EXPANDING DEEP SEA HORIZONS:
ABYSSAL SCIENCE PRIORITIES
WORKSHOP

Adam Soule, Anna-Louise Reysenbach
WORKSHOP OBJECTIVES

- Synthesize community input into a publication describing science priorities at abyssal depths.
- Develop a white paper outlining science verification activities for 6500m HOV Alvin.

COMMUNITY INPUT

- Online survey
- Subject-matter expert presentations
- Online community discussion

188 resp. from 34 states + International
WORKSHOP

- Workshop is held online (Zoom) in three sessions. Participants watch pre-recorded presentations and spend 90 minutes in breakout group discussion on a common set of questions.

**Abyssal Plains & Seamounts**
17 June (10am EDT, 2pm PDT)
- Peter Auster, U Conn
- Jill McDermott, Lehigh U
- Steve D’Hondt, GSO URI
- Jasper Konter, SOEST U Hawaii

[>150 registered]

**Trenches & Transforms**
30 June (10am EDT, 2pm PDT)
- Chris German, WHOI
- Karyn Rogers, RPI
- Patty Fryer, SOEST U Hawaii
- Jeff Drazen, SOEST U Hawaii

**Technology & Societal Relevance**
07 July (10am EDT, 2pm PDT)
- Bruce Strickrott, WHOI
- Pete Girguis, Harvard U
- Beth Orcutt, Bigelow
- Diva Amon, NHM London
Pre-Workshop Materials

Peter Auster, UConn

Steve D’Hondt, GSO URI

Jasper Konter, SOEST UH

Jill McDermott, Lehigh Univ

https://ndsf.whoi.edu/alvin/workshop-alvin-in-the-abyss/
DIVERSITY, EQUITY, AND INCLUSION

- The nationwide protests have illuminated the challenges we face in science with DEI. We have reserved a portion of our discussion time in the workshop session focused on ‘Societal Relevance’ for this topic.

- We are working towards adding a fourth session to the workshop that deals exclusively with systemic racism in the sciences and approaches to address diversity, equity, and inclusion within our community. KnowInnovation, who is facilitating the digital side of the workshop offered to support this fourth workshop pro bono.
NDSF Technology Update: Other

• DS_ROS
• Rapidly expanding to more vehicles, NDSF, NSF general, ONR, ARPA-E, OTZ, NUWC Keyport, ???
• Two way street NDSF contributes and receives modules
• Must solve the divergence and maintenance problem
• Centralize and then interconnect domain knowledge
• First Project DVL Standardization – kick off soon
• Software and Data
  • Common Code, Workflows, Hardware, and People
  • Auto QA/QC/Configuration Management
  • Reduce errors, catch errors earlier, reduce training
  • Better Error tracking, reporting, and analysis
• Common Technology – Make using common tech the default not the goal
• Power supplies, hotel hardware, imaging, topside support, etc
• Simulation and training – more of a far field initiative but potentially highly valuable