



En
State Hygienic Laboratory
Environmental Health Division
Environmental Laboratory Specialist

University Classification: **Environmental Laboratory Specialist**

Job Code: **PHB2** Pay Level: **4A**

Position #: **00290772** Org/Dept/Sub-dept #: **90-9060**

Position Reports to: **Dustin May** **00016628**

Name Position #

Position Specific Summary:
 This Professional and Scientific position will be filled as either an Environmental Laboratory Specialist (PHB2-4A) or Environmental Laboratory Scientist (PHB4-6A) based on candidate qualifications of the successful candidate. Please indicate in your cover letter the position you wish to be considered for, or indicate both.

The State Hygienic Laboratory is seeking an experienced chemist to fill the Environmental Lab Specialist, or Environmental Lab Scientist position for the Chemical Threat, Environmental Testing, and Food Testing Programs. This position will perform analysis samples for chemical threat agents and contaminants in a wide variety of matrices. This position will be responsible for sample preparation, sample analysis, data processing and reporting of results from a variety of forms, including clinical, environmental, and food matrices. This position will be responsible for operating and maintaining instruments, including LC-MS/MS, HPLC, GC-MS and associated equipment to ensure prompt analytical response and minimal turnaround times back to external partners and customers. Additional duties include method development and outreach/training to first responder organizations.

Location: Coralville, IA
Schedule: Normal working hours are 8am to 5pm, Monday through Friday. However, this position must be willing to be available to respond to emergency response analyses at potentially unconventional business hours or on the weekend in emergency situations.
Modality: In-Person, on-site.

Key Areas of Responsibilities and Specific Job Tasks

Classification Key Areas of Responsibility	Specific Job Duties and Tasks
Sample / Specimen Preparation and Analysis	<ul style="list-style-type: none"> • Must be able to perform extractions of clinical samples, controlled substances, food products, and other samples for the detection of various chemicals, including pesticides, toxins, and metabolites. • Must be able to handle forensic evidence and handle chemical threat and hazardous materials safely using established chain of custody protocols. • Should routinely seek out new and better ways to analyze samples for all-hazards threats in environmental matrices, food, and clinical specimens • Training will be provided onsite or offsite for analyses, if needed, including training at the Centers for Disease Control and Prevention if accommodations can be arranged.
Instrumentation and Technology	<ul style="list-style-type: none"> • Perform daily operation and direct routine maintenance, training, troubleshooting and calibration of laboratory instruments and equipment. • Hands-on training at instrument vendors (e.g. Sciex and Agilent) may be provided if funds are available. • Coordinating with service engineers to ensure that instrumentation is kept in ready status. • Must be familiar with and be able to learn new data acquisition systems. Must understand and demonstrate analytical proficiency with the use of liquid and gas chromatography, mass spectrometry (both single and tandem quadrupole). • Must understand data acquisition; the use, and installation, of software needed to allow instrumentation to operate normally.

	<ul style="list-style-type: none"> • Research and recommend equipment and instruments for analytical services area.
Data Analysis, Reporting and Documentation	<ul style="list-style-type: none"> • Prepare and review technical reports and communicate results to relevant personnel. • Document and review complex analytical procedures, results and reports; interpret, process and report results in laboratory information management system (LIMS). • Provide secondary data review and confirmation of others' analytical work. • Write new standard operating procedures as needed; review and update existing standard operating procedures in a timely manner to comply with SHL quality management goals. • Document and review routine data analysis, procedures, and results. • May prepare documentation for test validation reports.
Quality Control, Quality Assurance and Quality Systems	<ul style="list-style-type: none"> • Review, trend, and report quality control data and assure quality assurance procedures are in accordance with established policies. • Identify and implement corrective and process improvement actions. • Document and review data analysis, procedures, and results. • Release data and reports after review of results and analysis of quality control.
Outreach and Communication	<ul style="list-style-type: none"> • Engage in routine interaction with the LRN-C, FSIS FERN, and state/local emergency response agencies. • Position requires travel for training in chemical threat fields. • Collaborate with external clients/stakeholders/researchers and provide scientific advice. • Work with Food Emergency Response Network
Compliance/Administration	<ul style="list-style-type: none"> • Adhere to certification standards, rules and or, regulations necessary to maintain compliance with regulatory agencies. • Organize and maintain laboratory records.
Leadership / Human Resources	<ul style="list-style-type: none"> • Act as lead analysts for SHL's Food Chemistry program, performing routine and special analysis, collecting samples, and performing special project work. • Serve as technical expert for specific instrumentation and test/method combinations. • Provide direction, assignments, feedback, coaching and counseling to assure outcomes are achieved.
Human Resources	<ul style="list-style-type: none"> • Provide input on HR activities such as recruitment and promotion.
Financial Responsibility	<ul style="list-style-type: none"> • Initiate purchasing requests for supplies, equipment, etc. • Assist in budget development and review.

