VIMS-Industry Partnership Meeting
May 25, 2012
Notes

Attendees: Vic Chatigny (Ocean Power Technologies), Doug Dwoyer (Innovate Hampton Roads), Margaret Fonner (VIMS), Carl Friedrich (VIMS), Jim Golden (W&M), Troy Hartley (VIMS), Steve Kaattari (VIMS), Dennis Manos (W&M), Dave Marsell (Measurement Specialties), Mike Melo (ITA International), Doug Meredith (Gloucester County), Marcus Rowell (Measurement Specialties), Leonard Sledge (W&M), Greg Stringfield (Consultant), Mike Unger (VIMS), Lyle Varnell (VIMS), John Wells (VIMS), Heather Wood (Virginia Port Authority), Steve Yakshe (Entrepreneur)

Notes from our meetings and some presentations are posted at: http://www.wm.edu/offices/economicdevelopment/regionalprojects/chesapeakebay/vimsinduspartner/index.php .

- **VIMS Update - John Wells**
  - Five new VIMS faculty will be hired in the areas of marine geography, physical oceanography, microbial ecology, and environmental microbiology
  - Received funding to design and replace an aging research vessel (70-100 feet)
  - Three representatives from Senator Warner's office are visiting VIMS to learn more about oyster aquaculture

- **A Real-Time Antibody-Based Field Assay to Predict Contaminant Bioavailability in Sediments – Mike Unger**
  - NIEHS Superfund Research Program ($872K from 2012-2014)
  - Principal Investigators – Mike Unger, Steve Kaattari, and Wolfgang Vogelbein (VIMS & William & Mary)
  - Collaborator – Josef Reiger (The Elizabeth River Project)
  - Using innovative technologies to look at contaminated sediment to predict human health risk
    - "Pore Water Squeezer" developed at VIMS
    - Sensor technology developed by Sapidyne Instruments
  - Project Aims
    - Conduct on-site PAH measurements of water using a rapid, cost-effective real-time biosensor and test its ability to predict tissue burdens in oysters from PAH-contaminated environments
    - Conduct controlled laboratory dosing of oysters to validate the biosensor as an effective predictor of oyster tissue burdens as a strict function of dose (concentration, time)
      - VIMS Seawater Lab is being used to evaluate sediment remediation techniques and how they alter PAH.

- **Green Ports: Challenges and Opportunities in the Maritime Sector – Heather Wood**
  - The Port of Virginia is the seventh largest port in the United States
  - The port is ISO 14001 & 9000 certified
  - Diesel engine replacement program
    - Cargo handling equipment meets or exceeds EPA emissions requirements
    - From 1995 to 2005, cargo traffic increased 55% while cargo handling emissions decreased 33%
  - Universal chassis pool program

        - 1.2M gallons of fuel saved annually, 1,500 tons/year of greenhouse gases, and average turn in the port decreased by 10%
    - Barge service from Norfolk International Terminal to the Port of Richmond
        - 24,000 trucks removed from interstates and local roads
        - Saved $1.1M in fuel cost; 30-40% reduction in emissions
    - Additional Port of Virginia Environmental Projects
        - Hybrid and Ultra-low emissions locomotives
        - Green Operator "Go" program
        - "Go" Vessels program
    - Creation of storm water management areas created under the wharf detention basin
    - Sponsored the Chesapeake Bay Foundation Oyster Reef (6,000 square meters)
    - Craney Island mitigation plan
        - $63M project
        - 411 acre river restoration
        - VIMS has been involved on the Planning Committee

- **ITA International Marine Division Update – Mike Melo**
    - ITA International established its Marine Division in 2010
    - Marine Services include:
        - Diving – Underwater ships husbandry, Underwater inspections, Marine construction, and ROV operations
        - Vessel Operations
    - Marine Division has a full dive team; 50' Dive Vessel; Remotely Operated Vehicle; and Underwater hull cleaning equipment
    - Completed projects include: USACE HQ Boat Pier Inspection, Occoquan Dam liner installation; BAE Shipyards cofferdam installation
    - Started an Engineering Services Division

- **Community Supported Fishery: Comprehensive Business Feasibility Study – Troy Hartley**
    - Study funded through the William & Mary green fees award
    - Feasibility study involved the Virginia Sea Grant Program, VIMS, William & Mary School of Business, and the William & Mary School of Law
    - 600 surveys received on attitudes and perceptions about seafood, sustainability, local fish, wild caught fish and aquaculture
    - Next steps include continuing the analysis of the feasibility study, consulting with the projects advisory group, assessing the local food distribution network, and preparing business plan options.

- **Next meeting – Friday, October 12, 2012 10AM - Noon Room A/B, Watermen's Hall, VIMS**