### **Geographical Information Systems (GIS) Analyst**

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

ORNL08-24-ESD

#### **Project Description:**

The Environmental Sciences Division (ESD), <a href="http://www.esd.ornl.gov">http://www.esd.ornl.gov</a> at the Oak Ridge National Laboratory (ORNL), <a href="http://www.ornl.gov">http://www.ornl.gov</a> has several openings for research associate positions beginning immediately. These positions involve the use of geographic information systems in hydrological modeling, and ecological indicators and regional simulation of ecological impacts. These projects are funded by NASA or the Department of Energy and are described on the Internet.

Modeling and Synthesis Thematic Data Center (Robert Cook, PI)

<a href="http://nacp.ornl.gov/mast-dc/">http://nacp.ornl.gov/mast-dc/</a>

Integrated Terrestrial Carbon Cycle Modeling (Mac Post, PI)

<a href="http://www.nacarbon.org/cgi-nacp/wcb/web/investigations/inv-pgp.pl?pgid-288">http://www.nacarbon.org/cgi-nacp/wcb/web/investigations/inv-pgp.pl?pgid-288</a>

Carbon Cycle Modeling of Agro Ecosystems (Tris West, PI)

<a href="http://nacarbon.org/cgi-nacp/web/investigations/inv-pgp.pl?pgid=136">http://nacarbon.org/cgi-nacp/web/investigations/inv-pgp.pl?pgid=136</a>

Candidates should have an M.S. in geography, ecology, soil science, forestry, or a related field. We seek a candidate with superior oral and written communication skills, excellent organizational skills, and strong personal motivation. The candidate must have knowledge and practical experience in using GIS software such as ESRI (workstation Arc/Info, ArcGIS, ArcView and associated modules such as GRID and Spatial Analyst) or other GIS/processing package, and knowledge and experience in using image processing software such as ERDAS Imagine, INVI, or IDRSI. Familiarity with visualization tools like IDV, NCL (NCAR Command Language), FERRET, GLODAP, LAS, GrADS, IDL, CDAT or others is an advantage. In addition, the candidate must have experience in acquiring and managing spatial data, familiarity with applying basic ecological and geographical principles within a spatial modeling framework. The candidate should have familiarity with UNIX and Windows operating systems, familiarity with environmentally relevant data layers, and programming experience, specifically in the context of developing GIS applications.

The candidate should be willing to work closely with other research staff in multiple capacities including contributing to a team designed to develop integrated ecological models and supporting the GIS and data needs of research team members. Responsibilities include managing and updating multiple spatial data sets, acquiring and assimilating new relevant spatial data sets, using GIS data and principles of landscape ecology to characterize landscape patterns at multiple scales, providing documentation for collected and newly created spatial data sets, and data integration.

Annual salary depends on experience. The position will be based at ORNL in Oak Ridge, Tennessee. All travel expenses are provided. The position is for one year.

# Qualifications: Master's degree required in Geography, Ecology, Soil Science, Forestry or related field.

Required discipline: Other Physical Sciences

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.

#### How to Apply:

Qualified applicants may apply online at <a href="https://www2.orau.gov/ORNL\_POST/">https://www2.orau.gov/ORNL\_POST/</a>. 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 <a href="http://www.orau.gov/orise/edu/ornl/ornl-pdpm/application.htm">http://www.orau.gov/orise/edu/ornl/ornl-pdpm/application.htm</a>. When applying for this position, please reference the position title and number (ORNL08-24-ESD).

This appointment is offered through the ORNL Postmaster's Research Associates Program and is administered by Oak Ridge Associated Universities (ORAU). This appointment 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.