#### REGISTRATION

# Online http://www.tunnel-graz.at

	end an e-mail to Sabine MINARIK ( <u>minarik@tugraz.at</u> ) including the ing information:
NAME	E / First name:
Comp	pany / Institution:
Posta	l Address:
Phone	e (including country-code):
E-Mai	1:
O O	I am interested in this symposium and want to get more information.  I wish to present a paper / poster (abstract attached).  Please indicate your preference for either
	O oral presentation or O poster
	(Abstracts up to max. 300 words should be submitted to the symposium organisation at the <b>latest until October 31</b> <sup>St</sup> , <b>2017.)</b>
0	I want to participate in the exhibition.

# **ORGANISATION**

Mrs. Sabine MINARIK
Graz University of Technology
Institute of Internal Combustion
Engines and Thermodynamics
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Conference language: German and English Simultaneous translation in both languages

# SYMPOSIUM FEE

EURO 925,-- (Presenting authors will get a reduction of 25 %).

The fee includes proceedings, coffee and lunch during the symposium as well as a conference dinner.

For participation in the **technical visit** an additional **EURO 90,--** is charged. Due to the fact that the number of participants is limited to 70 persons, please inform us of your participation as soon as possible.





# 9<sup>th</sup> International Conference

# TUNNEL SAFETY AND VENTILATION - New Developments in Tunnel Safety -



Messecenter Graz - Tagungszentrum www.mcg.at

http://www.tunnel-graz.at

in cooperation with

Österreichisches Nationalkomitee des Welt-Straßenverbandes AIPCR/PIARC (Austrian National Committee of PIARC)



#### CONTENT

Austria has a long tradition in the construction and operation of road and rail tunnels, a field where user safety and accident response management are becoming ever more important. Building on past success, this international symposium once again offers the possibility to exchange knowledge and to gain deeper insight into the newest developments in the following fields.

The focus is put on:

- > Ventilation: design for normal and incident operation
- Risk analysis: evaluation of safety related measures / limits of ventilation systems
- > System tests for the commissioning of road and railway tunnels and recurring tests during operation
- > Operational experience of road und railway tunnels
- > Refurbishment and upgrading of tunnels under operation

The programme covers plenary lectures on June 12<sup>th</sup> and 13<sup>th</sup> as well as technical visits on June 14<sup>th</sup>, 2018.

#### **TECHNICAL VISIT**



"Zentrum am Berg". The Res@ZaB is a European centre for research, development and testing, with a focus on the construction and operation of subsurface infrastructure. A unique research facility has been built in a dedicated part of the Styrian Erzberg (an iron mine in operation since the 11th century). It comprises two parallel tubes for road traffic and another two for rail traffic.

each of about 400 m in length. These tubes lead into an existing, abandoned tunnel, which has been suitably equipped up to a length of about one kilometre. These five tubes meet in a central cavern, forming a huge tunnel complex offering numerous possibilities for research, operation and training.

This arrangement allows for investigations in novel ventilation concepts, ventilation control systems, fire-fighting technologies and many other applications under real world conditions. The existing tunnel system provides excellent conditions for testing new technology, and for endurance tests under challenging climatic conditions (changing air temperature, humidity, etc.). Access to all types of test equipment is easily available via the local rail network. Furthermore, the Res@ZaB offers unique possibilities for the training of rescue personnel and maintenance staff, as well as for training under

emergency conditions. Further information can be found at <a href="http://zab.unileoben.ac.at/">http://zab.unileoben.ac.at/</a>.

June 14<sup>th</sup> is dedicated to a detailed visit to this unique research centre. Visitors can witness fire tests and actively participate in fire-fighting training. The demonstration of novel equipment is also planned.

#### **EXHIBITION**

The conference exhibition offers a chance to meet experts and to learn about projects, new products and innovations on a high level.

With more than 1000 m<sup>2</sup> of exhibition space, located directly adjacent to the conference rooms, an optimal forum for business contacts is guaranteed.

Note: Past experience shows that demand for the exhibition areas is very high. Please contact us as soon as possible in order to reserve your booth.

#### SCIENTIFIC DIRECTOR

STURM Peter, Ao. Univ.-Prof. Dr., TU Graz, A Tel.: +43/316-873 30200

### TECHNICAL PROGRAM Res@ZaBE

GALLER Robert, Univ.-Prof. Dr., Montanuniversity Leoben

#### TECHNICAL DIRECTOR

BACHER Michael Dr., TU Graz, A Tel.: +43/316-873 30190 RODLER Johannes Dr., TU Graz, A Tel.: +43/316-873 30199

# **CALL FOR PAPERS**

Papers are invited on any of the topics outlined or which cover the general field of the symposium. Abstracts (max. 300 words) should be submitted to the symposium organisers **not later than October 31, 2017.** 

To ensure a high-quality conference, all abstracts will be reviewed by the scientific committee in terms of their technical merit and suitability for acceptance as an oral presentation at the conference. Authors are informed as soon as the committee has made its decision..

All accepted papers (English version only) will be published in the proceedings.

Conference language: German and English

Simultaneous translation in both languages

The programme will be published in March 2018 and can be viewed at http://www.tunnel-graz.at.

Details of accommodation will be published in the provisional programme.