MATE ROV Competitions: Partnering with Industry to Engage Students in Hands-on Ocean Education & Meet Workforce Needs

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Marine Advanced Technology Education (MATE) Center
What is the MATE Center?

National partnership of organizations working to improve marine technical education & help prepare students for ocean occupations.

What does the MATE Center do?

► Workforce assessments
► Curriculum development
► Summer Institutes for teachers
► Technical internships for students
► ROV competitions
ROV Competition Program

To date…

► More than 1,000 students have worked in teams to tackle tasks based on the real world

► Includes 13 regional contests

► Involves more than 60 working professionals & organizations

► High schoolers are enrolling in engineering & technology programs & college grads are getting jobs in the marine industry
BACKGROUND

Partnering with the MTS ROV Committee to…

– **Address shortage of skilled individuals to support the marine industry**
  - Reach more students & get them interested in the industry
  - Help students develop the skills to support marine activities

– **Provide a venue for industry to become involved with education**
  - Funds – help programs hit by budget cuts
  - Mentors – complement & expand educators’ knowledge and expertise
Competition Goals

• Highlight marine technical fields, employers, and career opportunities

• Help students develop key skills

• Connect students & educators with employers & working professionals

• Highlight students’ skills & encourage employers to evaluate them as potential employees

• Get employers & working professionals involved by supporting the competing teams
It’s not only underwater...

Engineering & Communication

– Technical reports
– Poster displays
– Engineering presentations
4th ANNUAL ROV COMPETITION
for High School and College Students
From the Depths of the Oceans to the Far Reaches of Outer Space

June 17 – 19, 2005
NASA Johnson Space Center Neutral Buoyancy Lab

For information contact:
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2006 ROV Competition

Challenging teams to design ROVs for the next generation of ocean observing systems
Regional events (continued)

- So. CA ROV Fly-Off
- New England Regional
- Monterey Bay Regional
- Hawaii Underwater Robot Challenge (HURC)
- Florida Regional ROV Contest
- Great Lakes/Mid-West
Regional events – NEW in 2006!!!

- Big Island Regional ROV (BIRR) Contest
- Mid-Atlantic Regional
- Northern CA Regional
- Puget Sound
- Southeast Regional ROV Contest
- St. John’s Regional ROV Contest
Regional events

Texas Regional

- Alvin CC, MTS-Houston & NASA’s Neutral Buoyancy Lab
- Ike Coffman @ ACC helps organize teams
- NBL has hosted since 2002
- 22 teams competed last year, more each year!
How YOU can get involved

► Share time & expertise by mentoring a local team
► Provide access to equipment and facilities
► Donate supplies & building materials
► Contribute funds $$$
► Serve as judges & advisors
Power of Partnership

**Students benefit by...**
- Support
- Expertise from the field
- Exposure to careers
- Connections to employers

**Industry & the ocean community benefit by...**
- Increasing awareness
- Giving back to the community
- Supporting the next generation of scientists, engineers, & technicians
ROV Competitions for Students – Dive in!

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