



Beamline Scientist/Research Associate FMB

May 2021

Cornell University embraces diversity and seeks candidates who will contribute to a climate that supports students, faculty and staff of all identities and backgrounds. If you don't meet 100% of job qualifications, but see yourself contributing, please submit an application. We strongly encourage individuals from underrepresented and/or marginalized identities to apply. We're a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

The Cornell High Energy Synchrotron Source (CHESS) is an internationally-recognized research facility that provides high intensity x-ray beams and state-of-the-art instrumentation to scientists and students from university, government and industrial labs around the world. These groups employ CHESS to conduct research in areas ranging from biology, physics, and chemistry to mechanical and structural engineering, advanced manufacturing, environmental science, materials science, and cultural heritage.

CHESS is seeking a Ph.D. level scientist to work with a dynamic, interdisciplinary team to advance the fabrication and performance of next generation materials, especially polymers, polymer composites, and functional materials, making use of synchrotron-based x-ray characterization techniques. The successful candidate will serve as a beamline scientist supporting in-person and remote users of CHESS facilities, especially the AFRL-supported Functional Materials Beamline, and actively contribute to developing next-generation synchrotron light source technology and techniques.

Responsibilities

- Support an active user community, including users from DoD, Industry and Academia, engaged in employing x-ray techniques to characterize materials and materials processes, such as additive manufacturing.
- Creatively contribute to the development of new synchrotron methods and techniques, from experimental hardware to data reduction and analysis.
- Build and maintain effective working relationships among DoD and Industry collaborations.
- Communicate experimental outcomes to DoD and industry collaborators in the form of written reports and/or presentations.
- Maintain individual record of scholarship and contribute to the scholarly output of the lab through internal research highlights, publications in peer reviewed journals, and presentations at national and international conferences.
- Mentor students and postdoctoral researchers in synchrotron and domain-science techniques.

Essential Qualifications

- Ph.D. or equivalent in materials science, chemistry, physics, engineering, or a related field and 2 years post-PhD experience.
- Interest and ability to work in a multidisciplinary research environment.
- Record of scientific publications.
- Passion for contributing to an environment that builds individual and organizational effectiveness.
- Ability to communicate effectively with technical experts, operations staff, and researchers at all levels, including students, postdocs, interns, and facility users.
- Proficiency in science communication, written and oral, formal and informal.

Preference will be given to applicants with a background in materials science or mechanical engineering, particularly geared towards soft matter or composites and involving diffraction, especially using large user facilities. Experience analyzing large experimental datasets is also an asset.

The initial appointment is for three years and can be renewed based on satisfactory performance and availability of funds. For further information about the position, please contact MSN-C Program Director Arthur Woll (arthurwoll@cornell.edu) or lead FMB scientist Louisa Smieska (lmb327@cornell.edu). Applications received before August 5, 2021 are guaranteed full consideration.

Applications should be submitted on *AcademicJobsOnline* at: <https://academicjobsonline.org/ajo/jobs/18579>

A complete application will include the following material:

- Cover letter
- Curriculum Vitae
- List of Publications
- Statement of Research summarizing examples of recent research, and areas of interest for future work, especially involving synchrotron radiation and materials science and/or mechanical engineering.
- Three (3) letters of recommendation.

Visa sponsorship is not available for this position.

Located on the Cornell University campus in New York State, CHESS serves a world-wide user community of materials scientists, structural biologists, chemists, physicists, and engineers. Cornell University is an innovative Ivy League university and a great place to work. Cornell's inclusive community of scholars, students and staff impart an uncommon sense of larger purpose and contribute creative ideas to further the university's mission of teaching, discovery and engagement.

Cornell provides great benefits that include comprehensive health care options, generous retirement contributions, educational benefits (Employee Degree, Tuition Aid, Cornell Children's Tuition Assistance Programs), access to wellness programs, and employee discounts with local and national retail brands. Our leave provisions include three weeks of vacation and 13 holidays, including winter break from December 25th through January 1st.

Cornell has been nationally recognized as an award-winning workplace for our health, wellbeing, sustainability, and diversity initiatives. For more information, follow the link: [Benefits at Cornell](#).