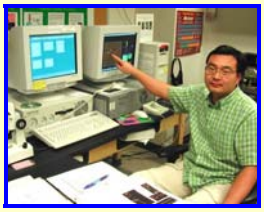
October 2006
College of William and Mary
Applied Research Center Student Newsletter

LAB EQUIPMENT IN USE

As soon as the fall semester started, students from W&M and other area universities began using our lab equipment in full scale for their experiments.

Jason Lunze (left), an undergraduate student at W&M uses our Scanning Electron Microscope to study the oxidation process on iron samples from the Confederate States submarine HL Hunley, which was sunk in 1864

Yujun Song, an ODU graduate student (right), is back again as a frequent user of our Atomic Force Microscope.



Mahzad Bastaninejad (left picture, left) and her advisor, Abdelmageed A. Elmustafa, ODU Assistant Professor of Mechanical Engineering.

Mahzad is a graduate student at ODU. She is studying the electrode breakdown in RF cavities. Our Hirox microscope serves as a main instrument for her research.

Judd Compton (left) also uses the Hirox microscope in his studies of the degradation of various polymers used in ocean platform oil pipelines. He is an Applied Science Ph.D. student at W&M. His scientific advisor is Chemistry Professor Kranbuehl.

Work in Progress

Laura Worrell, an Isle of Wight Academy high school student, started working in our lab this summer as a Lab Associate.

For her 11th grade science project, Laura was given an experiment using Colonial Williamsburg wrought iron samples. The main goal of her work was to use modern analysis to help Colonial Williamsburg blacksmiths in their attempts to reproduce retro-technological processes of iron production.

Michael Bagge-Hansen (left) is helping Laura in sample preparation

Testing ToF-SIMS Electronics

At the beginning of October Amy, Haijian, Natalie and Nimel conducted an experiment, where they determined the minimum length of the Argon gun pulse. Pictures below show the different stages of this process.

Editors / photographers: Amy Wilkerson, Olga Trofimova, Natalie Pearcy.