

# **Postgraduate Research Associate in Fuels, Engines, and Emission Research**

## **Engineering Sciences and Technology Division Oak Ridge National Laboratory Oak Ridge, Tennessee**

ORNL08-13-ESTD

### **Project Description:**

The Fuels, Engines, and Emissions Research Center (FEERC) in the Engineering Science and Technology Division at the Oak Ridge National Laboratory (ORNL) is seeking applications for a Postgraduate Research Associate through the Oak Ridge Institute for Science and Education (ORISE).

The successful candidate(s) will perform research on advanced emission control technologies and/or advanced engine combustion. Emission control research for internal combustion engines will likely have an emphasis on understanding the effect of chemical reactions taking place inside NO<sub>x</sub> abatement devices, oxidation catalysts, and/or particulate filters. Engine combustion research may include effects of fuel chemistry on PCCI combustion, HCCI combustion, and/or low-temperature combustion.

### **Qualifications:**

Ph.D. or Master's degree required. A background in mechanical engineering, chemical engineering, or chemistry is preferred, although other disciplines might also be considered. "Hands-on" experience with one or more of the following topics is desired: engine dynamometer research, engine controls, compression-ignition engine research, spark-ignition engine research, combustion analysis, engine modeling, catalyst characterization and evaluation, emissions measurement with conventional gas analyzers (chemiluminescent, FID, NDIR, etc.), particulate measurement, exhaust speciation with FTIR gas analysis and/or mass spectrometry, data acquisition systems (LabView, Cell Assistant, etc.). The successful candidate(s) will be expected to contribute to existing research programs and will have the opportunity to add valuable experience for career development. Excellent written and oral communication skills and the ability to work in a team are essential in this multi-disciplinary area. 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.

### **Additional Information:**

- Engineering Science and Technology Division:  
[http://www.ornl.gov/sci/engineering\\_science\\_technology/](http://www.ornl.gov/sci/engineering_science_technology/)
- Fuels, Engines, and Emissions Research Center:  
[http://www.ornl.gov/sci/ees/facility\\_feerc.shtml](http://www.ornl.gov/sci/ees/facility_feerc.shtml)

**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>. When applying for this position, please reference the position title and number (ORNL08-13-ESTD).

This appointment is offered through the ORNL Postdoctoral 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.