**JETIR.ORG** 

### ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue

# JETIR ...

# JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

### forensic science

Nayan Kapadia

#### INTRODUCTION

It is generally agreed that the origin of forensic science may be traced back to the practise of legal medicine in China, which dates back to the sixth century. This historical period is considered to be the beginning of forensic science. As a consequence of advancements in scientific knowledge and medical knowledge during the course of the next 10 centuries, it is anticipated that the percentage of cases in which medical evidence is used as supporting evidence would increase. Other types of scientific proof were not produced until the 18th and 19th centuries; this time period was also during which the majority of our current understanding of chemistry was just beginning to be accepted.

#### BACKGROUND THE STUDY

It is need-of-the-hour that each profession should create its set of codes that is a system of self-regulation. In absence of such self-regulatory codes, governments fill the gaps by imposing legal rules which are far less appropriate and suffer from serious shortcomings. The number of professionals working in the field of forensic science is relatively low in comparison to those working in other fields such as medicine and law. Since the interface between science and criminal justice system is filled by forensic scientists, therefore, many owe allegiance to other professional bodies.

#### **DEFINITION OF FORENSIC EVIDENCE**

This definition of the evidence can also be understood through the Indian Evidence Act, 1872 which is not itself an act but a legal system. The evidence which is obtained through some scientific observations or experiments is known as Forensic evidence. They are also known as scientific evidences. It includes various types of objects like fingerprints, DNA testing etc.

Justice does not come with a single click or a blink to anybody. It takes incredible several moves. Many people are misguided because of the idea of Hollywood movies or many web series, which shows that the cases are resolved within 1 hour, including advertisements.

#### TYPES OF FORENSIC EVIDENCE

Evidence can be divided into two categories:

- Testimonial statements or the spoken word from the victim(s) or witness(es).
- Physical also referred to as real evidence, consists of tangible articles such as hairs, fibres, latent fingerprints, and biological material.

#### CRIMINAL JUSTICE SYSTEM INDIA

Criminal Justice System India is a Union of States and is governed by a written constitution which came into force on 26 November 1949. India consists of 29 states and 7 Union Territories. Due to its colonial heritage, India follows the Anglo-Saxon common law justice system. Article 246 of the Constitution provides for three lists which are enumerated in 7th Schedule of the Constitution. List-1 is the Union List which enumerates the subjects on which the Parliament of India has exclusive power to make the laws. List-2 is the State List which enumerates the subjects on which the legislature of a state has the power to make laws.

#### FORENSIC EVIDENCE (SECTION 45 TO 51 OF THE INDIAN EVIDENCE ACT, 1872

Forensic evidence, or scientific evidence, is an essential form of evidence in a jury trial. It often introduces indisputable facts that investigators and forensic professionals prove using scientific methods. Forensic evidence primarily refers to genetic information, such as DNA and fingerprints. It also may include evidence proven by physics and other forms of science, such as ballistics. Its reliability makes it an important factor in whether juries decide to convict or exonerate a defendant in criminal cases.

#### **DNA TESTING (SEC-12 THE INDIAN EVIDENCE ACT)**

DNA Testing is itself an important part of forensic evidence. It can be described here as follows: Deoxyribose Nucleic Acid is the full form of the popular term DNA. It is a type of essential component in the human body and remains different in different bodies.

#### "ROLE OF FORENSIC EVIDENCE IN CRIMINAL JUSTICE SYSTEM"

Within the framework of the legal system, the objective of forensic science is to establish a connection between a suspect and a crime scene by employing "physical evidence obtained from the suspect and a sample retrieved from the scene of the" crime that is nearly identical to one another. This is accomplished by comparing the two samples. Both the authorities who are investigating the crime and the courts place a large lot of reliance on forensic evidence and testimony. This is due to the fact that "forensic evidence and testimony help provide information about the crime to" those who are investigating it.

#### FUNDAMENTAL PRINCIPLES OF FORENSIC SCIENCE

When it comes to the investigation and settlement of criminal cases, one of the most important steps is the collection and examination of forensic evidence. In spite of this, scientific evidence is crucial and may be accepted as evidence in judicial processes since it is based on a wide variety of sound conceptual underpinnings. The use of scientific evidence is essential to the functioning of the criminal justice system. In point of fact, they are: Individuality: Each and every thing that exists naturally have its own unique identity. Neither nature nor man can create an exact replica of it. Take, for instance, fingerprints. Locard's Principal: When two identities interact with one another, there is always a passing back and forth of traces between them.

## THE FORENSIC SCIENCE REGULATOR ACT 2021 AND THE CODES OF CONDUCT

Expert evidence as to forensic science activities is also potentially subject to the <u>Forensic Science Regulator Act 2021</u> ("the FSR Act") and the <u>Forensic Science Regulator Code of Practice</u> ("the FSR Code"). Not all forensic science activity is subject to the FSR Act and the

FSR Code but when the Act and the Code apply, they apply to both prosecution and defence experts.

#### THE FORENSIC SCIENCE REGULATOR ACT 2021

The <u>Forensic Science Regulator Act 2021</u> ("the FSR Act") sets out the Regulator's statutory powers along with the Regulator's duty to prepare and publish a code of practice about the carrying on of forensic science activities in England and Wales.

#### CRIMINAL LAW BILLS 2023 DECODED FORENSIC EVIDENCE

This series analyses the changes proposed by the Criminal Law Bills in 2023. This article was first published as part of Project 39A's Bharatiya Nagarik Suraksha Sanhita Bill, 2023 and Bharatiya Sakshya Bill, 2023:

This post analyses the changes proposed to the collection of forensic evidence and the scope of examining forensic science experts under the Bharatiya Nagarik Suraksha Sanhita Bill, 2023.