

Report on the 20th European Young Geotechnical Engineers conference



General view on the complex of buildings of the Faculty of Civil Engineering BUT, Brno

SUMMARY

From May 30 to June 1, 2010, the BUT Faculty of Civil Engineering hosted a 20th European Young Geotechnical Conference co-organized by the Czech and Slovak Committee for Soil Mechanics and Foundation Engineering. Brno University of Technology is the second largest and second oldest technical university in the Czech Republic. Its history goes back to 1849; the Faculty of Civil Engineering is 110 years old and has been significantly refurbished in recent years. Accommodation of hotel quality has been arranged in twin-bedded rooms at the Hotel Palacký ***.

The conference was attended by 48 geotechnical engineers of up to age 35 from 28 European countries nominated by their respective National Societies for Soil Mechanics and Geotechnical Engineering.

The Conference started on Sunday 30th May 2010 with evening Brno sightseeing and with common dinner for all EYGEC delegates in the historical centre of the town. During Monday 31st May 2010 and Tuesday 1st June 2010 48 lectures of 10 minutes (including 2 minutes of discussion) were presented by the EYGEC participants. According to the guidelines the sessions were “chaired by friendly, professional engineers” – John Atkinson, Jean-Louis Briaud and Ivan Vaniček.

The days of hard work were accompanied with more relaxing evening programmes: the sightseeing, dinner with live dulcimer music and closing technical excursion – construction of city road tunnels in Brno.

It was very useful to meet other young people working in geotechnical engineering and to have an opportunity to interact with them. There was a mix of participants from industry and academia, importantly, many useful contacts have been certainly made.

Young Geotechnical Engineers Conferences have developed from an idea by professor Atkinson back in the 1980s. The conferences took a long time that many good friendly relations and new geotechnical research cooperation were initiated.

CONFERENCE PROGRAMME

Sunday 30 th May 2010		Monday 31 th May 2010		Tuesday 1 th June 2010	
		8 ⁰⁰ – 9 ⁰⁰	Conference registration		
		9 ⁰⁰ – 9 ³⁰	Opening ceremony	9 ⁰⁰ – 9 ³⁰	Keynote lecture (J.-L. Briaud)
		9 ³⁰ – 10 ⁰⁰	Keynote lecture (J. Atkinson)	9 ³⁰ – 10 ⁴⁵	Lectures
		10 ⁰⁰ – 11 ⁰⁰	Lectures		
		11 ⁰⁰ – 11 ¹⁵	Coffe break	10 ⁴⁵ – 11 ⁰⁰	Coffe break
		11 ¹⁵ – 13 ⁰⁰	Lectures	11 ⁰⁰ – 12 ³⁰	Lectures
		13 ⁰⁰ – 14 ⁰⁰	Lunch	12 ³⁰ – 13 ³⁰	Lunch
14 ⁰⁰ – 16 ⁰⁰	Conference registration	14 ⁰⁰ – 14 ⁵⁰	Walk round the Faculty of Civil Engineering	13 ³⁰ – 14 ⁰⁵	Keynote lecture (J. Mühl and J. Šperger)
		14 ⁵⁰ – 15 ²⁰	Keynote lecture (M. Polenka)	14 ⁰⁵ – 14 ⁴⁵	Lectures
		15 ²⁰ – 16 ⁰⁰	Lectures	15 ⁰⁰ – 17 ⁰⁰	Technical excursion
16 ⁰⁰	Sightseeing Brno	16 ⁰⁰ – 16 ¹⁵	Coffe break		
		16 ¹⁵ – 17 ²⁵	Lectures		
18 ⁰⁰	Dinner in town	19 ⁰⁰	Dinner with live dulcimer music		

KEYNOTE LECTURES

How to do research

John ATKINSON – Emeritus Professor of Soil Mechanics, City University London

ISSMGE, research, and education

Jean - Louis BRIAUD – President of ISSMGE, Texas A&M University, USA

Modern foundation technologies

Jiří MÜHL – Technical director of Foundation engineering, Inc. and Jan ŠPERGER

The removal of rocky environment and groundwater contamination – GEOTest Brno case studies

Miloš POLENKA – GEOTest Brno, Inc.

