

## INVITATION to the DRAGON Demonstration Event in Leoben (Austria)

Dear Madam or Sir,

the DRAGON consortium cordially invites you to participate in the **DRAGON Demonstration Event** in Leoben on September 3<sup>rd</sup>, 2015.

DRAGON (Development of Resource-efficient and Advanced Underground Technologies) is a EU-funded project and aims at achieving resource efficiency in tunnelling by developing a prototype system for the automated analysis and recycling of excavated materials.

The DRAGON Demonstration Event will offer you the opportunity to experience the functionalities of this technologies and to learn more about current issues related to the utilization of tunnel excavation material. Participants will be encouraged to discuss and to share the opinions in respect to the future fields of application and to further steps to be taken in respect to resource-efficient tunnelling.

Within the event you will be provided with valuable information including:

- **Basic introduction of the DRAGON project**
- **Main results of the DRAGON project**
  - Excavation Materials: From legislation to industry requirements
  - Online material analysis, classification and in-stream sorting of excavated TBM material – Prototype
  - MineralBay - Marketing of Tunnel Excavation Material as a Resource for the Industry
  - Assessing the Environmental Benefits of DRAGON technology
  - Results of a Market Study
  - Current legal status
- **Discussions within the presenters, participants and industry experts**

We are looking forward to welcoming you at the DRAGON Demonstration Event on September 3<sup>rd</sup>, 2015.

Yours sincerely,

The DRAGON Consortium

### Date and Venue

*September 3<sup>rd</sup>, 2015*

**Montanuniversität Leoben**  
**IZW building – 4<sup>th</sup> floor**  
**Roseggerstraße 12**  
**8700 Leoben**  
**Austria**

[www.dragonproject.eu](http://www.dragonproject.eu)

### The Challenge

Future tunnelling projects in Europe are expected to generate around 800 million tonnes of excavated material. Currently, this excavation material is usually disposed of in landfills. The EU-funded **DRAGON project** was launched in 2012 and sets out to solve this challenge by developing a prototype **system of automated analysis and processing units to encourage the use of excavated material**. The DRAGON system is **directly integrated into the tunnel boring machine (TBM)** and provides the basis for assessing the suitability of the excavated material for different end-use options.



# DRAGON Demonstration Event in Leoben (Austria)

## AGENDA

Time	Topic
09:00	Registration
09:30	<b>Welcome and basic introduction of the DRAGON project</b> <i>Robert Galler (Montanuniversität Leoben)</i>
10:00	<b>Excavation Materials: From legislation to industry requirements</b> <i>Cedric Thalmann (B+G Betontechnologie + Materialbewirtschaftung AG)</i>
10:30	<b>Characterization of tunnel excavation material: Case studies of end-user requirements</b> <i>Jacques Burdin (Jacques Burdin Ingenieur Conseil)</i>
11:00	Coffee break
11:30	<b>Online material analysis, classification and in-stream sorting of excavated TBM material – DRAGON Prototype</b> <i>Thomas Edelmann, Christian Himmelsbach (Herrenknecht AG)</i>
12:00	<b>Determination of rock strength: Disc Cutter Load Measurement</b> <i>Stefan Barwart, Robert Galler (Montanuniversität Leoben)</i>
12:30	Lunch break
13:30	<b>Assessing the Environmental Benefits of DRAGON technology</b> <i>Peter Shonfield (PE International)</i>
14:00	<b>MineralBay – Database for Tunnel Excavation Material as a Resource for the Industry</b> <i>Hartmut Erben (Montanuniversität Leoben)</i>
14:30	<b>Utilization of Tunnel Excavation Materials – Results of a Market Study</b> <i>Peter Kremnitzer (PORR AG)</i>
15:00	<b>Utilization of Tunnel Excavation Material – Current legal status</b> <i>Roland Starke (BMLFUW)</i>
15:30	Coffee break
16:00	<b>Demonstration of DRAGON technologies in the laboratory</b>
18:00	Closure of the Demonstration Event

### Date and Venue

September 3<sup>rd</sup>, 2015

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8700 Leoben  
Austria

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### Contact Details

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### Registration

Please register via an informal mail to  
[nicole.wohltran@unileoben.ac.at](mailto:nicole.wohltran@unileoben.ac.at)