Neutron Scattering PhD Research
IGERT TRAINEESHIP PROGRAM
Now Accepting Applications

The University of Missouri, Columbia (MU) is offering a new paradigm for interdisciplinary training of PhD students in the application of neutron scattering techniques to research within three major themes of condensed matter science and engineering:

1) biological macromolecules and biomaterials;
2) the structure and dynamics of strongly correlated electronic materials;
3) design of artificial nanoscale materials.

ANNUAL STIPEND: $30,000 plus up to $10,500 for tuition and fees
TRAINEESHIP PERIOD: 2 to 3 years

Application requirements:
• US residency
• Bachelor’s degree in physics, biology, biochemistry, mechanical & aerospace engineering, or electrical and computer engineering
• GRE (general and subject)
Apply online at http://igert.missouri.edu
Contact: Prof. Haskell Taub, TaubH@missouri.edu

Fundamental research utilizing neutron scattering techniques has led to a host of technological advances in diverse areas such as drug design, the development of high-strength metals and cements, novel materials for electronic devices, and hydrogen storage materials.

Based on these achievements, the US has invested nearly $2B in new neutron scattering facilities over the past decade. This expansion provides exciting new opportunities for research in the fields of bioscience, materials science, condensed matter physics, and mechanical and electrical engineering.

MU is home to the nation’s largest university research reactor (MURR®), which has a suite of neutron scattering instruments for the investigation of the structure and dynamics of a wide range of materials. These instruments include the only triple-axis spectrometer at a US university, which can be used for studies of collective excitations in condensed matter by inelastic neutron scattering. MURR also has a diffractometer that can rapidly collect diffraction patterns for determination of the crystal structure of powder samples and a neutron reflectometer for structural studies of thin films.

Other participating institutions in the MU IGERT award:

IGERT is the National Science Foundation’s flagship interdisciplinary training program, educating US PhD scientists and engineers by building on the foundations of their disciplinary knowledge with interdisciplinary training.