

# Oak Ridge National Laboratory

## Neutron Scattering Science Points of Contact

Doug Abernathy, [abernathydl@ornl.gov](mailto:abernathydl@ornl.gov) (865-576-5105)  
*Atomic-scale dynamics at thermal and epithermal energies*

John Ankner, [anknerjf@ornl.gov](mailto:anknerjf@ornl.gov) (865-576-5122)  
*Density profiles normal to the surface at liquid surfaces and liquid interfaces*

Bryan Chakoumakos, [chakoumakobc@ornl.gov](mailto:chakoumakobc@ornl.gov) (865-574-5235)  
*Nuclear and magnetic crystal structure systematics and structure-property relationships among inorganic materials, powder and single-crystal neutron and x-ray diffraction methods*

Hahn Choo, [chooh@ornl.gov](mailto:chooh@ornl.gov) (865-574-3818)  
*Engineering neutron diffraction, structure-property relationships of structural materials, residual stresses*

Leighton Coates, [coatesl@ornl.gov](mailto:coatesl@ornl.gov) (865-963-6180)  
*Macromolecular crystallography applications in structural biology, enzymology, and computational chemistry*

Takeshi Egami, [egami@utk.edu](mailto:egami@utk.edu) (865-974-7204)  
*Joint Institute for Neutron Sciences, local structural analysis, the PDF method, inelastic neutron scattering*

Georg Ehlers, [ehlersg@ornl.gov](mailto:ehlersg@ornl.gov) (865-576-3511)  
*Inelastic neutron scattering, magnetism*

Al Ekkebus, [ekkebusae@ornl.gov](mailto:ekkebusae@ornl.gov) (865-241-5644)  
*Neutron Scattering Science user program*

Jaime Fernandez-Baca, [fernandezbj@ornl.gov](mailto:fernandezbj@ornl.gov) (865-576-8659)  
*Inelastic neutron scattering, hard condensed matter, magnetism, magnetic oxides, magnetic excitations in solids*

Garrett Granroth, [granrothge@ornl.gov](mailto:granrothge@ornl.gov) (865-576-0900)  
*Atomic-scale dynamics in the 0 - 2eV range, magnetic materials, quantum magnetism, disordered magnets.*

Mark Hagen, [hagenme@ornl.gov](mailto:hagenme@ornl.gov) (865-576-1521)  
*Inelastic neutron scattering and diffraction, magnetism, ferroelectricity, magnetic and structural phase transitions, real time and in-situ neutron scattering*

William T. Heller, [hellerwt@ornl.gov](mailto:hellerwt@ornl.gov) (865-241-0093)  
*Center for Structural Molecular Biology; small-angle neutron scattering, biological macromolecules and self-assembled systems, computational modeling*

Ken Herwig, [herwigkw@ornl.gov](mailto:herwigkw@ornl.gov) (865-576-5095)  
*Atomic scale dynamics, diffusive and vibrational motions of adsorbed molecules or large molecules*

Jason Hodges, [hodgesj@ornl.gov](mailto:hodgesj@ornl.gov) (865-576-7034)  
*Atomic structure in a wide variety of powdered crystalline samples*

Christina Hoffmann, [hoffmanncm@ornl.gov](mailto:hoffmanncm@ornl.gov) (865-576-5127)  
*Atomic structure in moderate-unit-cell single crystal samples*

Camden Hubbard, [hubbardcr@ornl.gov](mailto:hubbardcr@ornl.gov) (865-574-4472)  
*Residual stress mapping in engineering and research samples, micro residual stresses in polycrystalline composites, crystal structure and in situ studies*

Ashfia Huq, [huqa@ornl.gov](mailto:huqa@ornl.gov) (865)574-7923  
*Atomic structure analysis of powder crystalline and non crystalline materials using the Rietveld and PDF method*

Mark Lumsden, [lumsdenmd@ornl.gov](mailto:lumsdenmd@ornl.gov) (865-241-0090)  
*Neutron spectroscopy, magnetic materials, low-dimensional quantum magnetism.*

Eugene Mamontov, [mamontove@ornl.gov](mailto:mamontove@ornl.gov) (865-574-5109)  
*Atomic scale dynamics, diffusive motions of molecules on surfaces and in confinement*

Yuri Melnichenko, [melnichenkov@ornl.gov](mailto:melnichenkov@ornl.gov) (865-576-7746)  
*Small angle neutron scattering; soft condensed matter; phase transitions and critical phenomena in liquid and supercritical polymer solutions, gels and blends; dynamics and structure of fluids confined in small pores*

