

Professional Associate – Scientific
Forensic Chemist II Fellow
Division of Public Health

This is entry-level professional work providing a full range of services to state agencies in a variety of disciplines. Positions in this class are assigned less complex projects or problems, or are assigned segments of an overall larger and more complex project. Work assignments are characterized by defined objectives and specific guidelines, but require an overall understanding of project design and purpose. The Professional Associate classification is intended as a resource to attract entry-level talent in various fields to the State.

Project Description

This is a highly technical position conducting performance of routine and non-routine assays required by post-mortem, forensic toxicology laboratory. This position supports the Office of the Chief Medical Examiner and the State Medical Examiner System through the discovery of primary and secondary causes of unattended, unwitnessed, accidental, suicidal, or homicidal deaths. The Forensic Chemist II performs self-assigned work from the pending list of analyses for the isolation of drugs from biological specimens and pertinent evidence. The Forensic Chemist II is responsible for the routine maintenance of precision instrumentation and laboratory inventory. In addition, the Forensic Chemist II has a high degree of laboratory bench skills and attention to detail and is given responsibility for the more esoteric and difficult assays to perform as well as being trusted with casework that is of a limited volume. Results of the work are combined with preliminary autopsy findings to render final conclusions as to the cause and manner of death. Decisions may directly affect the safety and health of the public where dangerous and/or toxic substances are identified as a cause of death.

Knowledge, Skills, and Abilities

- Knowledge of the principles, practice, and current developments in the field of analytical toxicology
- Knowledge of the theoretical principles of analytical chemistry and the biological sciences
- Knowledge of laboratory protocol, procedure, and techniques associated with medico-legal investigative work
- Knowledge of principles of operation of analytical instrumentation
- Knowledge of laboratory research principles and techniques
- Knowledge of the rules of evidence and legal principles as they relate to the work
- Knowledge of the toxicology and pharmacology of ethanol
- Knowledge of and troubleshooting abilities with the following types of equipment is essential to the performance of these duties: solid- and liquid- phase extraction

techniques, GC/MS, NPD, FID, LC/MS/MS, UV/VIS spectrometer, and robotic instrumentation

- The Forensic ability to independently perform and record complex standardized and non-standardized laboratory tests and procedures
- Ability to establish standard operating procedures, analyze results, interpret methodology, and understand and solve theoretical problems
- Ability to express technical information clearly, both orally and in writing, when reporting results, testifying, or explaining procedures to others
- Ability to perform mathematics and statistical analyses
- Ability to understand and follow complex oral and written instructions and ability to establish and maintain effective working relationships

Minimum Education

Bachelor's degree or higher in chemistry, analytical chemistry, pharmaceuticals, or biochemistry