CONFERENCE PROCEEDINGS

All submitted papers were published in the conference proceedings „GEOTECHNICAL ENGINEERING 20, View of Young European Geotechnical Engineers, Brno 2010“ with ISBN 978-80-7204-686-7.

SUBMITTED PAPERS

Session 1: Ground Investigation

Nanna Vesterlund Frandsen: *Philosophy of site investigations for an offshore wind farm*

Sergii Kurash: *Soil sinkholes in conditions of compact city planning*

Katarzyna Stefaniak: *The constrained modulus of varved clay from in-situ tests*

Session 2: Geomechanics

Marzena Lendo-Siwicka: *Volume change of Warsaw clay due to deep excavation*

Laure F. C. Wils: *Stiffness of calcareous sands under cyclic loading*

Ibrahim Yigit: *Influence of duration of anisotropic loading in terms of clay fabric*

João Santos Pina: *The behaviour under excavation of the Luanda's sandy formation: case studies*

Rasmus Klinkvort: *Centrifuge modelling of monopiles*

Valeria Bandini: *Modeling of seismic-induced deformations in slopes: multi-block analysis vs shaking table tests*

Benoît Meulewaeter: *Application of the observational method for both final and temporary complex slopes design. Case study Bioko 3 Bridges*

Zsolt SzilvÁgyi: *New development in geotechnical numerical calculations*

Florent Prunier: *Modelling material instabilities in geomechanics. Application to landslides*

Benjamin Charbit: *Numerical analysis of laterally loaded lime/cement columns*

Muge Balkaya: *Comparison of the results of 3D FEA with analytical solutions for a buried PVC water distribution pipe*

Olga-Joan Ktenidou: *Numerical investigation of site effects at Aegion, Greece*

Mirko Petković: *Experience in using increx system for axial deformation measurements*

Dominik Hauswirth: *Development of a fibre optic strain sensor for soil displacement monitoring*

Raffaele di Laora: *Phase lag between kinematic and inertial interaction*

Session 3: Geotechnics – Foundation Engineering

Arne T. Eigeland: *New head office for DnB-NOR in Bjørvika, Oslo, Norway Foundation on drilled steel pipe piles*

Asuencei Vlad: *Influence of hydrostatic level variation on the foundations of civil engineering works in Moinesti town area, Moldavia region, Romania*

Yuri Gotman: *Variant design of using the jet-grouting technology for reduction the settlements of the existing buildings while construction an underground complex in Moscow*

Paul Doherty: *The impact of end condition on pile resistance in clay*

Johann Brückl: *Pile integrity testing effected by concrete age*

Ján Pivarč: *Stone columns - design methods*

Malek Allani: *Non axial effects in dynamic pile testing: pile vibration analysis using Timoshenko beam theory*

Ellen Katrine Wensaas Lied: *A study of time effects on pile capacity*

Dirk-Jan Jaspers Focks: *Quay wall design under seismic conditions in Filyos, Turkey*

Elona Goxhaj: *Bearing capacity of shallow foundations*

Dimitros Karamitros: *Simplified methodology for the performance-based design of shallow foundations on liquefiable soil with a clay crust*

Xhevahir Aliu: *Some aspects during design of one bridge abutment*

Paul J. Vardanega: *Design methods for piles: dealing with uncertainty*

Session 3: Geotechnics – Earth Structures

Alexander Rohe: *Stability analysis of dikes with reinforcing structures using finite element calculations*

Zoran Jovanov: *Repair of damaged building and road near dam*

Ville J. Lehtonen: *Instrumentation and analysis of a full-scale railway embankment failure experiment*

Germain Auray: *Construction of a motorway section on potential sinkholes: reinforcement with an original very high tensile strength geogrid*

Dorin Vasile Moldovan: *Designing reinforced soil slopes and retaining walls with geosynthetics*

Zoran Berisavljevic: *Problems in predicting the behaviour of the road embankment built on a soft soil*

