

ROLE OF SCIENTIFIC INVESTIGATION IN THE CRIMINAL JUSTICE SYSTEM

Dr. Shalini Bahuguna Bachheti¹

Dr. Avnish Bhatt²

Miss Roohi Naaz³

The study of facts used to support criminal prosecutions is a component of the applied science of criminal investigation. Searching, speaking with people, questioning people, gathering and preserving evidence, and using different investigative techniques can all be included in a full criminal investigation. Criminal investigations today frequently have a variety of cutting-edge scientific methods known as forensic science. Criminal investigations are techniques used to analyze crimes and catch culprits. The goal of the criminal investigator is to identify the perpetrators of crimes, their motivations, and the victims' identities. They may also look for and question witnesses.⁴ One significant development in criminal justice in recent years has been the use of technology in criminal investigations. On the other hand, the courts take into account these verifiable physical proofs, which are otherwise infallible, and more precisely assess the offender's guilt or innocence. The effectiveness and efficiency of the criminal justice system are now closely tied to the use of technology in criminal investigations. It is a subset of technology that operates within the bounds of the law. It has to provide support for those conducting studies and precise statistics to courts for criminal and civil cases. The crime scene must be handled scientifically and accurately. Forensic science is crucial in criminal prosecutions, particularly those dependent on circumstantial evidence. It may help establish the elements of a crime, identify a suspect, and determine whether an accused person is guilty or innocent. Searching thoroughly for evidence helpful in proving a crime is one of the investigating officer's main tasks at the crime scene. The investigating officer may be protected from possible physical evidence contamination that might develop at the crime site during collecting, packaging, and sending. Evidence must be preserved, and proper precautions must be taken to prevent contamination and to tamper with the material.⁵

Keywords: Forensic Science, investigation, evidence

No one gets justice with the click or blink of an eye. Many maneuvers are required. Hollywood movies or online programs that show problems being handled in under an hour may mislead viewers. That is not equivalent. Giving someone justice requires effort, patience, time, and many steps, from criminal activity to the police investigation, court cases, verdicts, and convictions. A developing, democratic society has always been distinguished by its sense of legitimacy. The foundation of the judicial system has long been thought to be the judges. Over time, the legal system has undergone tremendous change. As a result, technology and processes in solving crimes have increased. Here, forensic science is helpful. Criminal laws are enforced

¹ Associate Professor, School of Law, Graphic Era Hill University, Dehradun

² Assistant Professor, Xavier Law School, XIM University

³ Assistant Professor, Department of Commerce, Graphic Era Deemed to be University

⁴ <https://www.britannica.com/topic/criminal-investigation>

⁵ S.S. Upadhyay, "Application of Modern Scientific Techniques In The Investigation of Crimes," last accessed on http://lawhelpline.in/PDFs/CRIMINAL_LAWS/Scientific_investigation_of_crimes.pdf

by government organizations, including the police, CID, and CBI enforces civil and criminal laws.

This list of nine sorts of criminal investigations will provide insight into life as a police person regardless of the degree of expertise a department has.⁶

1. Homicide

The homicide unit's detectives are in charge of looking into cases of double homicide. They normally start their investigation by examining the event scene, which includes gathering evidence, checking for fingerprints, taking pictures of the stage, and scouring the neighborhood for potential witnesses to speak with. To get as much information as they can, homicide investigators must be adept at questioning both witnesses and suspects. This is difficult even with a cooperative witness, let alone one who is unwilling to speak out.

2. Cybercrimes

Unfortunately, many crimes that happen offline may also occur online. Identity theft, the selling of illegal guns, the trafficking of drugs online, and online harassment are some of these cybercrimes. Since they frequently occur across many countries and because their offenders can remain anonymous behind their computer screens, cybercrimes can be challenging to investigate. These tech-savvy sleuths employ technical analysis and electronic evidence to unearth the truth and provide victims with justice despite these obstacles.