Universal Competencies

Collaboration/Positive Impact (Working)	<ul style="list-style-type: none"> • Shares appropriate information/feedback openly, professionally and respectfully. • Models open, respectful, accepting, and supportive behaviors with team members. • Maintains productive work relationships while considering multiple perspectives and using effective conflict resolution practices. • Aligns expectations for self and team to achieve work objectives and overcome obstacles.
Welcoming and Respectful Environment (Working)	<ul style="list-style-type: none"> • Maintains productive work relationships while considering multiple perspectives. • Resolves cross-cultural conflicts effectively. • Understands and describes the unit's commitment to creating a workplace environment where people of all backgrounds and perspectives feel welcomed and appreciated, and the reasons for its importance. • Contributes to a welcoming and respectful workplace environment as described above.

Service Excellence/Customer Focus (Working)	<ul style="list-style-type: none"> • Enhances service by seeking ways to add value to customer interactions/services. • Demonstrates sincere concern and takes responsibility when a customer complains, even if the cause of the problem lies elsewhere. • Listens to feedback without defensiveness and uses it to enhance communication effectiveness. • Communicates in alternative ways to accommodate different listeners.
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Technical Competencies

Interpersonal Relationships (Working)	<ul style="list-style-type: none"> • Collaborates with departmental associates and management. • Adapts interaction style to situations and people. • Identifies roles and responsibilities for self and others. • Demonstrates an understanding of alternative points of view. • Explains impact of interactions with individuals and groups.
Laboratory Equipment Operation (Extensive)	<ul style="list-style-type: none"> • Operates and calibrates equipment in diverse laboratory environments. • Advises on diagnosing and resolving laboratory equipment malfunctions. • Oversees laboratory equipment quality recordkeeping. • Establishes risk-based criteria to evaluate laboratory equipment performance. • Establishes laboratory emergency response protocols and their rationale. • Supervises the safe purging of waste from laboratory equipment.
Laboratory Practice Quality Assurance (LPQA) (Working)	<ul style="list-style-type: none"> • Examines laboratory sample collection, handling and analyzation procedures. • Operates quality testing equipment and verifies collected data. • Adheres to related guidelines, regulations, standards and safety procedures in the LPQA process. • Handles actual or potential problems that affect the analytical results of an LPQA program. • Assesses laboratory equipment calibration and maintenance at various LPQA stages.
Laboratory Results Analysis and Reporting (Working)	<ul style="list-style-type: none"> • Makes a systematic comparison of actual test results against expected results. • Analyzes the accuracy of laboratory data and test results; assesses common problems and/or errors that can occur. • Detects and summarizes test results and findings by producing reports. • Interprets and explains results of data and test results. • Reviews the results to ensure the quality and accuracy of data gathering and analysis.
Laboratory Testing (Extensive)	<ul style="list-style-type: none"> • Supervises specimen/sample collection and processing for various test requests consistent with standard operating procedures, cGLP or other regulations. • Trains others on the appropriate operation of laboratory equipment; addresses safety issues. • Oversees the testing/examination of specimens/samples per testing SOP, cGLP or other regulations. • Evaluates the accuracy of results obtained from laboratory tests. • Recommends solutions to improve existing procedures of laboratory tests. • Directs relevant policy, regulatory and ethics compliance for all laboratory tests.

