

Job Title	Analytical Lab Technician/Scientist
PVN ID	RC-2402-006104
Category	Research
Location	CUNY-ADVANCED SCIENCE RESEARCH CENTER
Department	Environmental Sciences
Status	Full Time
Annual Salary	\$45,000.00 - \$55,000.00
Hour(s) a Week	35
Closing Date	Apr 01, 2024 (Or Until Filled)

General Description

CUNY's Advanced Science Research Center (ASRC) focuses on the most compelling and emerging areas of science for the modern world to elevate research and education in advanced disciplines and emerging technologies. The center is in upper-Manhattan/West Harlem and serves as a nucleus of CUNY-wide science enterprise and interfaces with other local and regional universities, museums, and hospitals.

ASRC's Laboratory for Chemical and Isotopic Signatures (ALCIS) seeks applicants for a full-time laboratory technician/scientist position; the position includes health and other benefits. ALCIS supports research activities in ecology, environmental geochemistry, and paleoceanography; therefore, the newly appointed technician will participate directly with a diverse array of research projects across disciplines and in collaboration with scientists at numerous institutions within CUNY and across New York City. In research and service, the lab provides elemental, molecular, chemical, and isotopic characterizations of modern and paleo-earth matrixes, manmade materials, and biological samples in addition to qualitative/quantitative information for small organic molecules at trace levels.

The technician will report to and work closely with the lab's director; the key duties and responsibilities for this position are:

- Calibrating instrumentation and standardizing measurements using already developed protocols
- Prepare and analyze samples using existing characterization methods
- Process, organize, and report on data
- Assist with the development of new characterization methods
- Daily maintenance and operation of laboratory instruments
- Ordering lab supplies
- Organizing and cleaning the lab
- Maintaining laboratory protocols
- Maintaining laboratory safety requirements and documentation
- Preparing SOPs and reports

Instruments and Tools

The facility hosts two isotope ratio mass spectrometers (a Thermo Scientific MAT-253 Plus and a Thermo Scientific Delta V Plus) and inlet system peripherals (i.e., high temperature conversion elemental analyzer, precon/gas bench, Kiel Device, GC-ISOLINK). The facility is designed to accommodate inorganic and organic samples in a variety of forms (i.e., solids, liquids, and gases) and offers analyses of all light isotopic systems (i.e., D/H, $^{13}\text{C}/^{12}\text{C}$, $^{15}\text{N}/^{14}\text{N}$, $^{18}\text{O}/^{16}\text{O}$, $^{34}\text{S}/^{32}\text{S}$). In addition to the isotopic tools are: Shimadzu QP2010SE GCMS, Thermo Scientific Dionex Accelerated Solvent Extractor (ASE) 350, Labconco RapidVap (vacuum solvent evaporator) and freeze dryer, New Wave Research high-resolution micromilling and sampling capabilities, Spex ballmill and cryomill, two microbalances and two analytical balances, custom-built online/offline gas vacuum extraction lines, a water purification system, numerous centrifuges, solid phase extraction vacuum chamber, sonicators, water baths, shaker tables, and cold storage units. The laboratory will also be receiving a Py-GCMS and FTIR/Raman microscope in 2024.

Other Duties

This is a 100% on-site position, the candidate is expected to report to work 5 days per week.

Qualifications

Applicant Instructions: Your application must include a cover letter that describes your interest and qualifications for the position, a resume/CV of your experience to date, and 2-3 professional references. Though the application must be submitted here, Dr. Brian Giebel (bgiebel@gc.cuny.edu) can be contacted for specific questions.

Required Qualifications

- Minimum of a Bachelor of Science degree in chemistry, geology or geosciences, earth or environmental science, environmental or chemical engineering, or a related discipline
- General chemistry laboratory skills, including weighing, pipetting, centrifuging, vortexing, filtering, preparing solutions and reagents, and using fumehoods
- Familiarity with analytical instrumentation, such as gas chromatography (GC), elemental analysis (EA), mass spectrometry (MS) or related instrumentation
- Excellent data management skills (lab notebook writing, spreadsheet organization and manipulation)
- Basic statistical analysis skills
- Excellent organization and time management skills
- Strong work ethic and ability to take initiative
- Strong ability to work independently and as part of a team
- Good written and oral communication skills

Preferred Qualifications (Not Required, but considered an Asset):

- One year of experience as a laboratory technician in a related field
- Experience with stable isotope and/or contaminant analysis
- Course work in environmental chemistry, analytical chemistry, quantitative chemistry, toxicology, etc
- Experience in maintaining, operating, and/or troubleshooting gas chromatographs, elemental analyzers,

and mass spectrometers

- Experience in preparing biological or environmental samples
- Familiarity with conducting scientific research