 18:00	SESSION S7 – BIOGROUT & OTHER GROUTING METHODS <i>General Reporter : J. CHU, Iowa State University, USA-Singapore</i> <i>Chairmen : R. ESSLER, RD Geotech Ltd, United Kingdom</i> <i>S. BRETTELLE, GHD, Australia</i>
16:30 - 16:35	Introduction by the session chairmen
16:35 - 17:05	Presentation of the General Report, <i>J. Chu</i>
17:05 - 17:15	Presentation of the selected papers A large diameter jet grouting method for arrival of shield tunnelling machine <i>S.H. Cheng, R.K.N. Wong, H.J. Liao.</i>
17:15 - 17:25	The design and execution of settlement mitigation measures for bridge 404, North South metro project, Amsterdam <i>F.J. Kaalberg, R.D. Essler, R. Kleinlugtenbelt</i>
17:25 - 17:35	Innovative monitoring tools for on line monitoring of excavations. A monitoring test site <i>G. Van Alboom, L. De Vos, K. Haelterman, W. Maekelberg</i>
17:35 - 17:45	Ground Improvement solutions for the new cruise terminal in Lisbon <i>A. Pinto, R. Tomásio, J. Ravasco</i>
17:45 - 18:00	Discussion
18:00 - 18:30	Closure of the symposium, <i>TC 211 Chairmen, J. L Briaud (ISSMGE President)</i>

Saturday 2 June 2012 – Technical Visit

The technical visit that has been elaborated in collaboration with DEME who sponsors this event. The programme consists in a boat trip on the Scheldt River and in the Harbor of Antwerp and a visit to the AMORAS sludge treatment plant for the participants. The accompanying persons have the possibility in the afternoon to visit the new MAS museum and the city of Antwerp.

Time schedule:

- 08:30 Departure of the busses from the symposium venue in Brussels (Crown Plaza Brussels – Le Palace) to Antwerp (Steenplein)
- 09:15 to 09:45 Reception with coffee and breakfast on a vessel.
- 09.45 to 13.00 Boat trip on the Scheldt River and in the Harbor of Antwerp and lunch on the boat.
During the boat trip explanation will be given:
on the lower deck (technical): on the windmill activities of DEME and of the AMORAS sludge treatment plant to be visited in the afternoon
on the upper deck (touristic): on Antwerp and the Harbor of Antwerp
- 13.00 to 17.15 Group A: Visit of the AMORAS sludge treatment plant for the participants. More info is available on www.amoras.be/en/project
Group B: Visit to the new MAS museum www.mas.be and the city of Antwerp for the accompanying persons
- 18.00 Arrival of the busses in Brussels at the symposium venue (Crown plaza Brussels - Le palace)



AMORAS sludge treatment plant (www.amoras.be/en/project)



MAS museum (www.mas.be)



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ORGANISING SECRETARIAT

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With the support of TIS-SFT

Conference website : www.bbri.be/go/IS-GI-2012



TC 211

IS-GI Brussels 2012

Organised by TC 211 of ISSMGE

International Symposium & short courses
**Recent Research, Advances & Execution Aspects of
GROUND IMPROVEMENT WORKS**

