
Investigative Frontiers Integration of Science Transforming Criminal Investigation

Year: 2026

Evidence Under Scrutiny: Admissibility, Reliability, and the Forensic-Legal Interface

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Abstract

The role of forensic evidence in the modern criminal justice system has proven to be an invaluable tool that provides scientific assistance in the investigation, prosecution, and adjudication of criminal justice cases. But the reliance on scientific evidence has also made the assessment of reliability, admissibility and applicability of law to scientific evidence an object of growing interest. The review examines the basic principles and types of forensic evidence, the scientific principles that underlie the examination of forensic evidence and the need for validation, quality assurance and accredited laboratory procedures. It also highlights the legal framework in respect of admissibility of forensic evidence in India in terms of Bharatiya Sakshya Adhiniyam, 2023 and Bharatiya Nagarik Suraksha Sanhita, 2023 with a focus on judicial assessment on scientific findings. The changing nature of the forensic–legal interface is also explored, emphasizing the need for proper communication, ethical obligations and institutional cooperation between forensic specialists and the judiciary. Finally, it raises modern issues like forensic mistakes, digital evidence, standardized scientific practices and artificial intelligence. Building the capability of forensic infrastructure, professional competence, and quality assurance is crucial to enhance the credibility of forensic evidence and to ensure fair, transparent and evidence-based justice.

¹ ISBN No. 978-93-7640-081-2

Keywords: *Forensic Evidence; Admissibility; Reliability; Forensic–Legal Interface; Criminal Justice System.*

1 Introduction

Evidence is the foundation of all criminal investigations and judicial proceedings. It is the key instrument for establishing facts, determining guilt or innocence, and providing for the administration of justice. As forensic science has developed, evidence has shifted from primarily relying on witness statements and confessions to including scientifically produced information from biological, chemical, physical and digital sources. The scientific advances that have helped to enhance investigative power have increasingly come under fire for the examination of evidence. The importance of evidence is not only that it is of scientific origin but it is also reliable, of good quality, and legally permissible, which is increasingly recognised by courts, investigators, legal practitioners, and forensic experts alike. This means that all evidence, from collection through preservation, laboratory analysis, interpretation and presentation in court, must be scientifically examined and subjected to strict scrutiny before it can be used.²

As forensic science and the law become increasingly intertwined, a complex forensic–legal interface has emerged in which the findings of forensic science are assessed according to the principles and procedures of the law. This is an intersection where reliability ensures that forensic processes yield accurate, valid and reproducible results and admissibility decides whether or not such evidence meets the legal criteria for acceptance in court.³ Forensic evidence has come under even greater scrutiny due to issues of cognitive bias, laboratory errors, contamination, inconsistent methods, and the rise of new technologies like digital forensics and artificial intelligence. These advances highlight the importance of communication between forensic scientists and legal practitioners, of quality assurance procedures and of strong legal frameworks that can accommodate scientific advances. In the context of this, this review explores the basic principles of forensic evidence, evidence-based scientific principles and the legal standards under which evidence is admitted, and the changing forensic–legal interface

² Srishti, “The Impact of Forensic Science on the Legal System in India,” *J. Forensic Sci. Res.*, vol. 9, no. 1, 2025, doi: <https://dx.doi.org/10.29328/journal.jfsr.1001072>.

³ L. A, “Forensic Evidence in Indian Courts: Reliability, Admissibility, and Need for Scientific Standards,” *Int. J. Judic. Sci. Res. Stud.*, vol. 2, p. 133, Nov. 2025, doi: [10.63090/IJJSRS/3049.0618.0039](https://doi.org/10.63090/IJJSRS/3049.0618.0039).

which collectively influences the credibility and efficacy of evidence in modern criminal justice systems.⁴

2 Foundations of Forensic Evidence in the Criminal Justice System

Forensic evidence, which is the scientific basis of the modern criminal justice system, consists of objective information that is used to assist in the investigation, prosecution, and adjudication of a criminal case. Forensic evidence differs from testimonial and circumstantial evidence, which is gathered through a scientific, systematic examination of physical, biological, chemical and digital evidence with regard to a crime. It has been useful in establishing facts and reconstructing events, identifying or eliminating suspects, and corroborating witness statements with measurable scientific findings. However, forensic evidence is only effective when it is collected, preserved, scientifically analysed and interpreted properly. Therefore, an appreciation of its concept, classification, and scientific underpinning is required in order to understand its role in ensuring accurate, reliable and legally admissible outcomes in the criminal justice system.⁵

