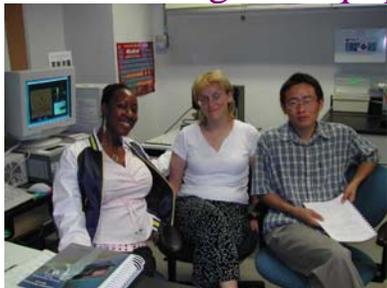




Applied Research Center Student Newsletter

Who's Using the Equipment?



Tracee Weaver, Natalia Noginova, and Feng Chen visited the lab from Norfolk State University on June 9th. They spent some time using the AFM to test some magnetically unusual materials.



Lab Tour

Bonnie Willard, from the William and Mary grants office and pictured here with Amy Wilkerson, came for a tour of the lab to see just what goes on over here.

Fun Times at Olga's



Som Mohanty, a 2003 Jlab REU student and recent graduate of Virginia Tech in material science engineering, returned to our lab to use the AFM to analyze various thin films on silicon substrates. Som is doing an internship at Norfolk State this summer and hopes to move on to graduate school.



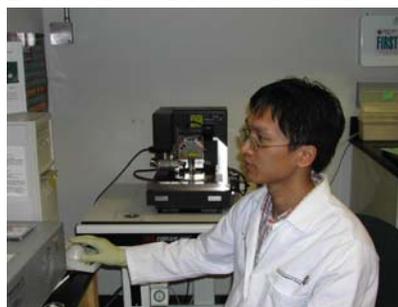
Dee Dee, Amy, Natalie, Olivia and Alan (behind the camera), were recently treated to lunch at Olga's new house in Newport News.

Featured Researcher:

ToF-SIMS Update...



Alan Marschall has returned to install the gold source on the ToF-SIMS, and this time Bob Palmatier, also a field service engineer from Physical Electronics, joined him.



Zhengmao
"Frank"
Zhu

Frank is interested in polymer surface modification by means of deep UV (172 nm) irradiation under inert or active gaseous media. He has successfully modified PET surfaces with better oil repellency performance than even pure fluoropolymer due to the special fluorocarbon self-assembly formed on PET surface. Analytical instruments such as ToF/SIMS, XPS, and AFM were employed to characterize the surface structure. In addition, semi-empirical quantum mechanic molecular modeling was conducted to elucidate the underlying photochemical mechanism.