

**THE AUSTRIAN SOCIETY
FOR GEOMECHANICS**

is honoured to invite you to the

59th Geomechanics Colloquy

on the 7th and 8th of October 2010

at the
Congress Centre „Salzburg Congress“,
Auerspergstrasse 6, Salzburg, Austria

Session Topics

Effects of Fluctuation of Ground Water Table

Interaction between Ground and TBM

Swelling Ground

Geothermal Energy

Previous to the colloquy the

7th Austrian Tunnel Day

is scheduled on the

6th of October, 2010

to which the Austrian Society for Geomechanics
would like to invite you cordially (see folder
attached).

Contact address:

Austrian Society for Geomechanics

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Agenda:

Thursday, 7th of October, 2010
08:30 a.m. Welcome by

W. SCHUBERT
President of the Austrian Society for
Geomechanics

08:45 a.m.

Leopold Müller Award

09:30 a.m. – 10:00 a.m. Coffee Break

Thursday, Oct. 7, 2010
10:00 a.m.

Effects of ground water table fluctuation

Chair

G. ZENZ	TU Graz, Inst. of Hydraulic Engineering and Water Resources Management
S. KIEFFER	TU Graz, Inst. of Applied Geosciences

Gotthard Base Tunnel - Tunnelling in the influence zone of two concrete arch dams

R. BREMEN	Lombardi, Minusio (CH)
H. EHRBAR	AlpTransit, Luzern (CH)
B. OTTO	Axpo, Baden (CH)

Behaviour of Kops arch dam during tunnel excavation

E. NETZER	Vorarlb. Illwerke
E. PÜRER	Vorarlb. Illwerke, Schruns (A)

Considerations of the crack water table and its fluctuation in pressure tunnel design and construction

A. VIGL Vigl Consult, Schruns (A)
R. GERSTNER Vorarlb. Illwerke, Schruns (A)

Groundwater resources and the design and construction of deep tunnels in rock

S. J. KLEIN Jacobs, San Francisco
 (CA, USA)
J. WAGGONER Jacobs, Pasadena (CA, USA)
T. HIBNER Metropolitan Water District,
 Los Angeles (CA, USA)

Landslides 2009 in Styria

R. HORNICH Gov. Styria
R. ADELWÖHRER Gov. Styria, Graz (A)

Gmünd reservoir - Graseggerslope stabilization

A. BLAUHUT Verbund AHP
A. LEOBACHER Verbund AHP, Vienna (A)

Ermenek HPP - Groundwatertable development during impounding

J. LINORTNER Pöyry Energy, Ankara (A)
R. KOHLER Pöyry Energy, Salzburg (A)
G. JUNG Pöyry Infra, Vienna (A)
S. GÜVEN Pöyry Energy, Ermenek (TR)

12:30 p.m. Lunch Break

Thursday, Oct. 7, 2010
02:00 p.m.

Interaction between ground and TBM

Chair

H. KÖHLER Porr, Vienna, (A)
J. HERDINA ÖBB, Innsbruck (A)

13m TBM-S without active support at the limit of use at the Tunnelkette Perschling

D. BACH IGT, Salzburg (A)
M. KÖPF STRABAG, Vienna (A)
J. LEMMERER ÖBB, Vienna (A)
N. SALCHER Viglconsult, Schruns, (A)

Interaction between ground, closed shield TBM and segmental lining system

A. GÖBL Porr, Vienna (A)

Tapovan – Vishnugad Hydroelectric Power Plant – Experiences with TBM excavation under high rock cover

J. BRANDL Geoconsult, Wals (A)
V.K. GUPTA NTPC Limited, Noida (IN)
B. MILLEN Geoconsult, Wals (A)

16:15 p.m. – 16:40 p.m. Coffee Break

Interaction between ground and TBM analyzed by machine data and rock mass parameters

R. POISEL TU Vienna, (A)
E. TENTSCHERT
A. PREH
V. OSTERMANN
W. CHWANTAL
A. ZETTLER Zconsult, Villach (A)

Exploration Tunnel Aicha-Mauls at Brenner Base Tunnel – Working progress and results

H. QUICK	QUICK Ing., Darmstadt (D)
E. FACCHIN	BBT, Bolzano (I)
K. BERGMEISTER	BBT, Innsbruck (A)
M. JOACHIM	Quick Ing., Darmstadt (D)

Using geomechanical calculations as a basis for assessing the interaction between TBM and rock mass

K. KEIPER	Lombardi, Minusio (CH)
R. CRAPP	
F. AMBERG	

**Thursday, Oct. 7, 2010
08:00 p.m.**

Camber Concert

The Province and City of Salzburg invite the participants and the accompanying persons to a chamber concert in the **GROSSE AULA der UNIVERSITÄT SALZBURG** – grand auditorium of Salzburg University – (**Kapitelgasse 4-6**). in the evening of Thursday the 8th of October, 2009

Congress Dinner

After the concert, the Austrian Society for Geomechanics invites all participants of the congress and accompanying persons to a wine tavern “Bräugasthof Sternbräu” in order to freely exchange thoughts with friends and gain new friends.

