

Venue

Symposium Hall: **Royton Sapporo, Hotel and Convention Center**

Royton Sapporo is located in the heart of Sapporo City. It is conveniently accessible from New Chitose Airport. It takes about 40 minutes to Sapporo City by the Rapid Airport Express Railway.

There are several direct flights from Eastern Asian countries to New Chitose Airport. And, it takes about 90 minutes from Tokyo area airports.



Access to Sapporo



Sapporo - Modern and Beautiful City -

Sapporo is the capital of Hokkaido Island. It is the center of the politics, the economy, and the culture of Northern Japan; it has a population of 1.9 million. The transportation system is well-developed for easy access to any place in the city. The city is proud of the harmony it has attained between nature and modern urban facilities. There are many nice restaurants providing Japanese, Asian, and European cuisines, as well as many places for shopping and sightseeing. Just outside of the city, you will find natural forests, mountains, beautiful lakes and the seaside. Sapporo is one of the most popular cities for tourists in Japan.

www.rocknet-japan.org/ARMS8/

July 12, 2013

Bulletin No. 2



Call for Papers

2014 ISRM International Symposium

ARMS 8

8th Asian Rock Mechanics Symposium

Rock Mechanics for Global Issues

– Natural Disasters, Environment and Energy –

14 – 16 October 2014
Sapporo, JAPAN

Organized by
Japanese Committee for Rock Mechanics

Co-sponsored by
Japan Society of Civil Engineers
The Japanese Geotechnical Society
The Mining and Materials Processing Institute of Japan
The Society of Materials Science, Japan



Hokkaido University Campus

Invitation

The Japanese Committee for Rock Mechanics (JCRM) - Japan National Group of ISRM - is pleased to extend an invitation to you to the 8th Asian Rock Mechanics Symposium "ARMS8", the 2014 ISRM International Symposium. The symposium will be held on 14-16 October, 2014 in Sapporo, a modern and beautiful city in Hokkaido, the northern island of Japan. The theme of the symposium is 'Rock Mechanics for Global Issues - Natural Disasters, Environment and Energy - '. The goal is to respond to those issues and to promote the exchange of knowledge and experiences in various areas of the rock mechanics and rock engineering. On behalf of JCRM, we invite all of you to join ARMS8 in Sapporo.

Prof. Norikazu Shimizu, Chairman of the Organizing Committee
Prof. Katsuhiko Kaneko, Chairman of the Scientific Committee



Prof. Shimizu



Prof. Kaneko

Symposium Topics

❑ Mitigation of Geo-hazards

Earthquakes and Rock Dynamics, Risk and Hazard Management, Disaster Mitigation, Slope Stability

❑ Environmental Issues

Global Warming, Carbon Dioxide Capture and Storage, Radioactive Waste Disposal, Coupled Phenomena, Environmental Aspects of Mining and Construction Engineering

❑ Energy Resources

Mining Engineering, Petroleum Engineering, Geothermal Power Generation, Reservoir Engineering

❑ New Technologies and Fundamental Aspects

Rock Properties, Site Characterization and Design, Geophysical Prospecting and Testing Methods, Tunnels and Underground Spaces, Rock Mechanics at Great Depth, Maintenance and Life Cycle Costs, Field Measurements and Back Analysis

Previous ARMS

The 1st ARMS was held in Seoul, Korea in 1997, the 2nd in Beijing, China in 2001, the 3rd in Kyoto, Japan in 2004, the 4th in Singapore in 2006, the 5th in Tehran, Iran in 2008, the 6th in New Delhi, India in 2010, and the 7th in Seoul, Korea in 2012.

Abstract Submission

Prospective authors are kindly asked to submit an abstract related to one of the proposed symposium topics to participate in the symposium. The abstracts should be written in English and should clearly explain the contents of the studies discussed. Specifically, it is strongly recommended that the abstracts state:

- the objective of the study
- the results obtained in the study and their significance
- the advancement over previous studies or novelties

Previously published results will not be accepted.

The length of the abstracts should be around 300 words.

The abstracts should include:

- the title of the paper
- the name(s) and affiliation(s) of the author(s)
- the e-mail address of the corresponding author
- the assignment of the abstract to one of the symposium topics
- 4-5 keywords

The abstracts should be prepared in PDF format and uploaded on the following symposium website:

<http://www.rocknet-japan.org/ARMS8/>

Submitted abstracts will be reviewed by two reviewers who are experts in the fields covered by the abstracts.

Language

The official language of this symposium is English.

