



Νάξος, παραλία Αγίας Άννας.
Καρχαρίας στη στεριά...



ΕΛΛΗΝΙΚΗ
ΕΠΙΣΤΗΜΟΝΙΚΗ
ΕΤΑΙΡΕΙΑ
ΕΔΑΦΟΜΗΧΑΝΙΚΗΣ
& ΓΕΩΤΕΧΝΙΚΗΣ
ΜΗΧΑΝΙΚΗΣ

Τα Νέα

58

της Ε Ε Ε Ε Γ Μ

Πρόταση της ΕΕΕΕΓΜ για την διοργάνωση των **Mediterranean Conferences on Geomechanics and Geoengineering**

Στις 17 Ιουνίου 2013 εστάλη πρόσκληση προς τις επιστημονικές εταιρείες γεωμηχανικής, μέλη της ISSMGE και της ISRM, των μεσογειακών και γειτονικών χωρών για την θέσπιση του θεσμού των ανά τετραετία διεξαχθησομένων Mediterranean Conferences on Geomechanics and Geoengineering. Η πρωτοβουλία της ΕΕΕΕΓΜ έτυχε θερμής υποδοχής από τον νέο Αντιπρόεδρο για την Ευρώπη της ISSMGE Antonio Gens (Ισπανία) καθώς και από τον υποψήφιο Πρόεδρο της ISSMGE Roger Frank (Γαλλία). Στη συνέχεια παραθέτουμε το κείμενο της επιστολής – πρόσκλησης.

To the
Geotechnical Societies
members of ISSMGE and ISRM
and the Chambers of Engineers
of the countries around and close to the Mediterranean Sea

Dear Colleagues,

The Hellenic Society for Soil Mechanics and Geotechnical Engineering has the honour to propose the foundation of the "Mediterranean Conferences on Geomechanics and Geoengineering" (MCGG).

The Mediterranean Sea is surrounded by three continents: Europe, Africa and Asia. The Latin Solinos gave the name "Mare Mediterraneum" as the sea separating two continents. However, Mediterranean did not separate the people of the continents, but eased and fostered close cultural, scientific, economic and personal relations among the people around since 4,000 years ago.



Π Ε Ρ Ι Ε Χ Ο Μ Ε Ν Α

Πρόταση της ΕΕΕΕΓΜ για την διοργάνωση των Mediter- ranean Conferences on Geomechanics and Geoengineer- ing	1
Αφιερωμένο στους συναδέλφους ερευνητές	4
Νέα από τις Ελληνικές και Διεθνείς Γεωτεχνικές Ενώσεις	5
- Web- based εφαρμογή για τη διαχείριση και διάχυση πληροφοριών σχετικά με τα Υπόγεια Έργα στον Ελλη- νικό Χώρο	5
- Offshore and Coastal Geotechnics Call for Papers	5
- 3rd ISRM Online Lecture	6
- Géotechnique 65 th Anniversary	6
Προσεχείς Εκδηλώσεων Γεωτεχνικού Ενδιαφέροντος στην Ελλάδα	8
- 2 ^ο Πανελλήνιο Συνέδριο Φραγμάτων και Ταμιευτή- ρων	8
- 6 ^ο Πανελλήνιο Συνέδριο Λιμενικών Έργων	9
- 2nd Eastern European Tunnelling Conference	9
Προσεχείς Γεωτεχνικές Εκδηλώσεις:	10
- Hydropower 2013--CHINCOLD 2013 Annual Meeting and the 3rd International Symposium on Rockfill Dams	10
- EUROCK 2014 ISRM European Regional Symposium Rock Engineering and Rock Mechanics: Structures on and in Rock Masses	12
- International Congress Tunnels and Underground Space : Risks & Opportunities	13
- 1st International Conference on Discrete Fracture Network Engineering	14
Ενδιαφέροντα Γεωτεχνικά Νέα	17
- Houses built on reportedly old dump, severely damaged. Residents blame city of Havelock, North Carolina	17
- Lack of foundation test sites 'a risk for UK offshore wind'	17
- Micro - Piling technique in Indian Sub-Continent	17
Ενδιαφέροντα - Σεισμοί	18
- Waves of Destruction: History's Biggest Tsunamis	18
- Earthquake Sounds Its Own Tsunami Warning	19
- Συρρικνούμενος ωκεανός - Νέο γεωλογικό ρήγμα «θα εξαφανίσει τον Ατλαντικό»	19
Ενδιαφέροντα - Λοιπά	21
- Συνταγή της παράδοσης : Το τσιμέντο των Ρωμαίων «καλύτερο από το σημερινό»	21
- How Do You Move An Entire Bridge? Mind the 3,400-ton truss!	21
Νέες Εκδόσεις στις Γεωτεχνικές Επιστήμες	23
Ηλεκτρονικά Περιοδικά	26



Καλό καλοκαίρι!

(συνέχεια από την πρώτη σελίδα)

Mediterranean is a place of constant flux. Frontier societies and particularly shores share an amalgam of cosmopolitan socio-economic and political structures. Classical historiography highlights the region as one "source" for many ideas, species, social organizations and religions. Shifts of ideas, modes of production, methodology, science, religion, language are among dynamics brought about successively by the various influxes to the region and yield hybrid outcomes. And this should continue by closer relationship between the Mediterranean and the adjacent countries, especially after the discovery of giant oil and gas fields in the Eastern Mediterranean, which pose many geotechnical problems to be solved for their exploitation.

The aim of the proposed Conferences is to bring together colleagues from the countries surrounding the Mediterranean Sea, as well as from adjacent countries, to share experiences on their latest developments in geomechanics and geoengineering; to provide a platform for technical knowledge exchange and networking opportunities; to help to disseminate our science and technical knowledge; to promote and support education for geoengineers; and to advance the development of tools and procedures required for our profession.

The Conferences will examine geotechnical problems common in the Mediterranean countries, arising from similar geological formations and geomorphological hazards, dense cities along coasts, shallow sea and islands near to the coast without connections to the mainland, environmental problems, numerous historical monuments above and under the ground, oil and gas fields onshore and offshore, etc.

"The Mediterranean is not only a cultural and historical, neither a mystic and lyric space... One must chase the manifold Mediterranean paths, those of the traffics of the pilgrimage, of the extension of lives and the rivers' courses; the borders will then become fluctuant and blurred, even concentric and coherent by drawing ideal curves like ripples in the sea"- C. Magris

We call you, the Geotechnical Societies of the countries around and close to the Mediterranean Sea, members of the International Society for Soil Mechanics and Geotechnical Engineering and the International Society for Rock Mechanics, as well as the Chambers of Engineers of the countries without Geotechnical Societies, to share with us the idea of these conferences and start the journey of Ulysses towards the Ithaca of the geomechanics and geoengineering knowledge. Our first safe haven could be Crete in the summer – autumn 2016.

In anticipation of your response and hopping to exchange ideas on the MCGG in details during the Paris 18th International Conference on Soil Mechanics and Geotechnical Engineering,

Wishing you for a nice summer,

Best regards,

Dr. Christos Tsatsanifos
President

Παραλήπτες της επιστολής – πρόσκλησης είναι οι παρακάτω εθνικές εταιρείες γεωμηχανικής:

1. National Geotechnical Society of Albania
2. l'Union Nationale des Scientifiques et Technologues d'Algérie
3. Geotechnical Society of Bosnia and Herzegovina
4. Bulgarian Society for SMGE
5. Croatian Geotechnical Society
6. Scientific Technical Chamber of Cyprus
7. Egyptian Geotechnical Society
8. Macedonian Association for Geotechnics
9. Comité Français de Mécanique des Sols et de Géotechnique & Comité Français de Mécanique des Roches
10. Israeli Association of Civil Engineers / Geotechnical Chapter & Israel Rock Mechanics Association
11. Associazione Geotecnica Italiana
12. Lebanese Geotechnical Engineering Society
13. Libyan Syndicate of Engineers
14. Chamber of Engineers of Malta
15. Engineers Chamber of Montenegro - Civil Engineers Chamber
16. Comité Marocain de la Mécanique des Sols et des Roches
17. Sociedade Portuguesa de Geotecnica
18. Romanian Society for SMGE
19. Serbian Society for Soil Mechanics and Geotechnical Engineering & Serbian Society for Rock Mechanics
21. Slovenian Geotechnical Society
22. Sociedad Española de Mecanica del Suelo e Ingenieria Geotécnica & Sociedad Española de Mecanica de las Rocas
23. Order of Syrian Engineers and Architects / Geotechnical Department
24. Association Tunisienne de Mécanique des Sols
25. Turkish National Committee for ISSMGE & Türk Ulusal Kaya Mekanigi Dernegi

ΑΦΙΕΡΩΜΕΝΟ ΣΤΟΥΣ ΣΥΝΑΔΕΛΦΟΥΣ ΕΡΕΥΝΗΤΕΣ

Οι παρακάτω «ορισμοί» κυκλοφορούσαν στα Soil Mechanics and Engineering Seismology Sections του Imperial College 40 περίπου χρόνια πριν! Αφορούν σε κείμενα διαφόρων τμημάτων διδακτορικών διατριβών, ιδιαίτερος πειραματικών. Είναι διαχρονικά, έχουν γούστο και ... αρκετή δόση αλήθειας.

COMMON SCIENTIFIC AND TECHNOLOGICAL PHRASES AND THEIR REAL MEANINGS

INTRODUCTION

It has long been known that ...
I haven't bothered to look up the original reference.

While it has not been possible to provide definite answers to these questions ...
The experiments didn't work out but I figured I could get at least one paper out of the mess.

EXPERIMENTAL PROCEDURE

The W-Pb system was chosen as especially suitable to show the predicted behaviour...
The fellow in the next lab already had it made up.

High Purity - Very High Purity - Super Purity
Composition unknown except for exaggerated claims of supplier.

Three samples were chosen for detailed study.
The results of the others didn't make sense and were ignored.

Accidentally strained during mounting.
Dropped on the floor.

Handled with extreme care during the course of the experiment.
Not dropped on the floor.

RESULTS

Typical results are shown.
The best results are shown.

Although some detail has been lost in reproducing the original photograph, it is clear that ...
It is impossible to tell from the photograph.

Agreement with predicted results is:

Excellent	-	Fair
Good	-	Poor
Satisfactory	-	Doubtful
Fair	-	Imaginary

As good as can be expected under test conditions - **Non-existent**

The most remarkable and reliable values are those of Jones.
He was a student of mine.

DISCUSSION

It is generally believed ...
Two other guys think so too.

It might be argued that ...
I have such a good answer to this objection that I shall now raise it.

It is clear that much additional work will be required before a complete understanding...
I don't understand it.

Unfortunately, a quantitative theory to account for these effects has not been formulated.
No one else understands it either.

Correct within order of magnitude.
Wrong.

It is to be hoped that this work will stimulate further work in this field.
This paper isn't very good, but neither are any of the others on this miserable subject.

ACKNOWLEDGEMENTS

I acknowledge the help of J.H. Smith with the experiments and the valuable discussions with A. B. Brown.
Smith did the work, Brown explained what it meant.

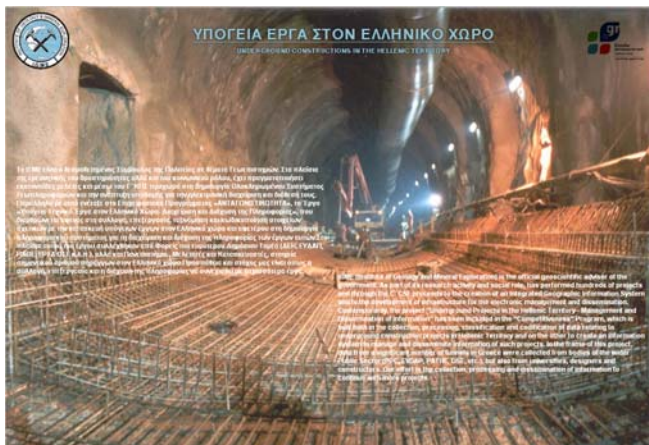
ΝΕΑ ΑΠΟ ΤΙΣ ΕΛΛΗΝΙΚΕΣ ΚΑΙ ΔΙΕΘΝΕΙΣ ΓΕΩΤΕΧΝΙΚΕΣ ΕΝΩΣΕΙΣ



ΙΝΣΤΙΤΟΥΤΟ ΓΕΩΛΟΓΙΚΩΝ ΚΑΙ ΜΕΤΑΛΛΕΥΤΙΚΩΝ ΕΡΕΥΝΩΝ ΚΑΙ ΜΕΛΕΤΩΝ ΔΙΕΥΘΥΝΣΗ ΓΕΩΛΟΓΙΑΣ ΤΜΗΜΑ ΤΕΧΝΙΚΗΣ ΓΕΩΛΟΓΙΑΣ

Web- based εφαρμογή για τη διαχείριση και διάχυση πληροφοριών σχετικά με τα Υπόγεια Έργα στον Ελλη- νικό Χώρο

Το πρώην Ι.Γ.Μ.Ε. και νυν Ι.Γ.Μ.Ε.Μ. / Ε.Κ.Β.Α.Α. υλοποίη-
σε στο πλαίσιο του Επιχειρησιακού Πρόγραμμα "Ανταγωνι-
στικότητα" του Γ' Κ.Π.Σ. το έργο με τίτλο "Υπόγεια Τεχνικά
Έργα στον Ελληνικό Χώρο - Διαχείριση και Διάχυση της
Πληροφορίας".



Σκοπός του έργου ήταν η συγκέντρωση των πληροφοριών
που έχουν κατά καιρούς παραχθεί στο πλαίσιο μελετών και
κατά τη διάρκεια κατασκευής υπογείων έργων σε διάφορες
περιοχές της χώρας, η κωδικοποίηση και η καταχώρησή τους
σε βάσεις δεδομένων, καθώς και η ολοκλήρωση και ανάπτυ-
ξη μεθόδου ψηφιακής διάθεσής τους που θα ξεκινά από τον
υφιστάμενο διαδικτυακό χώρο του Ι.Γ.Μ.Ε.

Ειδικότερα τα δεδομένα που συλλέχθηκαν και στη συνέχεια
μετά από αξιολόγηση και κωδικοποίηση εισήχθησαν στη
βάση δεδομένων αναφέρονται στα γενικά, οικονομικά, γεω-
μετρικά, γεωλογικά, γεωτεχνικά στοιχεία του κάθε έργου,
στα γενικά στοιχεία που αφορούν τη διάνοιξη, στο σύστημα
υποστήριξης, στο σύστημα παρακολούθησης κατά τη διάρ-
κεια κατασκευής (monitoring), στις εγκαταστάσεις και συ-
στήματα ασφαλείας μετά την κατασκευή (H/M), στις αστοχί-
ες που σημειώθηκαν και στον τρόπο αντιμετώπισής τους,
καθώς και στην ενσωμάτωση σχεδίων τυπικών διατομών και
μηκοτομών στη βάση δεδομένων του πληροφοριακού συ-
στήματος.

