



**Post-doctoral Research Associate Position**  
**Heterogeneous Catalysis by Carbon-based Materials**  
**Center for Nanophase Materials Sciences, Oak Ridge National Laboratory**

**ORNL11-12-CNMS**

The Multiscale Functionality Group of the Center for Nanophase Materials Sciences (CNMS) (<http://www.cnms.ornl.gov/>) at Oak Ridge National Laboratory (ORNL) is seeking a post-doctoral associate to work on a research project in catalysis by carbon materials.

**Brief Description of Major Duties and Responsibilities**

It is expected that the candidate will conduct research on nanostructure carbon-based catalyst and the role they play in promoting or altering catalytic pathways. This project includes studies of reaction mechanisms combined with characterization of new catalytic materials. The research will broadly target the use of carbon-based catalysts in oxidative dehydrogenation reactions and its utilization in energy related applications. The underlying goal will be to achieve a fundamental understanding of the active sites in these heterogeneous catalytic processes and the relationship between the structure of the carbon-based materials and their catalytic properties.

**Qualifications:**

Candidates must have a Ph.D. in chemistry, materials chemistry, chemical engineering with research focus on heterogeneous catalysis. The successful candidate will have a demonstrated background in researching fundamental reaction kinetics and utilization of many characterization and analytical techniques for heterogeneous catalysts (e.g. temperature-programmed experiments, BET, XRD, FT-IR, TGA, chemisorption, GC, MS). The candidate should be a self-starter, able to work independently and able to participate creatively in refining program directions. Presentations at national meetings and publication of scientific results in peer-reviewed journals are expected. The candidate must have good oral and written communication skills, and be able to interact effectively with a broad range of colleagues. 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.

**Remarks**

For more information about this position please contact Dr. Viviane Schwartz ([schwartzv@ornl.gov](mailto:schwartzv@ornl.gov)) and reference this position title and number in your correspondence. Applications will be accepted until December 31, 2010 or until the position is filled.

**How to Apply:**

Qualified applicants may 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). 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.