3. Forensic investigations

Forensics is used to investigate a wide range of crimes. To put together the facts of what happened and who committed the crime, the police investigators in this specialized team use scientific analysis of evidence from crime sites. They utilize Genetic evidence from hair or body fluids to assist in identifying or ruling out potential suspects, and they reconstruct the crime scene using techniques like ballistics analysis and soil analysis.

4. Fraud

Fraud occurs when someone purposefully misleads another individual or business, generally for financial benefit. Detectives must look into all the many sorts of fraud, including forgery, identity theft, insurance fraud, and credit card fraud.

Investigators employ their investigative abilities to compile proof of fraud and trace a paper trail that points to the perpetrator.

5. Family and sexual violence

This unit's detectives are experts in investigating cases of sexual assault, domestic violence, and maltreatment of children. These detectives question the victims and witnesses, collect forensic data, and build a claim against the offender. In these complicated situations, especially where there has been abuse or violence between family members, these detectives frequently undergo specialized training to help them aid victims. Investigators working on these cases may also collaborate with other agencies that help victims, such as social workers, therapists, and safe shelters for women and children.

6. Crimes against property

Investigations into theft, vandalism and break-ins fall under this broad category. There may be few clues available to detectives in cases involving crimes against property, mainly when there are no witnesses. These investigators focus on obtaining thorough reports from the property

⁶ <https://www.rasmussen.edu/degrees/justice-studies/blog/types-of-criminal-investigations/>

owner, carefully inspecting the available evidence, and scouring the neighborhood to discover if anyone noticed any unusual behavior.

7. Cold cases

Nobody wants to be a detective and have a chance to go cold. Some detectives focus on these unsolved crimes, going through earlier evidence, looking for fresh leads, and employing cutting-edge forensics equipment in the hopes that justice will eventually be served, regardless of time. Violent crimes like assault and homicide are frequently included in cold cases revived for investigation.

8. Narcotics

Detectives that specialize in narcotics are in charge of looking into drug-related offenses. This covers buying prescription pharmaceuticals illegally through smuggling, sales, drug cultivation or manufacture, and even fraud. These detectives may go undercover to dismantle a drug trafficking organization or operate on a lesser scale to reduce drug usage in a particular area.

9. Gang violence

These detectives concentrate on ending gang warfare in a certain city. Some of their investigations may cross paths with drug cases, while others focus on gang-related criminals. Their work includes removing illegal guns from the streets and monitoring high-crime areas. Because their mission is to create safer communities and stop violence, some of their work is preventative.

While the scientific method may differ slightly from that used in the hard sciences, it nonetheless follows the same fundamental principles. The scientific method is also applied in social science research. A hypothesis may be supported or disproved using empirical facts, which is the aim of the scientific process. We could use the scientific method to experiment to determine, for instance, if a new criminal justice program is beneficial. The empirical data are the outcomes of this investigation. The results may then be used to assess whether the program is successful or not.

Medico-legal doctrine, sometimes called forensic, legal, or state medicine, teaches how to apply information from every area of Medicine to legal issues. As a result, its boundaries are, on the one hand, legal requirements and, on the other, the entirety of treatment—biology, chemistry, Medicine, surgery, and physiology. Sometimes necessary, physics and botany offer their assistance; in other circumstances, all of these scientific disciplines are necessary to allow the court of law to properly resolve a contested issue affecting life or property.⁷

Although phrases like "medical jurisprudence," "forensic medicine," and "legal medicine" are frequently used to refer to the area of Medicine that deals with applying medical concepts and expertise to the purposes of both civil and criminal law, they have diverse connotations. Any issues involving people's civil or social rights and situations involving personal injuries fall under the umbrella of medical jurisprudence, which puts the medical professional into interaction with the legal system. All issues affecting people's civil and social rights and situations involving personal injuries fall under the umbrella of medical jurisprudence, which puts the medical professional into interaction with the legal system. Thus, forensic Medicine

