



ISSMGE TC 211 GROUND IMPROVEMENT NEWSLETTER n°4, April 2012

Dear Reader,

As promised in our third Newsletter we inform you about the progress with the organization of IS-GI Brussels 2012 and the Short Courses on Wednesday 30 May 2012. .

1 Organization of the Symposium and of the Short Courses:

We have the great pleasure to announce that the TC 211 Symposium IS-GI 2012 and the Short Courses have an overwhelming success. Actually we have:

- 239 registrations for the Symposium
- 166 registrations for the Short Courses, distributed as follows
 - 48 for SC1 Marine Ground Improvement
 - 66 for SC2 Deep Mixing
 - 54 for SC3 Rigid Inclusions and Soil reinforcement

Until now we have registrations from 38 countries all over the world, about 50% of the participants being from Belgium and France. So we will have a really international event.

For practical reasons the number of participants to the Symposium will be limited to 280 and to 70 for the SC 1 and SC3 and to 100 for SC2.

2 Sponsoring:

The Organizing Committee acknowledges the support of 19 companies, subdivided as follows:

- 6 Platinum Sponsors
- 10 Gold Sponsors
- 3 Silver Sponsors.

It has been decided to limit the number of Platinum Sponsors to 6. So actually additional sponsoring is only possible for Gold and Silver. Sponsoring conditions can be found on the symposium website www.bbri.be/go/IS-GI-2012.



2.1 *Platinum sponsors*



2.2 *Gold sponsors*



2.3 *Silver sponsors*



3 **Short courses:**

The programs of the 3 short courses on Wednesday 30 May have been finalized and are given below. It has to be remarked that minor changes in the program are still possible.

The final program of the Short Courses can be found on the symposium website and is also given here below.



SC 1: MARINE GROUND IMPROVEMENT



Coordinators:

M. Van Den Broeck, DEME, Belgium
S. Bretelle, GHD, Australia
Ph. Liausu, MÉNARD, France

PROGRAM

09h30 – 10h00 : General Overview of Ground Improvement methods, *P. Mengé, DEME, Belgium*
 10h00 – 10h30 : Overview of major geotechnical concerns, *M. Van Den Broeck, DEME, Belgium*
 10h30 – 11h00 : Site investigations for Marine Ground Improvement, *S. Bretelle, GHD, Australia*

11h30 – 12h00 : Dynamic compaction and replacement, *Ph. Liausu, Ménard, France*
 12h00 – 12h30 : Vibroflotation, *S. Lambert, Keller France*
 12h30 – 13h00 : Rapid Impact Compaction, *J. Dykstra, COFRA, The Netherlands*

14h00 – 14h30 : Consolidation PVD, *I. Chu, Iowa State University, USA-Singapore*
 14h30 – 15h00 : Vacuumconsolidation, *B. Indraratna, University of Wollongong, Australia*
 15h00 – 15h30 : Soft Soil Improvement, *M. Van Den Broeck, DEME, Belgium*

16h00 – 16h30 : Reuse of dredged material, Project AMORAS
 16h30 – 17h30 : Case studies, *P. Mengé and M. Van Den Broeck, DEME, Belgium*
 17h40 – 17h55 : Discussion

18h00 – 20h00 : Reception

During the presentations special attention will be given to the specific issues for underwater ground improvement design and to monitoring and quality control (constraints and practical solutions).



TC 211

SC 2 : DEEP MIXING



Coordinators:

*J. Maertens, Jan Maertens BVBA & KU Leuven, Belgium
N. Denies and N. Huybrechts, Belgian Building Research
Institute, Belgium*

PROGRAM

09h30 – 10h15 : General Overview, *M. Topolnicki, Keller, Poland*

10h15 – 11h00 : Deep Mixing in contaminated soils, *A. Al-Tabbaa, Cambridge University, UK*

11h30 – 12h30 : Deep Mixing Equipment:

Bauer, Germany, F.W. Gerressen, Germany

Solétanche Bachy, S. Borel, France

Liebherr, D. Quasthoff, Germany

12h30 – 13h00 : Discussion

14h00 – 14h45 : Deep Mixing Research Belgian Building research Institute, *N. Denies*

14h45 – 15h05 : Deep Mixing Research KU Leuven, *A. Vervoort, Belgium*

15h05 – 15h25 : Deep Mixing research Ghent University, *D Verastegui, Belgium*

15h25 – 15h40 : Deep Mixing Monitoring, *Noel Huybrechts, BBRI, Belgium*

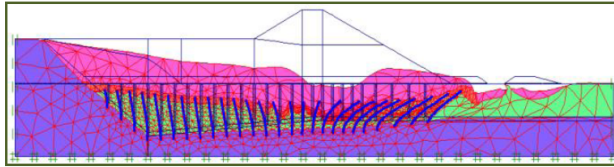
16h10 – 16h55 : Deep Mixing Design, *G. Filz, Virginia Tech, USA*