Αποτέλεσμα της παραπάνω προσπάθειας αποτελεί ο δικτυα-
κός χώρος www.ypogeia-erga.gr από τον οποίο ο χρήστης
μπορεί να αντλήσει πληροφορίες που έχουν κατά καιρούς
παραχθεί στο πλαίσιο μελετών και κατά τη διάρκεια κατα-
σκευής συγκεκριμένων υπογείων έργων σε διάφορες περιο-
χές της χώρας. Ο δικτυακός αυτός χώρος, στον οποίο υπάρ-
χει η δυνατότητα δίγλωσσης επιλογής (Ελληνικά και Αγγλι-
κά), προβλέπει:

1. Στη διάχυση πληροφορίας σχετικής με τα υπόγεια έργα
στον Ελληνικό Χώρο,
2. Στην ισότητα στην πληροφόρηση και μετάδοση της γνώ-
σης σε ευρύτερες επιστημονικές ομάδες εργαζομένων βο-
ηθώντας έτσι στη συνολική επαγγελματική μόρφωση και
στην προσαρμογή στις νέες ταχύτητες παραγωγής και
απορρόφησης γνώσης,
3. Στην προβολή του έργου του Ελληνικού Δημοσίου ανα-
φορικά με την ανάπτυξη υπόγειων τεχνικών έργων αλλά
και την αναβάθμιση της παρουσίας της Ελληνικής τεχνι-
κής κοινότητας τόσο στο εσωτερικό όσο και διεθνώς,
4. Στην προαγωγή της σχετικής έρευνας με τεχνικά υπόγεια
έργα,
5. Στην αποφυγή επαναληψιμότητας εργασιών,
6. Στη διευκόλυνση της έγκαιρης / έγκυρης πρόσβασης σε
πληροφορίες που σχετίζονται με τη παρακολούθηση των
έργων και του περιβάλλοντος μέσα στο οποίο εντάσσου-
νται και
7. Στη βελτίωση του επιπέδου επαγγελματικής κατάρτισης
των νέων επιστημόνων.

Στόχο του Ι.Γ.Μ.Ε.Μ. / Ε.Κ.Β.Α.Α. αποτελεί ο συνεχής εμ-
πλουτισμός της βάσης με νέα έργα καθώς και η μελλοντική
επέκταση της εφαρμογής με βάση τις παρατηρήσεις και ανά-
γκες των χρηστών.

Στο πλαίσιο αυτό, παρακαλούμε να ενημερώσετε τα μέλη
της επιτροπής σας για την ύπαρξη του παραπάνω δικτυακού
χώρου, σχετικού με τα υπόγεια έργα στον Ελληνικό χώρο
και τη δυνατότητα μας να αναρτήσουμε στοιχεία όλων των
σχετικών έργων που θα μας διατεθούν από την πλευρά
τους. Αυτό θα δημιουργήσει μια αμφίπλευρη σχέση διάθεσης
και διάχυσης της πληροφορίας και μπορεί να πραγματοποιη-
θεί αποστέλλοντας στους ενδιαφερόμενους το σχετικό από-
γραφικό δελτίο και οδηγίες για τη συμπλήρωσή του και α-
φού αυτό μας επιστραφεί συμπληρωμένο, να εισάγουμε τα
δεδομένα στη βάση με αναφορά στην πηγή προέλευσής.

Επίσης, για την ευρύτερη διάδοση του δικτυακού χώρου
www.ypogeia-erga.gr, στον οποίο υπάρχει πρόσβαση και
από την πρώτη σελίδα της ιστοσελίδας του Ι.Γ.Μ.Ε.
(www.igme.gr), θα θέλαμε να διερευνήσετε τη δυνατότητα
να δημιουργηθεί σύνδεσμος (link) του χώρου αυτού και
στον ιστότοπο (website) της Επιτροπής σας.



Offshore and Coastal Geotechnics Call for Papers

The SEAGS & AGSSEA Journal- Geotechnical Engineering is
happy to announce the call-for-paper on "Offshore and
Coastal Geotechnics" for a special issue published in De-
cember 2014. The collected papers will be reviewed by re-
nowned scholars in this regard. The subjects in this issue
will include Offshore Foundations; Seabed Liquefaction,

Marine Slope Stability and Geotechnical Aspects of Dredging and Reclamation Works, Tsunami-Seabed-Structure Interaction and other relevant subjects on Offshore and Coastal Geotechnics. Please kindly note the following dates should you like to contribute an article to this Issue.

Due-date for Abstract Submission: June 30, 2013

Note for acceptance of abstract: July 31, 2013

Due-date for full paper submission: January 31, 2014

Note for paper status and feedback for revision: April to August, 2014

Final camera ready manuscript received for publication: September 30, 2014

The abstract of less than 300 words and full-paper can be sent to one of the guest editors or the following personnel for editorial management.

Dr. Dariusz Wanatowski, The University of Nottingham Ningbo, China

E-mail: Dariusz.Wanatowski@nottingham.ac.uk

Guest Editors: Shinji Sassa, Poul V. Lade, Li-zhong Wang, Y.K. Chow, Dong Sheng Jeng, Christophe Gaudin, Fuping Gao

(Geoengineer.org, 06 June 2013)



International Society for Rock Mechanics



newsletter

3rd ISRM Online Lecture

The 3rd ISRM Online Lecture will be given by Prof. Pierre Duffaut on 13 September 2013

For the third Online Lecture the ISRM President invited Prof. Pierre Duffaut, and the title of his lecture will be "Rock Mechanics Lessons from Dams". It will have two main parts. 1. Rock mechanics problems on some major French Dams, before and after 1959; 2. Malpasset Arch Dam: history, 1959 foundation failure, research, lessons, traps, H&O factors.

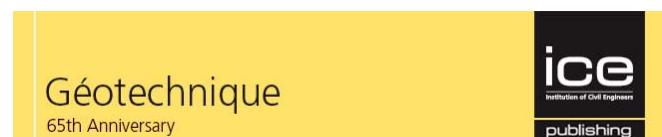
The lecture will be broadcast on 13 September, at 10 a.m. GMT, and it will remain online so that those unable to attend at this time will be able to do it later. In order to know what is the correspondence between GMT and your local time, just look for GMT in your Internet search engine.

As usual, the attendees will be able to ask questions to the lecturer by e-mail, on the topic of the lecture, during the subsequent 48 hours.

Pierre Duffaut is a retired geological engineer. Graduated from Saint Etienne School of Mines, France, in 1948, he served EDF, the French Authority for Electricity, first as geological engineer and later as civil engineering expert. He spent some years as Head of the Geotechnical Department at the French Geological Survey; then Head of Civil Engineering at the Continuing Education of Ecole des Ponts et Chaussées. From 1983 he worked worldwide as a freelance consultant. From the Malpasset dam failure he has followed the growth of civil Rock Mechanics, as a found-

der member in 1967 and later Chairman of the French Committees on Rock Mechanics. He performed research mainly on Concrete, Rock Mechanics, and Underground City Planning, being active in Dams, Tunneling, and all Geotechnical Societies, through conferences, working groups, papers, and lectures. Among his latest work was the coordination of a Manual of Rock Mechanics, in 4 volumes from 2000 to 2013. He is a founding member of ISRM Commission on Underground Nuclear Power Plants.

The first and the second ISRM Online Lectures were given in February by Prof. Wulf Schubert and in May by Prof. John Hudson, respectively. [All the ISRM Online Lectures will remain available on the ISRM website in this dedicated webpage \(click to open in a new window\).](#)



Dear Colleague,

It is our great pleasure and honour to celebrate the 65th anniversary of *Géotechnique*.

Its respectable age notwithstanding, the oldest geotechnical journal does not show any signs of fatigue. Quite the contrary, over the past year *Géotechnique* has gone through a number of fundamental reforms, which will strengthen the journal in terms of quality and help it to meet the challenges of the modern era of scientific publishing.

We are delighted to introduce to you this newsletter celebrating [our special 65th anniversary issue](#).

We hope you will enjoy reading it, will share it with your colleagues, and will take advantage of the free access being provided to some of our seminal content, including our most cited papers of all time.

Chairman and Honorary Editor: Professor Alexander M. Puzrin, ETH Zurich, Switzerland

EDITORIAL: Anniversary Issue

Géotechnique has a long history of providing access to the cream of geotechnical research worldwide. The journal was intentionally founded as an international journal, with authors from throughout Europe and the USA being represented in the first issue. Over the last 65 years, the geographic scope of the journal has increased markedly, with 75% of published papers now being from outside the UK and the *Géotechnique* Advisory Panel's make-up increasingly reflecting this diversity. Significant effort has been recently invested in both improving the quality criteria for the published papers and the speed of their publication.

NEW SERIES: Case histories

In the editorial of the first issue, Glossop and Golder spoke of the desirability of maintaining "the balance of theory and practice" in the journal. In order to facilitate the publication of high quality case histories, it has been recently decided to institute a new series of invited papers.

This new series will feature selected case studies, which demonstrate novel ideas in monitoring, understanding and analysis of the performance of important geotechnical

structures. The first of these papers is that on [the Lilla Tunnel](#) published in our anniversary issue by Alonso et al.

FREE: Most cited papers of all time

To celebrate our 65th Anniversary, we are pleased to announce that Géotechnique's five most cited papers of all time will be free to download until 31st July.

These papers are some of the most seminal works in geotechnical engineering and are available to you once you have registered on the ICE Virtual Library (see instructions below).

[A discrete numerical model for granular assemblies;](#)
[P A Cundall and O D L Strack \(1979\)](#)

[Strength and dilatancy of sands;](#)
[M D Bolton \(1986\)](#)

[A constitutive model for partially saturated soils;](#)
[E E Alonso, A Gens and A Josa \(1990\)](#)

[On the compressibility and shear strength of natural clays;](#)
[J B Burland \(1990\)](#)

[Slope stability analysis by finite elements;](#)
[D V Griffiths and P A Lane \(1999\)](#)

ΠΡΟΣΕΧΕΙΣ ΕΚΔΗΛΩΣΕΙΣ ΓΕΩΤΕΧΝΙΚΟΥ ΕΝΔΙΑΦΕΡΟΝΤΟΣ ΣΤΗΝ ΕΛΛΑΔΑ



2^ο ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΦΡΑΓΜΑΤΩΝ ΚΑΙ ΤΑΜΙΕΥΤΗΡΩΝ

Σχεδιασμός – Διαχείριση – Περιβάλλον
Αθήνα, 7 - 8 Νοεμβρίου 2013
<http://waterstorage2013.com>

Μετά το πολύ επιτυχημένο πρώτο συνέδριο στη Λάρισα το 2008, η Ελληνική Επιτροπή Μεγάλων Φραγμάτων (ΕΕΜΦ) διοργανώνει το **2ο Πανελλήνιο Συνέδριο Φραγμάτων και Ταμιευτήρων στις 7 & 8 Νοεμβρίου του 2013 στην Αθήνα, στην Αίγλη Ζαππείου.**

Η απαίτηση για ορθολογική διαχείριση του υδατικού δυναμικού είναι μεγαλύτερη παρά ποτέ. Στις αυξανόμενες ανάγκες για ύδρευση, άρδευση, ενέργεια και αντιπλημμυρική προστασία προστίθεται ολοένα και πιο επιτακτικά η ανάγκη για προστασία και επανατροφοδότηση των υπόγειων υδροφόρων και η αναβάθμιση και προστασία των ποτάμιων και λιμναίων οικοσυστημάτων.

Ο ρόλος των φραγμάτων και ταμιευτήρων είναι κομβικός για την αντιμετώπιση των ανωτέρω. Η χώρα μας, αν και καθυστέρησε σημαντικά στην εκμετάλλευση του υδατικού δυναμικού, έχει κατασκευάσει τις τελευταίες δεκαετίες μεγάλο αριθμό φραγμάτων, και ταμιευτήρων, ενώ ένας μεγάλος αριθμός νέων έργων είναι τώρα σε φάση μελέτης ή υλοποίησης.

Τα φράγματα και οι ταμιευτήρες είναι πολύπλοκα έργα με πολλές συνιστώσες που δημιουργούν αυξημένες απαιτήσεις κατά το σχεδιασμό, την υλοποίηση και τη λειτουργία τους. Ο σεβασμός στο περιβάλλον, η ολοκληρωμένη διαχείριση των υδατικών πόρων, η χρήση νέων τεχνολογιών, η μακροχρόνια συμπεριφορά και ασφάλεια, η ευθύνη του κυρίου του έργου ή του διαχειριστή για την ασφαλή λειτουργία των έργων, είναι θέματα στα οποία θα επικεντρωθούν οι εργασίες του συνεδρίου.

Το συνέδριο στοχεύει στην παρουσίαση, ανάδειξη και συζήτηση των ανωτέρω ζητημάτων και απευθύνεται σε όλους όσοι με την μελέτη, κατασκευή και διαχείριση έργων φραγμάτων και ταμιευτήρων.