⁷ The first paragraph of Alfred Swayne Taylor's *Principles and Practice of Medical Jurisprudence* was published in 1865. (Medical jurisprudence was favored over forensic Medicine in the 19th century. The former term reflects more accurately the subject's perceived subservience to the needs of the law).

deals with the criminal element of medical practice, whereas medical jurisprudence deals with the.⁸

The concept of "state medicine," proposed by Dr. Stanford Emersion Chaille in 1949, is unpopular everywhere. The phrase "legal medicine" is frequently chosen in Europe and the United States of America. However, the term Forensic Medicine is widely accepted in most parts of the world.⁹ Andrew Duncan (1744–1828), professor of the Institute of Medicine at the University of Edinburgh, is generally credited with establishing forensic Medicine in Britain on a systematic basis. Duncan was successful in convincing the government to create a regius chair in medical jurisprudence and medical police in 1806. Concerning forensic Medicine's vast societal use, Duncan said:¹⁰

..... to defend the injured innocence against the shafts of groundless suspicions or malicious calumny- to detect atrocious guilt though concealed with the deepest art – or to deal with distribution of material justice, where the person, property, or life of an individual is at stake.¹¹

Duncan mentioned the following as forensic Medicine applications. The criminal uses included rape, abortion, murder, and infanticide detection. The following portions were listed as the other two:

1. State of mind: madness, melancholy idiotism.
2. Pregnancy: concealed, pretended
3. Parturition: Concealed, pretended, retarded, premature
4. The firstborn of twins
5. Diseases: Concealed, pretended, or imputed.
6. Age and duration of life.

As the criminal justice system evolved, crime investigation methods underwent an incredible spread in terms of scientific infusion, as shown in the previous ten years. They were identifying accused offenders and applying scientific tools and procedures by police officials in crime detection to aid in creating a vital link between the legal system and the police force. Also, they consider these reliable proofs and assess the veracity of the offender's innocence or guilt.¹²

The concept of forensic science is not new to the criminal apparatus. In 1902, Argentina became the first nation to use forensic evidence in a criminal prosecution. Sir William Herschel supplied the suspect's fingerprints. The Indian judicial system is no different. Recently, forensic techniques that are being used, such as lie detectors and narco-analysis, have gained popularity. Forensic study shows that there is no such thing as a perfect crime. By punishing the guilty and pardoning the innocent, it fosters equity.

An introduction to Forensic Science defines it as "The application of science to those criminal and civil laws that the police agencies in a criminal justice system enforce." Forensic Science deals with the application of the knowledge and methodology of various disciplines of science to legal matters. It involves the use of multiple disciplines, such as physics, chemistry, biology, computer science, and engineering for evidence analysis. For instance, physics is used to understand the pattern of a blood spatter, biology to establish the source of an unidentified

⁸ http://www.ijarse.com/images/fullpdf/1523436914_JK1433IJARSE.pdf

⁹ HWV Cox ,Medical Jurisprudence, seventh edn,2002,p 3

¹⁰ MA Crowther, Brenda M White, Medicine, Property And Law In Britain, The Historical Journal, 1800-1914, p 314,,853-870, 856

¹¹ Duncan A, Heads Of Lectures On Medical Jurisprudence and Forensic Medicine, 1801, p 177.

¹² <https://www.legalserviceindia.com/legal/article-8130-forensic-science-under-criminal-law.html>

suspect, and chemistry to determine the composition of drugs. Thus, the role of forensic science in criminal justice and the legal system is highly critical but is often underrated.¹³

One significant development in criminal justice in recent years has been the use of technology in criminal investigations. On the other hand, the courts take into account these verifiable physical proofs, which are otherwise infallible, and more precisely assess the offender's guilt or innocence. The effectiveness and efficiency of the criminal justice system are now closely tied to the use of technology in criminal investigations. It is a subset of technology that operates within the bounds of the law. Its job is to provide reliable statistics to the courts for use in deciding criminal and civil cases, as well as support to those conducting investigations. The goal of our study is to evaluate the legal system that controls forensic software.¹⁴