Herb Mook, [mookhajr@ornl.gov](mailto:mookhajr@ornl.gov) (865-574-5242)  
*Magnetism and lattice dynamics of highly correlated electronic systems such as heavy fermion materials and the high temperature superconductors*

Dean Myles, [mylesda@ornl.gov](mailto:mylesda@ornl.gov) (865-574-5662)  
*Center for Structural Molecular Biology, biological structure & function, bio-SANS, bio-mimetics, protein crystallography, deuterium labeling*

Steve Nagler, [naglerse@ornl.gov](mailto:naglerse@ornl.gov) (865-574-5240)  
*Inelastic neutron scattering and diffraction, novel materials, correlated electron systems, low dimensional and quantum magnetism, molecular magnets, phase transitions*

Joerg Neufeind, [neufeindjc@ornl.gov](mailto:neufeindjc@ornl.gov) (865-241-1635)  
*Atomic structure of liquids and glasses, neutron and hard x-ray scattering.*

Michael Ohl, [ohlme@ornl.gov](mailto:ohlme@ornl.gov) (865-574-8426)  
*Inelastic neutron scattering, dynamics in glasses and disordered materials*

Judy Pang, [pangj@ornl.gov](mailto:pangj@ornl.gov) (865-241-4416)  
*Materials deformation understanding via synchrotron and neutron diffraction methods*

Andrew Payzant, [payzanta@ornl.gov](mailto:payzanta@ornl.gov) (865-574-6538)  
*Studies on polycrystalline materials as a function of temperature and atmosphere; internal strain and texture in engineering materials*

Claudia Rawn, [rawnci@ornl.gov](mailto:rawnci@ornl.gov) (865-574-3184)  
*Structure property relationships, thermal expansion, and phase equilibria*

Lee Robertson, [robertsonjl@ornl.gov](mailto:robertsonjl@ornl.gov) (865-574-5243)  
*Local atomic arrangements in alloys, martensitic phase transitions, lattice dynamics, structure and dynamics of liquids and amorphous materials*

Greg Smith, [smithgs1@ornl.gov](mailto:smithgs1@ornl.gov) (865-241-1742)  
*Neutron reflectometry, soft condensed matter, thin films and interfaces, biomimetic materials*

Judy Trimble, [trimblej@ornl.gov](mailto:trimblej@ornl.gov) (865-241-3675)  
*Neutron Scattering Science user program*

Chris Tulk, [tulkca@ornl.gov](mailto:tulkca@ornl.gov) (865-576-7028)  
*Atomic structure at pressures up to 100 Gp; Small-angle scattering from liquids and glasses, and analysis of disorder in crystalline materials*

Volker Urban, [urbanvs@ornl.gov](mailto:urbanvs@ornl.gov) (865-576-2578)  
*Small angle neutron and x-ray scattering, macromolecular structures, soft condensed matter and biological systems*

Xun-Li Wang, [wangxl@ornl.gov](mailto:wangxl@ornl.gov) (865-574-9164)  
*Residual stress, mechanical behaviors, phase transformation, magnetism. In-situ time-resolved diffraction and small angle scattering.*

George Wignall, [wignallgd@ornl.gov](mailto:wignallgd@ornl.gov) (865-574-5237)  
*Small angle neutron scattering, macromolecular structures in the condensed and fluid states, polymers and polymers solutions*

Barry Winn, [bwinn@bnl.gov](mailto:bwinn@bnl.gov) (865-241-0092)  
*Neutron triple axis spectroscopy, shape memory alloys*

Michaela Zamponi, [zamponimm@ornl.gov](mailto:zamponimm@ornl.gov), 865-576-5119,  
*Inelastic neutron scattering, soft condensed matter, polymer dynamics*

Jerel Zarestky, [zarestkyjl@ornl.gov](mailto:zarestkyjl@ornl.gov) (865-574-4951)  
*Neutron triple-axis spectrometry, lattice dynamics, magnetism, intermetallic compounds, superconductivity*

Jinkui Zhao, [zhaoj@ornl.gov](mailto:zhaoj@ornl.gov) (865-574-0411)  
*Large-scale structures in a variety of materials, including biological molecules, polymers, colloidal systems*

Andre Zheludev, [zheludevai@ornl.gov](mailto:zheludevai@ornl.gov) (865-241-0098)  
*Inelastic neutron scattering and diffraction, quantum magnetism, low dimensional systems, novel materials*

July 2007