Θεματολόγιο

1. Φράγματα και Ολοκληρωμένη Διαχείριση Υδατικών Πόρων

- Ο ρόλος των ταμιευτήρων στην ολοκληρωμένη διαχείριση υδατικών πόρων
- Ταμιευτήρες πολλαπλού σκοπού
- Αντιπλημμυρική προστασία
- Τεχνικο-οικονομικά κριτήρια υλοποίησης νέων φραγμάτων

- Ο ρόλος των φραγμάτων στον ενεργειακό σχεδιασμό - Σύγχρονες τάσεις και τεχνολογικές εξελίξεις
- Ταμιευτήρες - Αντλητικά και υβριδικά συστήματα παραγωγής ενέργειας

2. Εξελίξεις στις Μεθόδους Σχεδιασμού & Κατασκευής

- Υλικά κατασκευής φραγμάτων - Μέθοδοι κατασκευής - Νέες τεχνικές
- Εκτίμηση, επιλογή και αναθεώρηση πλημμυρών σχεδιασμού
- Σχεδιασμός και αναβάθμιση υπερχειλιστών
- Έργα στεγάνωσης και αποστράγγισης φράγματος και θεμελίωσης
- Η επιρροή των γεωλογικών συνθηκών στον σχεδιασμό
- Εξελίξεις στον γεωτεχνικό σχεδιασμό
- Εξελίξεις στον αντισεισμικό σχεδιασμό
- Εξελίξεις στον Η/Μ εξοπλισμό

3. Ασφάλεια Φραγμάτων και Ταμιευτήρων

- Κανονισμοί μελέτης, κατασκευής και λειτουργίας φραγμάτων
- Η πρόταση της ΕΕΜΦ για την σύνταξη εθνικού κανονισμού ασφαλείας φραγμάτων
- Αποτίμηση της διακινδύνευσης φραγμάτων (risk assessment)
- Δημόσιοι και ιδιωτικοί φορείς εμπλεκόμενοι στη διαχείριση φραγμάτων - θέματα οργάνωσης και τεχνικής ικανότητας
- Κίνδυνοι σχετιζόμενοι με προβλήματα οργάνωσης του κυρίου - διαχειριστή του έργου
- Απαιτήσεις παρακολούθησης συμπεριφοράς
- Ασφάλεια ταμιευτήρα (ευστάθεια πρανών, εκτεταμένες διαρροές κτλ)
- Αναλύσεις θραύσης φράγματος και επιπτώσεις
- Μακροχρόνια συμπεριφορά, γήρανση των έργων και εργασίες αποκατάστασης
- Κίνδυνοι οφειλόμενοι σε αστοχίες Η/Μ εξοπλισμού
- Παρουσίαση πρόσφατων συμβάντων ή περιστατικών
- Φράγματα, ταμιευτήρες και δημόσια ασφάλεια
- Ασφαλής παροχέτευση εκτάκτων πλημμυρικών παροχών κατάντη - απαιτήσεις οριοθέτησης της κοίτης

4. Φράγματα, Ταμιευτήρες και Περιβάλλον

- Φιλικές προς το περιβάλλον κατασκευές φραγμάτων και ταμιευτήρων
- Φράγματα, ταμιευτήρες και αειφορία
- Περιβαλλοντική και κοινωνικά αποδοχή φραγμάτων και ταμιευτήρων - Συμμετοχικές διαδικασίες στο σχεδιασμό και υλοποίηση
- Περιορισμός υδρομορφολογικών αλλοιώσεων και αισθητική αποκατάσταση περιβάλλοντος
- Αρχιτεκτονικός σχεδιασμός φραγμάτων και συναφών κατασκευών
- Τα φράγματα ως μέρος της πολιτιστικής κληρονομιάς
- Εμπλουτισμός και αποκατάσταση υπόγειων υδροφόρων - Δημιουργία υγροβιότοπων κ.λπ.
- Χρονική εξέλιξη των ποιοτικών χαρακτηριστικών των ταμιευτήρων - Διατήρηση και βελτίωση ποιότητας υδατικών πόρων
- Φερτές ύλες

5. Παρουσίαση έργων

Κρίσιμες ημερομηνίες για την αποστολή εργασιών:

- Υποβολή περιλήψεων: **15 Δεκεμβρίου 2012**
- Αποδοχή περιλήψεων: **15 Ιανουαρίου 2013**
- Υποβολή πλήρους κειμένου: **30 Απριλίου 2013**
- Αποδοχή πλήρους κειμένου: **30 Ιουνίου 2013**

Οδηγίες για την αποστολή των περιλήψεων θα βρείτε στη ιστοσελίδα της ΕΕΜΦ www.eemf.gr.

Οι περιλήψεις θα αποστέλλονται ηλεκτρονικά στην διεύθυνση της ΕΕΜΦ eemf@eemf.gr.

ΕΛΛΗΝΙΚΗ ΕΠΙΤΡΟΠΗ ΜΕΓΑΛΩΝ ΦΡΑΓΜΑΤΩΝ, μέσω ΔΕΗ – ΔΥΗΠ, Αγησιλάου 56-58, 104 36 ΑΘΗΝΑ, τστ. 210 - 5241223, Η/Δ : eemf@eemf.gr, www.eemf.gr



6° ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΛΙΜΕΝΙΚΩΝ ΕΡΓΩΝ Αθήνα 11 - 14 Νοεμβρίου 2013

Το Εργαστήριο Λιμενικών Έργων του Ε.Μ.Π. διοργανώνει το 6° ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΛΙΜΕΝΙΚΩΝ ΕΡΓΩΝ. Θα πραγματοποιηθεί στην Αθήνα στις 25 - 28 Νοεμβρίου 2013.

Αντικείμενο του Συνεδρίου είναι η παρουσίαση των νεότερων εξελίξεων στο χώρο των επιστημών και των τεχνολογιών που σχετίζονται με τα Λιμενικά Έργα και ειδικότερα την έρευνα, τον σχεδιασμό, την μελέτη, κατασκευή, προστασία, συντήρηση, διαχείριση, στις επιπτώσεις στο περιβάλλον καθώς και η ενημέρωση, η ανταλλαγή απόψεων και η προώθηση της τεχνογνωσίας στους τομείς αυτούς. Στόχος του είναι η ενημέρωση, η ανταλλαγή απόψεων και η προώθηση της τεχνογνωσίας.

Απευθύνεται στους ερευνητές, μελετητές, κατασκευαστές, ΑΕΙ, δημόσιους φορείς, ΟΤΑ, Ο.Λ., Λιμενικά Ταμεία, περιβαλλοντικές οργανώσεις και υπηρεσίες που ενδιαφέρονται και ασχολούνται με τα Λιμενικά Έργα, τους οποίους και προσκαλεί να παρουσιάσουν το έργο και τις εμπειρίες τους.

Θεματολόγιο

- Περιβαλλοντικά μεγέθη σχεδιασμού και κατασκευής λιμενικών έργων
- Σχεδιασμός λιμένων, μελέτη και κατασκευή λιμενικών έργων
- Χωροθέτηση λειτουργιών, διαμόρφωση λιμενικής ζώνης
- Αστοχίες, βλάβες λιμενικών έργων. Επιθεώρηση, αποκατάσταση, συντήρηση
- Μελέτη λιμένων σε φυσικό προσομοίωμα
- Περιβαλλοντικές επιπτώσεις από την κατασκευή και λειτουργία λιμένων
- Το Ελληνικό Λιμενικό Σύστημα υπό το πρίσμα της Ευρωπαϊκής οικονομικής κρίσης
- Διαχείριση, διοίκηση, λειτουργία λιμένων. Θεσμικό πλαίσιο. Ιδιωτικοποιήσεις δραστηριοτήτων.

Οι ενδιαφερόμενοι για περισσότερες πληροφορίες μπορούν να απευθύνονται στο Εργαστήριο Λιμενικών Έργων Ε.Μ.Π. τηλ.: 210.7722367, 210.7722375, 210.7722371, fax: 210.7722368 (κες Θ. Γιαντσή, Ι. Φατούρου).

e-mail: lhv@central.ntua.gr



30 September - 3 October 2014, Athens, Greece
www.eetc2014athens.org

It is our pleasure to inform you that the Greek Tunnelling Society is organizing the 2nd Eastern European Tunnelling Conference in Athens on September 28 - October 1 2014 (EETC2014, Athens).

The Eastern European Tunnelling Conference is a biennial regional traveling conference. It aims to promote the sharing of knowledge, experience, skills, ideas and achievements in the design, financing and contracting, construction, operation and maintenance of tunnels and other underground facilities among the countries of Eastern Europe, on an organized basis and with agreed aims. EETC2014 aims mainly to bring together colleagues from Eastern Europe but people from the rest of the world are also welcome.

The theme of EETC2014 Athens is:

"Tunnelling in a Challenging Environment"
Making tunnelling business in difficult times

The construction of underground projects is becoming increasingly demanding as new challenges are emerging in every aspect and sector of this multidisciplinary and multi-various business. Further to the usual geological, geotechnical, structural and operational challenges, we are now facing a difficult business and financial environment, which requires the deployment of even more intelligent and effective tools and solutions.

I really do hope that the EETC2014 Athens will contribute and further facilitate the growth of the tunnelling business and will be a forum for scientific and professional collaboration.

TOPICS:

- Innovative methods for Analysis and Design
- Tunnelling in difficult ground conditions
- Conventional urban or shallow tunnelling
- Mechanized tunnelling
- Hydraulic tunnels
- Underground complexes
- Caverns for Hydropower or Storage
- Pipe jacking and microtunnelling
- Innovations in tunnelling construction technology
- Tunnels and shafts for mining
- Rehabilitation and repair
- Safety and security in tunnels and tunnelling
- Contractual and financial issues
- Education and training
- Case histories
- Underground space use
- Tunnels and monuments

ΠΡΟΣΕΧΕΙΣ ΓΕΩΤΕΧΝΙΚΕΣ ΕΚΔΗΛΩΣΕΙΣ

Για τις παλαιότερες καταχωρήσεις περισσότερες πληροφορίες μπορούν να αναζητηθούν στα προηγούμενα τεύχη του «περιοδικού» και στις παρατιθέμενες ιστοσελίδες.

TC215 ISSMGE - International Symposium on Coupled Phenomena in Environmental Geotechnics (CPEG) - "From theoretical and experimental research to practical applications", 1 - 3 July 2013, Torino, Italy, www.tc215-cpeg-torino.org

BIOT-5 5th Biot Conference on Poromechanics, 10-12 July 2013, Vienna, Austria, <http://biot2013.conf.tuwien.ac.at>

ICEPR 2013 3rd International Conference on Environmental Pollution and Remediation, July 15-17 2013, Toronto, Ontario, Canada, <http://icepr2013.international-aset.com>

The 6th International Symposium on Rock Stress, 20-22 August 2013, Sendai, Japan, <http://www2.kankyo.tohoku.ac.jp/rs2013>

The Third International Symposium on Computational Geomechanics (ComGeo III), Krakow, Poland, 21-23 August, 2013, www.ic2e.org/index.php/comgeo/comgeo-iii

5th International Young Geotechnical Engineers' Conference (5iYGEC'13), 31 August - 01 September 2013, Paris, France <http://www.lepublicsystemepco.com/EN/events.php?IDManif=696&IDModule=21&PPAGE=&PAGE=&TEMPLATE=&CSS=&IDRub>

18th International Conference on Soil Mechanics and Geotechnical Engineering "Challenges and Innovations in Geotechnics", 1 - 5 September 2013, Paris, France www.paris2013-icsmqe.org

13th International Conference of the Geological Society of Greece, September 5-8 2013, Chania, Greece, www.ege13.gr

Géotechnique Symposium in Print on Bio- and Chemo-Mechanical Processes in Geotechnical Engineering, www.elabs10.com/content/2010001471/SIP%202013.pdf

EUROCK 2013 ISRM European Regional Symposium "Rock Mechanics for Resources, Energy and Environment", 21-26 September 2013, Wroclaw, Poland www.eurock2013.pwr.wroc.pl

International Symposium & 9th Asian Regional Conference of IAEG Global View of Engineering Geology and the Environment, 24 - 25 September, 2013, Beijing, China, www.iaegasia2013.com

Piling & Deep Foundations Asia, 25 - 26 September, 2013, Kuala Lumpur, Malaysia, www.pilingdeepfoundationsasia.com

Sardinia 2013 14th International Waste Management and Landfill Symposium, 30 September - 4 October 2013, Sardinia, Italy, www.sardiniasymposium.it

HYDRO 2013 International Conference and Exhibition Promoting the Versatile Role of Hydro, 7 to 9 October 2013, Innsbruck, Austria, www.hydropower-dams.com/hydro-2013.php?c_id=88

VAJONT 2013 - International Conference Vajont, 1963 - 2013 Thoughts and Analyses after 50 years since the catastrophic landslide, 8-10 October, 2013, Padova, Italy, <http://www.vajont2013.info/vajont-pd>

The 5th International Conference on Geoinformation Technologies for Natural Disaster Management (GiT4NDM 2013), October 9 - 11, Ontario, Canada, www.igrdq.com/5thGiT4NDM.php

The 1st International Symposium on Transportation Soil Engineering in Cold Regions - A Joint Conference with the 10th SHAHUNIANTS Lecture, October 10-11, 2013, Xining, China, <http://subgrade.sinaapp.com>

International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures, 13-16 October, 2013, Bologna, Italy, www.civil.columbia.edu/bologna2013

The Mediterranean Workshop on Landslides: Landslides in hard soils and weak rocks - an open problem for Mediterranean countries, 21 and 22 October, 2013, Naples, Italy, www.mwl.unina2.it

International Conference Geotechnics in Belarus: Science and Practice, 23-25 October 2013, Minsk, Belarus, geotechnika2013@gmail.com belgeotech@tut.by



**Hydropower 2013--CHINCOLD 2013
Annual Meeting and the
3rd International Symposium on Rockfill Dams
1-3 November 2013, Kunming, China
http://www.chincold.org.cn/dams/special/A2022index_1.htm**

Investment in hydropower is investment in the green economy. The key issue is to develop dams and hydropower in a sustainable way. Advanced technologies, new equipments and materials for dam construction have been achieved in different countries. It is necessary for engineers from all over the world to share the new progress. After a series of successful and fruitful conferences such as Hydropower 1996, Hydropower 1998, Hydropower 2004 and Hydropower 2006, Hydropower 2013 international conference jointly sponsored by Chinese National Committee on Large Dams (CHINCOLD) and China Society for Hydropower Engineering (CSHE) will provide a forum for strengthening the international communication and cooperation in hydropower and promote future development of hydropower in a safe, economic, and eco-friendly way.

CHINCOLD Annual meeting was held successfully in 2011 and 2012. New technologies for dam construction have been presented and discussed. Nearly 1000 experts and scholars from CHINCOLD member organizations have attended the events. The meetings have offered the members a platform for communication and cooperation on dam construction. In order to promote this communication, CHIN-

COLD 2013 Annual meeting will be held combined with Hydropower 2013.

In recent years, rockfill dams, a popular and competitive dam type, have gained vigorous development due to its advantages in economy and safety. During the Wenchuan Earthquake in 2008 in Sichuan, China, Zipingpu concrete faced rockfill dam (H=156m) has demonstrated the good performance of rockfill dams in seismic resistance. With increasing of the height of rockfill dams and facing more complicated geographic and geologic conditions, many challenging problems have arisen. To provide a platform for professionals to exchange their experiences in rockfill dams, Chinese National Committee on Large dams (CHINCOLD) and Brazilian Committee on Large Dams (CBDB) have jointly sponsored the 1st and the 2nd International Symposiums on Rockfill Dams in 2009 in Chengdu, China and in 2011 in Rio de Janeiro, Brazil, respectively.

Hydropower 2013--CHINCOLD 2013 Annual Meeting and the 3rd International Symposium on Rockfill Dams will be held on 1-3 November 2013 in Kunming, the Capital City of Yunnan Province, China.

It is great honor for the Organizing Committee to invite you to join Hydropower 2013--CHINCOLD 2013 Annual Meeting and the 3rd International Symposium on Rockfill Dams. We sincerely hope that this conference will contribute significantly to promote the worldwide successful experience in sustainable development of hydropower and dams. We believe the conference will provide a broader communication space and more opportunities for various specialists involved in the field of hydropower and dams.

We are looking forward to welcoming you in Kunming, China in November 2013.