In addition, despite significant technical advancements in recent years, the role of forensic technology in Indian criminal justice has remained or been severely constrained, as will be examined in this paper. Forensic investigations and trials should aim to produce results that allow victims of horrible acts to quickly receive reparation and justice.¹⁵ No one gets justice with the click or blink of an eye. Many moves are required. Hollywood movies or online programs that show problems being handled in under an hour may mislead viewers. That is not equivalent. Giving someone justice requires effort, patience, time, and a lot of steps, from criminal activity to police investigation to court cases to verdicts and convictions. A developing, democratic society has always been distinguished by its sense of legitimacy. The foundation of the judicial system has long been thought to be the judges.

Over time, the legal system has undergone tremendous change. As a result, the use of technology and processes in solving crimes has increased. Here, forensic science is helpful. Government organizations including the police, CID, and CBI, enforce both criminal and civil laws. Relating to criminal justice. The application of scientific understanding to legal circumstances is referred to as forensic science. "Forensics" is derived from the Latin word "forum." Assuring the preservation, gathering, and analysis of evidence used to prosecute criminal cases in forensic science.¹⁶ Medicine, biology, pharmacology, chemistry, and other scientific disciplines are used in forensic science. For example, the blood found on the site is blueprinted using physics. Chemistry can help detect the cause of death or the pharmaceuticals present in the corpse, while biology can help identify the deceased.

THE ART OF CRIMINAL PROFILING - BECOMING INTERESTED IN THE MIND OF A FRAUDSTER

Suspects can be identified based on their routines and dispositions. An offender's possessions are evaluated psychologically. This aids in the offender's social and psychological assessment. Though the accuracy, efficacy, and scientific validity of Profiling suspects are widely questioned, it is a great tool for solving complex crimes or to identify the serial offender. The crime scene is inspected and compared to comparable crimes that have occurred in the past, the victim's background and activities are assessed, all possible reasons are investigated, and the suspects are described in detail. The victim's background and activities are reviewed.¹⁷

¹³ <https://ffflab.org/the-importance-of-forensic-science-in-criminal-investigations-and-justice/>

¹⁴ N. B. Narejo, M. A. Avais, Examining the Role of Forensic Science for the Investigative-Solution of Crimes, 252SURJ (SCIENCE SERIES) Vol. 44(2) 2012.

¹⁵ <http://ipublisher.in/Ia/306005>

¹⁶ JyotirmoyAdhikary, DNA Technology in Administration of Justice, (LexisNexis, Butterworths, 2007)

¹⁷ KaulShali, S.2018. Applicability of Forensic Science in Criminal Justice System in India With Special Emphasis on Crime Scene Investigation. Medico-Legal Desire Media and Publications, Medico-Legal Reporter, (Inaugural Issue), p.4.

SIGNIFICANCE OF FORENSIC SCIENCE IN LAW

*Forensic science can be explained as the study and application of science to law matters. This connection between science and law provides new ways and methods for discovering reality. The word "forensic" is derived from the Latin word "forensis," which means forum, a public place where, in Roman times, senators and others debated and held judicial proceedings.*¹⁸

The phrase "forensic" comes from the Latin word "forensis", which means 'Forum,' where the law courts of ancient Rome were held. Today forensics refers to applying scientific principles and practices to the adversary process where incredibly knowledgeable scientists play a role.¹⁹ A forum was a public discussion board for judicial and political debate in historical Rome. So forensic science has its roots in the legal system and is defined as such. In Forensic Science, evidence is collected, preserved, and analyzed to prosecute an offender in court. Thus, forensic science is undeniably played a vital role in the criminal justice system.

Forensic evidence in criminal prosecutions is recognized as being of significant relevance by the judicial system. Because scientific procedures and techniques are employed, there is minimal room for bias or unfairness to manifest itself. As a result, DNA profiling and other forensic proof are typical in courts worldwide. The Chinese used finger and palm print identity in forensics hundreds of years ago (650 A.D.).

