

RUHR UNIVERSITY BOCHUM

RESEARCH DEPARTMENT

**Subsurface Modeling & Engineering**

**RUB**

WORKSHOP:

# **BOCHUM UNDERGROUND SPACE DAY 2017 – Subsurface & Energy**

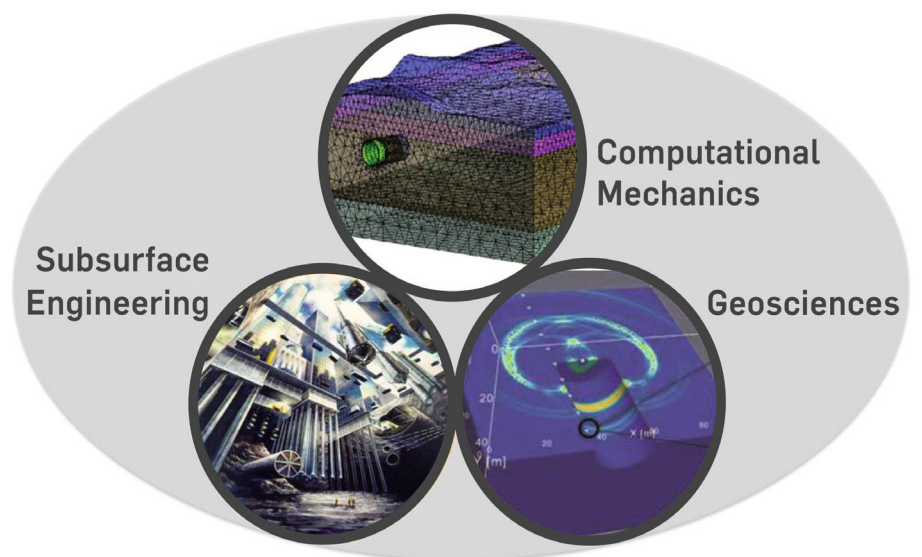
OCTOBER 25<sup>TH</sup> 2017

**RUHR UNIVERSITY BOCHUM, IC 03 / 604**  
Universitätsstraße 150, 44801 Bochum

The “**Bochum Underground Space Day**” is organized by the Research Department Subsurface Modeling and Engineering (RD SME) at Ruhr University Bochum as an annual workshop to exchange results of pertinent research and to foster cooperation within the RD as well as with external research institutions and companies.

This year the workshop will be devoted to the general topic “**Sub-surface and Energy**”. It starts with a invited keynote lecture by Prof. Lyesse Laloui, EPFL Lausanne followed by presentations from members of the RD and external institutions. During lunch break there will be a poster session open for all members of the RD to share their recent research.

After the workshop, a General Assembly of the RD SME will be held.



## **WORKSHOP PROGRAM – OCTOBER 25<sup>TH</sup> 2017 – 10:00 - 14:40**

**10:00** *Welcome*

**10:05 GEOMECHANICAL SOLUTIONS FOR GEO-ENERGY ISSUES**

*Prof. Lyesse Laloui* Swiss Federal Institute of Technology, École polytechnique fédérale de Lausanne, Switzerland

**10:40 COOPERATIVE RESEARCH IN SHYNERGIE AND AGES**

*Prof. Jörg Renner* Experimental Geophysics, Ruhr University Bochum

**11:15 MODELLING CONCEPT OF SEASONAL HEAT STORAGE IN FLOODED COAL MINES:  
CALCULATION AND VISUALIZATION OF COUPLED DENSITY AND VISCOSITY DEPENDENT FLOW**

*Dr. Christoph König* delta h Ingenieurgesellschaft mbH

**11:35 MODERN CHALLENGES OF UNDERGROUND ENERGY STORAGES**

*Dr. Tobias Rudolph* Uniper Energy Storage GmbH

**11:55** *Buffet with Poster Presentations*

**13:10 DER TUNNEL ALS WÄRMELIEFERANT / THE TUNNEL AS HEAT SUPPLIER**

*Dipl.-Ing. Wolf Friedemann* Züblin - Tunnelbau Stuttgart (TUB-S)

**13:30 PROCESS UNDERSTANDING OF REACTIVE MULTIPHASE FLOW SYSTEMS IN SALT DEPOSTS (PROSALZ)**

*Dr. Rüdiger Giese* Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences

**13:50 RESEARCH AT GEOTHERMAL SITE HORSTBERG WITH FOCUS ON GEOMECHANICS**

*Dr. Alireza Hassanzadegan* Federal Institute for Geosciences and Natural Resources

**14:10** *Break*

**14:40 GENERAL ASSEMBLY OF THE RD SME**

*For members of the RD SME: Discussion on future research cooperations*