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).

THEMES

The session themes of the Brussels' symposium, in line with the terms of reference of the TC 211, are:

- VIBRO AND IMPACT COMPACTION
- VERTICAL DRAINS, VACUUM CONSOLIDATION & PRELOADING
- SOIL MIXING 1 : SOIL STABILISATION (surface mixing and laboratory mixtures)
- SOIL MIXING 2: DEEP MIXING
- RIGID INCLUSIONS & STONE COLUMNS
- SOIL REINFORCEMENT (in fill and in cut)
- BIOGROUT AND OTHER GROUTING METHODS (jet grouting, permeation grouting, ...)

SYMPOSIUM VENUE & SHORT COURSES

CROWNE PLAZA BRUSSELS - LE PALACE **RUE GINESTE. 3** 1210 BRUSSELS **BELGIUM**

Tel: +32 (0) 2 203 62 00 Fax: +32(0)22035555

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

Persons who wish to attend the International Symposium and/or the short courses have to duly fill in the registration form and to send it back to the conference secretariat. Registration is also possible via the conference website: www.bbri.be/go/IS-GI-2012.







GLOBAL PROGRAMME

Wednesday 30 May 2012	Registration, Parallel short courses, Welcome reception	
Thursday 31 May 2012	rsday 31 May 2012 Plenary sessions, Louis Ménard Lecture, Technical exhibition, Symposium dinn	
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 symposium sponsors to present their products and services.

SHORT COURSES (30 May 2012)

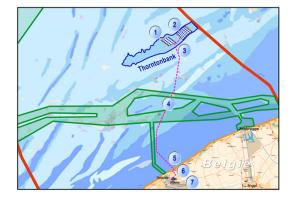
Short Course nr	Themes	Co-ordinators
SC 1	Marine Ground Improvement Vertical drains, vacuum consolidation, vibrocompaction of hydraulic fills, rapid impact compaction and underwater deep mixing	M. VAN DEN BROECK, <i>DEME, Belgium</i> S. BRETELLE, <i>GHD, Australia</i> PH. LIAUSU, <i>Ménard, France</i>
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, Jan Maertens bvba & KULeuven, Belgium N. DENIES, Belgian Building Research Institute, Belgium N. HUYBRECHTS, Belgian Building Research Institute, Belgium
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, Zetas Zemin Teknolojisi A.S., Turkey B. SIMON, TERRASOL, France J. SANKEY, The Reinforced Earth Company, USA

The short courses are organised in parallel, each of them taking a full day. A detailed programme of the short courses will be available on the symposium website by 30 November 2011.

TECHNICAL VISIT (2 June 2012)

The symposium participants will have the opportunity to visit on Saturday 2 June the construction site of an offshore wind farm on the Thorntonbank, \pm 30 km off the Belgian coast. At the time of the visit, construction phases II and III consisting of the realisation of 48 6.15 MW windmills will be deployed.

The offshore wind farm will be fully operational in September 2013 with an expected production of 1000 GWh per year.











