



Seeking postdoctoral applicants for Geosciences Research Associate

The University of Wisconsin Department of Geoscience and the Wisconsin Geological and Natural History Survey (WGNHS), in partnership with the University of Wisconsin Water Resources Institute (WRI) seek a postdoctoral research associate interested in addressing science and policy challenges related to groundwater quality and human risks. This position will provide a unique educational and career opportunity for a recent graduate who is interested both in groundwater resources and in the policy decisions affecting those resources. This is a 2-year appointment, starting as soon as possible with a flexible start date. The position will remain open until filled and applications will be evaluated on a rolling basis.

The research associate will focus on the challenges associated with assessing fate and transport of point- and non-point source contamination in groundwater. The successful candidate will: 1) Develop novel methodology to streamline construction of predictive groundwater models for forecasting contamination risks; 2) Implement novel tools to assess uncertainty and optimally reduce risks; and 3) Assess methods for effectively and accurately communicating with non-specialist stakeholders and policymakers.

The projects supporting this postdoctoral position are both at an intermediate stage, meaning that significant existing hydrologic, contaminant, and geospatial data can be leveraged. However, the research associate will also have an opportunity to gain hands on field experience with the collection and integration of hydrogeologic and geophysical data for parameterizing numerical models. These models will be used actively in stakeholder engagement and to support informed policy decisions by state and local governments.

We seek applicants who can:

- Apply their academic background, including course work or research experience, in groundwater flow and contaminant transport processes, application of numerical models, and evaluating uncertainty in results.
- Work independently and in teams to develop, calibrate and apply three-dimensional groundwater flow and transport models using standard groundwater modeling packages such as MODFLOW, MODPATH, and MT3D. Knowledge of FloPy and coding in Python is strongly desired.
- Conduct field work, such as reconnaissance surveys, data collection, and installation and maintenance of groundwater sampling equipment at field sites.
- Compile and analyze hydrogeologic data, maintain project databases, document model development and application so that streamlined decision support can be readily reproduced elsewhere in Wisconsin as needed.
- Prepare and edit high-quality manuscripts for publication in addition to project reports.
- Prepare and present project findings in person to a variety of audiences, including local government officials, regulators, scientists, and interested stakeholders.

This Research Associate will be stationed at the University of Wisconsin-Madison Department of Geoscience with additional office space and support at the WGNHS Office (3817 Minera Point Road) near the UW-Madison campus. This unique appointment will provide opportunities to work with USGS researchers, local stakeholders and policymakers in Wisconsin, and offer teaching opportunities and mentorship as desired. Opportunities to network with other postdoctoral fellows and research associates will be offered through the University of Wisconsin-Madison and WRI.

More detail on the position is below.

For questions or to express your interest in this position, please contact:

hydro_postdoc_application@office365.wisc.edu

Application Deadline: **Open until filled.**

Eligibility

Any postgraduate who will have graduated with a PhD in hydrogeology, hydrology, or a related field in the last five years is eligible to apply. Research Associates must have completed all degree requirements before starting the position.

Stipend and Expenses

Annual salary is \$59,000 for this Research Associate position with additional benefits (see - <https://hr.wisc.edu/benefits/new-employee-benefits-enrollment/benefits-for-employees-not-covered-by-the-wrs/>) Travel associated with the position will be covered.

Application Requirements

Application packages should be emailed to: hydro_postdoc_application@office365.wisc.edu

and should include:

1. A cover letter that describes your background and abilities, your expectations from the postdoctoral experience and how this experience fits with your career goals. (2 pages or fewer)
2. Curriculum vitae with relevant educational, professional and volunteer experience. (no length limit)
3. Copies of all official undergraduate and graduate student transcripts. Unofficial transcripts will be accepted when applying, but official transcripts must be received before an offer of employment is finalized.
4. Names and contact information for three professional references.
5. One to four writing samples, both formal and informal (e.g., journal articles or other technical documents such as project reports, project reports, popular articles, web resources, etc.)

Selection Process

The selection committee will identify a short list of candidates for interviews. Interviews will be conducted by the committee to determine the best fit for the position. It is expected that applicants will possess a strong hydrogeological sciences and modeling background, strong analytical skills, an ability to manage projects and work independently, and excellent written and verbal communication skills.

Length of Assignment

The length of assignment is for a minimum of 2 years preferably starting as soon as possible. However, the start date is flexible and may be adjusted to accommodate academic semester needs or the needs of the candidates.

Reporting and Other Requirements

Quarterly reports will be required during the assignment.