**Title:**IFS Technical Director

**Department:**  Forensic Chemistry

**Job Type:**Regular Full Time

**Location:**Willow Grove, PA

**Shift:**1st Monday through Friday

**Company Summary:**

NMS Labs has developed an extensive menu of more than 2,500 tests to support clients in forensic, criminalistic, public health and clinical fields. For over 50 years, our clients have relied on NMS Labs for unique testing solutions that demonstrate our company core values of Quality, Integrity, Service, Innovation and Engagement. As we work to increase the company’s positive impact on public health and public safety, we are seeking talented professionals to join us for the journey! We invite you to learn more about our company by visiting NMSLabs.com.

**Job Summary:**

This appointment at NMS Labs reports to the Forensic Lab Operations Manager.  The Forensic Chemistry Technical Director position involves scientific leadership in all aspects of Forensic Chemistry. The position, as defined below, includes overseeing technical aspects of operations for the network of Forensic Chemistry sites within NMS Labs.  The position acts as a resource for analytical chemists performing all forensic chemistry casework, including drug identification (e.g., controlled substances) and product integrity (e.g., assessment of pharmaceutical tampering, counterfeiting, and consumer product tampering) cases, directs the development and application of specialized tests for chemical artifacts and markers in non-biological matrices, provides training to in-house technical staff, recommends analytical method & SOP changes to improve process efficiency & procedure robustness, and acts as a resource for analytical chemists in method design, development, validation, and troubleshooting.

**Requirements:**

* M.S., or Ph.D. degree in analytical, synthetic organic, medicinal or forensic chemistry.
* 8+ years of experience may substitute for an advanced degree.
* Must have 5+ years of experience in an analytical chemistry problem-solving environment.
* Extensive experience in quantitative and qualitative analytical chemistry is essential, specifically including applications in the area of drug chemistry.
* Detailed understanding of modern chemical separation techniques including extraction, derivatization, and general chromatography as well as mass spectrometric techniques is essential, including GCMS, LCMSMS, LCTOF (preferred but not required), and interpretation of mass spectra.
* Mastery of chemistry fundamentals including acid/base chemistry, functional group chemistry, chemical bonding, molecular and atomic structure.
* Strong record of problem-solving skills in drug identification and analytical method development.
* Detailed understanding of uncertainty of measurement development, calculation, implementation and reporting.
* Experience with project management and documentation.

**Major Duties and Responsibilities:**

* Serves as the Technical Director for the Forensic Chemistry unit including remote sites.
* Participates in technical working groups for method development, test design, method validation and troubleshooting.
* Involvement with audits, preventative and corrective actions including investigation of the incident, root-cause determination, and remediation through training and/or method/procedure re-design.
* Works effectively with other technical staff.
* Provides continuing education lectures and training for the Forensic Chemistry unit including remote sites.
* Maintains awareness of the licit and illicit drug development marketplace and identifies opportunities for new tests.
* Keeps current with appropriate scientific advances, industry standards, and literature in forensic science.
* Keeps current with drug legislation at the state and federal levels and applies this to the work processes.
* Observes compliance with accreditation and licensing standards as it pertains to method development.
* Informs and collaborates with appropriate departments when new drugs are identified in casework.
* Designs and approves technical projects for investigation, method development, method improvement, and method validation.
* Reviews analytical method and SOP updates to ensure technical accuracy.
* Recommends analytical method and SOP changes to improve process efficiency and procedure robustness.
* Reviews analytical data, renders judgement on observations and reporting, provides appropriate guidance and approval in instances of deviation in protocol (when appropriate).
* Oversees appropriate maintenance programs for analytical instrumentation and performs troubleshooting of analytical instrumentation as needed.
* Keeps current with in-house instrumentation, software, and database evaluation and makes recommendations for upgrades, as needed
* Ensures that analytical instrumentation is operating properly, and data generated are consistent with the design of the instrumentation and method.
* Travels to remote sites as necessary to install instrumentation, implement new methods, and provide training.
* Where appropriate, works directly with vendors, external clients, and scientists.
* Performs, maintains, and improves appropriate quality assurance and quality control procedures.
* Acts as a liaison between all Forensic Chemistry sites and the NMS chemical hygiene officer(s) for topics related to chemical hygiene and safety.
* Prepares necessary documentation and expert testimony for legal proceedings, including court appearances, when necessary.
* Effectively communicates scientific findings to internal and external clients.
* Manages small projects to assure timely completion.
* Works with staff throughout the Forensic Chemistry network to provide guidance for research projects and professional presentations and publications.
* Participates in professional groups, societies, and organizations to ensure state of the art practices and knowledge within the network.
* Maintains regular and reliable attendance.
* Other duties as assigned.

**Knowledge, Skills and Abilities:**

* Expert level skills in chemical sample separation science, GC, LC (and other chromatography systems), FTIR and mass spectrometer operation, and data interpretation.
* Working knowledge of various analytical procedures including an understanding of terminology, methods and theory, and methods of data interpretation as applied in spectroscopy (IR, UV), NMR, separation techniques (wet chemistry, GC, LC, TLC) and mass spectrometry
* Demonstrates an understanding of chemical and instrumental methods, principles, and their significance to forensic applications.
* Strong problem-solving and analytical skills
* Ability to comprehend regulations and SOPs and apply them to work operations
* Has sufficient knowledge of instrument software products to use/program instrument data processing.
* Able to exhibit professional and effective interpersonal skills in communicating and coordinating with internal professional staff and external clients, including law enforcement, attorneys, and other external organizations.
* Proactive and solution oriented.
* Ability to prioritize, designate and utilize resources.
* Strong organization skills
* Knowledge of proper safety practices and awareness of chemical hazards
* Ability to read, write, and understand the English language

**Physical Demands:**

* Ability to talk, hear, and use hands and fingers to manipulate computer keyboard, objects, or controls
* Requires moving or carrying objects from one work location to another, and sitting sometimes for periods of time
* Specific vision abilities (with correction) include color, close, distance, peripheral, depth, and the ability to adjust focus and properly see colors.
* Ability to travel to various laboratory locations as needed

Offers of employment are made contingent upon a nationwide background investigation and urine drug screen with results satisfactory to standards of employment at NMS.  **NMS requires all employees to show proof of full COVID-19 vaccination.**

*We are an equal opportunity employer and will not discriminate against any employee or applicant for employment because of race, creed, sexual orientation, color, religion, sex, national origin, age, marital status, citizenship status, otherwise qualified disability, or protected veteran status (disabled Armed Forces Service medal, recently separated, active duty or campaign badge), domestic violence victim status, arrest record, or predisposing genetic characteristics.*