

Boston University, College of Arts & Sciences

Position ID: BU-College of Arts & Sciences-ASTP1 [#28712]
Position Title: Assistant Professor
Position Type: Tenured/Tenure-track faculty
Position Location: Boston, Massachusetts 02215, United States of America [map] 🌐
Subject Areas: [Quantum Science & Engineering](#) / [Physics](#), [Chemistry](#), [Computer Science](#)
Appl Deadline: 2024/11/15 11:59PM (posted 2024/10/03, listed until 2025/04/03)
Position Description: [Apply](#)

Boston University (BU) invites applications for three tenure-track assistant professor positions, as part of a multiyear cluster hiring initiative in **Quantum Science and Engineering**. This university-wide initiative, driven by a partnership between BU's College of Arts and Sciences and the College of Engineering, aims to recruit a cadre of scholars working on foundational, methodological, and use-inspired aspects of quantum science and engineering.

This year the three focus areas for our coordinated quantum science and engineering cluster search are: (1) Quantum Solid State Materials Chemistry, (2) Quantum Condensed Matter Experimental Physics, and (3) Quantum Computing.

All candidates pursuing basic or applied research in these areas will be considered. The specific focus areas for these searches are detailed below.

- 1. Quantum Solid State Materials Chemistry:** Candidates with research interests broadly defined in the areas of synthesis and study of new extended 3D or 2D quantum materials or molecular qubits for applications in quantum information science and engineering (QISE) and sensing are encouraged to apply. Focus areas include manipulating and generating long range correlations and emergent long-range electronic order through synthetic methods, materials development for molecular qubit manipulation and device integration, 2D materials engineering, and light-matter interaction manipulation.
- 2. Quantum Condensed Matter Experimental Physics:** Candidates with a strong record of innovative research in experimental condensed matter physics broadly construed and including but not limited to quantum materials, quantum sensing and metrology, quantum coherent systems and devices, and non-equilibrium systems are encouraged to apply.
- 3. Quantum Computing:** Candidates with research interests in foundational aspects of quantum computation and quantum information science are encouraged to apply. This includes, but is not limited to, quantum algorithms, quantum complexity theory, quantum and post-quantum cryptography/information security, quantum machine learning and AI, quantum error correction, and principles of quantum programming languages.

These searches are part of a University-wide initiative to build an integrated research community engaging researchers across different departments and colleges in the broad areas of quantum science, engineering and technology development. Cross-disciplinary search committees, coordinated through this joint College of Arts and Sciences and College of Engineering initiative, will work to integrate these searches within the overarching research cluster.

In conjunction with this search, the Department of Electrical & Computer Engineering is conducting a search in the broad area of photonics, but candidates with an interest in quantum photonics are strongly encouraged to apply. Please [click here](#) for more information.

Application Deadline:

Review of applications will start on November 15 and continue on a rolling basis.

Application Materials Required:

Submit the following items via <https://academicjobsonline.org/ajo/jobs/28712> to complete your application:


- Cover letter
- Curriculum Vitae
- Research statement
- Teaching statement
- Three or more reference letters

BU conducts a background check on all final candidates for certain faculty and staff positions. The background check includes contacting the final candidate's current and previous employer(s) to ask whether, in the last seven years, there has been a substantiated finding of misconduct violating that employer's applicable sexual misconduct policies. To implement this process, the University requires a final candidate to complete and sign the form entitled "Authorization to Release Information" after execution of an offer letter.

Our university community welcomes differences, encourages open-minded exploration, and upholds freedom of expression. We are an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, physical or mental disability, sexual orientation, gender identity, genetic information, military service, pregnancy or pregnancy-related condition, or because of marital, parental, or veteran status, or any other characteristic protected by law. We are a VEVRAA Federal Contractor.

Application Materials Required:

Submit the following items online at this website to complete your application:

- Cover letter
- Curriculum Vitae
- Research statement
- Teaching statement
- Three reference letters (to be submitted online by the reference writers on this site )

And anything else requested in the position description.

Further Info:

<https://www.bu.edu/hic/qsec/>

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