Friday, Oct. 8, 2010
08:30 a.m.

Tunnelling in swelling ground

Chair

A. LEITNER IGT, Salzburg (A)
H. EINSTEIN MIT, Cambridge, (USA)

Approaches to technical solutions for tunnelling in swelling ground

D. KIRSCHKE Ing.-Büro für Tunnelbau,
Ettlingen (D)

Tunnelling in swelling rock - a solved problem?

A. ZETTLER zconsult, Villach (A)
R. POISEL TU Vienna (A)
A. PREH
H. KONIETZKY TU Bergak. Freiberg (D)

Swelling of sulfatic claystones - some fundamental questions and their practical relevance

G. ANAGNOSTOU ETH Zürich (CH)

10:30 a.m. – 11:00 a.m. Coffee Break

Repair of the heaved section in the Chienbergtunnel using yielding supports

F. CHIAVERIO Aegerter & Bosshardt AG,
Basel (CH)
A. TUTH Solexperts, Möchaldorf (CH)

Brittle fracture in weak rock as trigger of swelling behavior: Qualitative evidence and analyses.

W. STEINER B&S AG, Bern (CH)
P. KAISER CEMI, Sudbury, Ontario (CA)
G. SPAUN Müller&Hereth, Freilassing (D)

A9 Bosrucktunnel - design approaches for swelling rock

F. LENZ	ASFINAG, Liezen (A)
T. MARCHER	PGB ILF, Rum (A)
T. NEUMAYR	PGB IL, Salzburg (A)

12:30 p.m. Lunch Break

For excellent doctoral thesis with practical relevance in the area of rock mechanics and geological engineering the Austrian Society for Geomechanics awards annually the

LEOPOLD-MÜLLER-AWARD

The Austrian Society for Geomechanics invites to submit doctoral theses that apply a holistic approach - in the spirit of Leopold Müller – to geomechanics and geology and that corresponds to the objectives of the Austrian Society for Geomechanics – accompanied by a short evaluation of the thesis by the university institute in question.

Submissions should be submitted latest by the end of January 2011 to

the Austrian Society for Geomechanics,
Bayerhamerstr 14, 5020 Salzburg, Austria (Europe)

Further information regarding the Leopold Müller Award can be retrieved from our homepage: www.oegg.at

The

60th Geomechanics Colloquy 2011

will take place on the

13th and 14th of October, 2011

in Salzburg.

The themes of this congress you may retrieve from our homepage www.oegg.at or, respectively, they are added to the conference materials of the 59th Geomechanics Colloquy.

Friday Oct. 8, 2010
02:00 p.m.

Geothermal Energy

Chair

W. UNTERBERGER iC Consulenter, Salzburg (A)
D. ADAM TU Vienna, Inst. f. Geotechnik (A)

The management of heat flow in deep mines

H. WAGNER Univ. of mining Leoben (A)

Geothermal prediction for planned tunnels in the Andean Mountains, Chile/Argentina

G. HÖFER-ÖLLINGER Geoconsult, Wals (A)
B. MILLEN

Geothermal energy plants at major projects - design and construction

H. HOFINGER iC Consulenter, Salzburg (A)
W. UNTERBERGER
R. MARKIEWICZ Geotech. Adam, Brunn/Geb. (A)
D. ADAM

Use of warm water from the Löttschberg Base Tunnel Switzerland

P. HUFSCHMIED ExTechNa GmbH,
Spiegel/Bern (CH)

Design and construction of the geothermal application in the Jenbach tunnel

S. FRODL Ed. Züblin AG, Stuttgart (D)
J.-N. FRANZIUS
T. BRATL ÖBB Infrastruktur AG, Vomp (A)

Deep geothermal energy plants - an interdisciplinary challenge - Shaft construction with 3D Collector heat exchanger system

CH. MUSER Ehoch10 / ste.p, Vienna (A)
H. HÄMMERLE Ehoch10/el-training, Vienna
(A)
R. GALLER Univ. of mining, Leoben (A)
W. SCHUBERT TU Graz, (A)

Excursion

Saturday, 9th of October, 2010

Bosruck Tunnel

The construction of the second tube of the Bosruck tunnel is a further step towards the completion of the A9 Pyhrn motorway with two tubes for all tunnels. The very challenging geological conditions have to be addressed not only during construction but also with regard to the long term behaviour. This is especially true for the sections situated in swelling rock, here called "Haselgebirge". The tunnel drives were started in February 2010 from both portals. After completion of the second tube, it will be used for two-way traffic while the existing tube is refurbished. This includes the stretches in swelling rock, where a full circular section will be constructed

Preliminary program

- 09.00 Departure from Salzburg
- 11.00 Arriving to south drive
- 11.15 Introduction of the Project
- 12.00 Site visit
- 13:00 Lunch
- 14:30 Departure to Salzburg
- 16:30 Estimated arrival in Salzburg

Accompanying Persons Program

Thursday, 7th of October, 2010

Bad Ischl

This year, we would like to offer the accompanying persons another cultural highlight.