The topics of the symposium are as following:

I. Topics for Hydropower 2013—CHINCOLD 2013 Annual Meeting

1. Design Construction & Monitoring of High Dams
2. Safety Assessment and Rehabilitation Technology of Dams
3. Sustainable Development of Hydropower & Dams
 - Environment-friendly Technologies for Dam Construction
 - Integrated Operation of Hydropower Stations and Reservoirs
 - Practice of Reservoir Resettlement
4. Others

II. Topics for the 3rd International Symposium on Rockfill Dams

1. General (project introduction, history, cases and experiences of Rockfill Dams)
2. Design and analysis
3. Construction materials and methods
4. Operation, performance and safety monitoring
5. Super-high CFRD dams and earth-core Rockfill dams (H≥200 m)
6. Seismic safety of Rockfill dams
7. Others

Ms. Yao ZHANG & Ms. Xiao WANG
Secretariat of Hydropower 2013-- CHINCOLD 2013 Annual Meeting and the 3rd International Symposium on Rockfill Dams
Chinese National Committee on Large Dams

Room 1260, IWHR Building A, A1 Fuxing Rd., Beijing 100038, P.R. China
Tel: +86-10-68781709/68585310
Fax: +86-10-68712208
Email: chincold-en@vip.126.com
Website: www.chincold.org.cn



Problems and experience of the engineering protection of the urbanized territories and a safeguarding of the heritage under conditions of the geo-ecological risk, 5-7 November 2013, Kyiv, Ukraine, <http://new.sophiakievskia.org/en>

IRF 17th World Meeting & Exhibition, November 9 - 13, 2013, Riyadh, Saudi Arabia, www.IRF2013.org

6th Annual Bridges Middle East & Tunnels Middle East, 11 - 13 November, 2013 - Doha, Qatar, www.bridgesme.com

6^ο ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΛΙΜΕΝΙΚΩΝ ΕΡΓΩΝ, Αθήνα 11 - 14 Νοεμβρίου 2013, lhv@central.ntua.gr

GEOMATE 2013 3rd International Conference on Geotechnique, Construction Materials & Environment, November 13-15, 2013, Nagoya, Japan, www.geomat-e.com

International Conference Built Heritage 2013 - Monitoring Conservation Management, 18-20 November 2013, Milano, Italy, www.bh2013.polimi.it

GEOAFRICA2013 Geosynthetics for Sustainable Development in Africa - 2nd African Regional Conference on Geosynthetics, 18-20 November 2013, Accra, Ghana, <http://geoafrica2013.com>

10th International Symposium of Structures, Geotechnics and Construction Materials, 26-29 November 2013, Santa Clara, Cuba, ana@uclv.edu.cu, quevedo@uclv.edu.cu, www.uclv.edu.cu

International Conference on Geotechnics for Sustainable Development, 28-29 November 2013, Hanoi, Vietnam, www.geotechn2013.vn

ISAP2013 International Symposium on Advances in Foundation Engineering, 5 -6 December 2013, Singapore, <http://rpsonline.com.sg/isafe2013>

Arabian Tunnelling Conference & Exhibition, 10-11 December 2013, Dubai, United Arab Emirates, <http://uae-atc2013.com>

8th International Conference Physical Modelling in Geotechnics 2014, 14-17 January 2014, Perth, Australia, <http://icpmg2014.com.au>

ANDORRA 2014 14th International Winter Road Congress 2014, 4-7 February 2014, Andorra la Vella (Andorra), www.aipcrandorra2014.org

World Tunnel Congress 2014 and 40th ITA General Assembly "Tunnels for a better living", 9 - 15 May 2014, Iguassu Falls, Brazil, www.wtc2014.com.br

CPT'14 3rd International Symposium on Cone Penetration Testing, 13-14 May 2014, Las Vegas, Nevada, U.S.A., www.cpt14.com

International Conference on Piling & Deep Foundations, 21-23 May 2014, Stockholm, Sweden, www.dfi-effc2014.org



Rock Mechanics and Rock Engineering: Structures on and in rock masses
The 2014 ISRM European Rock Mechanics Symposium (EUROCK 2014)
 Vigo, Spain, 27-29th May 2014



EUROCK 2014
ISRM European Regional Symposium
Rock Engineering and Rock Mechanics:
Structures on and in Rock Masses
27-29 May 2014, Vigo, Spain
www.eurock2014.com

Dear Colleagues,

On behalf of the organizing committee I am delighted to invite you to participate in the **2014 ISRM European Rock Mechanics Symposium (EUROCK 2014)** to be held in Vigo, Spain, on May 27-29, 2014. This Symposium is a common endeavour of the University of Vigo and the SEMR (Spanish National Group of the ISRM), who are doing their best to offer a pleasant and interesting event.

We have prepared an appealing program with a good number of keynote lectures by some of the world's leading experts on rock mechanics. Two short courses and a Workshop will also take place before the congress and some interesting visits to different mine and civil engineering works are in preparation for the aftermath.

You will also have the privilege to visit our town and region. Lively and dynamic, Vigo is a young and modern city, very famous for the beauty of its bay and the quality of their fish and shellfish delicacies. Located in the always green region of Galicia in North Western Spain, it is also very close to the Portuguese border and Porto. Santiago de Compostela and its "Camino" is only 45 minutes away.

It is a special honour for me to host for the first time in Spain the Symposium EUROCK and I strongly hope that an exciting program and the charms of this far-west beautiful part of Europe will combine to make this a successful and memorable event.

I look forward to meeting you in Vigo in May 2014.

Leandro R. Alejano
 Chairman of the organizing committee

The Congress will cover the entire scope of rock mechanics and rock engineering, with the emphasis on *Rock engineering and rock mechanics: structures on or in rock masses*. The main topics include but are not limited to the following:

- Rock properties and testing methods
- Rock mass characterization
- Rock mechanics for infrastructures
- Mining rock mechanics
- Design methods and analysis
- Monitoring and back analysis
- Excavation and support
- Rock engineering in quarrying
- Preservation of natural stone and rock weathering
- Case histories
- Petroleum engineering and hydrofracking
- CO₂ storage

- Applicability of EUROCODE-7 in rock engineering

Contact Person: Prof. Leandro Alejano
 ETSI MINAS - University of Vigo
 Dept. of Natural Resources & Environmental Engineering
 Campus
 Lagoas Marcosende
 36310 Vigo (Pontevedra), SPAIN
 Telephone: (+34) 986 81 23 74
 E-mail: alejano@uvigo.es



Geoshanghai 2014, International Conference on Geotechnical Engineering, 26 - 28 May 2014, Shanghai, China,
www.geoshanghai2014.org

World Landslide Forum 3, 2 - 6 June 2014, Beijing, China,
<http://wlf3.professional.com>

8th European Conference "Numerical Methods in Geotechnical Engineering" NUMGE14, Delft, The Netherlands, 17-20 juni 2014, www.numge2014.org

2nd International Conference on Vulnerability and Risk Analysis and Management & 6th International Symposium on Uncertainty Modelling and Analysis - Mini-Symposium Simulation-Based Structural Vulnerability Assessment and Risk Quantification in Earthquake Engineering, 13-16 July 2014, Liverpool, United Kingdom,
<http://www.icvram2014.org>

GeoHubei 2014 International Conference Sustainable Civil Infrastructures: Innovative Technologies and Materials, July 20-22, 2014, Hubei, China
<http://geohubei2014.geoconf.org>

Second European Conference on Earthquake Engineering and Seismology, 24-29 August 2014, Istanbul, Turkey
www.2eceeistanbul.org

TC204 ISSMGE International Symposium on "Geotechnical Aspects of Underground Construction in Soft Ground" - IS-Seoul 2014, 25-27 August 2014, Seoul, Korea,
csyoo@skku.edu



International Symposium on Geomechanics
from Micro to Macro (TC105)
01 - 03 September 2014, Cambridge, United Kingdom
ks207@cam.ac.uk

Organizer: TC105
 Contact person: Professor Kenichi Soga
 University of Cambridge, Department of Engineering,
 Trumpington Street, CB2 1PZ, Cambridge, UK
 Phone: +44-1223-332713
 Fax: +44-1223-339713



JUBILEE CONFERENCE 50th Anniversary of Danube-European Conferences on Geotechnical Engineering Geotechnics of Roads and Railways, 9 - 11 September 2014, Vienna, Austria, www.decge2014.at

IAEG XII CONGRESS Torino 2014 Engineering Geology for Society and Territory, IAEG 50th Anniversary, September 15-19, 2014, Torino, Italy, www.iaeg2014.com

10th International Conference on Geosynthetics – 10ICG, Berlin, Germany, 21 – 25 September 2014 www.10icg-berlin.com

14th International Conference of the International Association for Computer Methods and Advances in Geomechanics (14IACMAG), September 22 – 25, 2014, Kyoto, Japan, www.14iacmag.org

EETC 2014 ATHENS 2nd Eastern European Tunnelling Conference, 28 September - 1 October 2014, Athens, Greece, www.eetc2014athens.org



**International Congress
Tunnels and Underground Space :
Risks & Opportunities**

13-15 October 2014, Lyon, France

www.congres.aftes.asso.fr/en/content/invitation

The French tunneling and underground space association (Association Française des Tunnels et de l'Espace Souterrain, AFTES) is organising its 14th International Congress at Lyon's Cité Internationale, October 13-15, 2014.

The main subject of the congress is "Tunnels and underground space: risks and opportunities".

AFTES is keen to nurture discussions between various stakeholders in the business, such as developers, clients, engineers, architects, research units, entrepreneurs, construction firms and suppliers – and invites you to take part in this conference. Key features include:

- a particular emphasis on underground space: its design and the key players involved, including planners, architects, engineers and developers,
- a special initiative directed at underground professions and training for young engineers and technicians,
- a warm welcome for local authorities, raising their awareness of the benefits of underground structures,
- two presentation venues running side by side offering a range of scientific and technical talks,
- a large exhibition area with a central Agora: a discussion space where the opening ceremony and roundtable debates will be held,
- technical site visits.

Topics

In a society that strongly dislikes uncertainty and in which people are increasingly sensitive to any disturbance, underground works are not always welcomed, either by the pu-

blic or by key decision-makers. At the same time, examples of highly successful projects – along with the constraints of urban density – have resulted in renewed interest in daring and innovative underground developments.

The aim of this Congress is to bring together contributions demonstrating that in full awareness of these issues, our profession is successfully working to control risks of all kinds and develop opportunities for underground construction. These two approaches both involve bringing down and controlling costs and lead times; this is vital if broader perspectives for the use of underground space are to become a reality. The Congress will be structured around four topics:

A Design and coordination of tunnels and other underground construction projects

- Appropriate risk management processes need to be adopted for tunnel projects and underground works in general.
- Lessons must be learned from experience in the development of these processes in recent years.
- A way must be found to reach a balanced share between risks and opportunities.
- Risk management can provide legitimacy for ambitious projects and their development.
- All stakeholders need to be involved in such approaches.

B Technological progress and innovation

- Progress and innovations can reduce risks in a number of ways.
- Certain major advances and innovations relating to deep tunnels and other underground urban structures should be emphasised.
- For instance, these can give rise to new opportunities by broadening the scope of application for underground techniques and/or cutting lead times.
- Lessons may be learned from unfortunate experiences; these could contribute to better risk management in the future.

C New uses for underground space

- New opportunities for using underground space may be developed in a variety of ways.
- The authorities and the general public alike need to become aware of the many opportunities inherent in the development of underground space.
- Surface developments need to be appropriately linked to underground developments in such a way as to enhance both.
- The benefits to the community need to be expressed in measurable terms.

D Managing underground infrastructures

- Risk-based management can help rationalise upkeep and maintenance work.
- Assessing the ability of structures to fulfill their function in the long-term is important.
- Ways need to be found to allow potential changes in use of infrastructures to be apprehended, in line with changing needs.
- Certain innovations may enable better use of underground space.

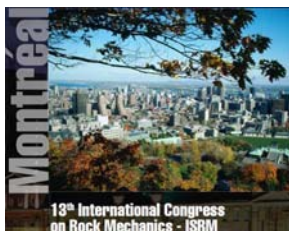


ARMS 8 - 8th ISRM Rock Mechanics Symposium, 14-16
October 2014, Sapporo, Japan
www.rocknet-japan.org/ARMS8/index.htm



**XVI African Conference on Soil Mechanics and
Geotechnical Engineering
Innovative Geotechnics for Africa
27 - 30 April 2015, Hammamet, Tunisia**

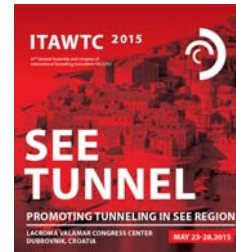
Contact person: Mehrez Khemakhem
Phone: +216 25 956 012
E-mail: mehrez.khemakhem@gmail.com



**13th ISRM International Congress on Rock Mechanics
Innovations in Applied and Theoretical
Rock Mechanics
10 - 13 May 2015, Montreal, Canada**

The Congress of the ISRM "Innovations in Applied and Theoretical Rock Mechanics" will take place on 29 April to 6 May 2015 and will be chaired by Prof. Ferri Hassani.

Contact Person: Prof. Ferri Hassani
Address: Department of Mining and Materials Engineering
McGill University
3450 University, Adams Building, Room 109
Montreal, QC, Canada H3A 2A7
Telephone: + 514 398 8060
Fax: + 514 398 5016
E-mail: ferri.hassani@McGill.ca



**World Tunnel Congress 2015
and 41st ITA General Assembly
Promoting Tunnelling in South East European
(SEE) Region
22 - 28 May 2015, Dubrovnik, Croatia
<http://wtc15.com>**

Contact
ITA Croatia - Croatian Association for Tunnels and Under-
ground Structures
Davorin KOLIC, Society President
Trnjanska 140
HR-10 000 Zagreb
Croatia
info@itacroatia.eu



**1st International Conference on
Discrete Fracture Network Engineering
October 19 - 22, 2014, Vancouver, British Columbia,
Canada
www.dfne2014.ca**

The Vancouver rock mechanics community is pleased to host **DFNE 2014**, the **1st International Conference on Discrete Fracture Network Engineering**. This conference will be the inaugural international meeting of engineers and geoscientists who use discrete fracture network engineering in the characterization of rock masses and solutions of engineering problems. This new and rapidly expanding area of engineering has wide applications, including underground and surface mining, underground nuclear waste disposal, petroleum geomechanics, civil engineering and natural hazards.

DFNE 2014 will be held at the Sheraton Wall Centre in scenic downtown Vancouver, British Columbia, Canada from October 19 - 22, 2014. The **DFNE 2014** organizing committee invites you to join us to share your ideas and experiences in the increased development and practical use of this technology under the theme **Engineering Characterization of Fractured Rock Masses: Applications of Discrete Fracture Network Engineering**.

The role of rock engineering and geological engineering in the safe and economic extraction of minerals in challenging environments has become increasingly important over the last decade. Engineers are faced with excavation of deeper open pits and underground mines and often the transition

from surface to underground. The need to need to provide access to energy resources in an environmentally sustainable and economic manner requires an improved characterization of the host rock mass.

