Los Alamos
NATIONAL LABORATORY

General information:

LANSCE: The Los Alamos Neutron Science Center is the major experimental science facility at Los Alamos National Laboratory (LANL), underpinning the Laboratory as a world-class scientific institution. At the heart of LANSCE is a powerful linear accelerator that accelerates protons to 84% the speed of light. When these protons strike a target of tungsten metal, neutrons are produced. Protons and neutrons are used in a wide range of applications that help the nation maintain its leadership role in many areas of science and technology. Research conducted at LANSCE helps to maintain the nation's nuclear deterrent, counter the spread of weapons of mass destruction and lays the foundation for many of the products we use in our daily lives by supporting materials sciences and technology

Manuel Lujan Jr. Neutron Scattering Center: The Lujan Neutron Scattering Center employs a pulsed spallation neutron source equipped with time-of-flight spectrometers for neutron scattering studies of condensed-matter. Neutron scattering is a powerful technique for probing the microscopic structure and dynamics of condensed matter and is used in materials science, engineering, condensed matter physics, chemistry, biology, and geology.

Job description:

Postdoctoral position in spallation physics and instrument development: The Manual Lujan Jr. Neutron Scattering Center (LANSCE-LC) is seeking postdoctoral candidates in the area of spallation physics and neutron scattering instrument development.

The Lujan Center enhancement project is designed to fully utilize the capabilities und opportunities in the area of neutron scattering at LANSCE. The project calls for the construction of three new neutron scattering instruments and major upgrades to six existing neutron scattering instruments. The successful candidate will be working as an interface between the target moderator development efforts at LANSCE and the instrument scientist. He/she will be expected to perform instrument simulations using one of the commonly used instrument code like McStas or NISP, communicate the findings to

the instrument scientist and provide feedback to the source developer based on the interaction with the instrument scientist.

Desired Skills:

Previous experience in the at least one of the following areas: target moderator development, instrument design or neutron scattering, is desired. Previous experience with McStas and/or NISP or an equivalent code package as well as basic understanding of the particle transport code MCNPX is strongly desired, but is not absolutely necessary. Good programming skills in C\C++ and/or Fortran will be beneficial.

Education:

A Ph.D. in physics, chemistry, material science, nuclear physics or a closely related field completed within the last five years or soon to be completed is required.

Notes To Applicants:

For further technical information, contact Dr. Guenter Muhrer at muhrer@lanl.gov. Please submitted your application through http://www.hr.lanl.gov/FindJob/, job # 214120 (generic job advertisement for post-doctorial positions at the Manuel Lujan Jr. Neutron Scattering Center), as well as directly to Dr. Guenter Muhrer at muhrer@lanl.gov.