José Sánchez Martín: *Reinforcing soil in front of the toe of a diaphragm wall with jet-grouting*

Jude M. Clancy: *Analysis of pullout resistance of a novel multifunctional geosynthetic in a fine grained marginal fill*

Sebastian Althoff: *Contribution to use multi-stage large shear-frame tests to investigate the interaction- behaviour between geosynthetics and cohesive soil*

Gregor Supp: *Spinanchor - a new constructional element*

Kevin Briggs: *Charing embankment: climate change impacts on embankment hydrology*

Ignasi Aliguer: *Canelles dam left abutment stability analysis*

Session 3: Geotechnics – Underground Structures

Jiří Bošтік: *Experimental analysis of parallel tunnels*

Tomáš Svoboda: *Simulations of a NATM tunnel in a stiff clay using hypoplastic model*

Maxim Tupikov: *Prediction of deformation of surfaces and buildings due to shallow service tunnels construction*

Primož Jelušič: *Deformation analysis of LRC underground gas – storage*

Session 3: Geotechnics – Environmental Geotechnics

Marcus Fuchsschwanz: *Geotechnical aspects for the design of waste rock dumps from coal mining in Vietnam*

Jan Valenta: *Problems with highly loaded foundation slab of building situated on abandoned fly ash tail basin*

CONFERENCE ADVISORY COMMITTEE

Ivan Vaníček Vice-President ISSMGE for Europe, Conference advisor
Kamila Weiglová
Jana Frankovská Chairwoman of the Czech and Slovak Committee of ISSMGE
Věra Glisníková

CONFERENCE ORGANISING COMMITTEE

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Pavel Pospíšil
Václav Račanský
All Department of Geotechnics, Faculty of Civil Engineering, Brno University of Technology

PHOTOS



Group photo in front of building of the Faculty of Civil Engineering



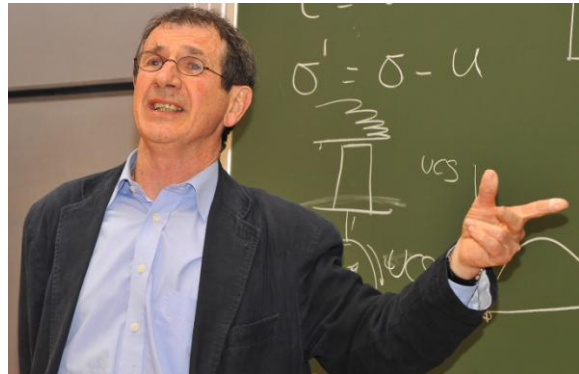
Prof. Ivan Vaníček and Prof. John Atkinson



Prof. John Atkinson and Prof. Jean-Louis Briaud



Prof. Jean-Louis Briaud during lecture



Prof. John Atkinson during lecture



General view on the lecture hall



Prof. Jean-Louis Briaud and delegates during discussion



General view on the lecture hall



Partial view on the lecture hall



Registration desk



Delegate's discussion



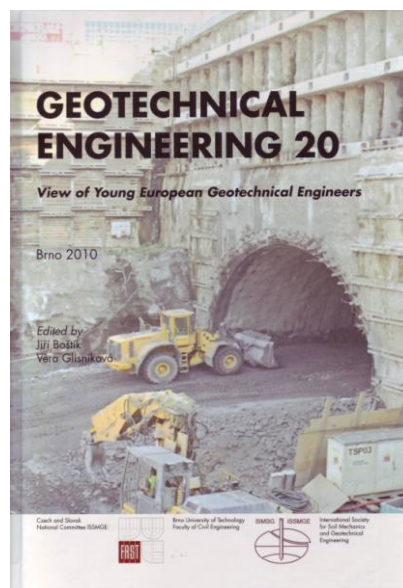
Prof. Briaud and Prof. Vaníček



Delegate's discussion during coffee break



Prof. Jean-Louis Briaud during his keynote lecture



Front page of the conference proceedings



Delegate's presentation



Dinner with live dulcimer music on Monday



Walk round the Faculty of Civil Engineering



Technical excursion



Technical excursion