CONFERENCE TIME SCHEDULE					
Wednesday 30 May 2012					
08:30 - 17:30	Registration				
09:30 - 17:30	Parallel short courses				
	SC1 - Marine Ground Improvement				
	SC2 - Deep Mixing				
	SC3 - Rigid Inclusions and Soil Reinforcement				
18:00 - 20:00	Welcome reception				
Thursday 31 May 2012					
08:30 - 17:30	Registration				
09:00 - 09:30	Opening of the Symposium				
09:30 - 11:00	Session S1 – Vibro & Impact Compaction General Reporter : J. KIRSTEIN, BVT Dyniv GmbH, Germany Chairmen : F. DE COCK, Geo.be, Belgium & chairman of BGGG-GBMS C. JACQUARD, Fondasol, France				
11:00 - 11:30	Coffee break				
11:30 - 12:30	Louis Ménard lecture by Dr. ir. P. Mengé, DEME, Belgium, introduced by S. Varaksin co-chairman TC 211				
12:30 – 14:00	Lunch				
14:00 - 15:30	Session S2 – Vertical Drains, Vacuum Consolidation & Preloading General Reporter : B. INDRARATNA, University of Wollongong, Australia Chairmen : Ph. MESTAT, IFSTTAR, France & chairman CFMS M. VAN DEN BROECK, DEME, Belgium				
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, Cambridge University, United Kingdom Chairmen : A. GOMES CORREIA, University of Minho, Portugal & ISSMGE TOC D. VERASTEGUI, Ghent University, Belgium				
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 2	2012				
08:30 - 17:30	Registration				
09:00 - 10:30	Session S4 – Soil Mixing 2 – Deep Mixing General Reporter : N. DENIES, Belgian Building Research Institute Belgium Chairmen : M. ROOVERS, Fondedile, Belgium & chairman of ABEF W. MAEKELBERG, TUC RAIL, Belgium				
10:30 - 11:00	Coffee break				
11:00 - 12:30	Session S5 – Rigid Inclusions & Stone Columns General Reporter : B. SIMON, Terrasol, France Chairmen : M. ALMEIDA, University of Rio de Janeiro, Brasil A. LE KOUBY, IFSTTAR, France				
12:30 - 14:00	Lunch				
14:00 - 16:00	Session S6 – Soil Reinforcement in fill and in cut, including a specialty lecture "Design of MSE Wall Reinforcement and Barriers against Truck Impact" by Prof. J.L. Briaud, President ISSMGE General Reporter Chairmen T. DURGUNOGLU, Zetas, Turkey & J. SANKEY, The Reinforced Earth Company, USA J.L. BRIAUD, Texas A&M University & President of ISSMGE M. BOTTIAU, Franki Foundations, Belgium				
16:00 - 16:30	Coffee break				
16:30 - 18:00	Session S7 – Biogrout & Other Grouting Methods (jet grouting, permeation grouting,) General Reporter : J. CHU, Iowa State University, USA-Singapore Chairmen : R. ESSLER, RD Geotech Ltd, United Kingdom S. BRETELLE, GHD, Australia				
40.00 40.00					

Saturday 2 June 2012 – Technical Visit

18:00 - 18:30

Visit to the offshore construction site of a windmill farm on the Thornton bank, 30 km off the Belgian coast.

08:00 Departure by coach from the symposium venue in Brussels

18:00 Estimated return at the symposium venue in Brussels

Closure of the symposium

TC 211 IS-GI Brussels 2012 Organised by TC 211 of ISSMGE

International Symposium & short courses
Recent Research, Advances & Execution Aspects of







SESSION SCHEDULE

Each session will be organised according to the following schedule:

• Introduction (5 minutes)

GROUND IMPROVEMENT WORKS

- General report dealing with a.o. actual research and advances (30 minutes)
- Selected individual presentations (4x10 minutes)
- Discussion (15 minutes)

ACCOMODATION

The organisation committee blocked a number of rooms in the conference hotel: Crowne Plaza Le Palace****(199 EUR/night single room - breakfast included).

Participants need to contact themselves the hotel for reservations and payment. Booking is possible via the following link: <u>BBRI 2012</u> Rooms are blocked until 29 April 2012 for the following dates: 29, 30 and 31 May 2012.

Other suggested hotels in the neighbourhood of the symposium venue (participants need to contact themselves the hotel for reservations and payment):

Hotel Astrid *** Hotel Arlequin*** Hotel Le Plaza

± 116 EUR single room ± 120 EUR single room ± 185 EUR single room

± 140 EUR double room incl. Breakfast ± 130 EUR double room (mention BBRI-IS-GI 2012)

Place du Samedi 11, B-1000 Brussels Rue de la Fourche 17-19 B-1000 Brussels Boulevard Adolphe, 118-126, B-1000 Brussels T.: +32 2 219 31 19 - F.: +32 2 219 31 70 T.: +32 - 2 522 33 22 F.: +32 2 527 24 49 T.: +32 2 278 01 00 F.: +32 2 278 01 01