Construction of underground facilities for waste disposal and a wide variety of civil engineering infrastructure projects demand both sophisticated geomechanical models and improved data collection. As population growth occurs within mountainous terrains and complex geological environments, the risks due to natural hazards will continue to increase. The applications of Discrete Fracture Network Engineering to characterize the permeability, strength and stability of rock masses has seen a significant increase over the last decade and it is anticipated that the integration of fracture networks with geomechanical models will become common practice in future engineering projects.

The **DFNE 2014** symposium is aimed at bringing together consultants, industry and academia to review the current applications and state-of-the-art in Discrete Fracture Network Engineering. Case studies and case histories using DFN's are actively solicited. Papers featuring innovative analysis techniques and solutions, as well as research (recent and/or future trends), are strongly encouraged.

The theme of **DFNE 2014** will be *Engineering Characterization of Fractured Rock Masses: Applications of Discrete Fracture Network Engineering* and will feature technical sessions and courses on subjects of common interest to all DFNE practitioners. In addition to a wide range of oral and poster sessions and workshops, the conference program will include a number of keynote and invited presentations conducted by distinguished guest speakers.

Researchers and practitioners are invited to submit abstracts for the oral and poster sessions in the following topic areas/themes:

Underground/Surface Mining

- Large open pit mining
- Deep underground mining
- Underground & surface coal mining
- Mine induced seismicity & rockbursts
- Pillar stability
- Block caving
- Block size analysis and fragmentation
- Rock support & ground control
- Mine subsidence
- Rock mass preconditioning
- Shaft/Raise stability

Infrastructure/Geohazards

- Tunneling
- Dam & hydro projects
- Excavatability & TBM performance
- Earthquake engineering & foundations
- Natural & engineered rock slopes
- Groundwater in fractured rock
- Environmental geohazards
- Karst Hazards

DFN Approach to Fundamental Rock Issues

- Rock mass characterization
- Discontinuity characterization methods
- Synthetic rock mass strength
- Blast Disturbance & Rock mass strength
- Rock bridge characterization
- Laboratory testing of rock
- Incorporation of DFN's into continuum and discontinuum models

- Numerical modelling of brittle fracture
- Remote sensing (LiDAR and Photogrammetry)
- Uncertainty and reliability in rock engineering

Energy Resources

- Nuclear waste depositories
- Underground storage & sequestration
- Petroleum geomechanics
- Borehole stability & hydraulic fracture
- Geothermal energy in rock

Contact Us

If you have questions about **DFNE 2014**, please feel free to contact one of the following individuals:

Doug Stead, Bill Dershowitz

Co-Chairs

chair@dfne2014.ca

Darren Kennard

Technical Chair

techchair@dfne2014.ca

Wayne Gibson

Conference Manager

info@dfne2014.ca



3rd International Symposium on Frontiers in Offshore Geotechnics, Oslo, Norway, 10-12 June 2015, www.isfog2015.no



XVI ECSMGE 2015

16th European Conference on Soil Mechanics and Geotechnical Engineering
"Geotechnical Engineering for Infrastructure and Development"
13 - 17 September 2015, Edinburgh, UK
www.xvi-ecsmge-2015.org.uk

The British Geotechnical Association (BGA) is pleased to announce that it will be hosting the 16th European Conference on Soil Mechanics and Geotechnical Engineering at the Edinburgh International Conference Centre from 13th to 17th September 2015. The conference was awarded by a meeting of the European Member Societies on 13th September 2011 at the 15th European Conference on Soil Mechanics and Geotechnical Engineering in Athens, Greece.

You can view the BGA bid document at the following link:
<http://files.marketingedinburgh.org/bid/ECSMGEELECTRONICBID.pdf>

The conference website will be updated regularly as arrangements for the conference progress. Please bookmark it and visit regularly.

We look forward to welcoming you all in Edinburgh, one of Europe's truly great cities, in September 2015.

Dr Mike Winter
Chair of the Organising Committee
mwinter@trl.co.uk



EUROCK 2015
ISRM European Regional Symposium
64th Geomechanics Colloquy
7 – 9 October 2015, Salzburg, Austria



NGM 2016
The Nordic Geotechnical Meeting
25 – 28 May 2016, Reykjavik, Iceland

The aim of the conference is to strengthen the relationships between practicing engineers, researchers, and scientists in the Nordic region within the fields of geotechnics and engineering geology.

All are invited to share their experience and knowledge with their Nordic colleagues.

Contact person: Haraldur Sigursteinsson
Address: Vegagerdin, Borgartún 7, IS-109, Reykjavik, Iceland
Phone: +354 522 1236
Fax: +354 522 1259
E-mail: has@vegagerdin.is

ΕΝΔΙΑΦΕΡΟΝΤΑ ΓΕΩΤΕΧΝΙΚΑ ΝΕΑ

Houses built on reportedly old dump, severely damaged. Residents blame city of Havelock, North Carolina

ABC News reports on the significant settlement of an area in Havelock, North Carolina. Reportedly, within very shallow depth, waste material is being excavated in the backyard of residents. The area is deforming significantly, affecting yards, houses and vegetation.



Planted plants reportedly do not last long and die out. The neighborhood is reportedly built on an old dump that was last used in the 1940s and 1950s. The city of Havelock began building out in the 1960s and into the 1970s. The state conducted studies in 2005 and identified the presence of cavities even at shallow depths that are believed to be caused by decomposed waste. Residents blame the city of Havelock that issued the permits to the builders. A city meeting is scheduled for June 10 2013. The lawyers of the city argue that the dumping predated the establishment of the city and thus the city cannot be liable.

See embedded video under "Media" below the news item.

Source: [ABC News](#), [Yahoo News](#)

([Geoengineer.org](#), 03 June 2013)



Lack of foundation test sites 'a risk for UK offshore wind'

The Carbon Trust has warned that innovations to reduce offshore wind costs are at risk as Britain has nowhere to demonstrate new, lower-cost foundations with more powerful offshore wind turbines.

Carbon Trust believes that without an urgent solution many cost saving innovations won't be available in time for the rollout of Round 3 projects, which are expected to deliver up to 18GW of new generating capacity by 2020.

According to Carbon Trust, the cost of offshore wind energy is currently around £140 to £150/MWh. With innovation and cost reduction in a number of key areas, such as new foundations, the Carbon Trust has shown that costs can be reduced to around £100/MWh. The organisation warns that this level of cost reduction won't happen unless new innovations are properly tested in situ to provide developers

and financiers with technical assurance before undertaking major multi-billion pound procurement programmes.

The foundations of an offshore wind farm currently account for about 30 per cent of the typical wind farm costs, so improving their designs and reducing their installation costs can have a material impact on cutting the overall cost of energy generation.

The Carbon Trust, through its Offshore Wind Accelerator (OWA), is backing four new foundation designs that include the Universal Foundation, which can be installed without piling as it uses a giant suction bucket to bury the steel structure into the seabed, and the Keystone twisted jacket structure, which uses less steel than traditional foundations.

Prototypes of the Keystone and Universal Foundation designs have already been installed in UK waters, at the Hornsea and Dogger Bank Round 3 zones in the North Sea. They have been fitted with meteorological masts. The next important step is to demonstrate the new foundations with 130 meter high wind turbines on top. The lack of demonstration sites puts this important next step at risk.

In a statement, Phil de Villiers, the head of Offshore wind at the Carbon Trust said, 'At present we have a Catch 22. We have the technology but we have no way of proving that it can work at scale because we currently have no suitable offshore demonstration sites in the UK ready to use.

'The bottom line is that unless we sort this issue out in the next few months we could be putting at risk the mass roll-out of major new cost saving technologies which, in turn, can help reduce the overall offshore wind build bill by billions of pounds.

'We have a duty to ensure we hit our carbon targets at the least cost possible, so it's in everyone's interest, including the government, the industry and consumers, to fix this problem and fix it fast.'

(the engineer, 13 June 2013, <http://www.theengineer.co.uk/civil-and-structural/news/lack-of-foundation-test-sites-a-risk-for-uk-offshore-wind/1016509.article#ixzz2W7upRSJA>)



Micro - Piling technique in Indian Sub-Continent



<http://www.youtube-nocookie.com/embed/cFb0nLCKypg?rel=0>

(από τον συνάδελφο Γιάννη Κωνσταντόπουλο)

ΕΝΔΙΑΦΕΡΟΝΤΑ - ΣΕΙΣΜΟΙ

Waves of Destruction: History's Biggest Tsunamis

These series of traveling ocean waves are primarily generated in association with underwater earthquakes (though underwater volcanic eruptions and landslides can also trigger a tsunami). In the deep ocean, the waves can reach hundreds of miles or more from wave crest to wave crest and can exceed speeds of 500 miles per hour (805 kilometers per hour). And they're sneaky, unable to be felt even aboard ships, and undetectable from the air.

Here are some of the biggest, most destructive and deadliest tsunamis on record.

The Orphan Tsunami

Around midnight on Jan. 27, 1700, a mysterious tsunami swept through several villages on the eastern coast of Japan. The waves reached as high as 12 feet and flooded rice paddies, washed away buildings and damaged fishing shacks and salt kilns. The tsunami struck not only without warning, but without an apparent cause, leading to its "orphan tsunami" moniker. Then in 2005, an international team of scientists and scholars has linked the orphan tsunami to a massive earthquake that struck a region in North America called Cascadia. [[Read full story on the orphan tsunami](#)]

8,000 Years Ago ...

A volcano-triggered avalanche in Sicily 8,000 years ago that crashed into the sea at 200 mph, generated a devastating tsunami that spread across the entire Mediterranean Sea. (The avalanche sent tumbling into the sea enough material to cover the entire island of Manhattan in a layer of debris thicker than the Empire State Building is tall.) Though no historical records of the event exist — only geological records — scientists say the tsunami was taller than 10-story building. [[Read full story on the Sicily tsunami](#)]



The Great Lisbon Earthquake

On Nov. 1, 1755, a colossal earthquake centered in the Atlantic Ocean — and whose three jolts of shaking lasted 10 minutes — destroyed Lisbon, Portugal, and rocked much of Europe, people took refuge by boat. A tsunami ensued, as did great fires. Altogether, the event killed more than 60,000 people.

Krakatoa Tsunami

On Aug. 27, 1883, eruptions from the Krakatoa volcano fueled a tsunami that drowned 36,000 people in the Indonesian Islands of western Java and southern Sumatra. The strength of the waves pushed coral blocks as large as 600 tons onto the shore.

The Sanriku Tsunami

On June 15, 1896, waves as high as 100 feet (30 meters), spawned by an earthquake that struck Honshu, swept the east coast of Japan. And as is often the case, the waves seemed to come from nowhere. "Fishermen twenty miles out to sea didn't notice the wave pass under their boats because it only had a height at the time of about fifteen inches," according to a website run by the University of Hawaii. "They were totally unprepared for the devastation that awaited them when they returned to the port of Sanriku." Some 27,000 people died.

Lituya Bay

On the night of July 7, 1958, a magnitude-8.0 or so earthquake struck along the Fairweather Fault, its epicenter just 13 miles (21 km) from Lituya Bay in Alaska. The earthquake caused a large landslide in the bay — located within Glacier Bay National Park — which triggered one of the largest tsunamis ever recorded in modern times. Waves reached a height of 1,720 feet (576 meters) in the bay, but because the area is relatively isolated and in a unique geologic setting, the tsunami did not cause much damage elsewhere. It sank a single boat, killing two fishermen.



Shown here, an aerial image showing the bay just weeks after the tsunami.

The 2004 Indian Ocean Tsunami

On Dec. 26, 2004, a colossal earthquake with a magnitude between 9.1 and 9.3 shook Indonesia and killed an estimated 230,000 people, most due to the tsunami and the lack of aid afterward, coupled with deviating and unsanitary conditions. The quake was named the Sumatra-Andaman earthquake, and the tsunami has become known as the 2004 Indian Ocean tsunami. Those waves traveled the globe — as far as Nova Scotia and Peru.

Japan Quake and Tsunami

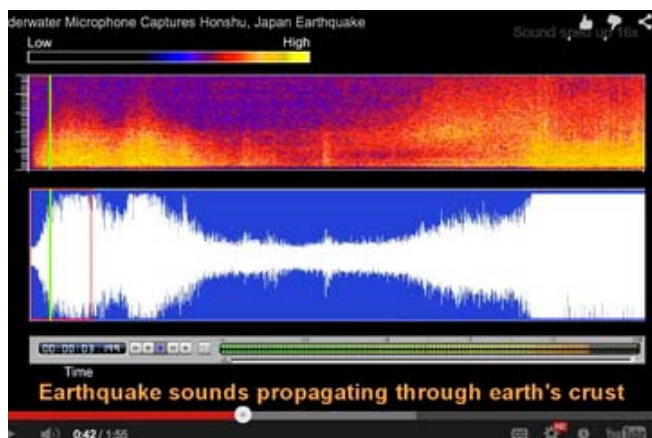
The magnitude-9.0 earthquake that struck Japan on March 11, 2011, was the largest known quake to strike the seismically active country and the world's fourth-largest earthquake in recorded history. While the quake itself was responsible for relatively few deaths, the massive tsunami it generated rapidly inundated coastal areas and took some

residents by surprise; the raging waters accounted for the bulk of the deaths in the disaster. Some 20,000 people perished or are considered missing.

(LiveScience Staff, 11 April 2012, <http://www.livescience.com/19618-history-biggest-tsunamis.html>)



Earthquake Sounds Its Own Tsunami Warning



Sound waves from large earthquakes, such as the 2011 Japan temblor, could offer several minutes warning before a tsunami hits, researchers say.

CREDIT: Pacific Marine Environmental Laboratory

Death by drowning was the biggest killer in the 2011 Japan earthquake and tsunami.

Since the disaster, scientists have analyzed the massive [Tohoku earthquake and tsunami](#), seeking better ways to predict these dangerous waves. Based on computer modeling, scientists at Stanford University now think [sound waves from big earthquakes](#) such as Japan's could provide 15 to 20 minutes of advance notice before a tsunami hits, according to a study published in the June 2013 issue of the journal the Bulletin of the Seismological Society of America. (Some towns on the Japan coastline had just 10 minutes to flee before the tsunami arrived.)

Along with seismic shaking, undersea earthquakes also produce low-frequency sound waves that travel through the ocean. The size of the sound signal is linked to the earthquake's magnitude. The U.S. National Oceanic and Atmospheric Administration (NOAA) uses a network of underwater microphones called hydrophones to listen for offshore earthquakes and volcanic eruptions.

The size of tsunami waves also appears to be linked to the acoustic signals produced by earthquakes, according to the new study.

"We've found that there's a strong correlation between the amplitude of the sound waves and the [tsunami](#) wave heights," co-author Eric Dunham, a Stanford geophysicist, said in a statement. "Sound waves propagate through water 10 times faster than the tsunami waves, so we can have knowledge of what's happening a hundred miles offshore within minutes of an earthquake occurring. We could know whether a tsunami is coming, how large it will be and when it will arrive."