Our trip takes us to Bad Ischl, which is situated in the famous Salzkammergut.

We will visit the Kaiservilla, the wedding present from the parents of Emperor Franz Josef I and his wife Elisabeth (Sissi). At the guided tour through this summer residence of the Austrian-Hungarian Monarchs, you will hear the true story about the so famous empress.

A short walk brings us to the tea house of Sissi, which houses an outstanding photo exhibition.

After a carriage-ride through the charming town of Bad Ischl, we stop at the distinguished Kaffee Zauner and make this day unforgettable.

- 08:45 Departure from Salzburg Congress to Bad Ischl
- 10:15 Guided tour through the Kaiser Villa
- 11:45 Photo museum at the tea house
- 13:00 Lunch
- 14:30 Carriage-ride through Bad Ischl
- 15:30 Coffee and cake at the famous Kaffee Zauner
- 16:30 Departure to Salzburg
- 17:30 Estimated arrival at Salzburg Congress

More Information about Bad Ischl and the Kaiservilla you find at: www.badischl.com or www.kaiservilla.at

Languages

Conference Languages will be German and English. Simultaneous translation will be provided.

Technical Exhibition

Exhibition space and facilities accompanying the conference will be available at the symposium venue. Due to the great demand, interested companies are advised to book early. For further information, please, contact the office of the Austrian Society for Geomechanics (salzburg@oegg.at)

The papers of the Salzburger Geomechanics Colloquy are published by Wilhelm Ernst & Sohn Verlag, Berlin, Germany, in the bi-monthly periodical of the Austrian Society for Geomechanics

GEOMECHANICS AND TUNNELLING

Can be ordered at

Wilhelm Ernst & Sohn Verlag für Architektur und
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Rothestr. 21, 10245 Berlin, GERMANY
Tel: ++49(0)30 47031-200, Fax: -270
info@ernst-und-sohn.de, www.ernst-und-sohn.de

For members of the Austrian Society for Geomechanics the periodical "Geomechanics and Tunnelling" is free!

A membership can be applied for at

Austrian Society for Geomechanics
Bayerhamerstr. 14, 5020 Salzburg, Austria
Tel.: ++43-(0)662-875519, Fax: ++43-(0)662-886748
or directly at the homepage: www.oegg.at

Registration and Payment:

All participants are asked to complete the attached registration form or the digital form available for download from our homepage www.oegg.at and to return it via e-mail or fax to the office of the Austrian Society for Geomechanics.

After registration, you will receive an invoice. Please, specify **by all means** the **invoice number** as well as the **name of the participant** on the money transfer voucher. The registration is only valid after payment. You are able to pay by bank transfer, cheque, or credit card. Following Credit Cards will be accepted: Visa, MasterCard, Diners Club, and JCB.

The payment has to be in Euro (€) and **“free of charge for the beneficiary“**

Registration fee covers participation in the conference, dinner at Sternbräu, and proceedings. No proceedings are handed out to students on free admission.

Your name tags (tickets) as well as the proceedings will be handed out directly at the registration desk in the congress centre.

Cancellation

Please understand that we can only accept a written cancellation. When cancelling before the 1st of October 75% of the fee will be refunded. If you are unable to attend or cancel later than the above mentioned date, no refund can be granted. The documents will be mailed at receipt of payment. We, however, gladly accept a substitute participant without demanding any additional charges.

Registration fees

Registration before the 15th of August,2010

Tunnel Day & Geomechanic Colloquy

ÖGG & ISRM members	€ 350.-
Regular participants	€ 430.-
Retiree	€ 200.-
Students/lecturer	free
<i>Congress Dinner Festung*</i>	€ 20.-

Only Geomechanics Colloquy

ÖGG & ISRM members	€ 250.-
Regular participants	€ 330.-
Retiree	€ 100.-
Students/lecturer	free

Social Program:

<i>Concert</i>	<i>free</i>
<i>Accompanying persons tour</i>	€ 75.-
<i>Excursion</i>	€ 75.-

Registration after the 15th of August, 2010

Tunnel Day & Geomechanik Kolloquium

ÖGG & ISRM members	€ 390.-
Regular participants	€ 480.-
Retiree	€ 225.-
Students/lecturer	free
<i>Congress Dinner Festung*</i>	€ 20.-

Only Geomechanics Colloquy

ÖGG & ISRM members	€ 290.-
Regular participants	€ 380.-
Retiree	€ 125.-
Students/lecturer	free

Social Program

<i>Concert</i>	<i>free</i>
<i>Accompanying persons tour</i>	€ 75.-
<i>Excursion</i>	€ 75.-

* The dinner on Oct. 6th, 2010 is only bookable for participants of the Austrian Tunnel Day