POSTDOCTORAL SCHOLAR IN APPLIED NUCLEAR SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

The Bay Area Neutron Group in the Department of Nuclear Engineering at the University of California, Berkeley welcomes applications for postdoctoral scholars in neutron detection, low energy nuclear physics, and applied data science. Our work, in collaboration with US DOE National Laboratories, support applications in nonproliferation, nuclear security, nuclear energy, as well as basic nuclear physics. We have immediate needs for candidates to support a range of projects, including the measurement of inelastic neutron scattering cross sections on actinide nuclei, organic scintillator characterization for fast neutron and neutrino detection, and artificial intelligence applications in nuclear reactor monitoring and processing and analyzing large amounts of natural language text.

Each research topic area has different primary responsibilities, though tasks may include the support and execution of experimental campaigns, software development, data analysis and interpretation, manuscript development, and communication of research at relevant scientific meetings. Work will be performed remotely and at the 88-Inch Cyclotron at Lawrence Berkeley National Laboratory. The full-time annual salary will be commensurate with qualifications and experience.

There is potential for this position to be supported in part through the Nuclear Science and Security Consortium, an NNSA funded program designed to develop the next generation of nuclear security experts. As an NSSC Postdoctoral Fellow, you will be part of a community of nuclear science and security experts in academia and the US DOE National Laboratories.

Required Qualifications:
- PhD in Physics, Nuclear Engineering or related disciplines

Desired Qualifications:
- Experience with aspects of gamma and/or neutron radiation detection hardware, data acquisition, data analysis, and/or simulation
- Demonstrated creativity and highly developed problem-solving skills
- Superior academic performance and publication record
- Excellent verbal and written communication skills
- Demonstrated proficiency with nuclear instrumentation
- Experience with nuclear physics data analysis (e.g., ROOT)
- Demonstrated proficiency in Monte Carlo based radiation transport codes (e.g., MCNP and/or GEANT4)
- Experience in design optimization of radiation detectors and imaging systems

The position(s) will remain open until filled.

To apply: Send a cover letter and CV to Dr. Bethany Goldblum at bethany@nuc.berkeley.edu

Learn more:
https://bang.berkeley.edu/
https://nssc.berkeley.edu/