

Grimsel Training Centre

In-situ Testing and Hydraulic Characterisation in URL

Date: 9 to 14 September 2019

Duration: 6 days, with general lecture hours from 08:00 to 16:00

Location: Nagra's Grimsel Test Site near Guttannen, Canton Berne, Switzerland
(www.grimsel.com)

Nagra offers a 6-day workshop at the Grimsel Test Site on in-situ rock characterisation in underground rock laboratories (URLs). The participants will get hands-on experience on URL field research methods such as handling drill cores, borehole fluid logging and hydraulic testing. The testing will be done in existing boreholes in low permeable and fractured rock.

The course aims to impart both theoretical and practical knowledge. The acquired skills shall help the participants in planning, tendering and carrying out field experiments in URLs. To a certain degree, the imparted topics are translatable to site investigations in general.

Theoretical blocks and related field work will alternate in short intervals. The daily activities will be structured as follows:

1. Short lecture on theory of methods to be applied during the day.
2. Field work using specialised equipment. Acquire high quality field data.
3. Instruction on how to analyse the acquired test data.
4. Analysis of results (individually or in small groups).
5. Discussion of results (all).

Daily transfer to the Grimsel Test Site

Daily transport from a Hotel near the site to the GTS is organised by Nagra and included in the course fee.

Cost

CHF 3,500.00 (excl. travel, accommodation and VAT). We are happy to support or organise appropriate accommodation or local transportation.

Requirements

Participants shall bring their own laptop.

Registration

The expected number of participants is between 8 and 12. Deadline for registration is May 31st, 2019.

Programme:

Day 1	Introduction and theory of hydraulic investigations
Day 2	Borehole characterization methods. Drill core analysis and documentation. Borehole fluid logging
Day 3	Hydraulic testing using packer systems and test interpretation
Day 4	Hydraulic testing using packer systems and test interpretation
Day 5	Hydraulic test evaluation, synthesis of results, comparison of methods
Day 6	Use of investigation data and development of conceptual models



Analysis of drill cores, preparing core pictures for transfer to WellCAD



Hydraulic testing using double packer system and borehole geophysical logging.



Hydraulic double packer tests in the 197 m deep ADUS Borehole

Registration Form

GTC 2019 - In-situ Testing and Hydraulic Characterisation in URL course

I would like to participate.

Title	
Surname	
First name(s)	
Profession	
Function	
Organisation	
Complete Address	
Nationality	
Date of birth	
Phone (mobile)	
E-mail	
Motivation/Expectations (brief outline)	

Hereby I confirm if participation is cancelled less than two weeks before the course starts, I accept to pay 30% of the course fee.

Date:

Signature:

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Please submit your registration no later than **31st May 2019** to
Ms. Andrea Wettstein – De Marco (andrea.wettstein@nagra.ch).