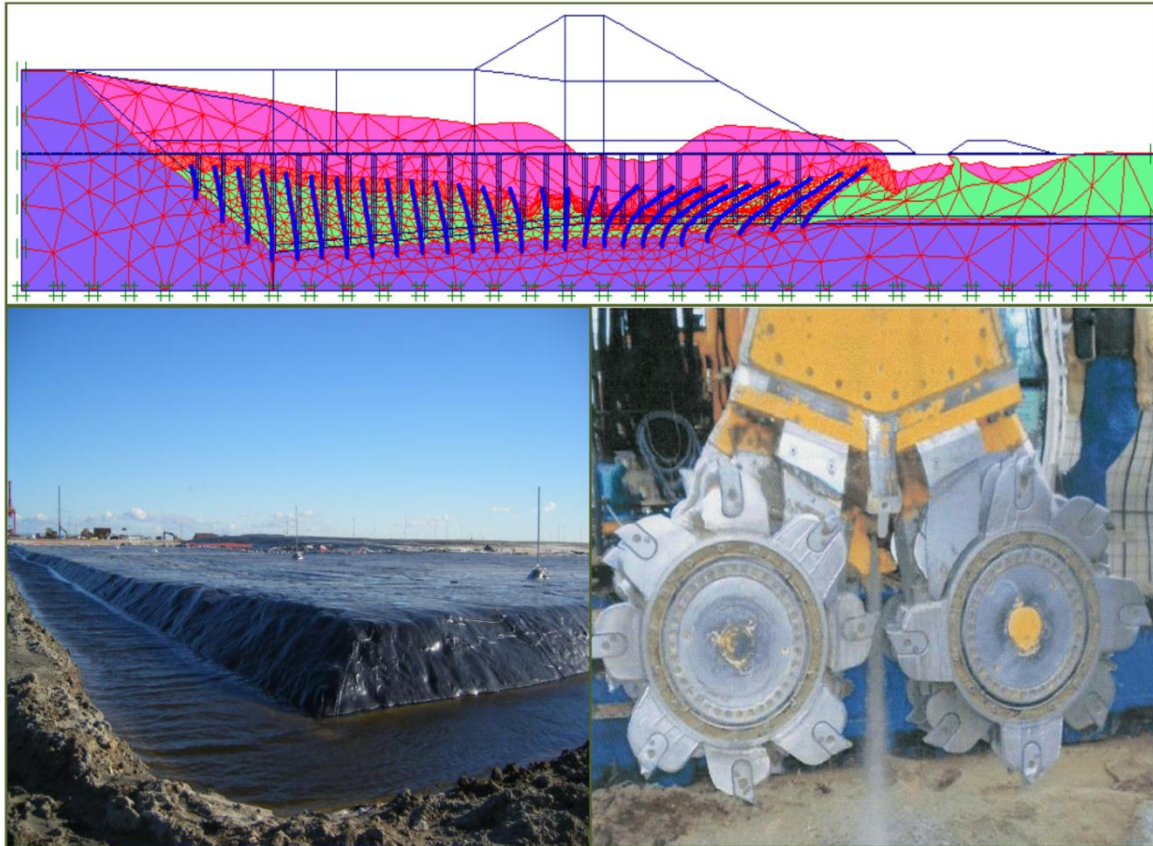


INTERNATIONAL SYMPOSIUM & SHORT COURSES

TC 211 IS-GI Brussels 2012



**Recent Research, Advances & Execution Aspects of
GROUND IMPROVEMENT WORKS**

30 May – 1 June 2012, Brussels, BELGIUM



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IS-GI Brussels 2012 - in total 330 registrations

Wednesday 30 May – Short Courses (230 participants)

- 3 parallel courses: Marine Ground Improvement – Deep Mixing – Rigid Inclusions & soil reinforcement
- Welcome reception (225 participants)

Thursday 31 May & Friday 1 June – Int. Symposium (280 participants)

- 7 Plenary sessions Vibro & Impact compaction – Vertical drains, Vacuum consolidation & Preloading – Soil Stabilisation – Deep mixing – Rigid inclusions & stone columns
Soil reinforcement in fill & in cut – Biogrout & other grouting methods
- Louis Menard lecture (P. Mengé, DEME)
- Specialty lecture by J.L. Briaud, President ISSMGE
- Technical Exhibition (16 Companies : gold & platinum sponsors)
- Banquet in the Belgian Comic Strip Centre – Horta (170 participants)

Saturday 2 June : Technical Visit (70 participants)

- AMORAS & MAS & City of Antwerp

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Thursday 31 May & Friday 1 June - International Symposium (280 participants)

