

FORENSIC CHEMIST III

NATURE AND VARIETY OF WORK

This is senior/lead professional technical work in the field of forensic chemistry. Incumbents are assigned to a forensic analysis laboratory where they perform the full range of qualitative and quantitative analyses of evidence submitted to the laboratory by law enforcement personnel. Such employees prepare summary findings and materials for use in testifying as an expert witness in criminal trial cases. Subject incumbents may perform lead work over subordinate level Forensic Chemist and perform the duties of a supervisory level Forensic Chemist IV in their absence. General supervision is received from a higher level supervisory Forensic Chemist. Work is performed with a considerable degree of independence in accordance with established technical standards and policies. Incumbent is evaluated based upon their ability to analyze, identify and document physical evidence and to offer effective case related testimony at criminal proceedings, as well as the ability to assist the Forensic Chemist IV in leading and training subordinate forensic chemists.

EXAMPLES OF WORK (ILLUSTRATIVE ONLY)

Conducts qualitative and quantitative analyses of the more difficult evidence using both traditional chemical test and contemporary instrument analysis.

Prepares clear, technically sound, accurate and informative reports of chemical analysis containing conclusions to be used for presentation in criminal court proceedings.

Prepares standardized/non-standardized chemical reagents for use in performing chemical tests.

Testifies in court as an expert witness as to the results of test analyses in the prosecution of criminal cases.

Maintains records and files of analysis and findings for use in compiling reports or presenting testimony in court.

Confers with and advises the State's Attorney on the forensic aspects of cases and the preparation of the testimony concerning the analysis of evidence.

Operates and maintains various analytical instruments in conducting analyses including infrared and ultraviolet spectrophotometer, gas chromatograph, mass spectrometry, microscope, thermal cycler, real-time PCR instruments and genetic analyzers.

Provides technical guidance and training to subordinate level professional technical laboratory personnel.

Assists supervisory level forensic chemist in developing/modifying laboratory procedures and techniques.

May be required to use automated equipment in conjunction with assigned duties and responsibilities.

Willingly and cooperatively performs tasks and duties which may not be specifically listed in the class specification or position description, but which are within the general occupational category and responsibility level typically associated with the employee's class of work.

REQUIRED KNOWLEDGES, SKILLS AND ABILITIES

Thorough knowledge of the principles, methods and techniques of chemistry.

Thorough knowledge of the scientific principles, laboratory procedures, research methods and analytical instrumentation as applied to the work of a forensic analysis laboratory.

Thorough knowledge of the criminal trial process related to the rules of evidence and the operation of the Police Department concerning evidence associated with the commission of a crime.

Ability to analyze and identify both routine and difficult evidence submitted to the crime laboratory through both traditional chemical tests and through contemporary instrumental analysis.

Ability to describe items of evidence and prepare accurate records and reports thereof, including procedures followed.

Ability to present testimony in court in a clear, understandable manner to varied personnel present in the courtroom.

Ability to understand and follow complex written and oral instructions.

Ability to operate and maintain a variety of testing and analysis equipment normally associated with a modern police forensic analysis laboratory.

Ability to maintain effective working relations with personnel in the forensic analysis laboratory, other divisions of the Police Department, Police Officers and law enforcement agencies.

Ability to provide technical guidance and training to subordinate level professional technical laboratory personnel.

MINIMUM QUALIFICATIONS

Bachelor's degree in chemistry, forensic science, or other physical science including at least twenty-four (24) semester hours in chemistry; plus at least two (2) years of progressively responsible experience performing analyses in a laboratory setting; or an equivalent combination of at least six (6) years of relevant education and experience.