



# Importance of Forensic Drug Chemistry

Lorena Canals\*

*Department of Analytical Chemistry, Institute of Materials, University of Alicante, Alicante, Spain*

## ABOUT THE STUDY

Forensic drug chemistry (FDC) is used as a sequence of techniques performed in the laboratory or field to detect the presence or absence of controlled substances. Chemical evaluation performed in the laboratory on submitted evidence detects and identifies illegal drugs and helps law enforcement prosecute offenders.

A principle of drug chemistry is simply chemistry as it is implemented to the identification of illegal materials within the criminal justice system. Like all different chemistry disciplines, it examines the way the atoms and molecules in matter interact and bond with each other. All matter has a set of characteristics which are specific to only that substance. Forensic drug chemistry uses these characteristics to identify substances using clinical techniques that can be replicated through different chemists and thus are presentable as fact in court. Forensic drug chemistry covers illegal drugs and poisons.

Forensic chemistry includes the evaluation of controlled materials in relation to criminal investigations. Drug evidence can be in the form of plant materials, liquids. Drug chemistry analyzes new compounds to determine the techniques and substances which can be used to manufacture them, as well as their effects on the physiology of users. Chemists strive to produce detection techniques and therapy systems that will reduce illegal use of controlled materials.

Generally, forensic drug chemistry is trained in organic chemistry. This ensures that the forensic drug chemists can run evaluation on blood and different body samples to identify DNA. They are also trained in organic chemistry in order to run toxicology screenings. Forensic toxicologists perform medical tests on physical fluids and tissue samples to identify any drugs or chemical compounds present in the body. They use highly sophisticated instruments, and specific methodologies to decide the presence or absence of

specific materials in the sample. The study of forensic pathology is a pathology that focuses on determining the cause of death through analyzing a corpse. A post mortem examination is performed through a forensic pathologist, generally during the research of criminal law cases and civil law cases in some jurisdictions.

Students who struggle with forensic drug chemistry and forensic toxicology will find this course to be one of the most difficult during the forensic drug technology degree program. Drug chemistry is mostly lecture-based course with specific lab days that emphasizes pharmacodynamics, main region of concern for the forensic scientist. Forensic chemistry examines physical evidence and samples for clues to solve crimes. Forensic drug chemistry applies knowledge from various disciplines which includes chemistry, biology, and genetics to analyze evidence found at crime scenes or in the bodies of crime suspects.

It is important because without it we wouldn't recognize the outcome of a crime. The forensic drug chemistry process is to examine evidence given to them from a crime scene, when it happened who committed the crime at times. This is also frequently used because it provides the strongest evidence in court. Forensic drug chemistry is the application of chemistry to criminal investigation. Focuses on the chemical evaluation of materials related to a crime. Forensic Toxicology is the use of technology and generation to enforce civil and criminal laws.

The scientists in the drug chemistry Section examine objects of evidence submitted through law enforcement for the presence or absence of controlled substances. Drug chemistry evidence can be in the form of plant material including marijuana, synthetic cannabinoids, and solids including methamphetamine, crack cocaine, and pharmaceutical or clandestine tablets, liquids including clandestine laboratory samples, or paraphernalia including smoking devices, spoons.

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**Correspondence to:** Lorena Canals, Department of Analytical Chemistry, Institute of Materials, University of Alicante, Alicante, Spain, E-mail: [Lorenacanal@gmail.com](mailto:Lorenacanal@gmail.com)

**Received:** 03-Jan-2022, Manuscript No. MCA-22-336; **Editor assigned:** 05-Jan-2022, Pre QC No. MCA-22-336(PQ); **Reviewed:** 19-Jan-2022, QC No MCA-22-336; **Revised:** 24-Jan-2022, Manuscript No. MCA-22-336(R); **Published:** 31-Jan-2022, DOI: 10.35248/2329-6798.10.1.336.

**Citation:** Canals L (2022) Importance of Forensic Drug Chemistry. Mod Chem App. 10:336.

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