|  |  |
| --- | --- |
| **TITLE:** | Natural Gas Infrastructure Engineering Research Intern |
|  |  |
| **DEPARTMENT:** | U.S. Department of Energy/National Energy Technology Laboratory (NETL) |
|  |  |
| **NETL CONTACT:** | Peter Hsieh, peter.hsieh@netl.doe.gov |
|  |  |
| **DUTY LOCATION:** | Albany, OR |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ACADEMIC LEVEL:** |  | PhD | **X** | MS | **X** | BS |  | Undergrad |  | Faculty |

|  |  |
| --- | --- |
| **POSITION** **INFORMATION:** | 1-year appointment; full time (40 hours per week) with the possibility of extension |
|  |  |
| **CLOSING DATE:** | 7/31/2018 |
|  |  |
| **WHO MAY BE** **CONSIDERED:** | United States Citizens, LPRs, & Foreign Nationals with appropriate approval which includes F-1 OPT with EAD (STEM extension not valid), J-1 Exchange Visitor, and LPR with EAD |

**SUMMARY:**

The National Energy Technology Laboratory (NETL) is interested in improving composite liner materials used in natural gas pipelines. The engineering research intern will be a part of an interdisciplinary team evaluating different fabrication methods for composite metal-polymer barrier liners and measuring the gas permeability of different polymer materials. The candidate will be actively engaged in sample fabrication and data collection. Candidates should be comfortable working in an interdisciplinary team environment, have excellent communication skills, and training in materials science and engineering or a closely-related academic discipline.

**Desired Expertise:**

1. Academic coursework or research experience in metallurgy or polymer science/engineering.
2. A solid understanding of measurement science principles, particularly the estimation of uncertainty in experimental data.
3. Hands-on laboratory experience in physics, chemistry, materials engineering (including metallurgy or polymer engineering), mechanical engineering, industrial engineering, or chemical engineering.
4. Experience in metallography, welding of metal foils, or packaging science.

#### **Qualifications:**

* BS or MS in Materials Science and/or Engineering preferred, candidates with degrees in Engineering or Physics with relevant expertise will also be considered.

**Key Requirements:**

1. Course work in physics, chemistry, metallurgy, polymer engineering, materials engineering, or engineering thermodynamics.
2. Familiarity with chemical and workplace safety protocols in a research or industry laboratory context. Candidates with relevant academic laboratory course work that includes safety training may be considered.
3. Strong verbal and written English communication skills.

**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 to apply classroom knowledge in a real-world setting to learn about NETL’s core mission areas.

* Interested applicants should complete the online application at <http://www.orau.gov/netl/>. For questions or issues, please email both Terry.Howard@orau.org and Kerri.Fomby@orau.org .
* In the online application, **list Peter Hsieh as your requested mentor.** This will associate your application with this research opportunity. Please send a CV to peter.hsieh@netl.doe.gov.
* If you have additional questions, please contact Patricia Adkins-Coliane, Patricia.adkins-coliane@netl.doe.gov, who is the NETL Graduate Education Program Manager.

The participant(s) will be assigned to the program solely for the educational benefit it provides. The assigned project should not include activities that are reserved for federal employees nor should it require a participant to perform inherently governmental functions such as: supervise or mentor federal employees or federal contractor staff, hire or fire anyone; have budget, program management, or signature authority; carry an official job title; or function in any way as a representative of the federal government.