The Japan Meteorological Agency issued a tsunami warning three minutes after the 2011 earthquake struck, but the agency underestimated the height of the waves. A revised warning of the bigger tsunami was sent out within minutes, but some residents did not hear or heed the new alert. In March, the country unveiled a new tsunami warning system with upgraded seismic sensors and offshore buoys to better track incoming waves. [[Infographic: How Japan's 2011 Earthquake Happened](#)]

The researchers said the varying orientation of faults offshore of tsunami-prone regions, such as Alaska, Chile and the Pacific Northwest, means the model's telltale acoustic signal could vary from region to region.

"The ideal situation would be to analyze lots of measurements from major events and eventually be able to say, 'This is the signal,'" lead author Jeremy Kozdon, a mathematician at the Naval Postgraduate School, said in the statement.

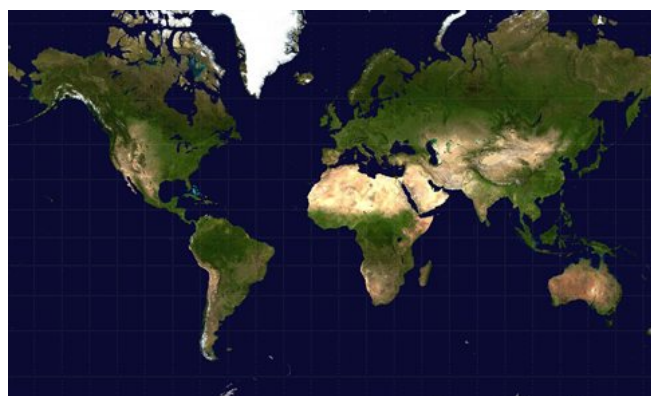
The U.S. tsunami warning system detects and locates potential tsunami-triggering earthquakes with seismic monitors and ocean-bottom pressure sensors, and uses computer models to predict the impact of incoming waves. Countries such as Chile are also exploring [GPS-based tsunami alert](#) systems, which provide more accurate estimates of ground movement than do seismic monitors (seismometers).

Tsunamis occur when earthquakes or undersea landslides suddenly displace the ocean floor and the sea above it, triggering a wave.

(Becky Oskin / OurAmazingPlanet, 10 June 2013, <http://www.livescience.com/37308-earthquake-sound-tsunami-warnings.html>)



Συρρικνούμενος ωκεανός Νέο γεωλογικό ρήγμα «θα εξαφανίσει τον Ατλαντικό»



Ευρώπη και Αμερική: η απόσταση φαίνεται ότι αρχίζει να μικραίνει

Ένα σύστημα γεωλογικών ρηγμάτων που σχηματίζεται έξω από τις ακτές της Πορτογαλίας σηματοδοτεί την αρχή του τέλους για έναν ωκεανό: ο Ατλαντικός θα συρρικνωθεί και τελικά θα εξαφανιστεί καθώς η Ευρώπη πλησιάζει την Αμερική, εκτιμά νέα μελέτη. Το ίδιο, εξάλλου, συνέβη και σε έναν άλλο αρχαίο ωκεανό, ο οποίος μίκρυνε και σήμερα λέγεται Μεσόγειος.

Σύμφωνα με την έρευνα που δημοσιεύεται στην επιθεώρηση Geology, ο θάνατος του Ατλαντικού προμηνύεται από ρήγματα που εντοπίστηκαν έξω από την Ιβηρική χερσόνησο, καθώς και από δύο ισχυρούς αλλά μυστηριώδεις σεισμούς που έληξαν την Πορτογαλία το 1775 και το 1969.

Εδώ και δεκαετίες είναι γνωστό ότι οι ήπειροι της Γης δεν είναι σταθεροί σχηματισμοί. Ακολουθούν αντίθετα τον λεγόμενο Κύκλο του Ουίλσον, κατά τον οποίο οι μάζες ξηράς αρχικά απομακρύνονται η μία από την άλλη και στη συνέχεια επανενώνονται και σχηματίζουν υπερηπείρους όπως η Παγγαία. Και αυτός ο σχηματισμός και η μετέπειτα διάλυση των υπερηπείρων έχουν συμβεί τουλάχιστον τρεις φορές τα τελευταία τέσσερα δισεκατομμύρια χρόνια.

Όταν οι ήπειροι απομακρύνονται η μία από την άλλη, σχηματίζονται ανάμεσά τους οι λεγόμενες μεσσωκεάνιες ράχες, βαθιές ρωγμές από τις οποίες αναβλύζει μάγμα το οποίο κλείνει έτσι το κενό. Αντίθετα, στην περίπτωση που οι ήπειροι πλησιάζουν η μία την άλλη, σχηματίζεται ανάμεσά τους μια ζώνη υποβύθισης -μια ζώνη στην οποία η τεκτονική πλάκα της μίας ηπείρου βυθίζεται αργά κάτω από την πλάκα της δεύτερης.

Η ομάδα του Δρ Ζοάο Ντουάρτε στο Πανεπιστήμιο Monash της Αυστραλίας εξέτασε τα διαθέσιμα δεδομένα για τους ύποπτους σεισμούς του 1775 και του 1969 και επιπλέον χαρτογράφησε το φλοιό έξω από την Πορτογαλία.

«Η σημαντική σεισμική δραστηριότητα [...] υποδεικνύει ότι υπάρχει τεκτονική μετακίνηση σύγκλισης» αναφέρει ο ερευνητής. «Είναι κάτι σαν εμβρυακή ζώνη υποβύθισης» σχολιάζει.

Η ερευνητική ομάδα εκτιμά επιπλέον ότι η νέα ζώνη υποβύθισης σχηματίζεται λόγω της επίδρασης του λεγόμενου Τοξου του Γιβραλτάρ -μια ζώνη υποβύθισης στη δυτική Μεσόγειο, η οποία ήταν κι αυτή κάποτε ωκεανός, μέχρι που η Αφρική άρχισε να πλησιάζει την Ευρασία.

«Η υποβύθιση μπορεί να συμπεριφέρεται σαν μεταδοτική ασθένεια», η οποία επεκτάθηκε από τη Μεσόγειο στον Ατλαντικό, λέει ο Ντουάρτε.

Ακόμα όμως κι αν οι εκτιμήσεις του ευσταθούν, η Αμερική δεν θα εμφανιστεί σύντομα στον ορίζοντα της Ευρώπης: η ζώνη υποβύθισης υπολογίζεται ότι θα χρειαστεί 20 εκατ. χρόνια για να ενεργοποιηθεί πλήρως, και στη συνέχεια θα χρειαστούν ακόμα 220 εκατ. χρόνια μέχρι η Ιβηρική χερσόνησος να συγκρουστεί με την Αμερική.

(Newsroom ΔΟΛ / 18 Ιουν.

2013, <http://news.in.gr/science-technology/article/?aid=1231253387>)

Are subduction zones invading the Atlantic? Evidence from the southwest Iberia margin

João C. Duarte, Filipe M. Rosas, Pedro Terrinha, Wouter P. Schellart, David Boutelier, Marc-André Gutscher and António Ribeiro

Abstract

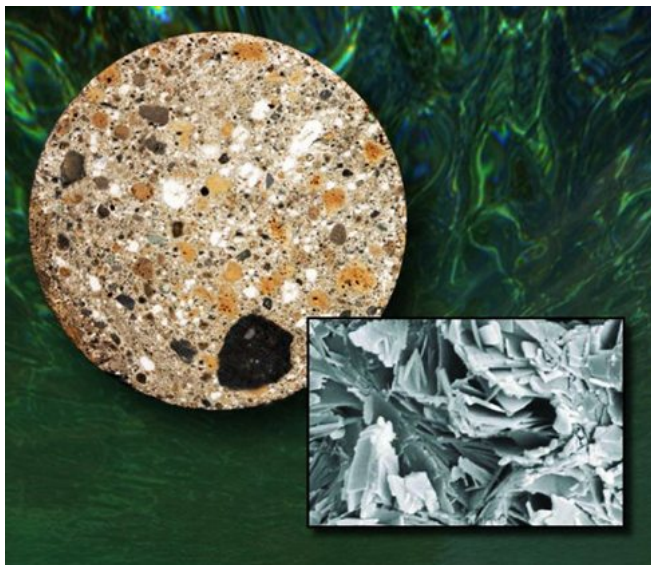
Subduction initiation at passive margins plays a central role in the plate tectonics theory. However, the process by which a passive margin becomes active is not well understood. In this paper we use the southwest Iberia margin (SIM) in the Atlantic Ocean to study the process of passive margin reactivation. Currently there are two tectonic mechanisms operating in the SIM: migration of the Gibraltar Arc and Africa-Eurasia convergence. Based on a new tectonic map, we propose that a new subduction zone is forming at the SIM as a result of both propagation of compressive stresses from the Gibraltar Arc and stresses related to

the large-scale Africa-Eurasia convergence. The Gibraltar Arc and the SIM appear to be connected and have the potential to develop into a new eastern Atlantic subduction system. Our work suggests that the formation of new subduction zones in Atlantic-type oceans may not require the spontaneous foundering of its passive margins. Instead, subduction can be seen as an invasive process that propagates from ocean to ocean.

(<http://geology.gsapubs.org/content/early/2013/06/05/G34100.1>)

ΕΝΔΙΑΦΕΡΟΝΤΑ - ΛΟΙΠΑ

Συνταγή της παράδοσης Το τσιμέντο των Ρωμαίων «καλύτερο από το σημερινό»



Αριστερά, δείγμα του βυθισμένου τσιμέντου. Περιέχει ασβέστη (άσπρο), ελαφρόπετρα (κίτρινο), λάβα (σκούρα θραύσματα) και άλλα ηφαιστειακά υλικά. Δεξιά, το υλικό στο ηλεκτρονικό μικροσκόπιο (Berkeley Lab)

Αναλύσεις σε έναν ρωμαϊκό κυματοθραύστη που παραμένει βυθισμένος εδώ και 2.000 χρόνια στον Κόλπο της Νάπολης δείχνουν ότι το σκυρόδεμα που είχαν αναπτύξει οι Ρωμαίοι είναι πιο ανθεκτικό και λιγότερο επιβαρυντικό για το περιβάλλον σε σχέση με το κύριο είδος τσιμέντου που χρησιμοποιείται σήμερα.

«Στα μέσα του 20ού αιώνα, οι τσιμεντένιες κατασκευές σχεδιάζονταν να διαρκέσουν 50 χρόνια, και πολλές ζουν σήμερα με δανεικό χρόνο» σχολιάζει ο Πάουλο Μοντέριο του Εθνικού Εργαστηρίου Lawrence Berkeley, γνωστού ερευνητικού φορέα του αμερικανικού υπουργείου Ενέργειας.

«Σήμερα σχεδιάζουμε κτήρια που θα ζήσουν 100 ή 120 χρόνια» προσθέτει. Κι όμως, οι κατασκευές πολλών ρωμαϊκών λιμανιών παραμένουν στέρεες έπειτα από 2.000 χρόνια παρά τη δράση των κυμάτων και τη χημική επίθεση που δέχονται από τη θάλασσα.

Οι αναλύσεις με τεχνικές φασματοσκοπίας και περίθλασης ακτίνων Χ έδειξαν ότι, χάρη στα ηφαιστειακά συστατικά του, το ρωμαϊκό σκυρόδεμα όχι μόνο είναι πιο ανθεκτικό, αλλά επιπλέον απαιτούσε πολύ λιγότερη ενέργεια στην παραγωγή του.

«Δεν μπορεί κανείς να ισχυριστεί ότι το σημερινό τσιμέντο δεν είναι καλό. Αντίθετα, είναι τόσο καλό ώστε χρησιμοποιούμε 19 δισεκατομμύρια τόνους το χρόνο. Το πρόβλημα είναι ότι η παραγωγή του τσιμέντου Πόρτλαντ αντιστοιχεί στο 7% του διοξειδίου του άνθρακα που εκπέμπει στην ατμόσφαιρα η βιομηχανία» επισημαίνει ο Δρ Μοντέριο, επικεφαλής της μελέτης.

Το τσιμέντο του Πόρτλαντ είναι η πηγή της «κόλλας» που συγκρατεί τα συστατικά των περισσότερων σημερινών σκυροδεμάτων. Παράγεται από τη θέρμανση ενός μείγματος ασβεστόλιθου και αργίλου στους 1.450 βαθμούς Κελσίου. Η

θέρμανση του ασβεστόλιθου απελευθερώνει διοξείδιο του άνθρακα, όπως συμβαίνει και με την καύση ορυκτών καυσίμων που απαιτείται για τη θέρμανση του μείγματος.

Αντίθετα, οι Ρωμαίοι χρησιμοποιούσαν ένα μείγμα ασβέστη και ηφαιστειακών υλικών. Ο ασβέστης προερχόταν από τη θέρμανση ασβεστόλιθου στη σχετικά χαμηλή θερμοκρασία των 900 βαθμών, μια διαδικασία πολύ λιγότερο ενεργοβόρος σε σχέση με τις σημερινές.

Στην περίπτωση των βυθισμένων κατασκευών, οι οποίες πρέπει να αντιστέκονται στη διάβρωση του θαλασσινού νερού, οι Ρωμαίοι ακολουθούσαν μια μάλλον ασυνήθιστη τακτική, έδειξε η νέα μελέτη: ο ασβέστης αναμειγνυόταν με ηφαιστειακή τέφρα και στη συνέχεια έμπαινε σε ξύλινα καλούπια. Όταν τα καλούπια βυθίζονταν στη θάλασσα, το θαλασσινό νερό πυροδοτούσε μια εξώθερμη χημική αντίδραση, στην οποία ο ασβέστης ενσωμάτωνε μόρια νερού στη δομή του και αντιδρούσε με τη στάχτη για να συγκρατήσει όλα τα υλικά του τσιμέντου στη θέση τους.

Οι αναλύσεις έδειξαν ότι η χρήση ηφαιστειακής στάχτης, η οποία περιείχε αλουμίνιο προσέφερε μια ασυνήθιστα σταθερή κρυσταλλική δομή στο σκυρόδεμα.

Σήμερα υπάρχουν στην αγορά φιλικά στο περιβάλλον σκυροδέματα που βασίζονται στην ηφαιστειακή τέφρα ή την τέφρα από σταθμούς λιθάνθρακα (πητική τέφρα). Η σταθερότητα αυτών των τσιμεντών σε μακροπρόθεσμη βάση δεν μπορούσε να εκτιμηθεί πριν από την ανάλυση του ρωμαϊκού σκυροδέματος, υποστηρίζουν οι ερευνητές.

Το μάθημα που πρέπει να πάρουμε για το μέλλον, λέει ο Δρ Μοντέριο, είναι ότι το ενεργοβόρο τσιμέντο του Πόρτλαντ θα μπορούσε να αντικατασταθεί εν μέρει από ηφαιστειακή τέφρα όπως το «ποτσολάν» (pozzolan), ηφαιστειακές αποθέσεις που υπάρχουν στην παραθαλάσσια πόλη του Ποτσουόλι στον κόλπο της Νάπολης.

