FORENSIC SCIENCE SPECIALIST

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision, an incumbent of this class performs the most difficult and complex chemical, microscopic and instrumental analyses of physical evidence submitted to a Forensic Science Laboratory. Responsibilities include the technical training of personnel, performing complex analyses, and conducting research and development projects. This position functions as a specialist and requires a superior level of analytical or instrumental competency. This title is distinguished from the Forensic Scientist by the incumbent's depth of involvement in laboratory methods validation and development, along with the identification and implementation of process improvements to ensure the laboratory's high standards of performance for Quality Assurance/Quality Control. This position functions in a lead capacity over professional, technical and clerical personnel. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Performs difficult and complex serological examinations of blood and other biological fluids and related physical evidence;

Performs complex chemical, physical, microscopic and instrumental methods for the qualitative and quantitative analysis of controlled and other drug related substances;

Performs difficult chemical, physical, microscopic and instrumental methods for the analysis of physical evidence (i.e. hair, fibers, glass, paint, arson, gunshot residue, etc.);

Performs methods validation for the implementation of new techniques, new instruments and new protocols, for meeting the requirements of the laboratory's accreditation. The validations must meet the requirements of the laboratory's accrediting body, and generally include various performance characteristics such as measurement range, accuracy, limit of detection, etc.

Performs methods development and/or verification by conducting various experiments on new equipment, instruments and/or software. The experiments are utilized to determine reproducibility, accuracy, repeatability and reproducibility.

Monitors on-going quality assurance standards to ensure consistency in the quality of laboratory results within the assigned unit;

Identifies quality trends and develops changes to standard procedures in response to deviations from desired norms;

Trains Forensic Science personnel in procedures and methods of analysis;

Interprets results from complex analysis relative to crime scene processing and issues written reports;

Evaluates, identifies and recommends the need for program modification and specific technical training;

EXAMPLES OF WORK: (Illustrative Only) (Continued)

Makes recommendations regarding new methods and equipment that could enhance the productivity of the laboratory and better enable it to meet the goal of quality and timely scientific analyses of physical evidence to support law enforcement agencies in Westchester County;

Schedules and oversees work assignments of subordinates in the routine conduct of casework;

Maintains proper supplies, equipment, solutions, and reagents;

Assists in the design and the implementation of the laboratory's quality assurance program. This includes writing procedures for newly validated methods, designing quality control procedures and assisting with other aspects related to the laboratory's accreditation.

Participates in internal and external proficiency testing programs;

Conducts research and development projects;

Testifies in court regarding laboratory analyses and the significance of the results;

Attends training sessions to keep abreast of new laboratory procedures, techniques, and equipment;

Participates in the Departments' teaching programs;

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments;

May perform other incidental tasks, as needed.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Comprehensive knowledge of modern laboratory techniques, procedures, principles, practices, statistics, instrumentation and safety precautions used in the field of Forensic Science; skill in the operation, calibration, troubleshooting and maintenance of modern laboratory equipment; ability to operate standard laboratory equipment and apparatus; ability to train subordinate technical personnel; ability to conduct tests and analyses of specimens, detect and investigate problems, and make evaluations supported by experimental evidence; ability to carry out quality control measures; ability to establish and maintain effective working relationships; ability to understand and follow complex verbal and written technical instructions; ability to communicate effectively both orally and in writing; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential functions of the position; ability to effectively use computer applications such as spreadsheets, word-processing, and database software; accuracy; thoroughness; dependability; resourcefulness; integrity; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: A Bachelor's Degree* in Forensic Science, Chemistry, Biology, Biochemistry or Medical Technology, or closely related field, which must have included or been supplemented by twenty credit hours** in chemistry, and either, (a) four years of progressively responsible experience in a Forensic Science Laboratory gained within the last seven years; or (b) a Master's Degree* in one of the above stated fields and three years experience as stated in (a).

SUBSTITUTION: Possession of Ph.D.* in one of the fields stated above may be substituted for two years of the required experience.

*SPECIAL NOTE: Education beyond the secondary level must be from an institution accredited or recognized by the Board of Regents of the New York Education Department as a post secondary-degree, granting-institution.

**NOTE: The twenty credit hours of chemistry may be obtained at the undergraduate or graduate level or in any combination of undergraduate or graduate level credit hours.

SPECIAL REQUIREMENT: Possession of a valid license to operate a motor vehicle in the State of New York will be required at the time of appointment and maintain same while in the title.

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