

FORENSIC CHEMIST I

NATURE AND VARIETY OF WORK

This is entry level professional technical work in the field of forensic chemistry. Incumbents are assigned to a forensic analysis laboratory where they conduct 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. Routine work assignments are performed under close supervision by supervisory level Forensic Chemist. Incumbents are evaluated based upon their ability to analyze, identify and document evidence and to offer effective case-related testimony at criminal trial proceedings.

Upon the satisfactory completion of a probationary period, entry level incumbents may be non-competitively promoted to the II full performance level at management's discretion.

EXAMPLES OF WORK (ILLUSTRATIVE ONLY)

Performs routine qualitative and quantitative analyses of physical evidence using both traditional chemical test and/or 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, but not limited to: infrared and ultraviolet spectrophotometer, gas chromatograph, mass spectrometry, microscope, thermal cycler, real-time PCR instruments and genetic analyzers.

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

Knowledge of the principles, methods and techniques of chemistry.

Knowledge of the scientific principles, laboratory procedures, research methods and analytical instrumentation as applied to the work of a crime laboratory.

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

Ability to analyze and identify evidence submitted to the 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 for analysis.

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

Ability to understand and follow written and oral instructions.

Ability to utilize a calculator/computer to quantify substances.

Ability to maintain effective working relationships with a wide variety of 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 professional experience in forensic lab work; or an equivalent combination of at least four (4) years of relevant education and experience.