

JOB TITLE: Pressure Gain Combustion for Land Based Power Generation

DEPARTMENT, AGENCY: Department of Energy, National Energy Technology Laboratory

SALARY RANGE: Depends on level of experience

OPEN PERIOD: Until Filled

LEVEL: Post-graduate

POSITION INFORMATION: Temporary, ~24 months full time (40 hrs) beginning Jan 2014

DUTY LOCATION: Morgantown, WV

WHO MAY BE CONSIDERED: United States Citizens & Foreign Nationals with appropriate approval

JOB SUMMARY:

The National Energy Technology Laboratory (NETL) is the only DOE laboratory with a primary mission of the development of advanced fossil energy technologies including coal gasification, gas turbines, solid oxide fuel cells, catalysts, sorbents, and carbon capture and sequestration. The NETL Office of Research and Development Innovative Energy Concepts Team within the Thermal Sciences Division focuses on the development of advanced energy concepts with the direct or indirect ability to reduce carbon emissions from fossil fuel derived power production.

A post-doctoral position on this team is immediately available with a duty station of Morgantown, WV. The researcher will assist with an experimental study on the application of rotating detonation combustion for land based power generation. The post-doctoral position will have the following job responsibilities: participating in a design team to develop appropriate experimental diagnostics for high speed, high pressure combustion, assist with development of test plans focused on production of validation data for computational models and verification of fundamental concepts related to rotating detonation combustion, reporting experimental results for both DOE internal and external review, assisting in the identification of future research objectives.

A PhD in Chemistry, Physics, Aerospace, Mechanical or Chemical Engineering, or related field is required. Candidates with experience in one or more of the following areas are particularly encouraged to apply:

- 1) High pressure combustion experimental design with optical diagnostic techniques
- 2) A strong background and training in thermal sciences, fluid mechanics and combustion sciences
- 3) Demonstrated accomplishments in experimental research
- 4) A working style that demonstrates initiative and a willingness to take on considerable individual responsibility
- 5) Excellent verbal- and written-communication skills
- 6) The ability to work effectively with others

KEY REQUIREMENTS:

- 1) Applicants must be U.S. Citizens or approved Foreign Nationals suitable for Federal employment, as determined by background investigation.

2) Must hold a masters and/or PhD degree from an accredited institution in Materials Science, Physics, Electrical Engineering, or a related field is required.

HOW TO APPLY:

Applicants should apply through the Oak Ridge Institute for Science and Education (ORISE) program. The ORISE Program provides opportunities for undergraduate students, recent graduates, graduate students, postdoctoral researchers, and faculty researchers. NETL utilizes the ORISE program to support research and work within NETL's Office of Research & Development.

- Interested applicants should complete the online application at <https://netl.orau.gov/>.

In the online application **indicate "MORGANTOWN" as your preferred NETL location** and **list Don Ferguson as your requested mentor**. This will associate your application with this job posting.

If you have additional questions please contact:

Don Ferguson

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