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FORENSIC CHEMIST IV

NATURE AND VARIETY OF WORK

This is professional supervisory technical and administrative work in the field of forensic chemistry. Incumbents are assigned to a police crime laboratory where they are responsible for planning and supervising the work of professional technical laboratory personnel performing quantitative and qualitative analyses of evidence submitted to the laboratory by law enforcement personnel. Incumbents function as working supervisors. Major duties may include: assisting in the administration of the laboratory, responsibility for training and performance of subordinates, analyzing samples, interpreting test results and conducting research to improve laboratory methods and procedures. Work is evaluated by higher level supervisory personnel for departmental efficiency and effectiveness, and compliance with policies and procedures.

EXAMPLES OF WORK (ILLUSTRATIVE ONLY)

Supervises the activities of a staff of professional, para-professional, technical and clerical personnel.

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

Plans and coordinates the operational activities of a police crime laboratory to assure timely completed assignments for technical soundness, consistency of reporting and adherence to laboratory policy.

Plays a key role in developing and/or modifying laboratory procedures to enhance operational efficiency and increase productivity.

Prepares and reviews technical reports on the findings and conclusions resulting from chemical and instrumental examinations of substances containing findings and conclusions.

Conducts research to develop/modify techniques and procedures for analyzing substances.

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

Testifies in court as an expert witness regarding the results of test analyses.

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.

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

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

Extensive knowledge of the operation and maintenance of 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.

Extensive 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 crime laboratory through both traditional chemical tests and through contemporary instrumental analysis.

Ability to prepare and review technical reports on the findings and conclusions resulting from chemical and instrumental analyses of evidence.

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

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

Ability to plan and direct operations of a forensics analysis laboratory

MINIMUM QUALIFICATIONS

Bachelor's degree in chemistry, forensic science, or other physical science including at least twenty-four (24) hours in chemistry, plus at least three (3) years of progressively responsible experience performing analyses in a laboratory setting, one (1) year of which was in a lead/supervisory capacity; or an equivalent combination of at least seven (7) years of relevant education and experience, including one (1) year of which was in a lead/supervisory capacity.