Important Dates

Abstract Submission Deadline: **31 December 2013**

Notification of Abstract Acceptance: **31 January 2014**

Full Paper Submission Deadline: **30 June 2014**

Notification of Full Paper Acceptance: **31 July 2014**

Keynote Lectures

Prof. Xia-Ting Feng (ISRM President, The Chinese Academy of Sciences)

- Tunneling and underground construction in China-challenges and progress –

Mr. Rolf Christiansson (Swedish Nuclear Fuel and Waste Management Co., Sweden)

- Environmental impact of nuclear waste management
- Concerns from intermediate storage to final disposal –

Prof. Derek Elsworth (Pennsylvania State University, USA)

- Stimulation and fluid displacement in unconventional reservoirs using liquids and gases –

Prof. Seokwon Jeon (Seoul National University, Korea)

- Performance assessment of a rock cutting tool –

Prof. Toshifumi Matsuoka (Kyoto University, Japan)

- Contributions of rock physics to carbon dioxide capture and sequestration –

Prof. Surya Parkash (National Institute of Disaster Management, India)

- Geohazards risk management in India –

Prof. Ernesto Villaescusa (The Curtin University of Technology, Australia)

- Research in ground support technology for deep underground excavations –

2014 ISRM Lecture and Rocha Medal Lecture will be announced in September 2013.



Prof. Feng



Mr. Christiansson



Prof. Elsworth



Prof. Jeon



Prof. Matsuoka



Prof. Parkash



Prof. Villaescusa

Workshops and Short Courses

Several workshops and short courses will be held in collaboration with the ISRM commissions and in connection to the symposium. All programs will be updated on the ARMS8 website.

Short Course on Block Theory, DDA, and NMM organized by the ISRM Commission on DDA

- Coordinators: Dr. Genhua Shi, DDA Company, USA and Prof. Guowei Ma, The University of Western Australia

Unconventional THMC Processes organized by the ISRM commission on Coupled THMC

Processes in Geological Materials and Systems

- Coordinator: Prof. Jishan Liu, The University of Western Australia

Rock Engineering and Environment

- Coordinator: Prof. Toshifumi Igarashi, Hokkaido University (to be extended)

Technical Tours

The following technical tours are being planned for October 17 (and October 18), 2014, depending on the expected number of participants:

Technical Tour A

The Horonobe Underground Research Center and road tunnel sites under heavy metal-rich volcanic rock

Technical Tour B

A pure pumped-storage hydro-electric power plant (the under-construction Kyogoku Power Plant)

Technical Tour C

The Toya Caldera and Usu Volcano Global Geopark (the inspection of a crater and the damage situation of an active volcano which erupted in 2000)

Technical Tour D

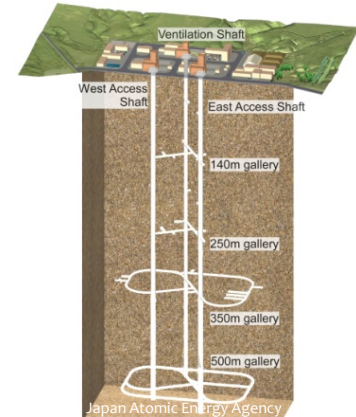
Rock cliff along a national highway and tunneling work in the Shakotan Peninsula of western Hokkaido

Technical Tour E

Rock slopes and columnar-joint rocks around Sounkyo Hot Spring

Technical Tour F

The Seikan Tunnel (the longest undersea tunnel in the world) and tunneling work for the Hokkaido Shinkansen (Bullet Train)



The layout of galleries may be changed depending on the results of future investigations.
Horonobe Underground Research Center, JAEA



Hokkaido Electric Power Co., Inc.



Kyogoku Power Plant, HEPCO

Students' Night

This event is being organized to encourage the active participation of young members in the community of rock mechanics, rock engineering and various related fields, and to establishment of a network among them. In this event, a sightseeing tour of Sapporo City and a Hokkaido style BBQ party will be conducted. Pre-registration will be required even though this event is free-of-charge.

Exhibition and Sponsors

Companies who would like to set up an exhibition at ARMS8 are asked to contact the organizer.

Program at a Glance

	12 (Sun)	13 (Mon)	14 (Tue)	15 (Wed)	16 (Thu)	17 (Fri) (& 18 (Sat))
Morning	ISRM Board Meeting Workshops Short Courses	ISRM Commission Meetings Workshops Short Courses	Symposium Opening Sessions	Symposium Sessions	Symposium Sessions	Technical Tours
Afternoon	ISRM Board Meeting Workshops Short Courses	ISRM Council Meetings Workshops Short Courses	Symposium Sessions	Symposium Sessions	Symposium Sessions Closing	
Evening		Welcome Reception	Students' Night	Banquet		

Awards

The ARMS Outstanding Paper Award and the Young Scientist & Engineer Award will be selected from the papers presented during the symposium.

Scholarships

Scholarships for students and young scholars will be provided for selected applicants. Please visit the symposium website for details.

Registration Fees

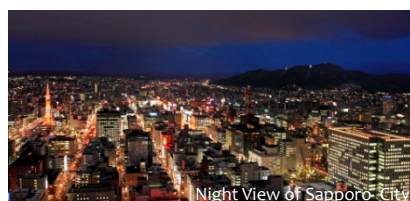
ISRM member: 50,000JPY
 Non-member: 65,000JPY
 Student: 20,000JPY
 Accompanying person 10,000JPY

VISA and Invitation Letters

Invitation letters will be available upon request.
 Please visit the symposium website:
www.rocknet-japan.org/ARMS8/

Contact Information

Dr. Kiyoshi Kishida, Secretary General
 E-mail: arms8@rocknet-japan.org
 URL: <http://www.rocknet-japan.org/ARMS8/>



Organizing Committee

Norikazu Shimizu, Yamaguchi University, Chairman of the Organizing Committee
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Hokkaido District Transport Bureau
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