All across the world, forensic evidence is utilized to convict and exonerate persons. Forensic science labs have sprouted up across the globe in recent decades. In truth, forensic services have been improved by special legislation in the US, Canada, and Australia. This would boost the likelihood of catching criminals and, thus, the likelihood of conviction. These acts emphasize efficient and quality crime scene handling.

IN CRIMINAL INVESTIGATION, A LEGAL PROVISION SUPPORTING FORENSIC ANALYSIS

Forensic science provides the investigating officer with crucial information using evidence collected on the scene and scientific equipment. They assist the court in determining how the crime was perpetrated. What exactly is the crime? Who are the potential suspects? They also attempt to repeat the crime and determine why it was committed by answering all questions and contacting the perpetrator.²⁰

Indian regulation governs how forensic technology can be used in criminal investigations and trials.

- a) Do such procedures have constitutional validity?
- b) To what extent can forensic evidence be used in criminal cases?
- c) What is the forensic information acquired from the experts' evidential value?

No one accused of a crime can be compelled to testify against oneself under Article 20(3) of the Indian Constitution. The presumption of innocent until established guilty is primarily based on Article 20(3). It also protects the accused from torture even as they're in police custody. It is presumed harmless till validated responsible absolutely. Everyone charged with a crime has a right to be assumed innocent till established guilty in line with the law in a public trial, pronounces Article 11 of the Universal Declaration.

¹⁸ <https://liveadalat.com/importance-of-forensic-science-in-law/>

¹⁹ http://web.sbu.edu/psychology/lavin/forensic%20nov29_files/frame.htm#:~:text=The%20word%20%22forensic%22%20comes%20from,o%20ancient%20Rome%20were%20held.

²⁰ Code of Criminal Procedure, 2005 Amendment

Self-incrimination and compelled testimony are prohibited under Article 20 (3) of the Indian Constitution. Those accused of crimes are protected by Article 20 (3) from being forced to testify against them. Prior evidence, as well as evidence presented in court is protected. Only when self-incrimination is forced, not when voluntary declarations, disclosures, or productions are made, is Article 20 (3) protected.

Discussion rages over whether or not forensic proof violates Indian Constitution's Article 20(3). In *Kathi Kalu Oghad & Others*²¹, it was found that the accuser's thumb impact, specimen signature, blood, hair, semen, and other body fluids do now not represent "turning into a witness." Thus, the accused has no felony basis for an item to DNA testing for investigation or trial.

Testing at the suspects inside the phony stamp paper rip-off, the SIT has been given the pass-ahead. Abdul Karim Telgi is the main suspect in the case. According to the judgment, truth serum can likewise be used in this manner. Narco-analysis of an accused does not constitute forced testimony, according to the Madras High Court in *Dinesh Dalmia v State*²². Even if some scientific procedures may be used in criminal investigations involuntarily, the Supreme Court has reviewed their legitimacy in *Selvi and Ors. v. State of Karnataka & Anr*²³.

The Supreme Court found in the above instance that inconclusive brain mapping and polygraph testing in criminal investigations were unconstitutional. When the Code of Criminal Procedure was modified in 2005, it was made possible to obtain medical information from suspects. After being detained, a suspect may also be subjected to a clinical exam if authorities have "affordable grounds for thinking" that the examination may additionally screen proof of crook interest. Samples from sexual offenders are examined using contemporary and scientific techniques such as DNA profiling, swab samples, and hair and fingernail clippings.

The 2005 amendment, on the other hand, only applies to rape situations. Similarly, Section 164-A of the 1973 Code of Criminal Procedure mandates that a rape victim undergo a 24-hour medical evaluation, which includes DNA analysis. It is permitted by Section 2(h) of the Indian Medical Council Act, 1956, for any medical practitioner to take a DNA sample. I'm curious to know if every doctor can collect and keep DNA proof. Common knowledge is that even the most minor inaccuracy can lead to sample contamination. A polluted sample has little value.

