On April 27, Drs. Shanov and Schulz debuted the latest facilities addition to the Nanoworld Lab Group, Room 581 ERC Building. Accompanied by College of Engineering Administration Dr. Frank Gerner, Dr. George Sorial and Dr. Jay Kim, the Nanoworld Lab directors declared the Substrates and Nanomaterials Processing Lab open for research.

Preceding the grand opening, a complimentary luncheon was held to recognize the contributions of the college support staff, administration, facilities management personnel, and student researchers. Dr. Shanov thanked all in attendance and attributed them to the great success and rapid expansion of the Nanoworld Lab Group.

Following the luncheon, faculty, staff, and students toured the lab and got a chance to learn about the functions of the new instrumentation and equipment within it. The 581 lab contains several state-of-the-art instruments including: (1) a PVD sputtering machine used for substrate engineering and thin film deposition, (2) an advanced plasma system for surface modification of carbon nanostructured materials, (3) vacuum oven for nano-materials thermal treatment in an inert environment, (4) a micro balance scale used for density measurements of nanostructured materials, (5) coating system for coating, doping, and densification of carbon nanotube thread for making electrical wire, (6) high magnification optical microscope for morphological studies of nanostructured materials, (7) and an experiment to prove that carbon nanotube sheet can be used for power generation when interacting with a running fluid.

Also, during the tour, Dr. Shanov proudly announced that the new lab was inspected by the University Fire Marshal and certified safe. He also recognized Engineering Facilities manager Rick Koch, his staff, and Mike Schulz for their help setting up the lab.

The addition of the 581 ERC Substrates and Nanomaterials Processing room marks the 6th laboratory in the Nanoworld group.
Nanoworld Lab Group Debuts Newest Facilities Addition

-April 2012
-Page 2, Additional Photographs

-------------------------------

Microscopy Table in ERC 581 lab. (Olympus model BX-51 in center)

Custom designed machine for coating, doping and densification of nanotube thread.
Nanoworld Lab Group Debuts Newest Facilities Addition

-April 2012
-Page 3, Additional Photographs

Precision balance scale that will accurately measure to one ten millionth of a gram.

Kurt Lesker PVD 75 Sputtering Machine in the 581 ERC lab.