

**JOB TITLE:** Postgraduate Researcher

**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 Appointment: 1 year with potential for extension; Full-Time (40 hours per week); Starting as soon as possible.

**DUTY LOCATION:** Morgantown, WV

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

**JOB SUMMARY:**

### **Computational Fluid Dynamics of Magneto-Hydrodynamic Generators.**

Applications are sought for a post-graduate research fellowship in computational energy sciences at the National Energy Technology Laboratory (NETL) as part of the ORISE post-graduate fellowship program. The research engineer would be part of a multidisciplinary team developing and assessing next generation energy systems. The specific activity would involve the development, validation and application of a CFD based tool chain for the assessment and optimization of magneto-hydrodynamic generator designs. Applicants should have experience applying and modifying commercial or open-source computational fluid-dynamic software (e.g. Fluent or OpenFOAM) including associated mesh generation and post-processing tools and a strong background in computational and thermal sciences. Experience and/or background in the areas of plasma physics, magneto-hydrodynamics, CFD-workflow automation and/or optimization are desired though not necessary.

### **KEY REQUIREMENTS:**

- Applicants must be U.S. Citizens or approved Foreign Nationals suitably approved to be onsite, as determined by background investigation.
- Must hold a Master's or PhD degree from an accredited institution in chemical engineering, mechanical engineering, applied mathematics, physics or another field appropriate for the applicant's area of expertise.

### **HOW TO APPLY:**

Applicants should apply through the Oak Ridge Institute for Science and Education (ORISE) program ([orise.ornl.gov](http://orise.ornl.gov)). 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.ornl.gov/>
- In the online **application list David Huckaby and Rigel Woodside as your requested mentors**. This will associate your application with this job posting.

If you have additional questions please contact Nancy Andres,  
[Nancy.Andres@NETL.DOE.GOV](mailto:Nancy.Andres@NETL.DOE.GOV), who is the NETL ORISE program contact.

**ADDITIONAL INFORMATION:**

Please see the following for more information about onsite research at NETL  
[http://www.netl.doe.gov/onsite\\_research/index.html](http://www.netl.doe.gov/onsite_research/index.html)