A. Concept and Scope of Forensic Evidence

Forensic evidence is all physical, biological, chemical, or electronic evidence scientifically analyzed to determine facts that could be used in a legal investigation or in court proceedings. It is a source of information without any personal opinion or bias and it connects people, things, places and events together, helping investigators to reconstruct a crime and determine who the perpetrator or victim were. Forensic evidence, unlike testimonial evidence, relies on scientific observation, laboratory testing and accepted methods, and is a reliable part of criminal investigations.

With the advancement of scientific and technological progress, the scope of forensic evidence has been greatly enriched. It now incorporates many fields, such as DNA analysis, fingerprint examination, toxicology, ballistics, forensic pathology, questioned document examination, trace evidence analysis and digital forensics. In addition to being used in criminal investigations, forensic evidence is also crucial in civil cases, disaster victim identification, environmental,

⁴ K. Mishra and A. Singh, "Forensic evidence in Indian courts: Analyzing the role of investigating agencies in justice delivery," *Int. J. Civ. Law Leg. Res.*, vol. 4, no. 2, pp. 141–147, 2024, doi: <https://doi.org/10.22271/civillaw.2024.v4.i2b.101>.

⁵ A. PANDEY, "THE IMPACT OF FORENSIC EVIDENCE ON THE CRIMINAL JUSTICE SYSTEM IN INDIA: AN EXAMINATION OF OPPORTUNITIES, CHALLENGES, AND FUTURE DIRECTIONS," *ILE J. LAW FORENSIC Sci.*, vol. I, no. I, pp. 1–4, 2023.

cybercrime, and national security investigations. It is a multidisciplinary approach that helps the courts to assess factual matters based on scientifically verifiable information, increasing the accuracy, fairness and credibility of judicial decisions.⁶

B. Classification of Forensic Evidence

Forensic evidence may be classified into the following categories:

- i. **Physical Evidence:** Tangible objects such as weapons, tools, clothing, broken glass, footprints, tire marks, and other materials recovered from the crime scene.
- ii. **Biological Evidence:** Blood, saliva, semen, hair, bones, skin cells, tissues, and DNA samples used for individual identification and biological comparisons.
- iii. **Chemical Evidence:** Narcotics, poisons, explosives, petroleum products, paints, inks, and other chemical substances examined through laboratory analysis.
- iv. **Trace Evidence:** Minute materials such as fibres, soil, pollen, gunshot residue, glass fragments, paint chips, and microscopic particles transferred during criminal activity.
- v. **Digital Evidence:** Data obtained from computers, mobile phones, surveillance systems, cloud storage, emails, social media, GPS devices, and other electronic sources.
- vi. **Documentary Evidence:** Handwritten documents, signatures, currency notes, printed materials, passports, and altered or forged documents subjected to forensic examination.
- vii. **Impression Evidence:** Fingerprints, palm prints, shoeprints, bite marks, and tool marks that help establish identity or reconstruct criminal events.

C. Scientific Principles Underlying Forensic Evidence

The principles of scientific value of forensic evidence are based on the generally accepted ideas that evidence has to be examined objectively and systematically. One of the most basic is the Principle of Exchange (Locard's Exchange Principle), which holds that whatever comes into contact with another object will be transferred, and investigators can use this transfer of material to connect suspects, victims and crime scenes. The Principle of Individuality is equally significant, as it states that each object or person has unique features and can be identified by fingerprints, DNA fingerprints or tool marks.

