

GLENN T. SEABORG Distinguished Postdoctoral Associate

or more than six decades, Idaho National Laboratory (INL) scientists and engineers have helped solve some of the nation's most pressing energy, environment and national security challenges. The advancement of actinide chemistry and physics is a fundamental part of INL's mission. Part of the mission of INL's Glenn T. Seaborg Institute is to prepare the next generation of actinide scientists, with particular emphasis on advancing nuclear energy technologies and helping early career researchers develop a potential long-term career. To support that effort, the laboratory is offering a valuable opportunity for top early career Ph.D. researchers in actinide related fields.

The Glenn T. Seaborg Distinguished Postdoctoral Research Associate program is designed to nurture early career scientists and engineers with strong interests in actinides for solid-state chemistry and physics, solution-phase chemistry and physics, and forensics and standards. This highly competitive appointment will provide the candidate with outstanding opportunities focused on programmatic research topics in conjunction with a high degree of flexibility to further the candidate's personal research interests. The Glenn T. Seaborg Distinguished Postdoctoral Research Associate appointment provides up to two years of research support to the selected candidate with a possible one-year extension.

Strong candidates will have demonstrated scientific aptitude through their knowledge, academic achievements, publication record, leadership roles, enthusiasm, creativity and innovation, showing their potential to become impact players in the field of actinide studies. Preferred candidates will be familiar with the actinide elements in support of nuclear energy, including fuel cycle technologies, used fuel and nuclear waste management, non-proliferation, and fundamental f-block science. Direct experience in the study of the actinides is a plus.



Glenn T. Seaborg

Glenn T. Seaborg (1912-1999) is widely recognized as the father of the modern periodic table of elements after he suggested that elements 89-103 be placed in a series below the lanthanide elements. This breakthrough allowed him to predict the properties of new elements and led to his discovery of multiple new elements, including plutonium, americium and the element that bears his name, seaborgium, among others. His work ushered in the modern nuclear age and led to the widespread use of nuclear energy and countless radiological advancements in medical, household and military applications. He served as an adviser to multiple U.S. presidents and organizations that shaped nuclear policy and research directions.

In his later career, Seaborg became concerned with the lack of new researchers entering the fields of actinide and transactinide studies. He was instrumental in establishing the first Glenn T. Seaborg Institute with the twofold mission of training and educating new researchers and advancing the scientific understanding of the f-block elements.

Distinguished Postdoctoral Associate program The program provides the following:

- An opportunity to develop and build independent research while helping advance INL, the Department of Energy, and national agendas for energy and security.
- Access to cutting-edge instrumentation and facilities.
- A strong mentoring program, including access to top INL researchers and leaders.
- A prestigious and competitively compensated position.

Candidate requirements

- Completed Ph.D. in the physical sciences, engineering, mathematics or comparable discipline prior to distinguished postdoctoral appointment and within the previous five years.
- Demonstrated leadership and potential for independent research.
- Demonstrated oral and written scientific communication skills in English.

Applicants are encouraged to establish one or more research contacts at INL to support their application.

Application deadline:

The application is open from August through November, with reviews and selections performed on an as-received basis.

Application process

Please submit the following materials:

- 1. Letter of interest that details long-term professional goals, dates of availability, and development goals that include descriptions of strengths and disciplinary areas for research (two pages maximum, 8.5-by-11-inch paper, single-sided)
- 2. Current curriculum vitae
- 3. Unofficial transcripts
- 4. Bibliography of publications, preprints and significant presentations
- 5. Abstract of doctoral dissertation
- 6. Proposed research plan (maximum of two pages, 8.5-by-11-inch paper, single-sided), which includes:
 - Research to be addressed
 - Conjectures or hypotheses to be tested
 - Proposed methods of investigation
 - Guiding relevant theoretical frameworks
 - Research schedule
 - Major equipment needs and other necessary resources
- 7. Three letters of recommendation (one preferred to be from Ph.D. adviser)
- 8. One peer reviewed publication preprint or reprint of your choice
- 9. One or more research contacts at INL if possible

Applicants must submit all required materials through www.inl.gov/careers.

Applications that do not follow all submission instructions may be ineligible.

Finalists may be asked to provide additional information.

Contact Information:

Postdoc Office Idaho National Laboratory 2525 N. Fremont Avenue Idaho Falls, ID 83415-3790 postdocoffice@inl.gov

