# Post Master's or Postdoctoral Research Associate in Physics or Engineering for Electro-optical Components & Systems Development

# Measurement Science and Systems Engineering Division Energy and Engineering Sciences Directorate Oak Ridge National Laboratory Oak Ridge, Tennessee

### ORNL08-120-MSSE

#### **Project Description:**

The Nanosystems and Structures Group in the Measurement Science and Systems Engineering (MSSE) Division at the Oak Ridge National Laboratory (ORNL) is seeking to identify a postdoctoral and/or postmaster candidate. MSSE is seeking physics or engineering graduates with training and experience in the field of electro-optical sciences. The Nanosystems and Structures Group consists of staff members who develop a variety of materials, components, and systems through innovative and cost-effective research and development often sponsored by the Department of Defense. The selected candidate will conduct applied electro-optics research and development in areas such as innovative infrared detectors, fiber-optic sensors, novel radiation detectors, etc. The candidate will work with researchers with similar and complimentary backgrounds in the Nanosystems and Structures Group, throughout MSSE, and across ORNL. The candidate will be expected to participate and make presentations at technical conferences associated with professional societies and support the publication of original work in peer-reviewed journals. Over the long term, the candidate will be expected to lead research and development project teams and work directly with sponsors.

#### Qualifications:

A master's and/or Ph.D. degree is required in either Physics or Engineering. The candidate must have a working knowledge of electro-optical components and systems. The candidate should have mechanical and computer related aptitude for supporting the experimental aspects of this position. In addition, the candidate should have a working knowledge of electrical circuit design. A background in, or willingness to learn, hands-on microfabrication/MEMS processing is desirable. The candidate must have excellent writing skills for preparing reports, proposals, and publications/journal articles, and possess excellent communication skills to effectively give presentations as well as to interface with project sponsors and project teams. The candidate must be a self-starter who knows how to learn and is interested in broadening his/her knowledge. Some travel may be required. 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

http://www.orau.gov/orise/edu/ornl/ornl-pdpm/application.htm. Interested candidates need to apply as soon as possible. For technical questions regarding the position, please contact Slobodan Rajic at <a href="mailto:rajics@ornl.gov">rajics@ornl.gov</a>.

This appointment is offered through the ORNL Postdoctoral or Postmaster's Research Associates Program and is administered by Oak Ridge Associated Universities (ORAU). The position is open to citizens or legal permanent residents of the US without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnamera veteran or disabled veteran.