

**Opportunity Title:** Mobility and Fate of Contaminants of Concern **Opportunity Reference Code:** DOE-MSIPP-17-1-PNNL

Organization	U.S. Department of Energy (DOE)
Reference Code	DOE-MSIPP-17-1-PNNL
How to Apply	A complete application must include the following to be considered:
	<ul> <li>Completion of all required fields in the application and successful application submission</li> <li>Undergraduate or graduate transcripts as appropriate</li> <li>Two recommendations</li> </ul>
	If you have questions, send an email to Kerri Fomby at kerri.fomby@orau.org . Please include the reference code for this opportunity in your email.
	For technical questions, please contact Sabrina Hoyle at sabrina.hoyle@pnnl.gov.
Application Deadline	3/27/2017 12:00:00 AM Eastern Time Zone
Description	The Minority Serving Institutions Partnership Program (MSIPP) Internships is a new program to promote the education and development of the next generation workforce in critical science, engineering, technology, and math (STEM) related disciplines that complement current and future missions of DOE national laboratories. The MSIPP Internship program is designed to provide an enhanced training environment for next generation scientists and engineers by exposing them to research challenges unique to our industry.
	MSIPP Interns will be given the opportunity to complete Summer Internships aligned with ongoing U.S. Department of Energy Office of Environmental Management (DOE-EM) research under the direction of a host national laboratory. The internship will be performed at the host national laboratory, utilizing their facilities and equipment under the guidance of a research staff member. Minority Serving Institutions are institutions of higher education enrolling populations with significant percentages of undergraduate minority students.
	<b>Project:</b> The laboratory-based research involves experiments conducted to evaluate the processes that control the release and mobility of contaminants and their interactions with minerals, soils and sediments. The student will conduct research to determine the extent and rate of adsorption/desorption reactions, study the fate and transport of contaminants (e.g., U, Tc, Cr and I), and investigate changes in the chemical, mineralogical and physical properties of soils/sediments at different temporal and spatial scales. The student will be setting up and running batch and/or hydraulically saturated and unsaturated column







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experiments in support of these efforts. If time allows, the student will also process this data into meaningful graphs and tables.

**Location:** This internship will be located at Pacific Northwest National Lab.

**Salary:** Selected candidate will be compensated by either a stipend or salary, and may include one round trip domestic travel to and from the host laboratory. Stipends and salaries will be commensurate with cost of living at the location of the host laboratory. Housing information will be provided to interns prior to arrival at the host laboratory, and will vary from lab to lab.

Application Deadline: March 27, 2017

Expected Start Date: June 5, 2017

### Qualifications Eligible applicants must:

- Be a citizen of the United States,
- Be at least 18 years of age,
- Currently enrolled as a full-time undergraduate or graduate student at an accredited Minority Serving Institution, http://orise.orau.gov/sepreview/msipp/Approved%20MSI%20 School%20List%202017.pdf,
- Working toward a science, technology, engineering, or mathematics (STEM) degree,
- Have an undergraduate or graduate cumulative minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale, and
- Pass a drug test upon selection to participate in the MSIPP\*The process and timing for drug testing varies from lab to lab.Use of Marijuana/Cannabis or its derivatives if prescribed is legal in some states.However, having these drugs in your system is NOT legal at United States Federal Contractor sites and National Laboratories.

# Required Knowledge, Skills, Work Experience, and Education

### Successful candidates will:

• Be a current undergraduate or graduate student and have completed basic chemistry courses and have experience with basic chemistry practices, such as measuring pH.

#### Desired Knowledge, Skills, Work Experience, and Education

It is desirable for the candidate to have:



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 Geosciences courses, mechanical pipette, data processing, quality control, detailed and readable note taking, and time management, experience with batch and/or column experiments, maintenance of QA/QC documents, glassware maintenance, SigmaPlot, multi-tasking and lab housekeeping.

## Eligibility Requirements

- Citizenship: U.S. Citizen Only
- **Degree:** Currently pursuing a Bachelor's Degree or Master's Degree.
- Overall GPA: 3.00
- Discipline(s):
  - Chemistry and Materials Sciences (12 •)
  - Earth and Geosciences (21 ●)
  - Environmental and Marine Sciences (2 (2)
- Affirmation I certify that I am at least 18 years of age and a US citizen, and am currently enrolled as a student in a degree seeking undergraduate or graduate program in a STEM field at an accredited Minority Serving Institution (MSI).