

Jacob Urquidi

New Mexico State LANSCE Professor of Physics
Department of Physics, New Mexico State University,
Las Cruces, New Mexico 88003

Office: 505-646-5199

Fax: 505-646-1934

Email: jurquidi@nmsu.edu or jurquidi@lanl.gov



Education

2001 Ph.D. Physical Chemistry, Texas Tech University
2000 M.S. Physical Chemistry, Texas Tech University
1994 B.S. Chemistry with a minor in Physics, University of Texas at El Paso

Professional Experience

2003-Present New Mexico State LANSCE Professor of Physics, New Mexico State University and Los Alamos Neutron Scattering Center (LANSCE), Lujan Center, Los Alamos National Laboratory
2001-2003 Postdoctoral Research Scientist on disordered materials at the Intense Pulsed Neutron Source (IPNS), Argonne National Laboratory
2000-2001 Chemistry Faculty, Assistant Professor, South Plains Junior College
1996-2001 Research Assistant, SPQR Labs, Dept. of Chemistry and Biochemistry, Texas Tech University

Primary Research Interests

Molecular liquids (water in particular) and amorphous materials (e.g. high and low density amorphous ice and optically relevant glasses) through the use of neutron and high energy X-ray diffraction techniques combined with molecular dynamics (MD) and reverse Monte Carlo (RMC) simulations as aids in data interpretation; the use of plants in remediation of areas contaminated with heavy metals; microheterogeneity in water/alcohol systems and how this may shed light on the hydrophobic effect; and the use of small angle scattering to probe the evolution of structure during protein folding