



# College of William and Mary Applied Research Center Student Newsletter

## Who is New at the ARC?



*Left:* Erin Brnich, a sophomore Biology Major at Thomas Nelson Community College

*Right:* Olga Trofimova, a graduate from Moscow State University with an MS in Physics

## Also at the ARC this semester:



*Left:* Natalie Percy, a sophomore at Thomas Nelson Community College, has been with the ARC for 3 years. <http://www.jlab.org/ARC/WM/121/pearcy.html>

*Right:* Laurel Averett, a Junior Physics Major at William and Mary, has worked on campus with the XPS machine for 2 years.

## Featured Lab: Surface Modification Lab

**Staff:** Nimel Theodore, Michael Bagge-Hanson, Ming-Yao Zhu, Jianjun Wang

Layers like paint, chrome, nickel or gold plating created using light or plasma processing are more environmentally friendly than traditional thermal methods of melting, baking, stamping, and forging. These coatings being developed by W&M can provide decorative function, optical function, wear or friction resistance such as a thin film coating of titanium nitride over the materials used for human hip implant or cutting tools. Ion implantation, a "dip like" method can replace anodizing and is useful for making aircraft and automotive parts, forming semiconductor chips in computers, sensors, and memory. [http://www.jlab.org/ARC/WM/207/Nimel\\_Abstract.html](http://www.jlab.org/ARC/WM/207/Nimel_Abstract.html)

## Coming Up:

Siemens VDO is playing host for a day to Carl Zeiss imaging systems, who will be setting up a large mobile laboratory (in the form of a tractor trailer) on Tuesday, April 6th, to demonstrate their optical equipment and imaging systems. Amy Wilkerson will be providing transportation to this event two times, once in the morning and once in the afternoon from the Applied Research Center. For more details contact Amy at 269-5723.



*Left:* Kelly Sullivan, a junior Physics and Math double major at William and Mary, has worked at the ARC for 2 years.

*Right:* Michael Bagge-Hanson, a freshman at William and Mary, has worked at the ARC since summer 2003.



*Above:* Christine "Dee Dee" Hopkins, is a Virginia Tech graduate with a BS in Biology. She is currently taking graduate level classes at William and Mary, and is applying to the graduate program for this fall.

*Not Pictured:* Ashley Worrell, a junior at Isle of Wight Academy, has worked with the ARC since summer 2003.