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- Technical Exhibition (16 Companies : gold & platinum sponsors)
- Banquet in the Belgian Comic Strip Centre – Horta (170 participants)

Profile participants Symposium

-Participants from 36 countries – 6 continents
(B : 85 - F : 45 – other : 150)

- Contractors & Manufacturers	: 48% (B: 55%)
- Design/consultants	: 15 % (B: 22%)
- Research & academics	: 33% (B: 18%)
- Government/owners	: 4% (B: 5%)

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Thursday 31 May & Friday 1 June - International Symposium (280 participants)

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Soil reinforcement in fill & in cut – BiogROUT & other grouting methods



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-Louis Menard lecture (P. Mengé, DEME)



























ISSMGE Technical Committee 211 – Ground Improvement
TC 211 IS-GI SESSION 1 – 24 May 2012
International Symposium on Ground Improvement Systems

General Report "VIBRO AND IMPACT COMPACTION" Contributed by Professor K. Klose (Germany)

- Contents
1. introduction
 2. basics of vibro and impact compaction
 3. vibro technique
 4. dynamic compaction
 5. compaction methods with low vibrations
 6. impact compaction closer to surface
 7. summary, web based toolkits and networks

Information about other TC 211 sessions will be provided by the TC 211 secretariat. The content of this report is not to be used for any other purpose without the permission of the TC 211 secretariat. The report is published under the terms of the TC 211 license. © 2012, TC 211 secretariat. All rights reserved.













































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LOUIS MENARD LECTURE

11:30 – 11:40 Introduction by the Serge Varaksin, TC 211 co-chairman

11:40 – 12:30 Louis Menard lecture held by Dr. Patrick Méné, DEME
*Ground Improvement in Dredging and Environmental
Marine Engineering*

















thanks to MENARD, KELLER, HUESKER and
documentation and earlier publications.





LESSON 02 - VERTICAL DRAINAGE CONFIGURATION & PRELIMINARY

Buddhima Indraratna

Professor of Civil Engineering and Research Director
Centre for Geomechanics and Heavy Engineering
University of Wollongong
Wollongong City, NSW, Australia



