

## Supporting Organizations

European Community on Computational Methods in Applied Sciences (ECCOMAS)  
International Association for Computational Mechanics (IACM)  
Ruhr University Bochum, Germany  
International Tunnelling And Underground Space Association (ITA - AITES)  
German Research Foundation (DFG)

## EURO:TUN 2013 Computational Methods in Tunneling and Subsurface Engineering



### Conference Office

Institute for Structural Mechanics  
Department for Civil and Environmental Engineering  
Ruhr University Bochum, Building IA 6/126  
44780 Bochum, Germany  
Tel: +49 234 32 29051  
Fax: +49 234 32 14149  
[www.eurotun2013.rub.de](http://www.eurotun2013.rub.de)

### Conference Venue

The conference will take place at Ruhr University Bochum, which is located in the midst of the Ruhr Area. The venue is easily accessible by public transport from the international airports Düsseldorf, Dortmund and Cologne Bonn.

### Social Program

An attractive social program, including a reception and a banquet, will be organized for the conference participants and accompanying persons.

### Accommodation

A sufficient number of hotel rooms has been reserved in the vicinity of the conference venue (two-star to four-star category). Some detailed information on accommodation facilities can be found on the conference website.

### Registration Fee

	Early*	Late**
ECCOMAS-Members	440	500
Non-ECCOMAS-Members	490	550
Students	250	300

\*applicable until 15.12.2012

\*\*applicable after 15.12.2012

The registration fee includes the Book of Abstracts, the Conference Proceedings, attendance to all scientific sessions, coffee breaks, lunch, the reception and the banquet.

### Important Dates

One-page abstract, deadline	15.10.2012
Notification of acceptance	30.11.2012
Full-paper submission, deadline	15.01.2013
Early registration, deadline	15.12.2012

### An ECCOMAS Thematic Conference

EURO:TUN 2013 is one of the Thematic Conferences of the European Community on Computational Methods in Applied Sciences (ECCOMAS). For further information on ECCOMAS please visit: [www.eccomas.org](http://www.eccomas.org).



### Thematic Conference

# EURO:TUN 2013

III International Conference on

## Computational Methods in Tunneling and Subsurface Engineering

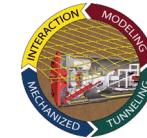
2013 April 17<sup>th</sup> - 19<sup>th</sup>, Bochum, Germany

An IACM Special Interest Conference



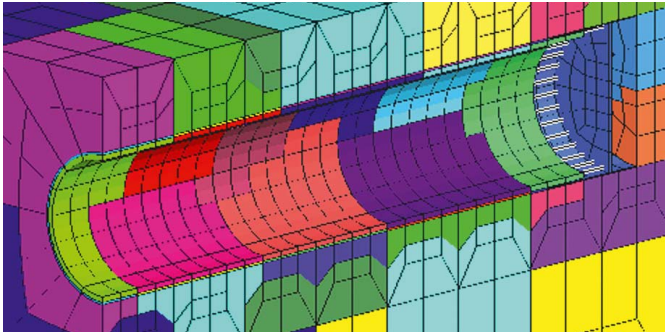
[www.eurotun2013.rub.de](http://www.eurotun2013.rub.de)

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## Conference Objectives

Computational models and methods, together with advanced exploration and monitoring techniques are, by now, established tools in underground engineering. While numerical methods are nowadays regularly applied in the design, construction and maintenance of underground structures, thus evolving from a pure research state to a vivid and practically used technology of highly innovative potential, the conference aims to discuss the latest advances and challenges connected with computational prognosis models and methods to generate safe, economic and environmentally friendly solutions in subsurface engineering and tunneling.

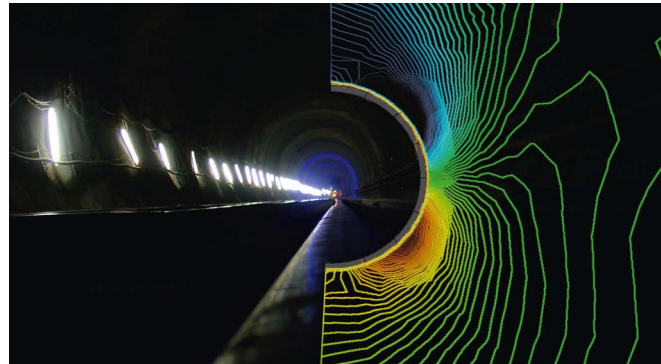
**EURO:TUN 2013** is the third conference of a series of successful conferences started in 2007 in Vienna. **EURO:TUN 2013** expands the range of topics from the specific area of simulation models for tunneling towards computational models and methods for related areas of subsurface engineering such as mining, caverns and subsurface storage facilities. Like the previous conferences, **EURO:TUN 2013** aims to provide a forum for the discussion, assessment and review of latest advancements in research, new developments and applications of computational models and methods in tunneling and subsurface engineering. Furthermore it will provide an overview of the current state of the research and future perspectives of numerical modeling and computational technologies in underground construction.

## Conference Topics

**EURO:TUN 2013** will be concerned with latest advances in numerical models and computational methods and application concepts for the design, construction and maintenance of tunnels and underground facilities.

Topics to be addressed include:

- spatial and temporal discretization strategies for static and dynamic numerical analyses at various scales (finite element, boundary element, particle finite element, discrete element methods, mesh-free and hybrid methods)
- advanced (multi-phase, multi-scale) constitutive models for geological materials and materials used for supporting measures
- model identification and sensitivity analysis
- computer aided process control
- computational methods in ground exploration
- computational life cycle management, life time assessment, smart tunnels and embedded monitoring
- logistics modeling and data management
- soft computing, visualization, data mining and expert systems
- uncertainty modeling and risk analysis
- other related topics



## Call for Papers

Prospective authors are kindly invited to submit a one-page abstract related to the conference topics electronically through the conference website by October 15, 2012.

Instructions for preparing full-length papers will be provided with the notification of acceptance of the contribution.

## Exhibition

Companies and/or publishers are kindly invited to exhibit their products and services. Interested exhibitors can find all necessary information on the conference website.

## Conference Chairman

- G. Meschke** Ruhr University Bochum, Germany  
**J. Eberhardsteiner** Vienna University of Technology, Austria  
**T. Schanz** Ruhr University Bochum, Germany  
**K. Soga** University of Cambridge, United Kingdom  
**M. Thewes** Ruhr University Bochum, Germany

## Local Organization Committee

- T. Barciaga** Ruhr University Bochum, Germany  
**J. Stascheit** Ruhr University Bochum, Germany  
**G. Vollmann** Ruhr University Bochum, Germany

## Scientific Advisory Committee

- G. Anagnostou** Federal Institute of Technology Zurich, Switzerland  
**A. Bezuijen** Ghent University, Belgium  
**R. Borja** Stanford University, USA  
**H. Einstein** Massachusetts Institute of Technology, USA  
**G. Exadaktylos** Technical University of Crete, Greece  
**A. Gens** Universitat Politècnica de Catalunya, Spain  
**H. Huang** Tongji University, China  
**H. Konietzky** TU Bergakademie Freiberg, Germany  
**H. A. Mang** Vienna University of Technology, Austria  
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**P. Vermeer** University of Stuttgart, Germany  
**A. Whittle** Massachusetts Institute of Technology, USA  
**W. Yuan** Tongji University, China  
**J. Zhao** École Polytechnique Fédérale de Lausanne, Switzerland