

Energy Challenges for Future AUV Systems

01 February 2013 ■ ME Auditorium ■ 0900

With Guest Lecturer Dr. James G. Bellingham

Chief Technologist

Monterey Bay Aquarium Research Institute

Current energy storage technologies fundamentally limit the performance of undersea systems, and motivate a range of design and energy management strategies.

Topics will include:

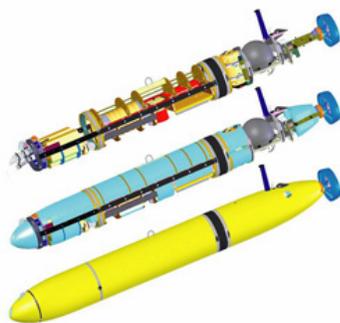
- A simple framework for vehicle design for energy constraints
- Energy and multi-platform systems
- Examples of designing for energy efficiency

The talk will conclude with a discussion of prospects for improved energy availability.



Dr. James G. Bellingham

Mapping AUVs



Long Range , Tethys AUV

Abridged Biography:

James G. Bellingham is the Chief Technologist at the Monterey Bay Aquarium Research Institute. He is an internationally recognized expert in AUV technology, and the energy storage systems required for Autonomous Underwater Vehicles (AUVs). In the process of developing these vehicles, he spent considerable time at sea, leading over 20 AUV expeditions. Dr. Bellingham leads the Autonomous Ocean Sampling Network (AOSN) program at MBARI, which uses fleets of autonomous vehicles to adapt to and observe rapidly changing oceanographic processes.



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