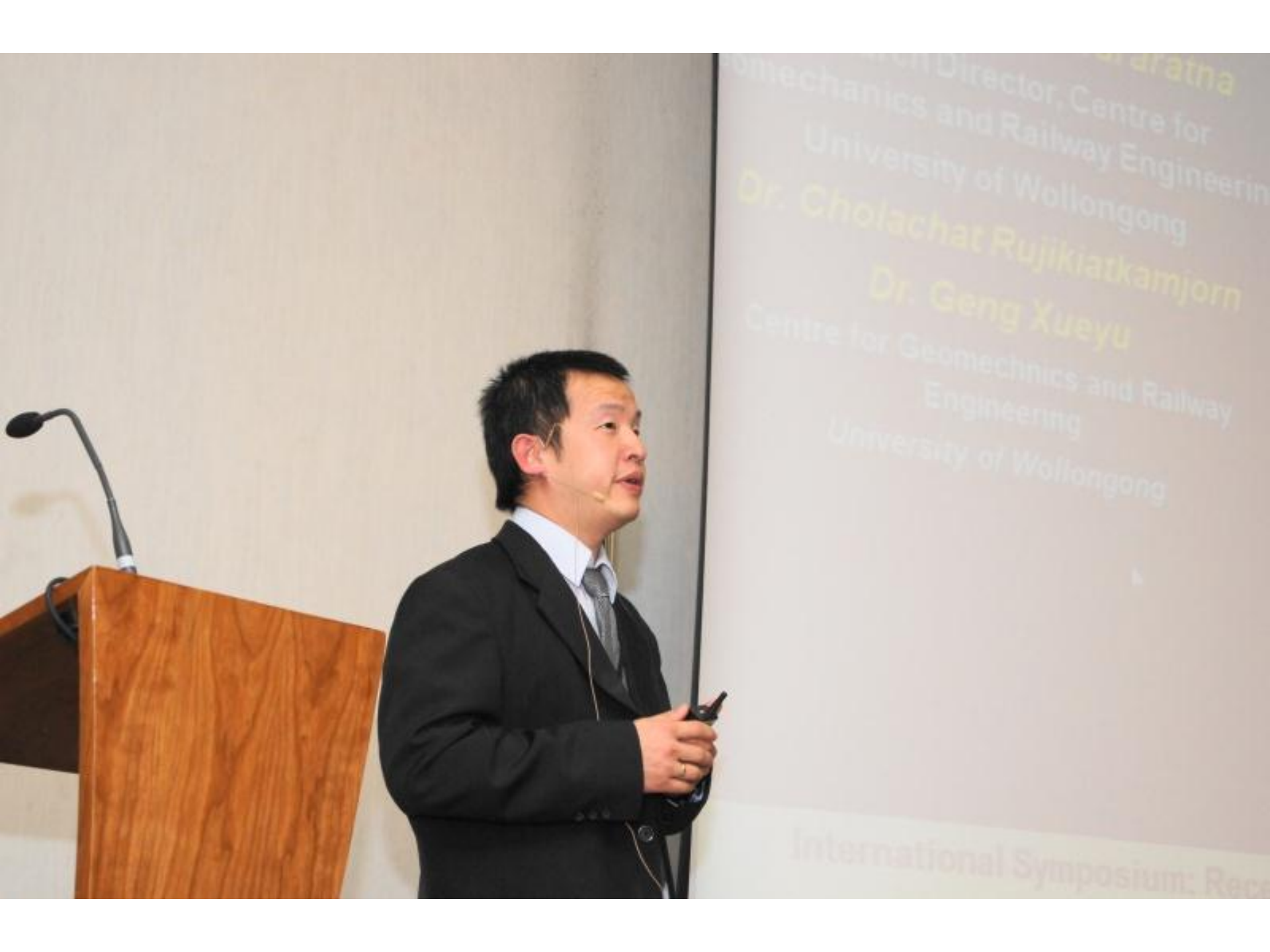
University of Wollongong



International Symposium & short courses Review Research Advances & Emerging
Aspects of GROUND IMPROVEMENT TECHNIQUES







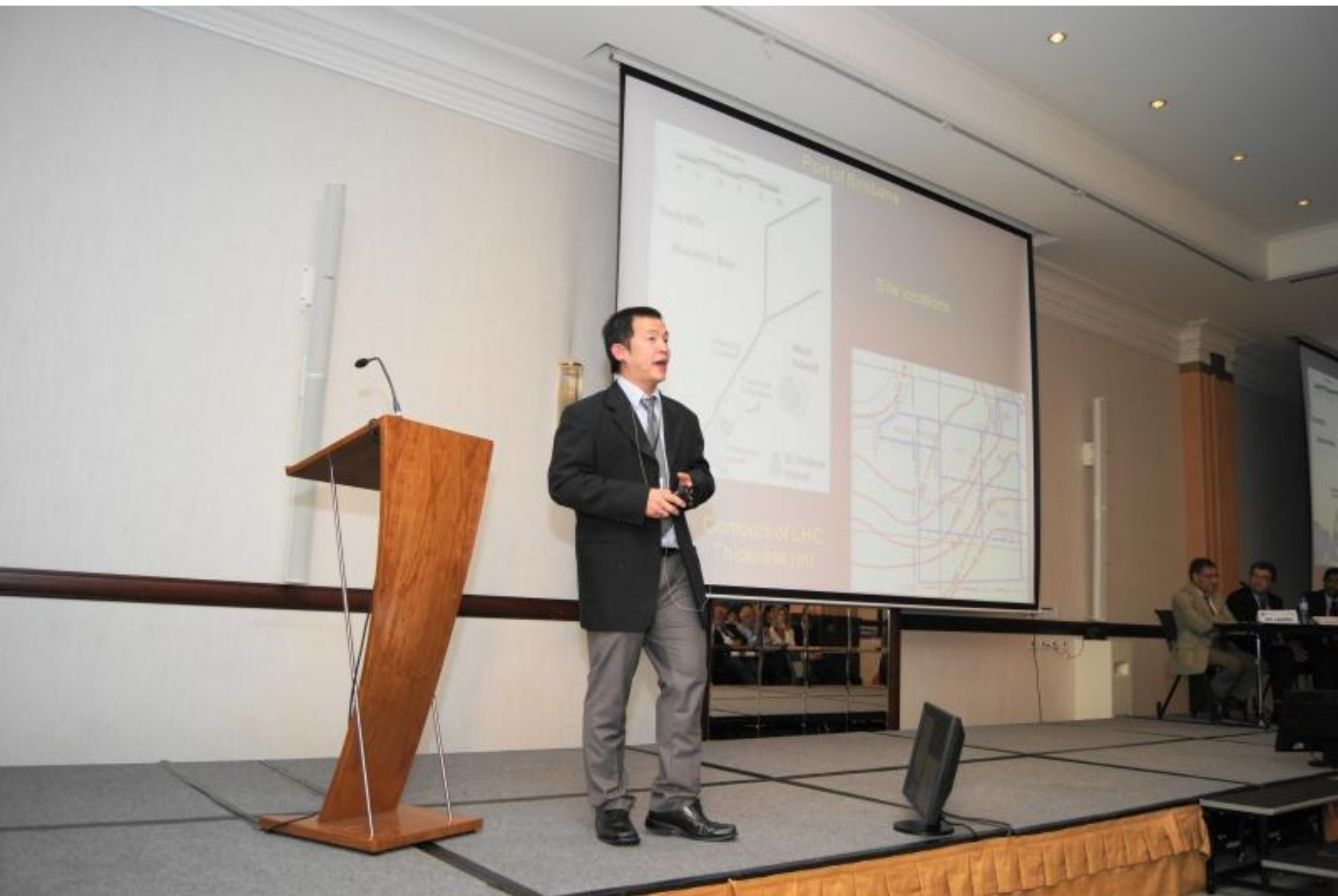
Research Director, Centre for
Geomechanics and Railway Engineering
University of Wollongong