This description is intended to indicate the kinds of tasks and levels of work difficulty that will be required of positions that will be given this title and shall not be construed as declaring what the specific duties and responsibilities of any particular position shall be. It is not intended to limit or in any way modify the right of any supervisor to assign, direct, and control the work of employees under his or her supervision. The use of a particular expression or illustration describing duties shall not be held to exclude other duties not mentioned that are of similar kind or level of difficulty.

As part of performing the key areas of responsibility and competencies described above, staff members are expected to meet reasonable standards of work quality and quantity, as well as expectations for attendance established by their supervisor. Staff members are also expected to comply with policies governing employee responsibilities and conduct, including those contained in the [University Operations Manual](#).

Proficiency levels are defined as:

Basic Application - Uses basic understanding of the field to perform job duties; may need some guidance on job duties; applies learning to recommend options to address unusual situations.

Working Experience - Successfully completes diverse tasks of the job; applies and enhances knowledge and skill in both usual and unusual issues; needs minimal guidance in addressing unusual situations.

Extensive Experience - Performs without assistance; recognized as a resource to others; able to translate complex nuances to others; able to improve processes; focus on broad issues.

Expert/Leader - Seen as an expert and/or leader; guides, troubleshoots; has strategic focus; applies knowledge and skill across or in leading multiple projects/orgs; demonstrates knowledge of trends in field; leads in developing new processes.

Position Qualifications

Education or Equivalency Required	Bachelor of Science in chemistry, analytical chemistry, or related field, or an equivalent combination of education and experience.
Required Qualification	<ul style="list-style-type: none"> ● Relevant laboratory experience (typically 3 years) and knowledge of analytical chemistry. ● Intermediate to advanced experience with pipetting small volume and sample preparation. ● Experience with gas chromatography and/or liquid chromatography. ● Experience with mass spectrometry. ● Demonstrates effective communication, using varied tools and techniques to transmit, receive, and interpret information, both written and verbally. ● Demonstrate the ability to work with a variety of individuals and groups in a constructive and civil manner and utilize existing resources and learning to achieve or exceed desired outcomes of current and future organizational goals and needs. ● Extensive proficiency with Windows based systems, computer and digital operations. ● Possession of a valid state or commercial driver's license, and the ability to meet University Fleet Safety Standards.
Highly Desirable Qualification	<ul style="list-style-type: none"> ● A master's degree, or equivalent experience, in a related field is highly desired. ● Experience with mass spectrometry and the application toward quantitative and qualitative analysis. ● Previous work in or understanding of CLIA accredited labs and regulations. ● Identification of unknown chemical samples. ● Clinical laboratory analysis - working with urine and blood borne pathogens. ● Method validation and/or method verification. ● Knowledge of- and work with forensic sample handling procedures. ● Demonstrates working knowledge and experience with Laboratory Information Systems (LIMS). ● Work with first responders and other emergency response organizations. ● Knowledge of CBRNe threats with an emphasis on Chemical Agents of Opportunity for Terrorism. ● Previous experience analyzing food for chemical contaminants.

See requisition # 24004908 at <https://jobs.uiowa.edu>
Applicable background checks will be conducted.

The University of Iowa prohibits discrimination in employment, educational programs, and activities on the basis of race, creed, color, religion, national origin, age, sex, pregnancy (including childbirth and related conditions), disability, genetic information, status as a U.S. veteran, service in the U.S. military, sexual orientation, gender identity, or associational preferences. The university also affirms its commitment to providing equal opportunities and equal access to university facilities. For additional information on nondiscrimination policies, contact the Senior Director, [Office of Civil Rights Compliance](#), the University of Iowa, 202 Jessup Hall, Iowa City, IA 52242-1316, 319-335-0705, daod-ocrc@uiowa.edu.