

Gas-Hydrate Observatories Workshop (GHOBS)

July 18-20, 2007; Portland, Oregon

Agenda – July 2, 2007

July 18, 2007

6:00 – 10:00 pm Sign in and informal reception and poster session at the Hotel Monaco.

July 19, 2007

Theme: What are the important science questions concerning submarine gas hydrates? Why are observatories needed? What measurements are needed?

9:00 – 9:15 am Welcome and summary of workshop objectives and logistics (Torres)

9:15 – 9:30 am History and future of gas hydrate research (Paull)

9:30 – 9:45 am The GoM observatory (MacDonald)

9:45 – 10:00 am CORKS (Davis)

10:00 – 10:15 am The Marianas CORK (Fryer)

10:15 – 10:30 am Neptune Canada (Riedel)

10:30 – 10:45 am The Regional Cabled Observatory (Kelley)

10:45 – 11:00 am Numerical modeling of submarine gas hydrate processes (Flemings)

11:00 – 11:10 am Outreach opportunities (Cooper)

11:10 – 11:45 am Break

11:45 – 12:30 pm Plenary Session (Trehu) – Discuss science questions and charges to working groups. Note: preliminary charges and group memberships and group chairs will be determined prior to the meeting based on responses to comments on the agenda, and an updated agenda and working group sign-up list will be circulated prior to the meeting.

12:30 – 1:30 pm Lunch

Theme: How can we make the needed measurements in the coming decade?

- 1:30 – 1:45 pm Introduction to objectives of this session (Davis)
- 1:45 – 2:00 pm Communications and power overview (Massion)
- 2:00 – 2:15 pm Alternatives to CORKs (Moran)
- 2:15 – 2:30 pm Borehole seismic measurements (Stephen)
- 2:30 – 2:45 pm MiniCORKS (Johnson)
- 2:45 – 3:00 pm Distributed temperature measurements (Fukahara)
- 3:00 – 3:15 pm In-situ sensing of chemical changes (Ripmeester)
- 3:15 – 3:30 pm Methane sensors (Suess)

- 3:30 – 4:00 pm Break

- 4:00 – 6:00 pm Discussion (Riedel) Summary of Science and technology issues, discussion of charges to working groups.

- 6:00 – 7:30 pm Poster Session

- 7:30 pm Dinner

July 20, 2007

Theme: Discussions

- 8:00 – 8:15 am Plenary session (Torres); Logistics
- 8:15 – 12:30 pm Working Groups meet*
- 12:30 – 1:30 pm Lunch
- 1:30 – 3:30 pm Plenary Session (Paull): Working group chairs present results followed by discussion. The objective is to develop a realistic plan to provide guidance to the scientific community and funding agencies on how to proceed.

Meeting adjourned.

- 4:00 – 6:30+ pm Planning committee and working group chairs meet to put together an outline of the report, determine writing assignments and establish a time-table for report completion.

*Preliminary list of working groups.

Group 1: 4D Site characterization

Group 2: Fluid and microbial borehole measurements (sampling and in situ)

Group 3: Physical state parameters in situ in boreholes

Group 4: Fluid and microbial seafloor observations

Group 5: Education and outreach opportunities

Charges to Groups 1-4:

- Short statement of science questions.
- Review current technology: evaluate readiness, identify special challenges posed by gas hydrate.
- Implementation issues: evaluate the need for cable or mooring technologies, discuss installation and maintenance challenges.
- Propose/suggest experiment and/or strategies that incorporate technology to address key science questions.
- Fill in table with OOI requirements for tools and sensors.