

Job Posting Title

Postdoctoral Research Associate in Fiber Diffraction / NB50388197

Posted Date

08/30/2013

End Posting Date

10/30/2013

## **Purpose**

The Neutron Sciences Directorate (NScD) at Oak Ridge National Laboratory (ORNL) operates the High Flux Isotope Reactor (HFIR), the United States' highest flux reactor based neutron

source, and the Spallation Neutron Source (SNS), the world's most intense pulsed accelerator based neutron source. Together these facilities operate 24 instruments for neutron scattering research, each year carrying out in excess of 1,000 experiments in the physical, chemical, materials, biological and medical sciences for more than 3,000 visiting scientists. HFIR also provides unique facilities for isotope production and neutron irradiation. To learn more about Neutron Sciences at ORNL go to: <http://neutrons.ornl.gov> .

The Biology and Soft Matter Division at Oak Ridge National Laboratory (ORNL) invites applications for a postdoctoral position in fiber diffraction to study the structure of lignocellulosic biomass and how it changes during pretreatment during the production of biofuels.

## **Major Duties/Responsibilities**

The successful candidates will carry out research investigating the structure and properties of several types of plant cell wall systems and their extracted components, including cellulose, as they are thermochemically and enzymatically treated. This project involves multi-task, multi-disciplinary efforts involving cellulose chemistry, X-ray and neutron fiber diffraction and scattering, and computer modeling techniques. This represents an excellent opportunity for researchers to develop their careers and interact with leading scientists from around the world.

## **Qualifications Required**

A Ph.D. degree in structural studies of fibrous or polymeric systems or a related field is required. Candidates should have a proven track record in scattering, diffraction and molecular modeling and simulation techniques.

## **Qualifications Desired:**

Preferred candidates will be self-motivated, have good interpersonal, communication and presentational skills and demonstrated ability to interact effectively with staff at all levels and to work within a multi-disciplinary team.

Technical Questions: Questions regarding the position can be directed to Dr. Paul Langan (langanpa@ornl.gov). Please reference the position title and number in the correspondence.

## **Additional Information:**

Applicants cannot have received the most recent degree more than five years prior to the date of application and must complete all degree requirements before starting their appointment. Certain exceptions may be considered. This position is a temporary, full-time assignment for 24 months.

This position will remain open for a minimum of 5 days after which it will close when a qualified candidate is identified and/or hired.

We accept Word(.doc, .docx), Excel(.xls, .xlsx), PowerPoint(.ppt, .pptx), Adobe(.pdf), Rich Text Format(.rtf), HTML(.htm,

.html) and text files(.txt) up to 2MB in size. Resumes from third party vendors will not be accepted; these resumes will be deleted and the candidates submitted will not be considered for employment.

If you have trouble applying for a position, please email [ORNLRecruiting@ornl.gov](mailto:ORNLRecruiting@ornl.gov). ORNL is an E-Verify Employer.

UT--Battelle is recognized by our employees and the community as an inclusive environment where diversity is valued and individuals and teams are inspired to contribute fully to the organization's success. ORNL is an equal opportunity employer.