

ANALYTICAL INSTRUMENTATION SCIENTIST II

Function of Job:

Under general supervision, apply scientific method in performing laboratory analyses skillfully on samples, generate results by implementing standard laboratory methodology, and perform routine laboratory maintenance as it relates to the use of highly specialized instrumentation in support of the University research and teaching community and other clients; work with students, faculty, clients, and staff, helping them to use such instrumentation.

Characteristic Duties and Responsibilities:

1. Assist in the operation, routine calibration, and laboratory maintenance of sophisticated computer-controlled analytical instrumentation for material, biological, and chemical analysis.
2. In conjunction with other duties, perform instrument maintenance as needed.
3. Prepare samples for analysis with various techniques (e.g., scanning electron microscopy, transmission electron microscopy, energy dispersive spectroscopy, nuclear magnetic resonance spectroscopy, ultraviolet-visible spectrophotometry, Fourier-transform infrared spectroscopy, and tandem gas-chromatography/mass spectrometry) utilizing understanding of underlying principles for proper operation of the analytical instrumentation.
4. Assist in providing help and basic training to students, faculty, and staff in the operation and function of the instrumentation.
5. Maintain current knowledge as new techniques and accessories to the basic instrumentation become available.
6. Maintain and manage assigned databases and spreadsheets as required by individual projects and respond to requests for information.
7. Help prepare documentation for operation of instruments as necessary.
8. Exercise discretion regarding scientific and research information.
9. Assist with designated projects for research community/clients and participate in execution of them as assigned.
10. Schedule use of laboratory facilities and equipment. Maintain computerized records and reports as needed.
11. Supervise inventory and ascertain needs and specifications for routine laboratory supplies and equipment.
12. Supervise staff and students as needed, providing instructions and checking work.
13. Perform related duties as assigned.

Minimum Acceptable Qualifications:

1. Bachelor's degree in chemical or biological science (or relevant science) and two years of experience in research-related use of instrumentation.
2. Computer literacy and computer skills including use of word processing, spreadsheets, and databases.
3. Skill in reading meters, graphs, and other mechanical and electronic equipment.
4. Thorough knowledge of laboratory safety, equipment, techniques, procedures, and language.
5. Ability to perform scientific procedures with a high degree of accuracy and precision.
6. Ability to prepare scientifically accurate and thorough reports.
7. Effective oral and written communication skills.

Additional Desirable Qualifications:

1. Experience in a college/university environment.
2. Additional experience beyond minimum requirements.

11/8/2002
System Approval

11/8/2002
Effective Date

This document is a generic classification specification of the University System of New Hampshire. Its purpose is to describe the representative responsibilities and general level of complexity, and it is not a substitute for the specific job description of the individual position