The principles of comparison, scientific validation and reproducibility are also fundamental to forensic science. Validated analytical techniques that can provide consistent and repeatable results should be used to compare evidence with known reference samples. Additionally, the

⁶ B. Banerji, K. V. R. Kumar, and A. Kaur, "REVIEW OF FORENSIC SCIENCE IN INDIA: REVIEW PAPER," *Int. J. Med. Toxicol. Leg. Med.*, vol. 26, no. 1–2, 2023, doi: 10.5958/0974-4614.2023.00031.1.

proper documentation of the evidence, the chain of custody and the quality assurance procedures ensure that evidence remains intact throughout collection in the courtroom. Together these scientific principles ensure the reliability and credibility of forensic evidence, and ensure that it can provide a sound basis for judicial decision making.⁷

D. Reliability of Forensic Evidence: Scientific Standards and Quality Assurance

The reliability of forensic evidence is a basic quality criterion as the validity of judicial decisions relies on the accuracy and consistency of scientific findings. In forensic science, reliability is the consistency of analytical methods and examination procedures to obtain accurate, repeatable and scientifically valid results, in standardized conditions. Reliable evidence reduces the chances of wrongful convictions, safeguards the rights of accused persons and enhances public confidence in the criminal justice system. The reliance on forensic evidence in criminal investigations has escalated in the Indian context and hence the demand for scientifically validated techniques, certified forensic laboratories and qualified experts has risen. The adoption of modern criminal legislations and the development of forensic institutes in various states have put importance on maintaining uniformity in scientific standards. In addition to advanced technology, reliability is also achieved by thorough validation, quality assurance, documentation, and by following nationally and internationally recognized laboratory practices. These measures will ensure that forensic evidence is objective, reliable and admissible in court during the investigation and trial.⁸

E. Scientific Validation of Forensic Methods

Scientific validation is the process of establishing the validity of a forensic test or method prior to its use in a criminal investigation by ensuring that the test or method is accurate, reliable, and reproducible. Validation are the procedures for assessing the accuracy, precision, sensitivity, specificity and limitations of analytical procedures carried out under controlled conditions. To ensure scientific credibility, DNA Profiling, Toxicology, Finger print examination, Ballistic and Digital Forensic analysis are increasingly being used by the Forensic Laboratory in India with validated methods. The reliability of laboratory findings is further ensured by the use of Standard Operating Procedures (SOPs), regular proficiency testing and peer review. Validation

⁷ I. Y. Brain et al., "Forensic Science in Indian Criminal Law: Legislative Provisions, Legal Implications and Suggestions for Reforms," *Int. J. Law Manag. Humanit.*, vol. 9, no. 2, pp. 2430–2440, 2026, doi: <https://doi.org/10.10000/IJLMH.1111758>.

⁸ D. G. Kaur and D. P. Goswami, "FORENSIC EVIDENCE IN INDIA: A CRITICAL ANALYSIS OF LEGAL AND PROCEDURAL ISSUES," *SSRN*, 2025, doi: <http://dx.doi.org/10.2139/ssrn.5226380>.

also helps to ensure that the scientific methods employed are suitable for the evidence presented to the court, thus increasing confidence in forensic conclusions.⁹

F. Quality Assurance, Accreditation, and Laboratory Standards

Quality assurance is the process that will ensure that the forensic examination is completed in a consistent and well-established scientific process, which will result in the integrity and consistency of the laboratory results. A complete quality management system involves the documentation of procedures, calibration of equipment, competency of staff, internal audits, and continual evaluation and monitoring of the laboratory's performance. Many forensic science laboratories are looking in India for accreditation from the National Accreditation Board for Testing and Calibration Laboratories (NABL) as per the internationally recognised testing and calibration laboratory accreditation standard, ISO/IEC 17025. Accreditation is a process that verifies that laboratories are technically competent and perform within the framework of quality standards. These practices increase the credibility of the forensic reports, contribute to the uniformity of the laboratories and promote the acceptance of scientific evidence in judicial proceedings.¹⁰

G. Sources of Error, Bias, and Uncertainty in Forensic Analysis

Although forensic science has made great advances, there are still problems of error, bias, and uncertainty that can lead to an unreliable determination of evidence. The errors could be caused by improper evidence collection, contamination, inadequate preservation, malfunctioning of instruments, or improper procedures in the laboratory during an examination of the evidence. However, if examinations are not carried out objectively, the conclusions drawn can be affected by human factors such as cognitive bias, confirmation bias and subjective interpretation. Other challenges in India like high case backlogs, inadequate trained forensic personnel, and uneven forensic lab facilities may also add to the delays and inconsistencies in the analysis process. Scientific uncertainty can also arise because evidence is degraded or incomplete or because it is not enough for making a definite scientific judgment. The difficulties suggest the importance of maintaining high standards in quality control, periodic continuing education for professionals,

⁹ A. Joseph, I. Rao, and N. Singh, "Towards standardized forensic DNA practices: Comparative analysis of forensic DNA quality management systems in India and the UK," *Multidiscip. Sci. J.*, 2025, doi: <https://doi.org/10.31893/multiscience.2025507> Towards.

