Chemist

CLASS TITLE	CLASS CODE	SALARY GROUP	SALARY RANGE
CHEMIST I	2472	B17	$42,976 - $64,469
CHEMIST II	2473	B19	$48,244 - $76,028
CHEMIST III	2474	B21	$54,278 - $87,046
CHEMIST IV	2475	B23	$61,184 - $99,658
CHEMIST V	2476	B25	$69,572 - $114,099

GENERAL DESCRIPTION

Performs chemical analysis work conducting chemical analyses and physical testing of materials, chemicals, physiological specimens, and other products; conducting research; and preparing technical reports.

EXAMPLES OF WORK PERFORMED

Conducts research and quality control tests on chemicals and materials.

Collects, prepares, and analyzes samples.

Prepares test solutions, compounds, and reagents for analytical procedures.

Interprets test results and prepares test reports.

Maintains, troubleshoots, calibrates, and/or sterilizes laboratory equipment.

Performs related work as assigned.

DESCRIPTION OF LEVELS

Examples of work and descriptions are meant to progress through the levels. For example, an employee at level V may also perform work listed within the previous levels.

***Note**: Factors that may distinguish between the journey levels include the degree of independence in performing the work and the complexity of the work and may include the employee's related experience, education, and certifications. Employees at the journey levels may independently perform the full range of work listed in the examples or may assist others in that work.*

CHEMIST I: Performs routine (journey-level) chemical analysis work assisting in conducting chemical analyses and physical testing of materials, chemicals, physiological specimens, and other products, and assisting with research. Works under moderate supervision, with limited

latitude for the use of initiative and independent judgment. Employees at this level may rely on direction from others to solve problems that are not standard. Employees may also assist others in performing work of greater complexity.

CHEMIST II: Performs moderately complex (journey-level) chemical analysis. Works under general supervision, with moderate latitude for the use of initiative and independent judgment. Employees at this level may work more independently than those at the previous level and may routinely assist others in performing work of greater complexity. Employees at this level may provide guidance to others and may:

- Conduct chemical and physical analyses of food, drugs, human clinical specimens, construction materials, wastewater, stream pollution, hazardous waste, alcohol, or other materials.
- Verify and interpret test results and prepare test reports.
- Prepare specifications for laboratory chemicals, equipment, and supplies.
- Prepare technical reports and research papers.

***Note**: Any senior-level employee (levels III-V) can serve as a team lead or supervisor; however, supervisory responsibilities within this job classification series will normally be found at levels IV and V. Senior-level employees may perform the full range of work listed in the examples above and may coordinate or oversee that work for others. Factors that may distinguish between senior levels include the scope of responsibility and oversight, the complexity of the work performed, and the employee's related experience, education, and certifications.*

CHEMIST III: Performs highly complex (senior-level) chemical analysis work. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:

- Coordinate and conduct chemical and physical analysis of food, drugs, human clinical specimens, construction materials, wastewater, stream pollution, hazardous waste, alcohol, or other materials.
- Conduct research and developmental work concerning chemical processes and substances.
- Conduct and evaluate research projects, interpret research data and document findings, and prepare technical reports and scientific papers.
- Conduct audits of environmental laboratories to ensure compliance with applicable environmental or public health laws, rules, regulations, and policies, and evaluate corrective action plans.
- Consult with staff on proper research, analysis, and interpretive procedures.
- Verify and review test reports.
- Provide specifications for laboratory chemicals, equipment, and supplies.
- Develop and implement laboratory procedures, safety guidelines, and/or guidelines for laboratory assessments and accreditation.
- Interpret laboratory and analytical results for use in regulatory determination decisions.

CHEMIST IV: Performs advanced (senior-level) chemical analysis work. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may fully perform highly complex chemical analysis work and may:

- Oversee and review the chemical and physical analysis of food, drugs, human clinical specimens, construction materials, wastewater, stream pollution, hazardous waste, alcohol, or other materials.
- Oversee, evaluate, and conduct research projects; interpret research data and document findings; and prepare technical reports and scientific papers.
- Coordinate special research projects.
- Plan and conduct audits of environmental laboratories to ensure compliance with applicable environmental or public health laws, rules, regulations, and policies; review and evaluate corrective action plans; and make appropriate recommendations.
- Consult with staff on proper research, analysis, and interpretive procedures, and determine the appropriate analytical methods for examinations.
- Determine the appropriate specifications for the use of laboratory chemicals, reagents, equipment, and supplies.
- Determine staff and equipment requirements for laboratory operations.
- Ensure the maintenance and quality of chemical or physical data.
- Interpret analytical findings in cases in which results are used in court.

CHEMIST V: Performs highly advanced (senior-level) chemical analysis work. Works under minimal supervision, with extensive latitude for the use of initiative and independent judgment. Employees at this level may independently perform the most complex chemical analysis and may:

- Oversee the activities of a chemical laboratory.
- Oversee and evaluate research projects; interpret research data and document findings; and review technical reports and scientific papers.
- Oversee special research projects.
- Oversee, plan, and review audits of environmental laboratories to ensure compliance with applicable environmental or public health laws, rules, regulations and policies; review and evaluate corrective action plans; and make appropriate recommendations.
- Coordinate the training of staff on the interpretation of laboratory and analytical results and on the environmental laboratory accreditation process.
- Provide leadership, guidance, and technical support to laboratory staff.
- Prepare and evaluate laboratory procedures, safety guidelines, or guidelines for laboratory assessments and/or accreditation.
- Consult with management regarding methods of analysis, sample assignments, work flow, and quality assurance.
- Interpret and verify analytical findings in cases in which results are used in court.
- Consult with physicians, public health staff, and field inspectors concerning proper procedures for the collection and submission of samples for chemical tests.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in chemical laboratory and/or chemical analyses work. Graduation from an accredited four-year college or university with major coursework in chemistry or a related field is generally preferred. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

For all levels

- Knowledge of the principles of chemical processes and analyses; the preparation, properties, structures, and use of chemical and physical substances; and the laws and standards related to the technical areas of responsibility.
- Skill in the operation of laboratory equipment and in the use of a computer and applicable software.
- Ability to conduct physical and chemical analyses and tests, to interpret test results, to prepare reports, and to communicate effectively.

Additional for Chemist III-V levels

- Ability to oversee and/or supervise the work of others.