

*2004 Proposal Form – External/Shared Projects (fully or partially funded by an external grant, and MBARI resources are being requested).*

*Submission Deadlines: Phase I: 8:00 a.m. on August 4<sup>th</sup>. Phase II: TBD*

**INTERNAL Project Number: 900303**

**EXTERNAL Project Number: 708303**

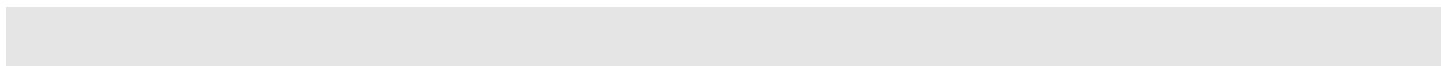
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**Project START: Jan 1,**

**Project Duration (in years):**

**Project Manager/PI: Francisco Chavez**

**Project Title: MBARI  
component of CIMT**



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### **1) Abstract (new and continuing projects)**

Continuous monitoring from moorings is essential for any Integrated Coastal Ocean Observing System in order to understand regional variability and provide context for process studies that occur over more limited periods. MBARI has demonstrated the utility of such a program, with nearly continuous data over the last 13 years from a series of offshore moorings. MBARI is in the process of developing a new generation mooring system capable of providing observations of water-column and benthic processes in near real-time. This system, in only the water-column mode, MOOS-Lite, may be tested on a mooring funded by the external portion of this project. The mooring will target bloom formation inside Monterey Bay and be located where blooms potentially reach their maximum levels. Once water enters the bay it slows and stratifies leading to optimal conditions for phytoplankton growth. In addition, this stratification acts to select for taxonomic groups (pennate diatoms, dinoflagellates) that are capable of producing toxins that are harmful to humans. Collectively, the mooring array may allow Monterey Bay to serve as a useful microcosm for the California coastal upwelling system. The proposal will be managed as follows:

Mike Kelley-Manages the building, instrumentation and deployment of the mooring. Additional costs to make CIMT mooring compatible with MOOS-Lite carried in internal portion of this proposal.

Tom O'Reilly-Manages hardware and software of the mooring controller aspects under the SIAM project.

John Graybeal-Manages the shore side data of the instrumentation on the mooring under the SSDS project.

Chavez-Ensures that all components are progressing in phase with the deployment date.

### **2) Proposal(Replace this text with proposal text from your external proposal submission)**

### **3) Expense Budget Justification (new and continuing projects)**