



## **SHORT BIO**

### **Bruce M. Howe**

Chair, Joint Task Force for SMART Subsea Cables  
Research Professor, University of Hawaii at Manoa

Dr. Howe is Chair of the international Joint Task Force (JTF) SMART Cable initiative, (Science Monitoring And Reliable Telecommunications) to incorporate sensors into commercial trans-ocean submarine telecommunication cable systems for climate, ocean circulation and sea level monitoring and tsunami and earthquake warning, now with several projects funded.

Dr. Howe develops ocean observing infrastructure, including cable systems. Projects have included basin-scale acoustic thermometry and planning, development and operation of cabled observatories. His long-term goals are to integrate acoustics systems in ocean observing for ocean-basin scale positioning, communications, timing, and tomography, and to develop the (largely cabled) infrastructure to support this.

At Station ALOHA 100 km north of Oahu, he and his team installed and operate the ALOHA Cabled Observatory – the world’s deepest plug-and-play power and Internet node on the planet at 4728 m water depth.

Previously, Dr. Howe worked on ocean acoustic tomography, including Moving Ship Tomography, Acoustic Thermometry of Ocean Climate and the North Pacific Acoustic Laboratory. Dr. Howe helped establish on-going Ocean Observatories efforts (NEPTUNE, OOI), working on fixed infrastructure (cable power systems and moorings), mobile platforms (gliders as acoustic/navigation/communication nodes), and hybrids (moored vertical profilers).

After obtaining engineering and oceanography degrees at Stanford University and the University of California at San Diego, he worked at the Applied Physics Laboratory, University of Washington, and since 2008, at the University of Hawaii, Department of Ocean and Resources Engineering.