



**Amherst College**  
**Office of Human Resources**

**JOB DESCRIPTION**

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Title: Scientific Instrumentation Specialist

Department: Chemistry Reports to title: Chair of Chemistry

Full Time: X Part Time: \_\_\_\_\_ Date Prepared: 10/03/2019

Job Group & Level: PT3 Regular Daily Work Schedule: \_\_\_\_\_ to \_\_\_\_\_

Pay Type: Weekly \_\_\_\_\_ Monthly X \_\_\_\_\_ Months Per Year: 12 \_\_\_\_\_ Hours Per Week:  
40 \_\_\_\_\_

(Summer Months) Months Per Year: \_\_\_\_\_ Hours Per Week:  
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1. Summary of Position:

Support the Chemistry Department faculty and staff by providing expertise in the installation, maintenance, and repair of scientific equipment and instrumentation in both the research and teaching laboratories. Oversee instrumentation interfaces and software updates on the many computers not maintained by the College's Information Technology Department.

Takes appropriate actions to support a diverse workforce and participates in the College's efforts to create a respectful, inclusive, and welcoming work environment.

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2. Principal Duties and Responsibilities:

75% Scientific Equipment & Instrumentation

- Install, maintain, and repair scientific equipment and instrumentation—such as NMR spectrometer, UV-vis spectrophotometer, gas chromatography-mass spectrometer, chillers, glove box, vacuum pumps, etc., etc.—in the teaching and research laboratories.
- Oversee, maintain, and update computer interfaces with departmental instrumentation.
- Coordinate maintenance schedules for major instrumentation.

10% Teaching and Research Laboratory Support

- Collaborate with faculty and students to provide instrumentation support on specialized research projects.
- Prepare, test, and assemble lecture and lab demonstrations.

5% Assist faculty and students with electronics/computer issues, including recommending new computer and scientific equipment.

10% Perform other duties/functions as requested.

All employees are expected to participate in the College's efforts to create a respectful, inclusive, and welcoming work environment.

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3. Internal-External Interaction/Communication:

Straightforward operational interactions/communications such as providing, obtaining, and receiving information. Frequent interactions with faculty and students.

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4. Education: (include certifications and licenses)

Required: Associate's Degree, or equivalent education and/or training

Preferred:

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5. Experience: (List specific skills necessary to perform this job)

Required:

- 3–5 years of experience installing, maintaining, and repairing scientific instrumentation, including instrumentation computer interfaces.
- Skilled in the use of personal computers and related software applications.
- Strong verbal and written communication, and interpersonal skills with the ability to exercise diplomacy.
- Strong time management, problem solving and organizational skills with the ability to multi-task.
- Attention to detail and function with accuracy.
- Experience with or commitment to working with a diverse population.
- Able to work some evenings and weekends.

Preferred:

- 5+ years of experience

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6. Environmental and Physical Demands: (Please describe the work environment and unusual physical demands, i.e. lifting requirements.)

- Exposure to hazardous materials – chemical (using personal protective equipment).
- Lift, carry, push and pull up to 25 pounds.
- Repetitive motions include hands, fingers and wrists.
- Visual – close concentration/manual dexterity.
- Movement includes kneeling, bending, and reaching.

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7. Decision Making:

- Work is complex and varied, and requires frequent changes in priorities to meet the needs of teaching labs and research labs in the department.
- Work requires independent analysis, judgment and decisions about equipment use and maintenance.
- Work requires problem solving, creative thinking, and trouble-shooting.
- Analyzes information and evaluates results to select and implement the best solution.
- Work requires flexibility and resourcefulness to solve problems that arise.
- Coordinates with the departmental chair as necessary to prioritize work on projects requiring completion, but little day-to-day guidance will be provided.
- Expected to provide periodic input to the chair on efficiently managing the many responsibilities of the position.

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8. Supervision Exercised/Received:

Supervision provided by the Chair of Chemistry.

Supervisory Responsibility: Yes \_\_\_\_\_ No X \_\_\_\_\_

Number of Employees Supervised: \_\_\_\_\_