The Alliance for Coastal Technologies

Supporting the Technical Education & Training Needs of Tomorrow’s Ocean Observing Workforce

Ali L. Hudon
ACT Gulf of Mexico Partner
Education & Outreach Coordinator
A NOAA-funded partnership of research institutions, state and regional resource managers, and private sector companies interested in developing and applying sensor technologies for monitoring coastal environments.

See http://act-us.info
Alliance for Coastal Technologies
Partner Institutions

University of Alaska

CILER
Cooperative Institute for Limnology & Ecosystems Research

Gulf of Maine Ocean Observing System

Moss Landing Marine Laboratories

Monterey Bay Aquarium Research Institute

University of Michigan

NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Skidaway Institute of Oceanography

University of South Florida
COLLEGE OF MARINE SCIENCE

University of Hawai‘i

SOEST
Diverse Environments
Alliance for Coastal Technologies
Stakeholders’ Council

- Members from private sector companies and environmental management agencies.
- Members participate in planning and decision-making to ensure a focus on service-oriented activities.
- Help foster the interactive flow of information and ideas between various sectors and end users.
Workshops focus on specific sensor technologies for use in coastal environments.

Workshop participants include equal numbers of researchers, managers, and representatives from private sector companies.

Workshop Goals:

- To help build consensus on the steps needed to build useful tools, while also facilitating critical dialogue among technology manufacturers, developers, and end users.
Alliance for Coastal Technologies
Recent Technology Workshops

- **Towed Vehicles as Platforms for Mapping Coastal Features and Processes** (MML/MBARI, February 2007)

- **Passive Acoustic Hydrophones** (UH/SOEST and UAF/ASLC, February 2007)

- **Wave Sensor Technologies** (USF/NDBC, March 2008)

- **State of Technology for *in-situ* Measures of Salinity Using Conductivity Temp. Sensors** (SkIO, December 2007)
Alliance for Coastal Technologies
Upcoming Technology Workshops

- Environmental Sensing for Port Security
  *(IOOS/SRNL/CCEHBR/HML)*

- Environmental Sample Concentration Methods/Technologies
  *(CCEHBR/HML/OHII)*

- Harmful Algal Bloom (HAB) Detection Technologies
  *(CICEET/SCCWRP/FWRI)*
Technology Verifications:

- Evaluations of *commercially-available instruments* to verify manufacturers’ performance specifications or claims;

- Conducted at 5 or more (but typically all) Partner Sites.

Technology Demonstrations:

- Abilities and potentials of *new technologies* established by working with manufacturers and developers to field test the instruments in diverse environmental conditions;

- Typically conducted at 2-3 Partner Sites.
Recent: Nutrient Analyzers (2007)
- YSI 9600 Nitrate Analyzer
- Wet Labs Cycle P Nutrient Analyzer
- American Ecotech NUT 1000
- Satlantic ISUS V3 Nitrate Analyzer

Upcoming:
- C-T Sensors for In-Situ Salinity (2008)
- pCO₂ Sensors for Ocean Acidification (2009)
- HAB Sensors (2009)
- Wave Height Instruments (tbd)
Alliance for Coastal Technologies
Data & Information Clearinghouse

http://www.act-us.info

- Continuously updated
- 3 search criteria
- Instrument description & technical specifications
- Cost & manufacturer contact information
- Workshop & evaluation reports; CNUAs

Looking for an Instrument?
- Identify technologies available to meet your needs.
- Search by environmental parameters, sensor types or manufacturers.

This is a living database that is continuously updated. Please help us provide the information you would like to see in the most useful format by sending us your comments. New information, corrections, suggestions, and constructive criticism will only improve the quality of the database and this site. Please email us with your suggestions.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Topics</th>
<th>Posts</th>
<th>Last Post</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Topics &amp; Comments</strong></td>
<td>1</td>
<td>1</td>
<td>by jordan Q on Fri Jan 11, 2008 3:43 pm</td>
</tr>
<tr>
<td><strong>News &amp; Events</strong></td>
<td>9</td>
<td>9</td>
<td>by Jason Cook Q on Mon Sep 15, 2008 9:35 am</td>
</tr>
<tr>
<td><strong>Industry Announcements</strong></td>
<td>0</td>
<td>0</td>
<td>No posts</td>
</tr>
<tr>
<td><strong>Sensor Technologies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Tracking</td>
<td>0</td>
<td>0</td>
<td>No posts</td>
</tr>
<tr>
<td>Buoys / Drifters</td>
<td>0</td>
<td>0</td>
<td>No posts</td>
</tr>
<tr>
<td>Conductivity / Salinity</td>
<td>0</td>
<td>0</td>
<td>No posts</td>
</tr>
<tr>
<td>CTD</td>
<td>1</td>
<td>4</td>
<td>by Jason Cook Q on Thu Oct 18, 2007 3:51 pm</td>
</tr>
<tr>
<td>Current / Flow</td>
<td>0</td>
<td>0</td>
<td>No posts</td>
</tr>
<tr>
<td>Dissolved Gases / DO</td>
<td>0</td>
<td>0</td>
<td>No posts</td>
</tr>
<tr>
<td>Fish / Plankton</td>
<td>0</td>
<td>0</td>
<td>No posts</td>
</tr>
</tbody>
</table>
Alliance for Coastal Technologies
Field Guides & Training Opportunities

Training Opportunities:
- Offered for DO and nutrient sensors
- Timed to coincide w/field verification trials
- Purpose: to gain hands-on experience using the sensors with manufacturers present

Field Guides (Best Practices Guides):
- Planned for fluorometers, DO sensors, turbidity sensors, and nutrient sensors
- Technology workshop → working field guide