¹⁰ M. Du, "Analysis of Errors in Forensic Science," *J. Forensic Sci. Med.*, 2017, doi: 10.4103/jfsm.jfsm_8_17.

blind proficiency testing and the independent evaluation of the forensic results to guarantee that evidence is accurate, unbiased and scientifically sound prior to testimony in court.¹¹

3 Admissibility of Forensic Evidence in Judicial Proceedings

The admissibility of forensic evidence can make or break scientific findings being accepted and relied upon in judicial proceedings. The Bharatiya Sakshya Adhiniyam, 2023 (BSA) and the Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS) govern the process of evidence collection, store, presentation and appreciation in criminal matter in India. To be admissible in court, forensic evidence should meet the basic criteria of relevance, authenticity, legality and procedural fairness. Then there is the maintenance of an unbroken chain of custody, proper documentation, lawful investigation and the preservation of evidence of the crime scene to the courtroom. Scientific evidence has only been deemed reliable where it has been produced by a validated analytical process, investigated by skilled forensic scientists, and backed up by routine laboratory procedures and quality assurance practices. Transparency of the methodology, reproducible results and use of accredited forensic laboratories further strengthens the credibility of forensic reports. But the Indian courts are not blind to scientific nature of the evidence and hence the same cannot be accepted only because it is scientific in nature. The judges determine its reliability, relevance and probative value on their own, based on the experience and qualifications of the expert witnesses, the consistency of laboratory results, the scientific and legal rigor followed and the credibility of the evidence as a whole. Forensic reports are not evidence of a crime that must be accepted as compelling, but are used in conjunction with witness evidence, documentary evidence, and other circumstantial evidence to ensure that the court makes decisions on a full and sound basis of all the facts available.¹²

4 The Forensic–Legal Interface: Bridging Science and Law

Forensic–legal interface is the intersection between scientific investigation and legal proceedings, where scientific investigation results in evidence that is scientifically relevant, reliable and legally acceptable. This relationship has become more prominent in India since the introduction of the Bharatiya Nyaya Sanhita, 2023 (BNS), Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS) and Bharatiya Sakshya Adhiniyam, 2023 (BSA), all of which made greater use of

¹¹ M. MAURYA and D. S. MISHRA, “Evidentiary Value and Admissibility of Forensic Evidence,” *Int. J. LAW Manag. Humanit.*, vol. 8, no. 2, pp. 4170–4190, 2025, doi: <https://doi.org/10.1000/IJLMH.119552>.

¹² S. Sharma and B. N. Sarangi, “ADMISSIBILITY OF FORENSIC EVIDENCE IN INDIA: A COMPARATIVE ANALYSIS WITH USA,” *NFSU J. Forensic Justice*, vol. 14, no. 2, pp. 69–83, 2025.

forensic science in criminal investigations and the giving of evidence.¹³ For scientific evidence to be collected, analysed, interpreted and presented according to scientific standards and legal requirements, an effective coordination between investigating agencies, forensic laboratories, prosecutors, defence counsel and the judiciary is required. Judge and lawyers do not necessarily have any special scientific training and therefore, the forensic scientist must articulate his or her findings so that their value, limitations and reliability are understood to the court.¹⁴

Attending to the interpretation of forensic evidence, the court must decide whether it is relevant, reliable and consistent with the facts generally of the case, rather than merely relying on a scientific report. Scientific evidence is given with the goal of supporting the reasoning of a judge, which is to corroborate or disconfirm facts, and is subject to legal analysis. Forensic experts are required to maintain the highest level of ethical and professional conduct, such as being impartial, having integrity, maintaining confidentiality, and following validated scientific methods and standard operating procedures, at this interface. In the Indian context strengthening of forensic–legal interface calls for an expansion of number of accredited forensic laboratories, enhancing of infrastructures, training of forensic professionals and judicial officers, and promotion of continuous cooperation between scientific and legal institutions. This will enhance the quality of forensic investigations, aid in accurate interpretation of scientific evidence and ensure that the development of forensic science is contributing to a fair, transparent and evidence-based criminal justice system.¹⁵

