

**July 23<sup>rd</sup> In Situ Sensors Meeting**  
*Miscellaneous Components*

**Topic:** Various components such as batteries, lighting, comms, etc.

**Batteries**

- D cells
  - Best power-to-weight ratio
  - Alkalines are not good in the cold
- Lead acid
  - Heavy
  - Okay in the cold
- Lithium ion
  - High charge rate
- Lithium primary
  - Non-rechargeable
  - Good in the cold
  
- Ocean Server Technology, Inc.
  - <http://www.ocean-server.com/>

**MVCO – Martha's Vineyard Coastal Observatory**  
<http://mvcodata.whoi.edu/>

- Offshore node
  - 12 m water depth, 1.5 km from shore
- Air-Sea Interaction Tower (ASIT)
  - 15 m water
  
- 20 guest ports @ each location
  - 12 or 24 (possibly 36 V) – 100 W limit
  - 4 data conductors (Ethernet, RS-232, or RS-422)
- Power is shut down when divers are in the water (~1/2 day)
  - will happen weekly this Fall (2007)
  - usually not that often