Functions of the Job

Nature of Work

This is an advanced technical laboratory and analytical work in criminal identification and investigation for the Miami-Dade Police Department.

Work involves the application of advanced laboratory techniques, materials, equipment, and instrument operation in making physical and chemical analyses of evidence obtained at crime scenes or elsewhere and the presentation of findings for investigative and prosecution uses. Work is performed at the full performance level of difficulty and is differentiated from the lower class by independent action and analytical complexity of the duties. Duties occasionally require contact with contaminated, corrosive, or explosive materials. Employees may be required to supervise the work of subordinate technicians in the laboratory or at crime scenes, and the development of new techniques and procedures is sometimes necessary. Supervision is received by the professional laboratory supervisor who reviews work through conferences, written reports, and observation of laboratory examinations.

Illustrative Task

Trains and supervises mobile crime laboratory technicians in the collection and preservation of evidence at the scene of a crime; reviews the activities of technicians and examines materials collected for adherence to procedures of collection and identification; maintains records of activities performed. Analyzes and prepares reports of evidence for use in court testimony; testifies in court as an expert witness concerning narcotics, stained materials, firearms, documents, soils, inflammables, vestiges of human tissue and similar analyses of chemical and physical substances.
Performs complex laboratory examinations in chemical, microscopic, spectrographic, x-ray diffraction, photographic, ballistic, document examination, tissue analysis and related analyses and procedures.

Directs and supervises the dismantling, removal and disposal of bombs and similar explosives throughout the metropolitan area; personally handles most explosive materials and instructs subordinates in all phases of anti-demolition work.

Designs new equipment and initiates new procedures to meet the technical evolution of criminal investigation and evidence analysis.

Qualitates and quantitates unknown substances by means of chemical, physical and instrumental analyses such as gas or liquid chromatography, spectrography, chemical microscopy, and microscopic examination.

Performs related work as required.

Knowledge, Abilities, and Skills

Thorough knowledge of principles, practices, instruments, and methods used in the collection and analysis of criminal evidence.

Considerable knowledge of the rules of evidence as they relate to the presentation of technical analyses of criminal evidence.

Considerable knowledge of the specialties of criminal identification, current developments and trends in crime detection.

Knowledge of the handling and analysis of corrosive agents, explosives, contaminated and diseased evidence.

Considerable knowledge of investigative techniques including ballistics, toxicology, micrography, photomicrography, forensic chemistry, spectroscopy and diffractometry and stoichiometry.

Knowledge of law enforcement practices and procedures.

Ability to plan, assign and supervise the work of technicians in a manner conducive to maintenance of high technical standards, full performance, and high morale.

Ability to detect research requirements and to plan and execute a scientific research effort.

Ability to perform extremely hazardous bomb disposal work.

Minimum Qualifications

Bachelor’s degree or above in chemistry, Forensic Science, Biology, or related field. Three years of technical experience in forensic science are required. Experience in chemistry, including the use of instrumentation and instrument validations, and/or quality assurance practices preferred. Applicants will be subject to an extensive screening process to include background investigation, fingerprint check, polygraph, psychological, and medical examinations.

Recruitment Notes

Two vacancies, one position will reside in the Analytical Section and one in the Quality Assurance Section.

To Apply: [https://www.miamidade.gov/global/humanresources/jobs/home.page](https://www.miamidade.gov/global/humanresources/jobs/home.page)