

VIMS Industry Partnership Meeting

23 May 2013

Notes

VIMS Update – John Wells (wells@vims.edu)

- The Governor recently visited VIMS to sign a storage water bill that was years in the making.
- \$10M funding has been secured for the new 80 ft. ocean going vessel. Completion is expected late 2016. It will have a 1500 mile range, 10 day at sea capacity, and berths for 10 people.
- A fresh water capability is being added to the current sea water facility for fish disease research.
- VIMS is discussing a wind effects program with the Bureau of Ocean Management's Environmental/Energy/Minerals Department.

Professor Mike Unger (munger@vims.edu)

- The Elizabeth River has one of the highest levels anywhere of the toxin PAH from creosote. The toxins cause fish cancer and put oysters at high risk. There are six sites being studied to test measurement vs. expectation. The current technology using the Sapidine equipment is extremely fast so results are available nearly instantaneously as opposed to months with other measurement devices. This makes it practical to test for "hot spots" and for remediation results testing.
- HRSD (Hampton Roads Sanitation District) is concerned about PCBs in the James River, an ideal use of this technology.
- Is teaming with Auburn, LSU, and Gulf Coast Research Laboratory for a grant to search for underwater oil; there is a lot of it out there but no one knows where it is. It could be as much as \$2M for VIMS.

Professor Donglai Gong (gong@vims.edu)

- Underwater glider technology is extremely efficient in studying coastal shelves, under ice studies, and etc. As their power consumption is very low, typically 2 – 3 watts, they can stay out for weeks or nearly a year depending on the battery pack.
- The device is buoyancy driven, using a small pump to increase/decrease buoyancy as needed. Depth can be up to 1000 meters.
- Research areas include pollution spills, effects of storms on the biology and chemistry of an area, effects of polar-tropical water intersections (e.g. the Hudson and Delaware rivers).

- There is considerable interest in developing sensors for underwater measurements.

Mr. Tucker Pierce, Lockheed Martin (henry.pierce@lmco.com)

- An overview of LMCo was provided. The Company 113,000 employees, has 5 principal companies, and is involved in everything from nano technology to space mission support.
- Mr. Pierce is with the Exploration and Mission support Division which focuses on federal clients such as NOAA, NASA, NSF, and DHS.
- The Company has multiple partnerships with universities and is potentially interested to engage with VIMS in cooperative research engagements and procurement partnerships.