

Tenure Track Assistant Professor of Chemistry  
Department of Chemistry  
Morehouse College

Morehouse College is one of the nation's top Historically Black Liberal Arts Colleges for African American males in Atlanta, GA. Morehouse provides a rigorous curriculum in science, engineering, technology, and mathematics (STEM) and is the top producer of African American Males in STEM who continue to pursue graduate and professional degrees.

Position Summary: The Department of Chemistry at Morehouse College invites applicants to apply for a full-time (9-month contract) tenure-track faculty position beginning in August Fall 2024 in the field of experimental physical chemistry or computational/theoretical physical chemistry at the interface of chemistry, biology, and data science. The successful candidate is expected to demonstrate the ability to teach undergraduate chemistry courses using innovative pedagogy, establish an externally funded and productive undergraduate research program in computational chemistry, computational chemical biology, cheminformatics, or scientific computing, and participate in service-related activities within the department and college.

Faculty at Morehouse College are passionate educators that are expected to balance teaching, research, and service while mentoring undergraduate students. Duties include but are not limited to teaching lower- and upper-level courses in chemistry and the general education curriculum, as assigned by the chair or sub-disciplinary expertise. Preference will be given to applications received prior to December 1, 2023 and remain open until filled. Inquires maybe directed to department chair, Dr. Juana Mendenhall at [chemfacultysearch@morehouse.edu](mailto:chemfacultysearch@morehouse.edu).

We encourage applicants with expertise in the areas of current interests related to, but not limited to, the following areas below:

Computational/Theoretical Chemistry and/or Scientific Computing:

1. Predictive modeling, computational/theoretical chemistry to solve complex bio(chemical) problems at different scale lengths for chemical, materials, and physical processes.
2. Quantum chemistry, dynamics, and statistical mechanics with the capability to develop new theoretical and computational methodologies capable of precise prediction of chemical and physical processes, reaction mechanisms, and polymerizations.
3. Development of novel methodologies to apply data science tools for machine learning and/or artificial intelligence) to facilitate discoveries of emergent chemical, material, or biological phenomena in various aspects of chemical and physical processes, reactions, and applications.
4. Big Data that can be applied to complex bio(chemical) problems.
5. Knowledge and expertise in coding (python), Linux, MatLab, R, jupyter notebooks, and spectroscopic studies.

## Responsibilities and Duties:

The Assistant Professor will be responsible for using their expertise to deliver educational services to students using innovative pedagogical techniques, start a research program for undergraduates, and participate in service to the profession, department, and college.

### **Teaching**

- Serve as a mentor to undergraduate students.
- Teach physical chemistry course, introductory chemistry courses, and advanced theory/computational courses.
- Preparing course materials and lectures.
- Delivering course content using innovative pedagogy and technology.
- Assigning and evaluating written work, projects, and exams that align with course or core learning objectives and providing timely feedback to students.
- Holding weekly office hours at times reasonably convenient to students.
- Monitoring and communicating student progress in real-time via Learning Management System (LMS) Blackboard.
- Assigning and submitting student grades using the Blackboard and the campus system by the Office of Register's designated deadline.
- Recording class attendance in Starfish software.
- Assigning and submitting student grades that are appropriate, accurate, and fair measures of student performance to the Office of the Registrar by the designated deadline.
- Develop and teach courses that contribute to the development of computational chemistry, machine learning, coding in chemistry and/or the general education curriculum.
- Participate in the assessment of student learning outcomes for courses in the department.
- Recording grades and submitting timely reports in Blackboard.
- Participation in departmental and division meetings.

### **Research**

- Setting up a laboratory to perform research that will engage undergraduates and lead to sustained publication of results in peer-reviewed journals.
- Pursuing extramural funding to support individual research and teaching objectives.
- Showcase and disseminate national and regional research at conferences with students.

### **Service**

- Provide service to the Department of Chemistry, professional organizations, Division of STEM, College, and community by serving on committees to advance the department and college's mission.

### **Qualifications**

Applicants with a Ph.D. in Chemistry with postdoctoral experience that are passionate about teaching and mentoring undergraduates are encouraged to apply.

### **Instructions for Applicants**

Applicants should submit a cover letter, curriculum vitae, and research plan describing how the candidate's program will be implemented at a Primarily Undergraduate Institution along with a list of equipment needed to support the research foci.

A teaching philosophy statement that describes the applicant's teaching philosophy and pedagogical approach to instructing chemistry at an undergraduate institution. A copy of graduate transcripts (unofficial transcripts are acceptable at this stage).

Contact information for three references.

If available, sample syllabi and teaching evaluations for any lecture course(s) taught.

**Commitment to Morehouse Mission:** “Candidates who apply are asked to identify their strengths and experiences in assisting Black men and men of color from diverse cultural and socio-economic backgrounds to accomplish curricular goals.”

**Support for General Education Curriculum:** “The successful candidate will be expected to support the College’s general education curriculum.”