International Workshop for the Iron-Bentonite Interaction

November 18-19, 2008, Kanazawa, Japan

Outline

The purpose of the workshop is to discuss the alteration processes of bentonite with iron by means of experimental, theoretical and natural analogue approaches. The workshop also focuses on the behavior and performance of altered bentonite in the disposal environment. The symposium will both encourage international cooperation in the field.

Hosted by:

Institute of Nature and Environmental Technology, Kanazawa University Laboratory of Environmental Geology, Graduate School of Engineering, Hokkaido University Laboratory of Nuclear and Environmental Materials, Graduate School of Engineering, Hokkaido University

Schedule:

November 18: Arrival at Kanazawa, registration November 19: Oral presentations, banquet

Venue

Lecture Hall, Kanazawa University, Kakuma, Kanazawa 920-1192, Japan

Contact person

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Organizing Committee:

Fukushi, K. (Institute of Nature and Environmental Technology, Kanazawa University, Japan)
Kozaki, T. (Graduate School of Engineering, Hokkaido University, Japan)
Sato, T. (Graduate School of Engineering, Hokkaido University, Japan)
Endo, N. (Department of Earth Sciences, Kanazawa University, Japan)
Hasebe, N. (Institute of Nature and Environmental Technology, Kanazawa University, Japan)
Morishita, T. (Frontier Science Organization, Kanazawa University, Japan)

Program

10:00 Opening

- Chair Keisuke Fukushi (Kanazawa University)
- 10:10 Satoru Suzuki (Nuclear Waste Management Organization (NUMO) of Japan)"The long-term behavior of bentonite as a promising candidate of the buffer material"
- 10:50 Tamotsu Kozaki (Hokkaido University, Japan) "Effect of exchangeable cations on performance of bentonite buffer"
- 11:30 L. R. Van Loon (Invited, Paul Scherrer Institut, Switzerland)"The Effect of Exchangeable Cations and Pore Water Chemistry on the Diffusion of Radionuclides in Compacted Bentonite"

Lunch

- Chair Kozaki Tamotsu (Hokkaido University)
- 13:10 Andreas Bauer (Invited, Forschungszentrum Karlsruhe GmbH, Germany)"Is Plutonium diffusion in Opalinus Claystone possible?"
- 13:50 Eric Gaucher (Invited, BRGM, France)"Modelling dual alteration of a bentonite plug by iron corrosion and concrete interaction"
- 14:30 Hiroshi Sasamoto (Japan Atomic Energy Agency (JAEA), Japan) "Experimental investigation of iron-bentonite interaction under high temperature conditions"

Coffee Break

- Chair Tsutomu Sato (Hokkaido University)
- 15:30 James Wilson (Invited, Quintessa Ltd. UK)"The effect of iron on bentonite stability: insight from experiments and modelling"
- 16:10 Keisuke Fukushi (Kanazawa University, Japan) "Iron-bentonite interactions found in nature"
- 16:50 General Discussion
- 18:00 Banquet

Time for presentation will be 30 minutes, followed by 10 minutes for discussion.

The workshop is supported by Radioactive Waste Management Funding and Research Center as a funded research program by Japanese Ministry of Economy, Trade and Industry.