5 Scrutiny of Forensic Evidence: Challenges and Contemporary Issues

The growing importance of forensic science has also led to greater judicial scrutiny of scientific evidence in order to ensure that it is reliable, legally admissible, and free from procedural “deficiencies.” In India, courts have been scrutinizing the collection, preservation, analysis and presentation of forensic evidence in adherence with the provisions of Bharatiya Sakshya Adhiniyam, 2023 (BSA) and the Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS). Even though there have been great strides in forensic technology, there is concern regarding the

¹³ N. Kumar, “Forensic Evidence in Modern Justice: Admissibility and Judiciary Perspectives,” *Acad.*, vol. 3, no. 10, pp. 215–230, 2025, doi: <https://doi.org/10.5281/zenodo.17598511>.

¹⁴ V. Kumar and Y. Singh, “Forensic science in the Indian legal framework: Challenges and opportunities in criminal investigations and trials,” *Int. J. Civ. Law Leg. Res.*, vol. 4, no. 2, pp. 213–220, 2024, doi: <https://www.doi.org/10.22271/civillaw.2024.v4.i2c.107>.

¹⁵ B. K. Mohamed, T. A. Rehan, A. M. A. Rasoul, M. A. Hussein, F. H. Abdulrazzak, and A. F. Alkaim, “Review Article: Forensic Evidence, Classification, Identification, Methods and Techniques,” *TIJER – Int. Res. J.*, vol. 12, no. 8, pp. 482–490, 2025, [Online]. Available: <https://tijer.org/TIJER/papers/TIJER2508055.pdf>

misuse or misinterpretation of scientific findings.¹⁶ Errors in evidence collection, contamination, insufficient documentation, subjective interpretation, cognitive bias and improper expert testimony can diminish the evidentiary value of forensic reports and can have a negative impact on judicial decisions. These deficiencies should underscore the need for adhering to scientific protocols, quality assurance, and ethical principals at all stages of the forensic process.

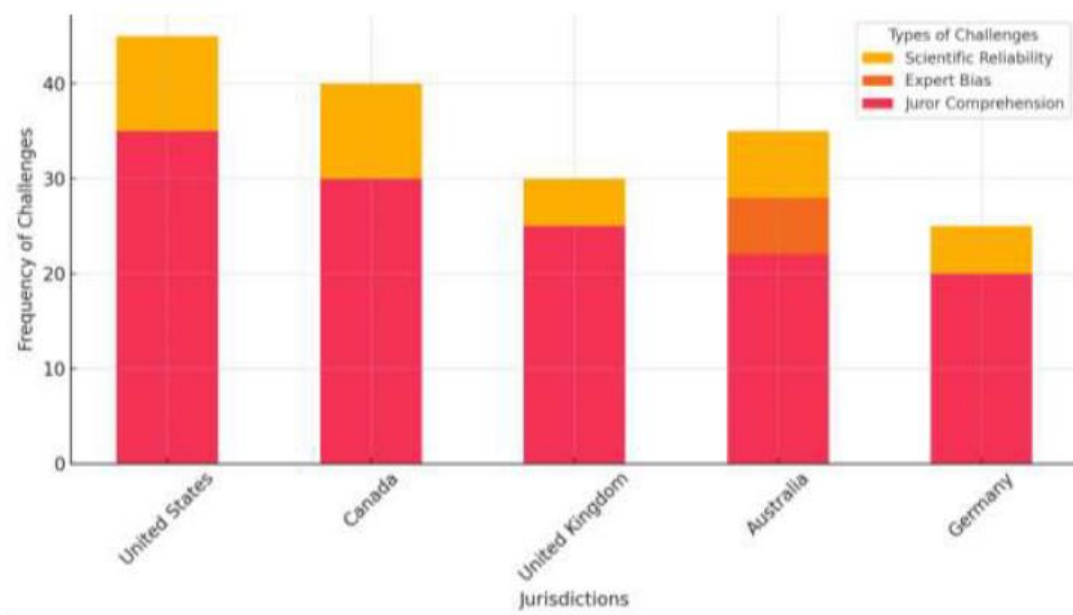


Figure 5: Frequency of Forensic Evidence Challenges Identified Across Jurisdiction¹⁷

