



2010 Summer Workshop for Faculty on



## ***Intermediate Level Remotely Operated Vehicle (ROV) Building for Classroom Projects***

**July 26 - August 1st, 2010  
Monterey Peninsula College: Monterey, California**

The Marine Advanced Technology Education (MATE) Center's annual Summer Institute for Faculty Development provides educators from high schools, community colleges, and universities from across the country with the skills and experiences they need to incorporate marine science and technology topics into their classrooms. In addition to lecture and hands-on time, the Institute includes field trips to the Monterey Bay Aquarium Research Institute (MBARI) and the Monterey Bay Aquarium.

The 2010 MATE ROV Summer Institute will provide a forum for educators, especially those interested in participating in future ROV competitions organized by the MATE Center and the Marine Technology Society (MTS) ROV Committee, to:

- (1) Acquire the knowledge and skills needed to implement ROV design and building curriculum in their classrooms.**
- (2) Gain exposure to and develop an understanding of the type of work that ROV technicians do and the technologies they use.**
- (3) Learn about the many career opportunities available in the submersible technology field.**



**During the ROV institute participants will:**

- ▼ Build a small-scale, fully functional ROV that can be replicated with students.
- ▼ Use the vehicle to complete a set of pre-determined missions.
- ▼ Acquire the knowledge, skills, and resources to effectively mentor students in designing and building an ROV to participate in future MATE competitions.
- ▼ Learn how to use a BASIC Stamp to program their ROVs to use more advanced motor controls and sensors.
- ▼ Learn how to build, use, and incorporate sensors into ROV's.
- ▼ Visit and interact with undersea engineers, ROV pilots, and marine technicians to understand the work they do and the technologies they use.
- ▼ Make connections with educators with similar interests and share "best practices" in teaching and instruction.

**Workshop participants should be:**

- ▼ A current faculty member at a college, community college, university, or high school. (If you do not fall into one of these categories, you will need to add a compelling statement to your application as to why you should attend.)
- ▼ Willing to return to your institution and either start an ROV course or club or integrate ROV technology into your current marine science, technology, or engineering courses.
- ▼ Willing to share with the MATE Center what you have accomplished as a result of the workshop. This could be adapting lessons from the workshop to your region, adding tasks/skills to the lessons, or developing new courses and new programs.

The Institute is a credited course through California State University Monterey Bay (CSUMB). Participants have the option of receiving (3) graduate credits through CSUMB. Note: You must cover the cost of registering for the course.

**Costs:** There is no fee for participating in this institute. In addition, hotel accommodations, lunches, and several dinners are provided by the MATE Center. Participants are required to provide their own transportation to and from Monterey, CA.

**Note:** Hotel accommodations are not provided if you live less than 50 miles from Monterey, California.

**For more information on our summer institutes and to find an application form, please visit the MATE web site at <http://www.marinetech.org/education/workshops.php> or contact Erica Moulton, MATE Faculty Development Coordinator at [emoulton@marinetech.org](mailto:emoulton@marinetech.org) or (727) 894-6821**