«Το ποτσολάν είναι σημαντικό για τις πρακτικές εφαρμογές του» αναφέρει ο ερευνητής. «Θα μπορούσε να αντικαταστήσει το 40% της παγκόσμιας κατανάλωσης τσιμέντου του Πόρτλαντ. Πηγές ποτσολάν υπάρχουν εξάλλου σε όλο τον κόσμο. Η Σαουδική Αραβία για παράδειγμα δεν διαθέτει πητική τέφρα, διαθέτει όμως ολόκληρα βουνά από ποτσολάν».

Οι αναλύσεις δημοσιεύονται στις επιθεωρήσεις Journal of the American Ceramic Society και American Mineralogist.

(Newsroom ΔΟΛ, 05 Ιουνίου 2013,
<http://news.in.gr/science-technology/article/?aid=1231251925>)



How Do You Move An Entire Bridge? Mind the 3,400-ton truss!

The Problem

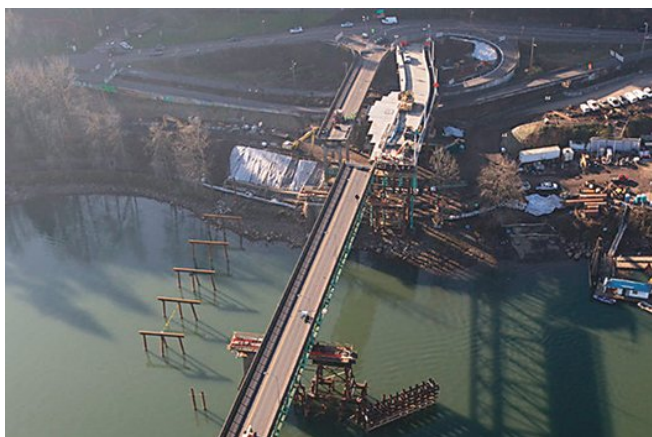
When the Sellwood Bridge in Portland, Oregon, was built in 1925, it wasn't designed to carry 30,000 vehicles a day. Or to hold back a slow landslide. But by the 1980s, cracks were forming in the bridge's supports, leading inspectors to rate the bridge a 2 on a 100-point federal safety scale and to eventually ban heavy trucks, buses, and fire engines. So county engineers decided it was time for a new bridge, and the least expensive option (\$306 million) was to move the existing structure over to serve as a detour while a new one was built in its place. But the bridge's rare design—a one-

piece, 1,100-foot, 3,400-ton truss—posed an unusual problem. How do you move a whole bridge at once?



The Solution

The great shift took place over 14 hours on January 19. Between the Sellwood's old and new locations, engineers built tracks, covered with Teflon pads and doused with liquid soap to make them slippery. Then 40 150-ton hydraulic jacks picked up the bridge and placed it on ski-like steel beams that could slide inside the tracks. Finally, a second set of jacks pushed the bridge inch by inch to its new home. (Because Sellwood's west end had to move 66 feet and its east end only 33, the engineers developed a system that tempered the flow of fuel to each jack, controlling how fast they pushed.) The new bridge is expected to open in 2015, after which the old Sellwood will be scrapped.



By the Numbers

3,400 tons: Weight of the Sellwood Bridge
33–66 feet: Distance the bridge needed to move
~25: Number of workers required
50: Number of hydraulic jacks



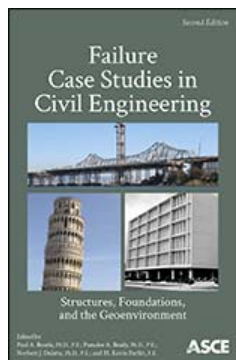
38-second time-lapse of the Sellwood Bridge move

from **JLA Involve** on **Vimeo**

<http://www.popsoci.com/technology/article/2013-05/bridge-bridge>

(Amber Williams / Popular Science, 07.06.2013, <http://www.popsoci.com/technology/article/2013-05/bridge-bridge>)

ΝΕΕΣ ΕΚΔΟΣΕΙΣ ΣΤΙΣ ΓΕΩΤΕΧΝΙΚΕΣ ΕΠΙΣΤΗΜΕΣ



Failure Case Studies in Civil Engineering

Structures, Foundations, and the Geoenvironment, Second Edition

Paul A. Bosela, Pamalee A. Brady, Norbert J. Delatte & M. Kevin Parfitt (Editors)

Sponsored by the Technical Council on Forensic Engineering of ASCE.

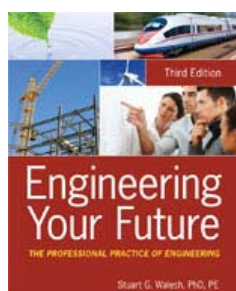
Failure Case Studies in Civil Engineering: Structures, Foundations, and the Geoenvironment, Second Edition, provides short descriptions of 50 real-world examples of constructed works that did not perform as intended. Designed for classroom use, each case study contains a brief summary, lessons learned, and references to key sources. This new edition, which replaces the 1995 classic edited by Robin Shepherd and J. David Frost, offers expanded descriptions, additional photographs and diagrams, and updated references. It also includes new case studies, such as the Alfred P. Murrah Federal Building, the Charles de Gaulle Airport Terminal, and the North Battleford, Saskatchewan, Water Treatment Plant.

Topics include:

- foundation failures;
- embankment, dam, and slope failures;
- geoenvironmental failures;
- bridge failures; and
- building failures.

This book supplies valuable resource material on typical failures that can be integrated into undergraduate engineering courses. Engineering professors and their students will use this book as the basis for class discussions, a starting point for further research, and a demonstration of how each failure leads to improved engineering design and safety.

(ASCE Press, 2013)



Engineering Your Future

The Professional Practice of Engineering, Third Edition

Stuart G. Walesh

Technical competency, the "hard side" of engineering and other technical professions, is nec-

essary but not sufficient for success in business. Young engineers must also develop nontechnical or "soft-side" competencies like communication, marketing, ethics, business accounting, and law and management in order to fully realize their potential in the workplace.

This updated edition of *Engineering Your Future* is the go-to resource on the nontechnical aspects of professional practice for engineering students and young technical professionals alike. The content is explicitly linked to current efforts in the reform of engineering education, including ABET's Engineering Criteria 2000 and ASCE's Body of Knowledge. The book treats essential nontechnical topics you'll encounter in your career, like self-management, interpersonal relationships, teamwork, project and total quality management, design, construction, manufacturing, engineering economics, organizational structures, business accounting, and much more.

Features new to this revised edition include: a stronger emphasis on management and leadership; a focus on personal growth and developing relationships; expanded treatment of project management; coverage of how to develop a quality culture and ways to encourage creative and innovative thinking; a discussion of how the results of design, the root of engineering, come to fruition in constructing and manufacturing, the fruit of engineering; new information on accounting principles that can be used in your career-long financial planning; and an in-depth treatment of how engineering students and young practitioners can and should anticipate, participate in, and ultimately effect change.

Engineering Your Future is essential reading for students or young practitioners at the beginning of their engineering careers.

(ASCE Press, 2013 - Copublished with John Wiley & Sons)



Geotechnique Letters

Dear Colleague,

I am writing to let you know that *Géotechnique Letters* has a LinkedIn group that has been steadily growing and is now over 500 active

members.

We set up the group with the idea to stimulate some more vibrant discussion, which I think we all agree is sadly lacking in modern geotechnics.

If you are interested, you can [join our LinkedIn group here](#).

We've recently had a post from John Atkinson, Emeritus Professor, City University, London titled "Where is the Zeitgeist of geotechnical engineering?"

Here is an extract:

"The spirit of the age of geotechnical engineering resides somewhere in the 1960s and the paradigm was set in the 1920s. It is no longer fresh and exciting. Routine practice relies on old methods and theories (SPT test, percussion drilling, Duncan and Chang); there are textbooks that confuse total and effective stress and describe soils as cohesive or granular (you know the ones I mean); linear elasticity is

still the basis for most routine design... It is as though 40 years of research never happened."

I hope you'll LinkIn to read the whole post and consider joining the discussion,

Best wishes,

Matthew Coop
Chairman and Honorary Editor
Géotechnique Letters



TUNNELLING SWITZERLAND

**G. Anagnostou & H. Ehrbar,
Editors**

Die Schweiz ist das Tunnelland par excellence: Rund 1300 Tunnel und Stollen prägen das Landschaftsbild. Und laufend kommen neue hinzu. "Tunnelling Switzerland" stellt die Errungenschaften der letzten 15 Jahre auf allen Gebieten des Untertagebaus anhand von mehr als 90 Projekten vor. Dazu gehören u.a. Strassentunnel, Eisenbahntunnel, Tunnelsanierungen, Kraftwerksanlagen, Hochwasserschutzbauten und Leitungstunnel zur Energieerzeugung und Wasserversorgung. Die einzelnen Bauwerke werden jeweils auf einer Doppelseite in Word und Bild vorgestellt. Dazu kommen Informationen zur Geologie, zu Bauherrschaft, Projektierungsbüros und Unternehmerschaft.

Die englischsprachigen Beschreibungen werden durch Übersetzungen in die Landessprachen ergänzt.

Vorgestellte Tunnel (Auswahl):

Gotthard-Basistunnel, Ceneri-Basistunnel, Durchmesserlinie Zürich: Weinbergtunnel, Unterfahrung Hauptbahnhof Zürich, Zimmerberg-Basistunnel, PTS-Tunnel am Flughafen Zürich, Tunnel Engelberg, Le métro lausannois, Tunnel Luzernerring, Uetlibergtunnel A3, Überdeckung Entlisberg A3, Islisbergtunnel, Tunnel Flüelen A4, Sicherheitsstollen Tunnel Flüelen, Tunnel Giswil A8, Tunnel Sachseln A8, Projektübersicht Südumfahrung Visp A9, Milchbuckeltunnel (Zürich), Tunnel Hausmatt (Olten), Umfahrung Bazenheid, Tunnel routier du Grand Saint Bernard, Erneuerung Tunnel San Bernardino A13, SBB Simplotunnel, Hochwasser-Entlastungsstollen Thunersee, Pumpspeicherwerk Limmern, Pumpspeicherwerk Nant de Drance, Ausbau der Grimselkraftwerke, Wasserkraftwerk Cleuson-Dixence, Trinkwasserstollen Uetliberg, Jungfrauoch – Top of Europe

Foreword

Doris Leuthard, Member of the Swiss Federal Council

Foreword

Martin Bosshard, President of the Swiss Tunnelling Society STS

Swiss underground construction and tunnel codes

Georg Anagnostou, Heinz Ehrbar

Statistics of Swiss Tunnels and Galleries

Heinz Ehrbar

Base Tunnels of Alptransit

Railway Tunnels

Road Tunnels

Flood Relief Tunnels and Galleries

Hydroelectric Power Plants and Water Supply Tunnels

Rehabilitation of Tunnels

Utility Tunnels and Caverns

List of Projects & Authors

Sponsors

(Swiss Tunnelling Society STS & vdf Hochschulverlag AG an der ETH Zurich, 2013)

* Το βιβλίο είναι δίγλωσσο: Γερμανικά και Αγγλικά



European Journal of Engineering Education

The Official Journal of the European Society for Engineering Education

Το τελευταίο τεύχος του περιοδικού European Journal of Engineering Education (EJEE) περιλαμβάνει μια θεματική ενότητα αφιερωμένη στην γεωτεχνική μηχανική και είναι προσβάσιμο στον πιο κάτω σύνδεσμο:

<http://www.tandfonline.com/toc/ceee20/38/3#.UcNqYdiymSo>

EJEE, Volume 38, Issue 3, 2013

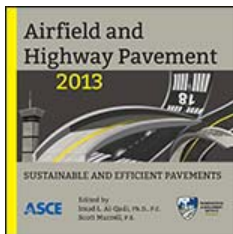
Contents

Theme Section Editorial

- "Geotechnical engineering education: promote links with research on engineering education", Marina Pantazidou, pages 235-237

Theme Section Papers

- "Incorporating learning outcomes into an introductory geotechnical engineering course", Gregg L. Fiegel, pages 238-253
- "Revising a design course from a lecture approach to a project-based learning approach", Tanya Kunberger, pages 254-267
- "Integration of centrifuge testing in undergraduate geotechnical engineering education at remote campuses", Usama El Shamy, Tarek Abdoun, Flora McMartin & Miguel A. Pando, pages 268-280
- "Environments for fostering effective critical thinking in geotechnical engineering education (Geo-EFFECTs)", Charles E. Pierce, Sarah L. Gassman & Jeffrey T. Huffman, pages 281-299
- "Geotechnical engineering in US elementary schools", Eduardo Suescun-Florez, Magued Iskander, Vikram Kapila & Ryan Cain, pages 300-315



Airfield and Highway Pavement 2013

Sustainable and Efficient Pavements

Edited by Imad L. Al-Qadi and Scott Murrell

Proceedings of the 2013 Airfield & Highway Pavement Conference: Sustainable and Efficient Pavements, held in Los Angeles, California, June 9-12, 2013. Sponsored by the Transportation & Development Institute of ASCE.

This collection contains 123 peer-reviewed papers that focus on the latest developments and cutting-edge technological improvements in pavements and pavement sustainability.

Topics include:

- advanced modeling, design, and analysis of pavements
- construction and rehabilitation techniques
- asphalt characterization and testing
- recycling materials in pavements
- pavement quality control/quality assurance; pavement sustainability and life-cycle assessment
- nondestructive testing and evaluation
- pavement management systems
- airfield and pavement case studies

This proceedings will be of interest to researchers, designers, project/construction managers, and contractors.

(ASCE Press, 2013)

1001 Papers Published in the International Conference on Case Histories in Geotechnical Engineering made freely available by University of Missouri (S&T)

More than 1000 papers are now electronically available from the 1st, 2nd, 3rd, and 4th International Conference on Case Histories in Geotechnical Engineering. These conferences, organized by Professor Shamsheer Prakash, a pioneer in the publication of case histories and a student of Professor Ralph Peck. These conferences have been a major outlet for the so important case histories in geotechnical engineering. Through an initiative of Professor Prakash, the University of Missouri digitized the papers and made them available through a searchable database.

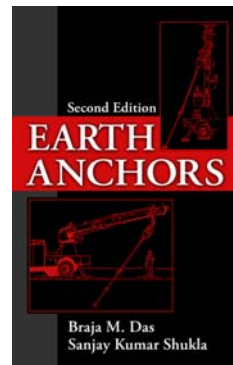
The papers published in the following conferences are made available:

- 1st International Conference on Case Histories in Geotechnical Engineering (1st: 1984: St. Louis, Missouri) (S&T)
- 2nd International Conference on Case Histories in Geotechnical Engineering (2nd: 1988: St. Louis, Missouri) (S&T)

- 3rd International Conference on Case Histories in Geotechnical Engineering (3rd: 1993: St. Louis, Missouri) (S&T)
- 4th International Conference on Case Histories in Geotechnical Engineering (4th: 1998: St. Louis, Missouri) (S&T)

The database is accessible [here](http://www.geoengineer.org).

