

ADVANCE Distinguished Lectureship



Dawn Bonnell, Ph.D.
Professor, Materials Science and Engineering
Director, Center for Science and Engineering of Nanoscale Systems
University of Pennsylvania

Defect Mediated Transport At Interfaces And Nanostructures

Inaugural Lecture, Spring Colloquium Series, Department of Materials Science and Engineering

Tuesday, January 27, 2004 at 4:15 PM - *RECEPTION TO FOLLOW*
White Metallurgy Building, Room 411

Probing Nanoscale Phenomena with Advanced Scanning Probe Techniques

Wednesday, January 28, 2004 at 4:15 PM
Glennan Building, Room 421

Ferroelectric Nanolithography: Exploiting the Interplay of Atomic Polarization and Charge in Ferroelectrics

Thursday, January 29, 2004 at 4:15 PM
Glennan Building, Room 421

Professor Bonnell's research over the last 15 years has focused on nanometer scale phenomena in complex materials. Her group pioneered atomic resolution studies of oxide surfaces; invented new probes of interface electronic properties, and has developed new approaches to produce and characterize functional nanostructures. Much of the research in her group utilizes scanning probe microscopy. This work produced over 150 publications and more than 200 invited presentations and has been recognized by several awards included the Presidential Young Investigator and Ross Coffin Purdy Awards.

Professor Bonnell has served in administrative positions in the AVS (currently President), the International Union of Vacuum Science, the American Institute of Physics, the American Ceramic Society and the Materials Research Society. She has served on oversight committees for National Labs and several companies and is on the Editorial Boards for Nanoletters and the Journal of the American Ceramic Society. In 2002 she established the Center for Science and Engineering of Nanoscale Systems (SENS) at Penn.

Professor Bonnell graduated from the University of Michigan and was a Fulbright Scholar at the Max Planck Institute in Stuttgart and a visiting scientist at IBM, Thomas Watson Research Lab before joining the faculty at the University of Pennsylvania in 1988.

With generous support from the National Science Foundation ADVANCE award, the Academic Careers in Engineering and Science (ACES) program at Case Western Reserve University seeks to contribute to the development of a national science and engineering workforce that includes the full participation of women at all levels of faculty and academic leadership.