

VIMS-Industry Partnership Meeting
February 17, 2012
Notes

Attendees: Bill Bean (W&M), Vic Chatigny (Ocean Power Technologies), Margaret Fonner (VIMS), David Forrest (VIMS), Carl Friedrich (VIMS), Jim Golden (W&M), Jen Kostyniuk (Dominion), Dave Malmquist (VIMS), Dennis Manos (W&M), Dave Marsell (Measurement Specialties), Mike Melo (ITA International), Ron Monark (W&M), Todd Nelson (VIMS), Paul Panetta (Applied Research Associates), JoEllen Rose (SAIC), Leonard Sledge (W&M), Greg Stringfield (Consultant), Mike Unger (VIMS), Lyle Varnell (VIMS), Harry Wang (VIMS), John Wells (VIMS), Steve Yakshe (Entrepreneur)

Notes from our meetings and some presentations are posted at:

<http://www.wm.edu/offices/economicdevelopment/regionalprojects/chesapeakebay/vimsindustripartner/index.php> .

- **VIMS Update - John Wells**
 - The second half of the General Assembly budget process is underway.
 - Four additional faculty positions are included in the Governor's budget for VIMS. These positions are tied to economic benefits for the state.
 - A replacement research vessel for VIMS is included in the Governor's budget for VIMS.
 - There will be a VIMS presentation given to the Hampton Roads Caucus.

- **Acoustic Measurements of Oil Droplet Size and Sediment Characterization – Paul Panetta**
 - The Deepwater Horizon BP oilspill is the reason for the project.
 - The project is funded by the U.S. Department of Interior - \$390K for one year.
 - Deepwater Horizon BP oilspill
 - 1.1 million gallons of dispersants used subsea
 - There are not any subsea methods to assess the effectiveness of dispersants
 - The motivation for the project funding is to develop methods to measure the effectiveness of dispersants
 - The goal of the project is to get oil droplet sizes to less than 100 microns
 - The longer term objective is to create a technology to license that measures droplet size
 - The project is drawing interest from oil and gas companies

- **Wave Energy for Powering Science – Vic Chatigny**
 - The first farm of buoys will be off the coast of Oregon. The second farm will be built in Perth, Australia.
 - The technology for Ocean Power Technology's buoys is a floating point absorber. This embodies a two hull approach and a wave capture element.
 - The buoys individually generate 10 to 500 kilowatts of power.
 - Key partners and customers include the U.S. Navy, Lockheed Martin and others.
 - Applications for autonomous power buoys include:
 - Homeland security
 - Offshore oil and gas platforms
 - Ocean based cellphone platforms
 - AUV charging stations
 - Offshore open ocean aquaculture
 - Oceanographic data collection
 - Desalination
 - Warning system for tsunamis, cyclones, and typhoons

- **Worms, Waves, and Water Quality – Todd Nelson**
 - An overview of the ONR/MTS Buoy Workshop.
 - AXYS Technologies has a large number of buoys in the Chesapeake Bay.
 - Overview of buoy collaborations with industry .
 - Funding for wormcam systems to measure the impact of the BP oilspill.

- **The Large Domain and High Resolution Storm Surge / Inundation Simulation in the Atlantic and Gulf Coasts – Harry Wang**
 - The super regional testbed coastal inundation project in the Gulf of Mexico was completed.
 - The VIMS inundation model is 10 – 50 times faster than other models.
 - The NOAA Director is exploring possible uses of the VIMS inundation model.
 - Subgrid modeling for the 1936 great flood in Washington, DC was shown.
 - Data was imported directly into the existing grid.
 - Smaller areas of the subgrid can be modeled on a personal computer.

- **Next meeting – Friday, May 25, 2012 10-noon Room A/B, Watermen’s Hall, VIMS**