Dr. Cholachat Rujikiatkamjorn

Dr. Geng Xueyu

Centre for Geomechanics and Railway
Engineering
University of Wollongong

International Symposium: Rec...





Use of Temporary Drawdown for Site Improvement

Richard Dwell

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A. GOMES CORREIA

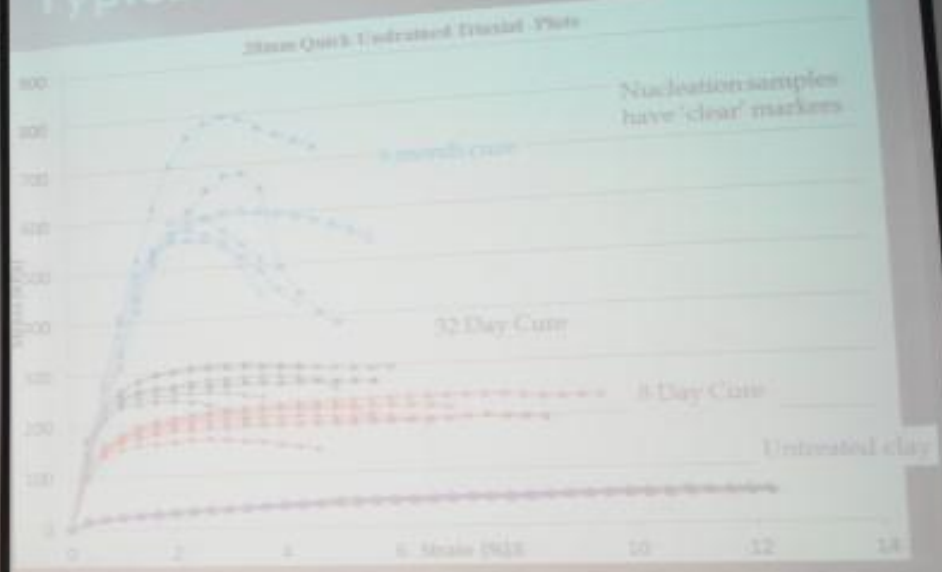
D. VERASTEGUI

A. AL-TABBAA





Typical results (38mm triaxial)





















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SESSION 12 - SOIL MIXING 1 - SOIL STABILIZATION (surface mixing and laboratory mixtures)

Chairpersons: A. N. MARRAS, Cambridge University, United Kingdom
 A. VENTIS CORREA, University of Minho, Portugal & ISSMGE TOC
 Z. VERASTOGOL, Ghent University, Belgium

12.05 - 12.08 Presentation of the General Report & AI Tables

Presentation of the selected papers:

12.08 - 12.09 Radiation cements in lime stabilized soils: *P. Beetham, T. Dijkstra, N. Gier*

12.09 - 12.10 Effect of fabric on elastic properties of lime treated clayey sand
E. Sene, M.A. Hattori, J.C. Verbrugge, B. Franca, T.J. Massart

12.10 - 12.11 Influence of specimen preparation on unconfined compression strength of cement-stabilized kaolin clay: *M. Kitazume*

12.11 - 12.12 Laboratory study on the applicability of molding procedures for the preparation of cement stabilized specimens: *M. Giraldo, M. Kitazume, E. Under, J.P. Hazzam, Hideoaki Mochizuki*

12.12 - 12.13 Laboratory study of the workability of the deep soil mixing material and fresh applications: *E. Stokichew, F.E. Tanga, A. La Foubie, Ph. Hoffmann, J.L. Tardif*

12.13 - 12.14 **Discussion**





A. GOMES CORREIA

D. VERASTEGUI

A. AL-TABBAA