

Rock Dynamics Workshop 2009, Lausanne

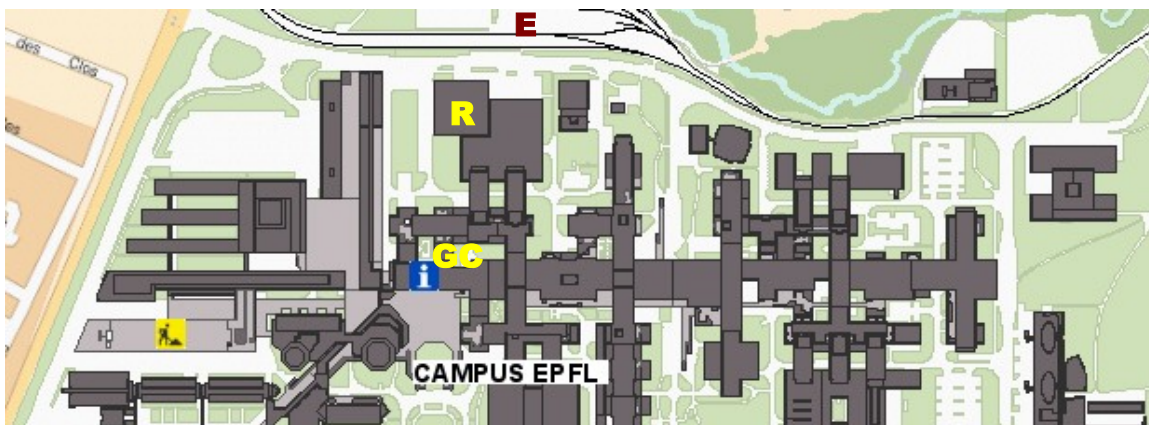
Date: 17-19 June 2009
Location: Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland
Organisation: ISRM Commission on Rock Dynamics (ISRM-CRD) and EPFL Laboratory for Mechanics of Rocks (EPFL-LMR)
Convenor: Yingxin Zhou, President of ISRM-CRD

2009.06.16 - Arrive in Lausanne
2009.06.17 - Workshop sessions
2009.06.18 - Workshop sessions
2009.06.19 - Visit VSH, Hagerbach underground test gallery

Visa: Please check if you need visa to enter Switzerland. Switzerland is part of the Schengen zone. If you need a visa, send your name, passport number, date of birth to Jian Zhao (jian.zhao@epfl.ch) and a visa support letter will be sent to you. Please note the time needed to get the visa.

Arrival: Airport for Lausanne is the Geneva airport. You may also land at Zurich airport. At both airports, you can take trains direct come to Lausanne (30 minutes from Geneva and 2.5 hours from Zurich). Hotel suggested (Hotel Alpha-Palmiers, marked A) is within 150 m of walking from Lausanne train station (marked S).

Come to EPFL: The Metro station (Flon, marked M) is about 200 m from Hotel Alpha-Palmiers (marked A). Take the train toward Renens and get off at EPFL station (marked E). Across the track and road (do not go underpass), you will see the Rock Mechanics Hall (Halle de Roches, marked R) right in front you, follow the sign and you will come to the right building. If you lose your way, ask for GC building (marked GC).



Contact in Lausanne: Jian Zhao, jian.zhao@epfl.ch, +41 21 6932321(T), 6934153(F)

Introduction

Many activities in rock mechanics and rock engineering involve the application of rock dynamics. Some examples include rock blasting, protective design (military applications), rock bursts, and seismic design against earthquakes. Understanding the effects of dynamic loading on rock and rock structures (rock tunnels and caverns with their associated reinforcement and support) is essential in dealing with the various rock dynamics problems in engineering design. However, guidance and standards in dynamic testing and design are generally lacking, and much of the research work done on rock dynamics for military purposes has not been easily available to the general public. It is against this background that the ISRM Commission on Rock Dynamics was established in January 2008.

Objectives and Scope

The Rock Dynamics Workshop aims to bring together leading researchers and practitioners to share and exchange knowledge and experience in rock dynamics research and its application to rock engineering design.

Specifically, the scope of the workshop will cover the following:

- Characterisation of dynamic loading sources (e.g. explosions, rock bursts, and earthquakes).
- Rock dynamic properties and their determination
- Propagation of dynamic stress waves in geological media
- Rock damage criteria and damage assessment
- Dynamic rock support design
- Numerical modelling

Programme

The workshop will feature presentations on the state of the art in research and engineering practice and provide ample time for discussion. In addition, members of the commission will present updates on work carried out so far covering the following sub-areas:

- Literature review
- Compilation of rock dynamic properties
- Preparation of suggested methods for rock dynamics testing
- Numerical modelling

Invitation

Interested parties are invited to contact Dr Yingxin ZHOU via email: zyingxin@dsta.gov.sg.