

# **Postgraduate Research Associate in Biomass Feedstock Resource Analysis**

**Environmental Sciences Division  
Oak Ridge National Laboratory  
Oak Ridge, Tennessee**

ORNL10-33-ESD

## **Project Description:**

ORNL Environmental Sciences Division seeks a post-doctoral researcher to provide technical and management support to a joint U.S.-China biomass assessment project. The collaborative project will assist China in developing one or more standardized biomass resource assessment methodologies that meet local planning and rural development requirements; make sure of existing data and prospective monitoring results; and facilitate national projections of future biomass supplies and costs.

The goals of the U.S.-China collaboration for integrated resource assessment include:

- 1) To assess existing and proposed approaches for biomass resource cost assessments;
- 2) To develop designs for data collection and monitoring systems;
- 3) To integrate sustainable production criteria into the methods;
- 4) To choose a pilot area for testing and verifying the proposed assessment methods;
- 5) To provide training, build institutional capacity and exchange information on models, tools and approaches for biomass cost assessments;
- 6) Build mutual understanding and productive collaborative relationships among multi-agency and multi-national working group members; and
- 7) To recommend at least one Biomass Resource Costing Case Study to meet Chinese requirements.

The selected individual is expected to provide technical and managerial support as needed to help achieve these goals and to serve as lead or co-author for several supporting technical reports and journal articles.

ORNL is a global leader in biomass energy research and development. ORNL Bioenergy Programs are supported by the U.S. Department of Energy (DOE) to foster growth of lignocellulosic bioenergy production and reduce U.S. dependence on foreign oil. ORNL work is integrated with interdisciplinary teams at other National Laboratories, at universities, and in the private sector. The ORNL Bioenergy Program was initiated forty years ago and continues to develop expertise for the next generation of feedstocks, including agricultural and forestry residues and dedicated lignocellulosic grass and tree crops. ORNL maintains world-class plant genomics, systems microbiology, and proteomics research capabilities. The successful candidate will join a vibrant ORNL research team working on bioenergy and the environment.

**Qualifications:**

A Ph.D. or master's degree in resource, forest, or agricultural economics, or a clearly justified, related field, is required. Excellent English language presentation and writing skills are necessary as well as demonstrated ability to facilitate and thrive in a multi-disciplinary team environment. An understanding of biomass (agricultural and forestry) production systems is necessary. Demonstrated experience and working knowledge with models and systematic approaches for conducting biomass resource assessments, preferably for bioenergy feedstock production, is required. A basic understanding of GIS is preferred. Occasional travel to China may be required. Knowledge of Chinese language (Standard Mandarin) is desired.

Experience and basic understanding in supporting disciplines such as soil science, agricultural engineering, agricultural economics, geography, ecology, statistics, rural sociology, regional planning, and international studies are also useful. Expertise in aspects of bioenergy production systems in China, international exchange and training programs, technical workshop planning, international research collaborations, biological monitoring, and related software tools are also beneficial.

Applicants cannot have received the most recent degree more than five years prior to the date of application appointment and must complete all degree requirements before starting their appointment.

**Technical Questions:**

Questions regarding the position can be directed to Erin Wilkerson at [wilkersoneg@ornl.gov](mailto:wilkersoneg@ornl.gov). Please include the requisition number and title when corresponding.

**How to Apply:**

Qualified applicants must apply online at [https://www2.ornl.gov/ORNL\\_POST/](https://www2.ornl.gov/ORNL_POST/). All applicants will need to register before they can begin the online application. For complete instructions, on how to apply, please see the instructions at <http://www.ornl.gov/orise/edu/ornl/ornl-pdpm/application.htm>.

This appointment is offered through the ORNL Postgraduate Research Participation Program and is administered by the Oak Ridge Institute for Science and Education (ORISE). The program is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.