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## **MoLab – a modular ocean laboratory for longterm observations. Cold-water corals and their physical and biogeochemical boundary conditions.**

### **Aim:**

Using various ocean observatories and moorings we try to understand the physical and biogeochemical boundary conditions for cold-water coral occurrences in the global ocean. MoLab consists of several different devices that can be combined according to the specific scientific question. Among the available modules are single autonomous deep-sea observatories in different configurations and sizes as well as oceanographic moorings which all have the same basic sensors systems. The core of the MoLab System is a communication module integrated in one of the moorings. This module communicates with all other modules in the measuring field using acoustic signals. Thus, it is possible to get a synchronized and coherent 4D-data record from several measurement devices at the ocean floor.

