

## Distinguished Lecture

### Dr. Mildred Dresselhaus

Institute Professor and Professor of Physics and Electrical Engineering,  
Massachusetts Institute of Technology



Friday,  
September 16,  
2005  
2:30 – 3:30 pm

Location:  
CHEMP 130

Reception  
following in  
Hahn Atrium

### IMPACTS OF NANO-TECHNOLOGY IN THE 21ST CENTURY

Dr. Dresselhaus will provide a brief survey on how the properties of materials at the nanoscale differ from their bulk counterparts. She envisages that future applications of nanostructures will focus on these differences in properties and one applications area where significant impact may be expected is in addressing the grand challenge of our energy future.

Mildred Dresselhaus received her undergraduate education at Hunter College in New York City and completed her PhD at the University of Chicago. She joined the MIT faculty in the Department of Electrical Engineering and Computer Science in 1967, the Department of Physics in 1983, and was named an Institute Professor in 1985. She is a member of the National Academy of Sciences, the National Academy of Engineering, the American Philosophical Society, and the American Academy of Arts and Sciences. She has received numerous awards, including the National Medal of Science and many honorary doctorates. Her research interests are in experimental solid-state physics, particularly in carbon-related materials, novel forms of carbon, including fullerenes, carbon nanotubes, porous carbons, activated carbons and carbon aerogels, as well as other nanostructures.

Dr. Dresselhaus' visit is co-sponsored by the Virginia Tech Physics Department and *AdvanceVT*, a National Science Foundation funded program to increase the participation of women in academic science and engineering careers.

