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| **TITLE:** | Brine Chemistry Analytical Associate |
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| **DEPARTMENT:** | U.S. Department of Energy/National Energy Technology Laboratory (NETL) |
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| **NETL CONTACT:** | Alexandra Hakala; Alexandra.Hakala@netl.doe.gov |
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| **DUTY LOCATION:** | Pittsburgh, PA |

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

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| **POSITION** **INFORMATION:** | 1-year appointment; full time (40 hours per week) with the possibility of extension |
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| **CLOSING DATE:** | 2/1/2019 |
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| **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:**

Through the Oak Ridge Institute for Science and Education (ORISE) this posting seeks motivated, post-graduates (M.S.-level) interested in performing research as part of the Geochemistry Team within the Geological and Environmental Systems Directorate at NETL. Post-baccalaureate candidates may be considered if sufficient experience exists. NETL is a multi-disciplinary, scientific and technical-oriented U.S. Department of Energy National Laboratory. NETL’s Research and Innovation Center (R&IC) conducts research to evaluate environmental impacts and risk assessments associated with domestic energy resource development.

Evaluating reservoir behavior and performance, and tracking subsurface migration of produced waters and other fluids associated with energy development are two research objectives associated with NETL’s carbon storage and onshore unconventional resources research portfolios. Analysis of dissolved chemical constituents in produced waters from oil and gas operations is crucial for identifying appropriate treatment, re-use, and management strategies. We are searching for a candidate with interest in application of ion chromatography-based techniques for analysis of dissolved constituents in complex waters and fluids. Over 1 year of experience with operating, maintaining, developing analytical methods and processing data for chromatograph instruments will be preferred. The candidate will participate on a variety of projects with a multidisciplinary research team and will support research and development activities associated with the Brine Chemistry laboratory. The candidate will also assist with field work activities at oil and gas sites, and conduct bench-top experiments to evaluate transport and fate of chemical constituents from different energy systems.

This position supports brine chemistry analytical capabilities within the NETL Geochemistry team. Applicants for this position must have a background in chemistry and/or geochemistry, with aquatic chemistry laboratory experience. Familiarity with Geochemistry, Geology, Chemistry, and Oil & Gas Operations would be beneficial.

**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** **Alexandra Hakala** **as your requested mentor.** This will associate your application with this research opportunity. Please send a CV to Alexandra.Hakala@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.