16h55 – 17h25 : Case study, *E. Leemans, ABEF & Soiltech, Belgium*

17h25 – 17h55 : Discussion

18h00 – 20h00 : Reception

SC3: RIGID INCLUSIONS AND SOIL REINFORCEMENT



Coordinators:

T. Durgunoglu, Zetas Zemin Teknolojisi A.A., Turkey,
B. Simon, TERRASOL, France
J. Sankey, The Reinforced Earth Company, USA

PROGRAM

RIGID INCLUSIONS

- 09h30 – 10h00 : Lessons from centrifuge model tests on piled embankments and foundation over soil reinforced by inclusions, *L. Thorel, IFSTTAr, France*
- 10h00 – 10h45 : Piled embankments reinforced with Geosynthetics : model experiments and analytical model developments, *S. Van Eekelen, Deltares, The Netherlands*
- 11h00 – 11h30 : US practice in Load Transfer Platform design : Lessons learned, *M. Walker, GEI consultants, USA*
- 11h30 – 12h05 : A review of the ASIRI research project findings about behaviour and design of foundations on soil reinforced by rigid inclusions, *B. Simon, Terrasol, France*
- 12h05 – 12h20 : Design of spread footing on soil reinforced by rigid inclusions, *B. Simon Terrasol, France*
- 12h20 – 12h55 : Design of slabs on grade supported with reinforced soil by rigid inclusions and Design assessment of limiting pressure at head of inclusions, *J. Racinais, Ménard, France*

REINFORCED SOIL

- 14h00 – 14h45 : Introduction to Mechanically Stabilized Earth (MSE) Wall Technology, *J. Sankey, the Reinforced Earth Company, USA*
- 14h45 – 15h30 : Review of Inextensible and Extensible MSE Reinforcement Applications, *J. Wynn, Consultant, UK*
- 15h30 – 15h45 : Discussion
- 16h15 – 17h00 : Application of Local Country Codes for MSE Wall Design, *N. Freitag, Terre Armée, France*
- 17h00 – 17h45 : Combined MSE Wall Applications with Ground Improvement Technologies, *T. Durgunoglu, Zeta Zemin, Turkey*
- 17h45 – 18h00 : Discussion
- 18h00 – 20h00 : Reception

Proceedings of the short courses:

The proceedings of the short courses will contain the powerpoint presentations.



Participants to the short courses will only receive the proceedings of the Short Course they are attending.

4 Symposium:

All available information can be found on the symposium website:

www.bbri.be/go/IS-GI-2012

The selection of the papers to be presented during the Symposium will be finalized during the meeting of the Organizing Committee on 26 April. The list of selected papers will be included in the final program that will be available on the website in the first week of May.

5 Other TC 211 related events:

Through members of the TC 211 we received information on the following events:

- Gye-Chun Cho, Professor, Dept. of Civil & Env. Eng., South Korea and member of TC211 has send the following information:
An international conference on Geomechanics and Enginneering (ICGE12) takes place in Seoul, Korea on 26-30 August, 2012.
More information is available on http://acem12.cti3.com/icge_email.htm.
The deadline for abstract submission is extended to April 27 2012.
Prof. Gye-Chun Cho proposes to organize a mini-symposium (5-7 papers per session) on "Ground Improvement" or equivalent, and asks to let him know if you are interested in it.
- International Conference on Ground Improvement and Ground Control – Transport Infrastructure Development and Natural Hazard Mitigation, ICGI Wollongong 2012, 30 October – 2 November 2012, www.icgiwollongong.com
This Conference, on the Antipodes of Bruxelles conference is co-sponsored by the TC 211, and belongs to the core activity of the TC 211.
- George Filz, Professor of Civil and Environmental Engineering Virginia Tech Blacksburg, VA 24061, asked to inform you on the 2013 Geo-Congress on Stability and Performance of Slopes and Embankments III to be held from 3-6 March in San Diego, California. Information on this Congress can be found on the website www.asce.org/GeoCongress2013 .



6 Next Newsletter:

The next newsletter will be edited in July 2012 and will give some impressions of the Symposium and the Short Courses. Also some ideas will be given concerning the activities of TC 211 during the International Conference of ISSMGE to be held in Paris next year.

We will try to include in the next newsletter a list with recent references to publications and internet sites concerning the themes given in the terms of reference.

Please transmit all available information to the secretary Noël Huybrechts, noel.huybrechts@bbri.be

We hope to see you all in Brussels end of May.

