|  |  |
| --- | --- |
| **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](mailto:peter.hsieh@netl.doe.gov) |
|  |  |
| **DUTY LOCATION:** | Albany, OR |

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

|  |  |
| --- | --- |
| **POSITION**  **INFORMATION:** | 1-year appointment; full time (40 hours per week) with the possibility of extension |
|  |  |
| **CLOSING DATE:** | March 31, 2019 |
|  |  |
| **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:**

NETL is interested in the development of new protective materials for pipelines used in the recovery, transportation, and utilization of natural gas. The post-doctoral researcher will be a part of an interdisciplinary team developing composite barrier liners that are impermeable to gas diffusion at natural gas pipeline-relevant pressures. The candidate will take an active role in designing experiments to test joining processes for polymeric and metallic thin films to form gas-tight seams and welds. Candidates should have excellent communication skills and laboratory experience relevant to attainment of these near-term goals.

**Desired Expertise:**

1. Prior academic courses or research experience in barrier film technology or packaging science
2. Ability to collaborate with industry partners to identify challenges in scale-up or manufacturability
3. Familiarity with analytical methods for polymer characterization

**Qualifications:**

* PhD in Materials Science and/or Engineering or Packaging Science; candidates with a PhD in Mechanical Engineering with relevant expertise will also be considered

**Key Requirements:**

1. Academic courses in polymer science/engineer, packaging science, or materials engineering
2. Strong verbal and written English communication skills
3. Demonstrated experience in conducting scientific research

**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.zintellect.com. For questions or issues, please email [NETLadmin@orau.org](mailto:NETLadmin@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](mailto:peter.hsieh@netl.doe.gov).
* If you have additional questions, please contact Patricia Adkins-Coliane, [Patricia.adkins-coliane@netl.doe.gov](mailto: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.