Digital forensics and artificial intelligence are rapidly evolving fields, offering fresh challenges and opportunities for the criminal justice system. The adoption of electronic records, cyber evidence, technology and AI-assisted forensic data can enhance the efficiency of investigations, but can also create issues for algorithmic transparency, integrity of data, privacy and acceptance by the judiciary. The experience of cases where the science has been wrong indicates that scientific evidence should never be accepted as a ‘rule’ and should always be considered in

¹⁶ I. Y. Brain et al., “Forensic Science in Indian Criminal Law: Legislative Provisions, Legal Implications and Suggestions for Reforms,” *Int. J. Law Manag. Humanit.*, vol. 9, no. 2, pp. 2430–2440, 2026, doi: <https://doi.org/10.1000/IJLMH.1111758>.

¹⁷ S. Bhan, N. Kumar, V. P. Singh, S. Gope, and M. Aqib, “Challenges In Admissibility Of Forensic Evidence: A Comparative Analysis Of Legal Standards Across Jurisdictions,” *Int. J. Environ. Sci.*, vol. 11, no. 14, pp. 1977–1985, 2025, [Online]. Available: <https://www.theaspd.com/ijes.php>

conjunction with other evidence. In India, more resources should be invested in established forensic labs, improved infrastructure, ongoing professional development, creating consistent processes, and regular quality control evaluations to enhance the credibility and value of forensic findings. Forensic scientists, investigators, prosecutors and the judiciary working together, as well as through the proper incorporation of new technologies, will increase the credibility of forensic evidence and strengthen and make more transparent and accurate an evidence-based criminal justice system.

6 Conclusion

Forensic evidence has revolutionized the criminal justice system by delivering scientifically valid information that can be used to assist in objective investigations and judicial decisions. However, the value of evidence is not only dependent on scientific advances, but also on the "reliability of forensic techniques, quality assurance measures, and legal conditions for the admissibility of evidence. The new laws, namely Bharatiya Nyaya Sanhita, 2023, Bharatiya Nagarik Suraksha Sanhita, 2023 and Bharatiya Sakshya Adhiniyam, 2023, have further bolstered the importance of forensic science in improving the credibility of criminal investigations and justice. Effective operation of the forensic–legal interface is based on a continuous and dynamic coordination between the investigator and the forensic experts, the prosecutor and the judiciary, with adherence to ethical conduct and scientifically validated procedures. Concurrently, laboratory mistakes, cognitive bias, digital evidence and the growing role of AI pose serious problems and require constant review and adaptation within the field of forensics. Increased numbers of accredited forensic laboratories, improved professional training, standardisation of protocols and the promotion of interdisciplinary cooperation will increase the reliability and admissibility of forensic evidence. These are necessary to ensure that scientific evidence continues to be accurate, unbiased, and capable of providing India's changing justice system with transparent, efficient, and equitable results.

7 Reference

- [1] Srishti, "The Impact of Forensic Science on the Legal System in India," *J. Forensic Sci. Res.*, vol. 9, no. 1, 2025, doi: <https://dx.doi.org/10.29328/journal.jfsr.1001072>.
- [2] L. A, "Forensic Evidence in Indian Courts: Reliability, Admissibility, and Need for Scientific Standards," *Int. J. Judic. Sci. Res. Stud.*, vol. 2, p. 133, Nov. 2025, doi: [10.63090/IJJSRS/3049.0618.0039](https://doi.org/10.63090/IJJSRS/3049.0618.0039).
- [3] K. Mishra and A. Singh, "Forensic evidence in Indian courts: Analyzing the role of investigating agencies in justice delivery," *Int. J. Civ. Law Leg. Res.*, vol. 4, no. 2, pp. 141–147, 2024, doi: <https://doi.org/10.22271/civillaw.2024.v4.i2b.101>.

