

Postdoctoral Research Associate

Nuclear, Plasma, and Radiological Engineering

Applications Due July 15

The Advanced Reactors and Fuel Cycles research group (ARFC), led by Prof. Katy Huff, seeks exceptional candidates for a Postdoctoral Research Associate position. The ARFC group pursues novel insights into nuclear energy challenges through advanced computational methods and simulations at many scales. Our work involves the development and use of computational tools to advance the safety and sustainability of nuclear energy production through improved reactor designs, fuel cycle strategies, and waste management techniques. The group specializes in the development of multiscale multiphysics methods for advanced reactor modeling and simulation. The successful candidate will assist in the continuation of these research efforts, take leadership in scholarly work, contribute to mentoring undergraduate and graduate students, support research administration activities, and participate in the development of funding proposals. The postdoctoral research associate will interact and collaborate with all members of the group to identify relevant work, design research, develop software, analyze data, and publish results.

Qualifications

- A PhD in nuclear engineering, physics, computer science, or related field received by the appointment start date and within the last 10 years.
- Experience in open-source software development, high performance computing, and reproducible scientific computing.
- Familiarity with modern tools and methods for neutronics of advanced reactor systems.
- Familiarity with best practices in open-source scientific computing.
- Interest in AI/ML and the use of GPU-accelerated architectures.

The full position description can be found at arfc.npre.illinois.edu/positions/postdoc. The Postdoctoral Research Associate is a full-time, benefits-eligible position appointed on a 12-month service basis. The initial appointment is for one year with the possibility of extension based on performance and funding. The anticipated start date is August 16, 2024, but is negotiable. Applicants may be interviewed before the closing date (July 15, 2024); however, no hiring decision will be made until after that date. Salary is commensurate with experience and qualifications. The U of I is an EEO Employer/Vet/Disabled that participates in the federal e-Verify program and participates in a background check program focused on [prior criminal](#) or [sexual misconduct history](#).

How to Apply

By July 15, submit the following by email to Prof. Katy Huff at kdhuff@illinois.edu:

- Cover letter,
- Curriculum Vitae,
- Contact information for 3 professional references.

arfc.npre.illinois.edu

