Don Brown

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Current Position

Scientist 4 (Senior Scientist), Los Alamos National Laboratory

Background

2012-2013 Visiting Professor, Physics Department Carnegie Mellon University, Pittsburgh, PA
2000-present Technical Staff Member, MST-8, Los Alamos National Laboratory, Los Alamos, NM
1998-2000 Post Doc, LANSCE 12, Los Alamos National Laboratory, Los Alamos, NM
1993-1998 Graduate Research/Teaching Assistant, The Pennsylvania State University
1997 Lecturer, Physics 202, Electricity and Magnetism, The Pennsylvania State University
1992 Intern – Prototype Division, GTE Sylvania, Warren, PA
1991 NSF-REU Undergraduate Research Assistant, Lehigh University, Bethlehem, PA

Honors

2008 Japanese Society for the Promotion of Science Fellowship Award
2004 Defense Programs Award of Excellence
2001 Defense Programs Award of Excellence
1994 Physics Departmental Graduate Teaching Award
1993 Sigma Phi Sigma National Physics Honor Society

Activities

2008-2011 ORNL Neutron Scattering Science Review Committee
2008-2010 Los Alamos National Laboratory LDRD-ER Engineering Review Committee
2007-present Metallurgical Transactions A Review Board Member
2004-2007 Lujan Center Materials Proposal Advisory Committee member

Interests

My career has been based on using diffraction to study structural and functional materials under conditions simulating use or processing. The SMARTS neutron diffractometer at the Lujan Center was built around this concept. I have used neutrons or x-rays to probe materials as appropriate. The materials range from aerospace materials (steel, magnesium, titanium), defense materials (uranium, beryllium), shape memory alloys (NiTi), to most recently nuclear energy materials.

Goals

As a user interested in nuclear energy materials I have experienced some degree of frustration in bringing radioactive materials into the APS. My first goal in this endeavor is to put myself into a position where I can possibly influence policy on the use of radioactive materials at the APS. Currently, the APS wastes much of its advantages (such as amazing signal/noise) by requirements on containment that, while they conform to the rules, are often not well considered.

Second, as both a frequent user of the APS (~5x per year) as well as a long time (10+ years) instrument scientist at a DOE-funded facility, I believe I have a unique perspective that can help guide future developments at the APS with an eye strongly fixed on improving the user access and experience at the APS.