(Geoengineer.org, 10 June 2013)



Earth Anchors

Second Edition

Braja M. Das & Sanjay Kumar Shukla

Anchors are primarily used in the construction of foundations of earth-supported and earth-retaining structures. The fundamental reason for using earth anchors in construction is to transmit the outwardly directed load to the soil at a greater depth, and/or farther away from the structure.

Although earth anchors have been used in practice for several hundred years, proper theoretical developments for the purpose of modern engineering designs have taken place only during the past 40 to 45 years.

Earth Anchors, Second Edition summarizes most theoretical and experimental works relating to the development of proper relationships for the ultimate and allowable holding capacity of earth anchors.

Key Features

- Details horizontal, vertical, and inclined anchor plates, helical anchors, and anchor piles
- New content added about single-helix screw anchors in sand
- Two new chapters:
 - Suction and Caisson Anchors
 - Geo-Anchors
- A summary and a self-assessment section at the end of each chapter provides multiple-choice questions and answers
- Reviews the soil failure mechanism located around the anchor and the various theories for calculating ultimate and allowable loads

(J. Ross Publishing - customerservice@jrosspub.com, 2013)



http://www.issmge.org/attachments/article/613/ISSMGE_Bulletin_Vol7_No3_May_2013_v6a.pdf

Κυκλοφόρησε το Τεύχος 3 του 7^{ου} Τόμου του ISSMGE Bulletin (Μαΐου 2013) με τα παρακάτω περιεχόμενα:

- Message from TC202 Transportation Geotechnics, Prof. Dr. António Gomes Correia, Chairman
- President's Reports, J.-L. Briaud, ISSMGE President
- South African Member Society
- Ecological Geotechnics, S. Sassa, Y. Watabe, S. Yang and T. Kuwae
- Overview of Geotechnical Damage Caused by the 2010 Chile Earthquake, Dr Ramon Verdugo
- News on Recent Conferences (1)
 - Report on 18SEAGC & 1AGSSEAC
 - 5th China-Japan Geotechnical Symposium
- Call for Papers Special Issue on Recent Advances in Computational Geomechanics in Soils and Foundations, Japanese Geotechnical Society
- Reminiscence: Prof. A.S. Balasubramaniam (Bala), Ikuo Towhata
- News on Recent Conferences (2)
 - 7th International Conference on Case Histories in Geotechnical Engineering
- Report to ISSMGE Foundation - 3rd International Conference on Geotechnical Engineering, Mohammed Elbyhagi Elfadil
- News: Donald M. Burmister's Soil Mechanics Laboratory Designated as Historical Geotechnical Heritage Laboratory
- Event Diary
- Corporate Associates
- Foundation Donors
- ISSMGE's International Journal of Geoengineering Case Histories
- News on Recent Conferences (3)
 - Baltic Geotechnical Roundtable in Pärnu, Estonia, Mait Mets

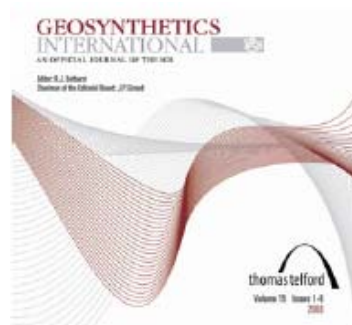


No. 22 - June 2013

http://www.isrm.net/adm/newsletter/ver_html.php?id_newsletter=86&ver=1

Κυκλοφόρησε το Τεύχος 22 / Ιούνιος 2013 του Newsletter της International Society for Rock Mechanics. Περιεχόμενα:

- Welcome to EUROCK 2013 - The 2013 ISRM International Symposium, Wroclaw, Poland, 23-26 September
- The 3rd ISRM Online Lecture will be given by Prof. Pierre Duffaut on 13 September 2013
- 6th Rock Stress Symposium RS2013 - Sendai, Japan, 20-22 August
- ARMS8 - 2014 ISRM International Symposium, Sapporo, Japan, 14-16 October 2014
- Eurock 2014 - Vigo 2014
- SINOROCK2013: a great success - An ISRM Specialised Conference held on 18-20 June 2013
- ISRM sponsored meetings
- ISRM Rocha Medal 2015 - nominations to be received by 31 December 2013
- Young Members Presidential Group activities
- An unusual view of New York City Underground
- Journal of the ISRM National Group of India
- CRC Press / Balkema: discounts for ISRM members



Geosynthetics International
www.thomastelford.com/journals

Κυκλοφόρησε το τεύχος αρ. 3 του 20^{ου} τόμου (Ιουνίου 2013) του περιοδικού **Geosynthetics International** με τα παρακάτω περιεχόμενα:

- Multiscale transmissivity study of drain-tube planar geocomposites: effect of experimental device on test representativeness, S. Bourghès-Gastaud; E. Blond; N. Touze-Foltz

- A bearing capacity calculation method for soil reinforced with a geocell, Authors: J.O. Avesani Neto; B.S. Bueno; M.M. Futai
- Pilot-scale load tests of a combined multilayered geocell and rubber-reinforced foundation, S.N. Moghaddas Tafreshi; O. Khalaj; A.R. Dawson
- Experimental and DEM simulation of sandy soil reinforced with H-V inclusions in plane strain tests, Y.L. Lin; M.X. Zhang; A.A. Javadi; Y. Lu; S.L. Zhang
- Role of strain magnitude on the deformation response of geosynthetic-reinforced soil layers, J.S. McCartney; B.R. Cox
- Centrifuge study of anchored geosynthetic slopes, A. Rajabian; H. Ghiassian; B.V.S. Viswanadham
- Behavior of nonwoven-geotextile-reinforced sand and mobilization of reinforcement strain under triaxial compression, M.D. Nguyen; K.H. Yang; S.H. Lee; C.S. Wu; M.H. Tsai
- Performance comparison of conventional biplanar and low-cost alternative geocomposites for drainage, C.A. da Silva; E.M. Palmeira

Πρόσβαση μέσω της ιστοσελίδας

<http://www.icervirtuallibrary.com/content/issue/gein/20/3>



Geotextiles & Geomembranes

www.geosyntheticssociety.org/journals.htm

Κυκλοφόρησε ο τόμος 38 (Ιουνίου 2013) με τα παρακάτω περιεχόμενα:

- Editorial Board/Aims & Scope
- Large scale field tests on geogrid-reinforced granular fill underlain by clay soil, Ahmet Demir, Mustafa Laman, Abdulazim Yildiz, Murat Ornek
- Quantification of diffusion of phenolic compounds in virgin GCL and in GCL after contact with a synthetic leachate, M.J.A. Mendes, N. Touze-Foltz, M. Gardoni, M. Ahari, L. Mazeas
- Bearing capacity of geosynthetic encased stone columns, Mahmoud Ghazavi, Javad Nazari Afshar

- Bearing capacity of square footing supported by a geobelt-reinforced crushed stone cushion on soft soil, Xiao-Hong Bai, Xian-Zhi Huang, Wei Zhang
- Prediction of pore size characteristics of woven slit-film geotextiles subjected to tensile strains, Xiao-Wu Tang, Lin Tang, Wei She, Bai-Song Gao
- A case study on soil settlements induced by preloading and vertical drains, Ernesto Cascone, Giovanni Biondi
- Finite element analysis experiments on landfill cover drainage with geosynthetic drainage layer, Dhani Narejo

Πρόσβαση μέσω της ιστοσελίδας

<http://www.sciencedirect.com/science/journal/02661144>



International Journal of Geoengineering Case Histories

Κυκλοφόρησε το Τεύχος 4 του Τόμου 2 του ISSMGE's International Journal of Geoengineering Case Histories με τα παρακάτω περιεχόμενα:

Christopher T. Senseney "Expedient Mitigation of Collapsible Loess in Northern Afghanistan", pp. 252-257

<http://casehistories.geoengineer.org/volume/volume2/issue4/issue4.html>



www.geoengineer.org

Κυκλοφόρησε το εορταστικό Τεύχος #101 του **Newsletter του Geoengineer.org** (Ιούνιος 2013) με πολλές χρήσιμες πληροφορίες για όλα τα θέματα της γεωτεχνικής μηχανικής. Υπενθυμίζεται ότι το Newsletter εκδίδεται από τον συνάδελφο και μέλος της ΕΕΕΕΓΜ Δημήτρη Ζέκκο (secretariat@geoengineer.org).





http://www.isrm.net/fotos/editor2/NI22/isrm_india_january_2013.pdf

Κυκλοφόρησε το 1^ο Τεύχος του 2^{ου} Τόμου – Ιανουάριος 2013 του ISRM (India) Journal με τα παρακάτω περιεχόμενα:

From Editor's Desk

Articles

Role of Geology and Special Rock Mechanics Tests in TBM Tunnelling – A Perspective 4 – *V.M.S.R. Murthy and Anand Gautam*

Influence of Anisotropic Stress Conditions on Design of Development Workings in Bord and Pillar Mining 16 – *R.K. Sinha, M. Jawed and S. Sengupta*

Strata Monitoring Studies in Blasting Gallery Panel During Depillaring Based on Field Instrumentation 25 – *S. Kumar Reddy and V.R. Sastry*

Mr. Devendra K. Sharma assumes the charge of Managing Director of Himachal Pradesh Power Corpn. Ltd.

Governing Council of Indian National Group of ISRM for the Term 2011-2014

Recent Activities of Indian National Group of ISRM

- Seminar on "Ground Control and Improvement", 20-21 September 2012, New Delhi
- International Seminar on "Minimizing Geological Uncertainties and Their Effect on Hydroelectric Projects", 27-28 September 2012, New Delhi
- Seminar on "Slope Stabilization Challenges in Infrastructure Projects", 29-30 November 2012, New Delhi

ISRM News

News from Indian National Group of ISRM

Publications of Indian National Group

Guidelines for Authors

Forthcoming Activities of Indian National Group of ISRM

ΕΚΤΕΛΕΣΤΙΚΗ ΕΠΙΤΡΟΠΗ ΕΕΕΕΓΜ (2012 – 2015)

Πρόεδρος :	Χρήστος ΤΣΑΤΣΑΝΙΦΟΣ, Δρ. Πολιτικός Μηχανικός, ΠΑΝΓΑΙΑ ΣΥΜΒΟΥΛΟΙ ΜΗΧΑΝΙΚΟΙ Ε.Π.Ε. president@hssmge.gr , editor@hssmge.gr , ctsatsanifos@pangaea.gr
Α' Αντιπρόεδρος :	Παναγιώτης ΒΕΤΤΑΣ, Πολιτικός Μηχανικός, ΟΜΙΛΟΣ ΤΕΧΝΙΚΩΝ ΜΕΛΕΤΩΝ Α.Ε. otmate@otenet.gr
Β' Αντιπρόεδρος :	Μιχάλης ΠΑΧΑΚΗΣ, Πολιτικός Μηχανικός mpax46@otenet.gr
Γενικός Γραμματέας :	Μαρίνα ΠΑΝΤΑΖΙΔΟΥ, Δρ. Πολιτικός Μηχανικός, Αναπληρώτρια Καθηγήτρια Ε.Μ.Π. secretary@hssmge.gr , mpanta@central.ntua.gr
Ταμίας :	Μανώλης ΒΟΥΖΑΡΑΣ, Πολιτικός Μηχανικός e.vouzaras@gmail.com
Αναπληρωτής Ταμία :	Γιώργος ΝΤΟΥΛΗΣ, Πολιτικός Μηχανικός, ΕΔΑΦΟΜΗΧΑΝΙΚΗ Α.Ε. ΓΕΩΤΕΧΝΙΚΕΣ ΜΕΛΕΤΕΣ Α.Ε. gdoulis@edafomichaniki.gr
Έφορος :	Γιώργος ΜΠΕΛΟΚΑΣ, Δρ. Πολιτικός Μηχανικός, Κέντρο Δομικών Ερευνών και Προτύπων ΔΕΗ gbelokas@gmail.com , gbelokas@central.ntua.gr
Μέλη :	Ανδρέας ΑΝΑΓΝΩΣΤΟΠΟΥΛΟΣ, Δρ. Πολιτικός Μηχανικός, Ομότιμος Καθηγητής ΕΜΠ aanagn@central.ntua.gr Μιχάλης ΚΑΒΒΑΔΑΣ, Δρ. Πολιτικός Μηχανικός, Αναπληρωτής Καθηγητής ΕΜΠ kavvadas@central.ntua.gr
Αναπληρωματικά Μέλη :	Χρήστος ΑΝΑΓΝΩΣΤΟΠΟΥΛΟΣ, Δρ. Πολιτικός Μηχανικός, Καθηγητής Πολυτεχνικής Σχολής ΑΠΘ anag@civil.auth.gr , canagnostopoulos778@gmail.com Σπύρος ΚΑΒΟΥΝΙΔΗΣ, Δρ. Πολιτικός Μηχανικός, ΕΔΑΦΟΣ ΣΥΜΒΟΥΛΟΙ ΜΗΧΑΝΙΚΟΙ Α.Ε. scavounidis@edafos.gr Δημήτρης ΚΟΥΜΟΥΛΟΣ, Δρ. Πολιτικός Μηχανικός, ΚΑΣΤΩΡ Ε.Π.Ε. coumoulos@castorltd.gr Μιχάλης ΜΠΑΡΔΑΝΗΣ, Πολιτικός Μηχανικός, ΕΔΑΦΟΣ ΣΥΜΒΟΥΛΟΙ ΜΗΧΑΝΙΚΟΙ Α.Ε. mbardanis@edafos.gr , lab@edafos.gr

ΕΕΕΕΓΜ

Τομέας Γεωτεχνικής
ΣΧΟΛΗ ΠΟΛΙΤΙΚΩΝ ΜΗΧΑΝΙΚΩΝ
ΕΘΝΙΚΟΥ ΜΕΤΣΟΒΙΟΥ ΠΟΛΥΤΕΧΝΕΙΟΥ
Πολυτεχνειούπολη Ζωγράφου
15780 ΖΩΓΡΑΦΟΥ

Τηλ. 210.7723434
Τοτ. 210.7723428
Ηλ-Δι. secretariat@hssmge.gr ,
geotech@central.ntua.gr
Ιστοσελίδα www.hssmge.org (υπό κατασκευή)

«ΤΑ ΝΕΑ ΤΗΣ ΕΕΕΕΓΜ» Εκδότης: Χρήστος Τσατσανίφος, τηλ. 210.6929484, τοτ. 210.6928137, ηλ-δι. pangaea@otenet.gr, ctsatsanifos@pangaea.gr, editor@hssmge.gr

«ΤΑ ΝΕΑ ΤΗΣ ΕΕΕΕΓΜ» «αναρτώνται» και στην ιστοσελίδα www.hssmge.gr