Start of registration : 01.11.2011

Deadline for full papers : 30.11.2011

Detailed programme short courses : 30.11.2011

Deadline for early bird registration : 15.01.2012

LOCAL ORGANISING COMMITTEE

Chairmen: S. Varaksin & J. Maertens

Secretary : N. Huybrechts Treasurer : G. Simon (GBMS)

Members:

M. Bottiau (ABEF & Franki Foundations Belgium)

S. Bretelle (GDH)

F. De Cock (chairman BGGG & GEO.BE)

R. Frank (ENPC-CERMES)

A. Holeyman (UCL – Université Catholique de Louvain)

C. Jacquard (Fondasol)

A. Le Kouby (IFSTTAR/LCPC)

Ph. Liausu (Ménard)

W. Maekelberg (TUC RAIL)

Ph. Mestat (chairman CFMS & IFSTTAR/LCPC)

M. Roovers (ABEF & Fondedile)

M. Van Den Broeck (DEME)

R.D. Verastegui (Ghent University)

J.C. Verbrugge (ULB – Université Libre de Bruxelles)

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)

D.T. Bergado (Asian Institute of Technology, Thailand)

J. Chu (Iowa State University, USA-Singapore)

T. Durgunoglu (Zetas Zemin Teknolojisi A.S., Turkey)

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)







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ORGANISING SECRETARIAT

Belgian Building Research Institute

Carine Godard Av. P. Holoffe, 21 B-1342 Limelette Belgium

E-mail: carine.godard@bbri.be Tel.: +32 (0)2 655 77 11

With the support of TIS-SFT

Fax: +32 (0)2 653 07 29

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











REGISTRATION FORM

To be returned to:

Mrs Carine Godard, avenue P. Holoffe, 21B-1342 LIMELETTE, Belgium By fax: +32 (0) 2 653 07 29 or by e-mail: carine.godard@bbri.be

Mrs/Ms/Mr Family Name:	First Name:				
Organisation/Company:					
Department:					
Function:					
Mailing Address:					
Postal code: City:	Country:				
·	-				
Tel.:Fax:	E-maii:				
REGISTRATION FEES INTERNATIONAL SYMPOSIUM**					
Full registration and payment before January 15th 2012					
☐ ISSMGE member	375,00				
□ Non member	425,00				
☐ MSc and PhD Students	200,00				
Full registration and payment after January 15th 2012	475.00				
☐ ISSMGE member	475,00				
□ Non member □ MSc and PhD Students	525,00 300,00				
U Wisc and File Students	300,00				
Welcome reception included		☐ Yes	□ No		
□ extra ticket(s) welcome reception		Nr of extra tickets			
		1			
Gala Dinner:	75,00	☐ Yes	□ No		
extra ticket(s) gala dinner	75,00	Nr of extra tickets:			
Short courses are organised in parallel sessions, please indicate your choice	**				
☐ Short Course 1 : Marine Ground Improvement					
•					
□ Short Course 2 : Deep mixing					
☐ Short Course 3 : Rigid inclusions & Soil Reinforcement					
□ ISSMGE member	200,00				
☐ Non member	250,00				
☐ MSc and PhD Students	120,00				
		1			
Technical Visit*					
Technical Visit on 2 June 2012	offered by DEME	☐ Yes	□ No		
□ extra ticket(s) technical visit		Nr of extra tickets			
*Technical visit limited to 200 participants. **Annulation of a registration: before 30 March 2012,reimbursement of max. 50% of the registration fees after 30 March 2012, no reimbursement of the registration fees					
METHODS OF PAYMENT					
I hereby forward the amount* of € (Reference 'IS-GI Brussels 2012 – Na	me of the participant')				
 By bank transfer, payable to Belgian Society of ISSMGE: BNP Paribas Fortis, B 1420 Braine-l'Alleu 	d, BELGIUM : IBAN BE73	0013 9895 9460			
*Bank charges or to be added to the amount	BIC/SWIFT	GEBABE BB			
o By credit card: ☐ Visa ☐ Eurocard-mastercard ☐ American express					
I hereby authorize the Belgian Society of ISSMGE to chargeEUR to m	y credit card for registration	1			
Credit card number : Expiration of	number: Expiration date:				
Full name of cardholder as it appears on the card :					