

DEveloping Submersible SCienceE for the Next Decade

DESCEND Workshop
Scientific Challenges, Technology Developments, and Investigative Strategies
October 25-27, 1999
National Science Foundation, Arlington, VA

Funded by: NSF, ONR, and NOAA

Focus:

The principal focus of the workshop will be to address the compelling scientific problems, as defined by the research community with regard to submergence work. Technological discussions will provide participants an opportunity to integrate scientific and engineering priorities. These discussions will include the challenges associated with the need for submergence assets capable of accessing 6000+m depths and with the proliferation of and technologies associated with shallow water vehicles. Participants will be invited to address a series of questions about scientific priorities, investigative methodologies, new directions in submergence technology development, and the operation, availability, and scheduling of submergence assets.

Participation:

The workshop is open to all investigators who are interested in carrying out submergence research and/or who develop technology important to submergence systems. Participants are required to complete an on-line application form as well as submit an abstract in advance of the workshop.

Steering Committee

Patty Fryer (Chair), U. Hawaii
Keir Becker, RSMAS
Jim Bellingham, MIT/MBARI
Craig Cary, U. Del
Lisa Levin, SIO
Marv Lilley, U. Wash

Steering Committee Meeting - June 24, La Jolla

Attended by the Steering Committee Meeting; Annette DeSilva, UNOLS Office; Dolly Dieter, NSF; and Bob Knox, UNOLS Chair

Discussed: Workshop Agenda & Speakers

Break-out Sessions & Leaders

Website Design

Strategies for Report Writing

Workshop Announcement Distribution:

UNOLS Newsletter

UNOLS Office mailing

E-mail blast from UNOLS Office

RIDGE and MARGIN distribution

DESCEND Website:

<http://www.gso.uri.edu/unols/descend/descend.htm>

Workshop Report - Final draft report to be ready for distribution at the December DESSC meeting.

DESCEND Workshop

Agenda

Monday, October 25th, Day 1: Science Discussions:

8:30 a.m. Open Meeting

- UNOLS Welcome/Introduction – Bob Knox
- Overview DESCEND – Patty Fryer
- Overview of FUTURES
- Overview of Submersible Science – Dan Fornari
- Observatory Science Overview – Keir Becker
- Charge to Participants/Workshop Groundrules – Patty Fryer

10:15 a.m. Breakout Sessions - Science Breakout Sessions:

- Ridge Processes
- The Abyss/Open Ocean
- Margins (passive & convergent)
- Shelf & Coastal
- Polar

12:00 Lunch

1:00 p.m. Reconvene Break - Out Sessions

3:45 p.m. Break

4:00 p.m. Plenary Session - Each session leader will provide a 10-minute summary of their respective session. At the conclusion of all summaries there will be an open discussion.

6:00 p.m. Adjourn

Tuesday, October 26th, Day 2: Technology & Instrumentation:

8:30 a.m. start time

- Overview of untethered systems - AUVs: Jim Bellingham
- Manned and Unmanned Vehicles: Mapping
- Data Systems - Case studies within and outside of MG&G:

10:15 a.m. Technological Breakout Sessions:

- Event Response
- Time Series - Long
- Time Series - Short
- Expeditionary
- Global

12:00 Lunch

1:00 p.m. Reconvene Break-Out Sessions

3:45 p.m. Break

4:00 p.m. Plenary Session - Each session leader will provide a brief (one bulleted overhead) summary of their respective session. At the conclusion of all summaries there will be an open discussion.

6:00 p.m. Adjourn

Wednesday, October 27th, Day 3: Wrap-Up: 8:30 Start Time

Morning: Overview of Technology Costs and Realities – Jim Bellingham

A Discussion period would follow.

Afternoon: The afternoon would be set aside to allow the Steering Committee to complete writing assignments.