

Instrumentation Specialist - Chemistry

Tufts University

Overview

The Department of Chemistry at Tufts University provides a supportive environment for undergraduate students, graduate students, and postdoctoral scholars to learn fundamentals, explore exciting topics in modern chemistry, and to participate in cutting-edge research. The Department of Chemistry has garnered world-wide recognition as a leader in teaching and research. We offer students the facilities and research opportunities of a top-tier research institution, while retaining the student-centered training focus of a smaller institution. Research in the department encompasses the traditional disciplines of organic, inorganic, physical, and analytical, physical, and computational chemistry, as well as chemistry education, with many interdisciplinary but most research projects reflect the interdisciplinary nature of modern chemical research.

What You'll Do

Tufts University is seeking an Instrumentation Specialist to join the Department of Chemistry. The Instrumentation Specialist will manage and maintain departmental instrumentation that supports the research and teaching missions of the Department of Chemistry. Responsibilities include maintenance and troubleshooting of a wide variety of chemical instrumentation in a shared instrumentation facility and undergraduate teaching labs, as well as training graduate, undergraduate, and postdoctoral users in proper operation of these instruments. A successful candidate will have excellent organizational and communication skills, as well as the ability to prioritize multiple demands. They will be proactive in familiarizing themselves with new instruments quickly and be comfortable working with legacy equipment and related software.

Specific Duties:

1. Train researchers and teaching assistants in effective and safe operation of departmental instrumentation.
2. Advise researchers in planning experiments involving instrumentation use.
3. Ensure that instrumentation is properly maintained. Essential maintenance may include maintaining cryogen levels, cleanliness of mass spectrometers, vacuum pumps, and air filters.

4. Ensure that repairs are carried out in a timely and cost-effective manner. Perform repairs when possible, often with help of Department electronics and machine shop. Contact and oversee manufacturers' service representatives and independent contractors when necessary.
5. Maintain instrument accessories and documentation in an organized and accessible state.
6. Supervise a graduate student Instrumentation Assistant who performs certain routine maintenance operations and provides general support when the Instrumentation Specialist is not available, i.e. evenings and weekends.
7. Maintain up to date knowledge of chemical instrumentation by attending seminars, training classes, and scientific meetings.
8. Maintain and periodically upgrade computers attached to instruments.
9. Serve as a backup to the Department Electronics shop for desktop computer support throughout the Department.
10. Assist with instrumentation issues within individual research groups as requested.
11. Serve as a member of the Instrument Committee.
12. Serve as primary Department contact for purchase of additional instrumentation. This includes obtaining quotes, reviewing specifications, vendor visits, negotiating with vendors, and preparing necessary documentation for the purchasing process.
13. Serve as primary Department contact for other University departments for instrumentation issues. This includes Facilities, Property Management, and Purchasing; as well as requests from other departments for access to Chemistry Department instrumentation.

What We're Looking For

Basic Requirements:

- Knowledge and skills as typically acquired by a Bachelor's degree in Chemistry, Biochemistry or related field
- Several years' experience operating and maintaining NMR and mass spectrometers
- Experience operating and maintaining at least some other chemical instrumentation (for example, gas chromatographs, HPLC systems, X-ray diffraction instrumentation, ICP-OES, EPR, flow cytometers, UV/Vis, and/or FTIR spectrometers)

Preferred Qualifications:

- Graduate-level work in Chemistry, Biochemistry or related field, PhD preferred
- A vision for enhancing the capabilities of chemical instrumentation in the department

- The ideal candidate will work with faculty to acquire new instruments through various funding mechanisms and work with graduate students to develop workflows using departmental instrumentation for specific research applications
- The candidate will be skilled working with computers (software and hardware), electronics, mechanical systems, and plumbing (cryogenics, compressed gases, etc.).

Pay Range

Minimum \$71,050.00, Midpoint \$88,850.00, Maximum \$106,700.00

Salary is based on related experience, expertise, and internal equity; generally, new hires can expect pay between the minimum and midpoint of the range.

Please apply via Tufts Careers: <https://careers-tufts-careers.icims.com/jobs/20992/job?mode=job&iis=Professional+Associations&iisn=NOBCChE>

An employee in this position must complete all appropriate background checks at the time of hire, promotion, or transfer.

Equal Opportunity Employer - minority/females/veterans/disability/sexual orientation/gender identity.