



CLASSE

Cornell Laboratory for Accelerator-based Sciences & Education

CBB SRF Postdoctoral Associate

July 2022

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 Laboratory for Accelerator-based Sciences and Education (CLASSE) has an opening for a postdoctoral research associate within the Center for Bright Beams to work on cutting-edge superconducting materials research. A Ph.D. or an equivalent in physics, material science, electrical engineering, chemical engineering, or chemistry is required.

Located on campus of a premier Ivy League Research University, CLASSE has a long history of excellence in various aspects of accelerator-related sciences and technology. The Center for Bright Beams (CBB; <https://cbb.cornell.edu>) is an NSF Science and Technology Center, which represents a multi-institutional effort to dramatically improve the quality of accelerator beams. With a multidisciplinary approach, the superconducting materials theme within the Center for Bright Beams offers unique research and career opportunities, and aims at developing methods and materials for next-generation superconducting radio-frequency (SRF) cavities with significantly higher performance levels than the current state-of-the-art (<https://cbb.cornell.edu/research/beam-acceleration>).

The successful candidate will make core contributions to the SRF activities of CBB, which currently focus on advancing the growth of homogeneous and inhomogeneous thin-film superconductors, on improving the fundamental understanding of related complex material systems, and on advancing the understanding of superconducting response to strong RF fields. The successful candidate will foster collaborations among groups and help define future research directions. The research will be conducted using cutting-edge superconducting RF growth and test infrastructure available at CLASSE, with access to state-of-the-art surface analysis facilities at Cornell Center for Materials Research (CCMR).

Applicants should have experience in at least one of the following areas (multiple areas will be considered definite assets): surface characterization techniques; thin-film superconductors and superconducting materials growth; electrochemistry; superconductor properties characterization; SRF cavity preparation, testing, and data analysis; fundamental RF superconductivity; general superconducting devices.

The initial Postdoctoral Associate appointment will be for one year, with the expectation for renewal for an additional two years.

Applications should be submitted at <https://academicjobsonline.org/ajo/jobs/22134> and should include a cover letter, a CV, and a detailed summary of research experience and interests. Applicants must arrange to have at least three letters of recommendation uploaded, as per instructions on the academicjobsonline website. For information about the position, contact Dr. Matthias Liepe at MUL2@cornell.edu.

Cornell University requires all employees, whether they work on campus or work fully remotely, to be fully vaccinated against COVID-19, or to have obtained a university-approved medical or religious exemption. For additional information on this requirement, visit: <https://hr.cornell.edu/covid/university-response/vaccination>.

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](#).

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans and Individuals with Disabilities. We also recognize a lawful preference in employment practices for Native Americans living on or near Indian reservations. Cornell University is an innovative Ivy League university and a great place to work. Our 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.