

Discover your future at Berkeley Lab!

[Berkeley Lab](#) (LBNL) addresses the world's most urgent scientific challenges by advancing sustainable energy, protecting human health, creating new materials, and revealing the origin and fate of the universe using interdisciplinary teams and by creating advanced new tools for scientific discovery. Founded in 1931, Berkeley Lab's scientific expertise has been recognized with 13 Nobel prizes. The University of California manages Berkeley Lab for the U.S. Department of Energy's Office of Science.

Berkeley Lab's [Advanced Light Source](#) (ALS) is seeking a Chemical Crystallography Research/Staff Scientist. Reporting to the Diffraction & Imaging Program Lead within the Photon Sciences Operations Group, the Scientist will lead the small molecule chemical crystallography program providing scientific and technical leadership and user support to the ALS Diffraction & Imaging Program and beamline 12.2.1 beamline (and other beamlines as appropriate). The Scientist will also provide support to users at the ALS as well as assist with experiment selection, proposal writing, data acquisition, data analysis/interpretation, and publications. The Scientist will work creatively in a multidisciplinary team, playing a lead role in the maintenance and ongoing development of the state-of-the-art beamlines and their associated instrumentation. This multidisciplinary position requires highly developed analytical and quantitative skills, strong initiative and independence, as well as a proven ability to manage and lead teams to critically impact the achievement of ALS organizational goals.

The ALS is a U.S. Department of Energy Office of Science national scientific user facility whose excellent scientific reputation, expert staff, and capabilities in the soft x-ray, hard x-ray, and infrared regimes attract more than 2,000 academic and industrial users each year in disciplines spanning physical, chemical, materials, biological, energy, and Earth sciences. It is one of five Berkeley Lab user facilities that serve a combined 11,000 users annually. The co-location of these user facilities – including the Molecular Foundry Nanoscale Science Research Center and the NERSC scientific computing center, as well as Berkeley Lab's outstanding programs in materials and chemical sciences among others – offers a prime environment for collaborative science. The ALS has been a global leader in soft x-ray science for more than two decades and is currently undertaking a new project ([ALS-U](#)) that will endow the facility with state-of-the-art x-ray capabilities. It's an exciting time to join our growing team!

The core values of the Advanced Light Source (ALS) reflect a strong commitment to diversity, equity, and inclusion. We seek candidates who will support a culture in which the entire ALS community feels welcomed and valued.

For those who hold roles as supervisors, an ongoing commitment to recruiting a vibrant, diverse and talented workforce is paramount to promoting a diverse lab community.

What You Will Do as a Research Scientist:

- Manage and supports the user program and reaches out to new user communities to develop applications of chemical crystallography. Supports users in both data collection and analysis.
- Perform all safety and supervisory duties of an ALS Beamline Scientist for Beamline 12.2.1.
- Develop comprehensive documentation for user groups to maximize efficient use of the experimental station.
- Advances the technical capabilities of the beamline while managing operational and development budgets.
- Interacts positively and supportively with users, members of the Diffraction & Imaging program, and a multidisciplinary team of staff at the ALS, in personal meetings, internal notes, and presentations.
- Guides technical staff assigned to the beamline. May serve as a project or program leader, and may supervise professionals, technical support staff, post-docs or students.

- Contributes creatively to research, especially as a member of collaborations, and communicates results as a co-author on peer-reviewed journal papers and presentations.
- Participate and engage in a science thrust area(s).
- Participate in Department of Energy scientific reviews in ALS.
- Disseminate the results of the above efforts through internal and external presentations, publications, international conferences, and seminars at the level expected of a professional scientist.
- Participate in ALS Division committees and working groups as appropriate to skill level and Division needs.
- Participate in Lab-wide committees and working groups as appropriate to skill level and Lab needs.

In addition to the above, Staff Scientist Specific Responsibilities:

- Leads and contributes creatively to research, especially as a member of collaborations, and communicates results as a co-author on peer-reviewed journal papers and presentations.

What is Required for a Research Scientist:

- Ph.D. in physics, chemistry, materials science, or a related field, and up to 5 years of work experience, or equivalent combination of research and education.
- Experience in vacuum techniques, equipment maintenance, and instrumentation design.
- Experience with single crystal X-ray diffraction using synchrotron radiation
- Experience using x-ray crystallography for obtaining structural solutions, including experience with software systems such as Bruker AXS APEX3 and with software such as SHELXT, SHELXTL or similar programs.
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- Experience collaborating in a diverse multidisciplinary team environment and excellent interpersonal skills.
- Ability to interact with a variety of technical and scientific personnel with varied academic backgrounds.
- Strong and effective oral and written communication skills for documentation of beamline operations and for summarizing, presenting, and publishing the results of R&D projects both internally and externally.

In addition to the above, Staff Scientist Specific Qualifications:

- Extensive experience with single crystal X-ray diffraction using synchrotron radiation

- Extensive experience using x-ray crystallography for obtaining structural solutions, including experience with software systems such as Bruker AXS APEX3 and with software such as SHELXT, SHELXTL or similar programs.
- A proven track record of publishing results in peer reviewed journals.
- Advanced analytical and quantitative skills, initiative, and independence.
- Advanced experiment and experimental design skills, in particular to aid user experimental preparation.
- Extensive expertise in obtaining structural solutions through x-ray crystallography.
- Extensive experience designing, troubleshooting, and supporting novel and custom experimental systems and equipment.
- Extensive experience collaborating in a diverse multidisciplinary team environment and excellent interpersonal skills.
- Proven ability to interact with a variety of technical and scientific personnel with varied academic backgrounds.

Additional Desired Qualifications:

- Experience working at a synchrotron chemical crystallography beamline and supporting/working with users in a dynamic environment.

The posting shall remain open until the position is filled, however for full consideration, please apply by close of business on January 6, 2019.

Notes:

- If hired at the Research Scientist level this is a full time Career or Career-Track appointment depending on experience. For Career-Track, this will be a 2 year appointment that may be renewed to a maximum of five years and that may be converted to career based upon satisfactory job performance, continuing availability of funds, and ongoing operational needs. If hired at the Staff Scientist level this is a full time Career appointment.
- Full-time, M-F, exempt (monthly paid) from overtime pay.
- This position may be subject to a background check. Any convictions will be evaluated to determine if they directly relate to the responsibilities and requirements of the position. Having a conviction history will not automatically disqualify an applicant from being considered for employment.
- **Work will be primarily performed at:** Lawrence Berkeley National Lab, 1 Cyclotron Road, Berkeley, CA.

Equal Employment Opportunity: Berkeley Lab is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or protected veteran status. Berkeley Lab is in compliance with the [Pay Transparency Nondiscrimination Provision](#) under 41 CFR 60-1.4. Click [here](#) to view the poster and supplement: "Equal Employment Opportunity is the Law."