- [4] PANDEY, “THE IMPACT OF FORENSIC EVIDENCE ON THE CRIMINAL JUSTICE SYSTEM IN INDIA: AN EXAMINATION OF OPPORTUNITIES, CHALLENGES, AND FUTURE DIRECTIONS,” *ILE J. LAW FORENSIC Sci.*, vol. I, no. I, pp. 1–4, 2023.
- [5] Banerji, K. V. R. Kumar, and A. Kaur, “REVIEW OF FORENSIC SCIENCE IN INDIA: REVIEW PAPER,” *Int. J. Med. Toxicol. Leg. Med.*, vol. 26, no. 1–2, 2023, doi: 10.5958/0974-4614.2023.00031.1.
- [6] Y. Brain et al., “Forensic Science in Indian Criminal Law: Legislative Provisions, Legal Implications and Suggestions for Reforms,” *Int. J. Law Manag. Humanit.*, vol. 9, no. 2, pp. 2430–2440, 2026, doi: <https://doi.org/10.10000/IJLMH.1111758>.
- [7] G. Kaur and D. P. Goswami, “FORENSIC EVIDENCE IN INDIA: A CRITICAL ANALYSIS OF LEGAL AND PROCEDURAL ISSUES,” *SSRN*, 2025, doi: <http://dx.doi.org/10.2139/ssrn.5226380>.
- [8] Joseph, I. Rao, and N. Singh, “Towards standardized forensic DNA practices: Comparative analysis of forensic DNA quality management systems in India and the UK,” *Multidiscip. Sci. J.*, 2025, doi: <https://doi.org/10.31893/multiscience.2025507> Towards.
- [9] M. Du, “Analysis of Errors in Forensic Science,” *J. Forensic Sci. Med.*, 2017, doi: 10.4103/jfsm.jfsm_8_17.
- [10] M. MAURYA and D. S. MISHRA, “Evidentiary Value and Admissibility of Forensic Evidence,” *Int. J. LAW Manag. Humanit.*, vol. 8, no. 2, pp. 4170–4190, 2025, doi: <https://doi.org/10.10000/IJLMH.119552>.
- [11] S. Sharma and B. N. Sarangi, “ADMISSIBILITY OF FORENSIC EVIDENCE IN INDIA: A COMPARATIVE ANALYSIS WITH USA,” *NFSU J. Forensic Justice*, vol. 14, no. 2, pp. 69–83, 2025.
- [12] N. Kumar, “Forensic Evidence in Modern Justice: Admissibility and Judiciary Perspectives,” *Acad.*, vol. 3, no. 10, pp. 215–230, 2025, doi: <https://doi.org/10.5281/zenodo.17598511>.
- [13] V. Kumar and Y. Singh, “Forensic science in the Indian legal framework: Challenges and opportunities in criminal investigations and trials,” *Int. J. Civ. Law Leg. Res.*, vol. 4, no. 2, pp. 213–220, 2024, doi: <https://www.doi.org/10.22271/civillaw.2024.v4.i2c.107>.
- [14] K. Mohamed, T. A. Rehan, A. M. A. Rasoul, M. A. Hussein, F. H. Abdulrazzak, and A. F. Alkaim, “Review Article: Forensic Evidence, Classification, Identification, Methods and Techniques,” *TIJER – Int. Res. J.*, vol. 12, no. 8, pp. 482–490, 2025, [Online]. Available: <https://tijer.org/TIJER/papers/TIJER2508055.pdf>

- [15] Y. Brain et al., “Forensic Science in Indian Criminal Law: Legislative Provisions, Legal Implications and Suggestions for Reforms,” *Int. J. Law Manag. Humanit.*, vol. 9, no. 2, pp. 2430–2440, 2026, doi: <https://doi.org/10.10000/IJLMH.1111758>.
- [16] S. Bhan, N. Kumar, V. P. Singh, S. Gope, and M. Aqib, “Challenges In Admissibility Of Forensic Evidence: A Comparative Analysis Of Legal Standards Across Jurisdictions,” *Int. J. Environ. Sci.*, vol. 11, no. 14, pp. 1977–1985, 2025, [Online]. Available: <https://www.theaspd.com/ijes.php>