Matthew G. Reuter

Eugene P. Wigner Fellow
Computer Science and Mathematics Division &
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Education

Northwestern University, Evanston, IL	Chemistry	Ph.D., 2011
Michigan Technological University, Houghton, MI	Chemistry, Mathematics	B.Sc., 2006

Professional Experience (ORNL = Oak Ridge National Laboratory)

2011/8   Eugene P. Wigner Fellow, Computer Science and Mathematics Division and Center for Nanophase Materials Sciences Division, ORNL

Professional and Synergistic Activities

2009–p   Reviewer; Journal of Physical Chemistry, Journal of Computational Physics

Honors and Awards (ORNL = Oak Ridge National Laboratory, NU = Northwestern University)

2011   Eugene P. Wigner Fellowship, ORNL
2010   Edmund W. Gelewitz Award for Excellence in Research and Service, NU
2008   Donald E. Smith Award for Excellence in Graduate-Level Teaching, NU
2007   U.S. Department of Energy Computational Science Graduate Fellowship (DOE CSGF)

Research Interests

1. *Surface Effects, Defects, & Disorder in Nanoscale Systems*.
   Investigating the decay lengths of of surface effects in nanoscale (low-dimensional) systems; calculating the effects of disorder in these systems; simulating molecular interactions with low-dimensional systems; developing efficient algorithms for such studies.

2. *Electric Current through Molecular Transport Junctions*.
   Comparing the current-voltage spectra for devices with metal or semiconductor electrodes; quantifying cooperative effects between molecular wires; calculating open-system boundary conditions for such systems; extracting physical/chemical information from experimental data.