A forensic report is considered a "professional opinion" under the Indian Evidence Act of 1872. An expert is someone who has learned and honed their skills through practice and observation. He has dedicated time and effort to a certain field of knowledge, making him particularly suited to share his opinions.

The expert's primary responsibility is to give all of the facts to the court, together with his rationale, for the court, which is not an expert, to form its own opinion based on the evidence. The reasons presented for the conclusion, as well as the methods and resources utilized to get it, determine an expert witness's credibility. The court, on the other hand, may disagree with the expert's conclusions and base its decision on other evidence. The National Draft Policy on Criminal Justice Reforms suggests converting the Indian Evidence Act to allow the clinical

²¹ AIR 1961 SC 1808, 1962 SCR (3) 10

²² 2006 CriLJ 2401

²³ AIR 2010 SC 1974, [2010] 7 SCC

proof to be admitted as "great evidence" instead of "opinion evidence" and establishing its probative price.²⁴

IN THE INDIAN JUDICIARY SYSTEM, RESTRICTIVE APPLICATIONS FOR FORENSIC EVIDENCE

In India, forensic evidence is still restricted, even though it is increasingly employed in courts. Previously, the court relied heavily on non-forensic, non-scientific evidence. According to a recent Supreme Court and Delhi High Court report, only 60-65 cases are solved using forensic evidence. Only 5% of murders and 3% of rapes have employed DNA evidence. The lack of scientific evidence in an Indian criminal investigation is demonstrated by this data alone. Integrating forensic science into criminal investigations and the legal system has been a monumental task. Conviction rates have been continuously dropping due to a lack of evidence. In this case, forensic evidence can help partially reverse the situation.²⁵

The motives for the court's resistance to utilizing forensic proof in criminal cases are complex. Collection, maintenance, or even non-series completed incorrectly. The evidence obtained from the sites needed to be properly stored in many cases, resulting in a skewed report, according to the court. The DNA samples are contaminated and rendered unusable. The evidence has been regularly forwarded to the lab. Delay in examining biological and serological data leads to degradation and the release of a large amount of alcohol. Because the court cannot rely on the outcome, determining the body's drunkenness may be difficult.²⁶

The goal of the forensic analysis was to discover the cause of death and maybe the crime scene. Thus, it is vital to properly arrange and handle evidence to ensure its validity in court. The sole step required is the efficient integration of forensic evidence into the investigation and analysis process.

ALTERNATIVE SUBSIDIARIES EXPERIENCING OBSTRUCTION

A technological domain such as forensic evidence currently needs to be utilized more as a result of the incompetence and ignorance of the investigating officer in charge. So far, non-scientific approaches have been utilized to gather information. In addition, because the investigating officer is the first respondent to the crime, his lack of scientific expertise jeopardizes the impartiality of the criminal justice system. Many people are concerned about the independence of forensic laboratories. Both the home ministry and the police department in India are responsible for forensic science laboratories. They have been subservient and have lost their independence. Forensic laboratories must be completely separate from all other departments to produce an unbiased outcome.

Lack of equipment, money, and cooperation between cops and forensic professionals are serious difficulties. Forensic scientific advice, professionalism, research, and development should be prioritized in the framework, according to the Committee. The Malimath group advised equipping forensic labs with the necessary equipment. Also, DNA profiling and sample processing requirements must be set. Lessons from the Verma Commission

²⁴ <https://www.legalserviceindia.com/legal/article-6517-case-analysis-selvi-v-s-state-of-karnataka.htm>

²⁵ Jyotirmoy Adhikary, DNA Technology in Administration of Justice, (LexisNexis, Butterworths, 2007)

²⁶ N. B. Narejo, M. A. Avais, Examining the Role of Forensic Science for the Investigative-Solution of Crimes, 252SURJ (SCIENCE SERIES) Vol. 44(2) 2012.

