Summary of Fiery Ice 2012

- 1. Construction of the Workshop
- 2.Presentations
- 3. Short summary of the Breakout sessions
- 4.Others

120531 Uchida



1. Construction

1. Participants

1) Total number 101

(Registration base)

Academic Industrial Governmental Students



1. Construction

1. Participants

2) Participants' nations 16 countries

Japan 56

Asia 21

Europe 15

America & Oceania 9



1. Construction

2. Sponsors











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- --- Booth Exhibition
- --- Schlumberger Night





2. Presentations

- 1) 3 summaries(2 Keynote speeches and a Banquet talk)
- 2) 12 national reports(Presentations will be included in the final report)
- 3) 49 individual researches
 14 oral presentations
 35 poster presentations



1. Evaluation of Methane Hydrate Resource Potential

Chair: Dr. Tatsuya Fujii (JOGMEC, Japan)

Rapporteur: Dr. Miko Fohrmann (GNS Sci., New Zealand)

Attendee (25):

* State of the art:

MH occurrence, esp. around Japan

Current evaluating methods of MH resource potential

* Discussions:

Supplementary methods for evaluating MH resource potential

Trap and Seal

Resource assessment and production methods

Alternative MH reservoirs



2012 Fiery Ice

8th International Workshop on Methane Hydrate Research & Development

28th May - 1st June 2012 | ROYTON, Sapporo, Hokkaido, Japan

2. Environment Impact

Chair: Prof. Kvamme (Univ. Bergen)

Rapporteur: Dr. Nesse (Statoil)

Attendee (22):

* State of the art & Discussions:

CO₂ storage underground;

- will it assist in sealing the reservoir?
- storing CO₂ in Hydrate Reservoirs

Methane Hydrate in relation to Global Warming

Geo Hazard & Bio system health assessment



3. Industrial Utilization of Gas Hydrate

Chair: Dr. Sano (MES)

Rapporteur: Dr. Seo (KAIST)

Attendee (21):

* State of the art & Discussions:

Gas transportation via making hydrate pellets

Economic evaluation of gas transportation via hydrate

- what should we know for feasibility study?

Recommendation: more publication for this issue to international journals



4. Methane Gas Hydrate Exploitation and Development

Chair: Dr. Yamamoto (JOGMEC)

Rapporteur: Dr. Dallimore (NRC)

Attendee (23):

✓ Define questions

discussions focussed on production rather than exploration considerations

✓ Find-out possible solutions and Discuss on research strategy

on Reservoir characterization

on Reservoir simulation modeling

on Field test and commercial scale production



5. Mechanisms of Hydrate Accumulations in Nature

Chair: Dr. Yoshioka (AIST)

Rapporteur: Dr. Coffin (NRL)

Attendee (17):

* State of the art:

CH₄ origin, CH₄ accumulation processes and analysis, geochemistry

- case study in various regions
- * Discussions:

depth of CH₄ sources and the vertical flux, the cap rock importance, ...etc.



6. Fundamental Hydrate Science Challenges

Chair: Prof. Mori (Keio University)

Rapporteur: Prof. Masutani (Hawaii Univ.)

Attendee (20):

* State of the art:

Self-preservation effect

Hydrate guest molecule exchange

* Discussions:

What is the mechanism?

Can these properties be reliably applied for certain engineering applications?



4. Others

1.Pre-workshop tour



Mt. Usu, Lake-Toya & Geo park

4. Others

2. Post-workshop tour

For Attendee to Post-Workshop Laboratory Tour on 1st June

- 1. The schedule is changed on Abstract Book and Hand Book.
- 2. Laboratory Tour will start at 10:00 on 1st June.
- 3. Bus to the AIST Hokkaido will leave at 9:00 from Royton Hotel.
- 4. If you would like to use Bus service, please meet at Lobby of Royton Hotel by 8:45.
- 5. If you individually come to the AIST Hokkaido, please reach to AIST Hokkaido by 9:45.

4. Others

3. Committee

Fiery Ice International Steering Committee

Richard B. Coffin, Naval Research Laboratory, Washington, D.C., U.S.A.

Bjørn Kvamme, University of Bergen, Bergen, Norway Stephen M. Masutani, University of Hawaii, Honolulu, U.S.A.

Hideo Narita, AIST, Sapporo, Japan

Tsutomu Uchida, Hokkaido University, Sapporo, Japan

Fiery Ice Local Organizing Committee

Hideo Narita, AIST, Japan

Tsutomu Uchida, Hokkaido Univ., Japan

Jiro Nagao, AIST, Japan

Tatsuo Saeki, JOGMEC, Japan

Masanori Kurihara, Waseda Univ., Japan

Kenichi Sano, Mitsui Engineering & Shipbuilding Co., Ltd., Japan

Norio Tenma, AIST, Japan

Yoshinori Furukawa, Hokkaido Univ., Japan Takeo Hondoh, Hokkaido Univ., Japan Kotaro Ohga, Hokkaido Univ., Japan

Hideki Minagawa, AIST, Japan Akiko Ono, AIST, Japan

...supported by GHRI-AIST, Nippon Travel Agency and Royton Sapporo

Thanks & See you in next WS!