CASE LAWS AND RELEVANT LEGAL PROVISIONS

That's what occurred in *State of NCT Delhi v Sujeet Kumar*²⁷. The court docket concurred with the investigation conclusions based totally on DNA reviews and other shreds of evidence and dominated the accused guilty, overturning the Trial Court's acquittal judgment.

There turned into only one unburned palm with fingers within the *Vishal Yadav vs. State of UP* murder case. The accused was convicted after DNA tests identified the deceased's body. Accumulating clinical facts from suspects Interrogation of the accused is a prison if there are "reasonable grounds for believing," it will uncover proof of the crime. It was utilized in the *State of NCT Delhi v Sujeet Kumar* to link the defendant to the horrible conduct of child sexual abuse. A higher court reversed a lower court's judgment to acquit based on DNA evidence and other evidence.

Section forty-five of the Indian Evidence Act, of 1872 offers an expert opinion in handwriting or finger expression cases. According to Section 46, a fact can be relevant in court if substantiated by an expert witness. Section 293 of the Criminal Procedure Code lists government-approved scientific experts who can help draft a report to better a trial or inquiry. Sections 53 and 54 grant the arrested person the right to be evaluated by a medical professional. Section 27 of the Prevention of Terrorism Act stipulates that a police officer may seek samples of handwriting, fingerprints, footprints, photographs, blood, saliva, sperm, hair, and the voice of the accused from the CJM. Although forensic science techniques are not explicitly regulated, the Supreme Court has repeatedly interpreted and clarified its views on the matter in several rulings.

FORENSIC LANDSCAPE INCOGNITO FORENSIC FOUNDATION

India's first forensic science laboratory opened in 1878. The number of forensic and crime laboratories has grown steadily. So do the number of forensic disciplines.

The millions of pending cases in India create a huge demand for forensic labs and forensic practitioners. There is increasing demand for law enforcement to secure evidence from around 5000 forensic professionals in India. The problem is that government forensic labs frequently take months to report.

IFF Lab has offices in both Chennai and Bangalore. It is a leader in the forensic sector. They bring competence in criminal investigations and cyber and digital forensics to the country's forensic arena. Law enforcement, private detectives, individuals, corporations, and the government use their cutting-edge digital forensics lab. To manage family issues without using the police, IFF Lab assists. IFF Lab helps companies and individuals avoid a PR disaster. Scams like document falsification and identity theft are rampant.

CONCLUSION

It is common knowledge that forensic science and evidence are crucial to the judicial system. Because of advancements in science and technology, forensic science has also seen significant development. On the other side, scientific and technological progress has made it easier for criminals to avoid capture. This highlights how crucial it is to include forensic science in our judicial system. There has also been increased reliance on scientific methods in India and other places. In India, there has been a lot of attention paid to how technology can be used in the

²⁷ CRL.A. No. 1190 of 2014

field of investigation. Several Commissions have said that if the courts use the scientific method when making their decisions, it can be fair, which is one of the hallmarks of democracy. Courts have struggled to incorporate forensic science into their systems, primarily because of problems with contaminated evidence and faked tests, which they want to avoid repeating. They prefer to use old, non-scientific methods for their goal. Forensic science and new technology have often been added to laws, but this hasn't helped much. There are a lot of forensic scientists and experts who could be better at what they do. There are few people who work in this field of law and science, so there has always been a problem with needing more jobs. To assist students in advancing in the profession, legal and medical colleges should offer forensic science as a course. The government must take greater action to educate the public about the value of forensics in the criminal justice system. Science and technology have evolved, and police, investigators, detectives, and scientists must be educated on this as well as how crucial evidence like this might be in a case. Compared to other sorts of auricular evidence, there is a strong chance that forensic evidence is more reliable. The criminal justice system can benefit from this sector, but we also need to fix the system's problems. Forensic science skills must be fully utilized by everyone in the legal system.

After the crime is committed, the investigating officer seeks to collect as much evidence as possible. Small proof can revert the case; thus, they must probe meticulously. To solve crimes and other terrible crimes, forensic science is essential.