CHAPTER - XLII

SCIENTIFIC AIDS TO INVESTIGATION

1979. Physical clues from the scene of crime should be collected basing on the principle that any contact between the criminal and the crime will leave a trace at the scene of crime or the place of occurrence.

1980. Keen observation and collection of physical evidence is the main function when an offence is investigated scientifically. The various types of physical evidence met with in different crimes would be in the forms of:-

(a). STAINS which are blood, semen, saliva, urine, facial and perspiration which may occur on a victim’s person and clothing at the scene of crime, on suspect’s person and clothing and on the weapon of offence;

(b). HAIRS which are present in crimes of violence such as rape, murder, hit and run cases;

(c). FABRICS and FIBRES for which major bits of evidence would be found at the scene or in the vehicle used in the crimes like man slaughter, hit and run, murder, house breaking, rape, robbery, etc;

(d). ROPES which are commonly used for committing crimes like burglaries, hanging, strangulation, etc;

(e). GLASS which is encountered as evidence very frequently in burglaries, murders, assaults, automobile accidents, in instances where firearm has been discharged through glass and in large variety of other types of crimes;

(f). SOIL which will be useful in evidence to determine whether a person has been to certain place and soil found on shoes, pant cuffs on the clothing if he has been thrown on the ground during the struggle or in a rape case if the rape is committed in open field;

(g). PAINTS which chips or smears of paints found on the clothings of suspects of house breaking, at the scene of automobile accident, in safe breaking cases and in connection with many different types of offences;

(h). DUST found with persons engaged in trades and professions during the course of their work characteristic materials in their finger nails, ears and skin folds;

(i). METALLIC FRAGMENTS which are frequently found among sweepings and mixed with debris; and
(j). **VEGETABLE MATERIALS** or botanical evidence such as portions of plant, fungi, bacteria, wood, pollens, tobacco, miscellaneous plant residues like seeds, leaf fragments, bark and twigs and ash of vegetable materials.

**Note**

The physical clues, as noted above, would be in addition to the finger prints or the foot prints of the accused person(s) found at the scene of crime or any material handled by him / them connected with the crime.

1981. The successful investigation / detection and the effective prosecution of a case shall be ensured by

(i). producing the physical clue in a legally admissible form,
(ii). scientific analysis of the seized materials, and
(iii). the opinion of the experts as accepted under law.

1982. The scientific evidence or the Forensic science has gained tremendous evidentiary value including the area of DNA (Deoxy Ribo Nucleic Acid) profiling on the basis of which it has become possible to precisely fix the identity by analyzing tissues, bones, hairs and body fluids including semen of the accused or victim. Wherever necessary and possible the evidence shall be collected on the principles of DNA testing to establish the identity of the accused or victim and fix it with the crime.

**FORENSIC SCIENCE LABORATORY**

1983. Generally for the Union Territory of Puducherry, the services of the experts of the Central Forensic Science Laboratory at Hyderabad shall be utilized. In certain cases, for the sake of quickness and convenience, the Director of State Forensic Science Laboratory at Chennai may be requested to examine the exhibits and give opinion.

1984. For all cases involving the chemical analysis of the ‘Viscera’ and the test for estimation of the presence of alcohol (Toxicology), the investigating officers shall send the exhibits to the Public Health Laboratory at Gorimedu, Puducherry.

1985. The investigating officers shall forward the exhibits, through the court having jurisdiction, along with the forwarding note to the following authorities of the Forensic Science Laboratories:

I. All exhibits requiring opinion of the experts of the Biology section, Anatomical, chemical, Fire arms, Physical examinations, Fibres, etc.

   Director
   Central Forensic Science Laboratory
   OUC Campus
   Ramanathapur
   Hyderabad 500 013.
PHOTOGRAPHS IN HOMICIDE CASES

1986. At the scene of a homicide, the photographs of the following subjects should be made for use as evidence.

(a). General photograph of the scene showing the location and position of the body; such photographs should be taken before anything is disturbed;

(b). Close-up view of the body and its proximity;

(c). Photograph of the weapon, if left at the scene;

(d). Photographs showing the exact location of bullet holes in furniture, floors, walls or any other nearby object;

(e). Close-ups of entrance and exit to crime scene;

(f). Photographs of the scene taken after removal of the dead body showing the blood stains under the body, etc;

(g). Photographs of all articles bearing Finger Prints showing location of finger prints;

(h). Photographs of all rooms having direct connection with the one in which death occurred;
(i). Exterior photographs showing entrance and exit used by murderer and surrounding territory;

(j). Photographs showing any shrubbery, fences, buildings or other objects used for concealment; and

(k). Photographs of street, sidewalls or drive ways probably used as gaining access to premises;

1987. **PHOTOGRAPHS IN SEXUAL OFFENCES**

(a). Photographs of all surrounding should be made;

(b). A single view photographing shall be avoided as it would mislead the fact relating to forceful act of the accused or the resistance of making outcry of the prosecutrix;

(c). Close-ups photographs of blood, semen and any other stains or marks; and

(d). Photographing of any item of physical evidence which may in any way identify the accused or prove the commission of the offence.

1988. **PHOTOGRAPHS IN BURGLARIES**

(a). Photographs of general view should be made of both the exterior and interior building in which a serious burglary has been committed.

(b). Close-ups photographs of the point of entrance and place to exit of the accused;

(c). Tools and other objects occasionally left behind by a burglar should be photographed; and

(d). Photographing of finger prints left at the scene.

1989. The investigating officers shall avail the services of the following Forensic Science Experts for scientifically comparing / matching and identifying the crime and criminals.

(i). Medico-legal expert including Forensic Pathologist (available in the Government General Hospitals, JIPMER and other authorized medical institutions of this territory).

(ii). Serologist (available in the General Forensic Science Laboratory, Hyderabad and other State Forensic Science Laboratory);
(iii). Biologist (CFSL & FSL)
(iv). Chemist (CFSL & FSL)
(v). Physicist (CFSL & FSL)
(vi). Ballistic expert (CFSL & FSL)

**Note**

(i). The Civil Surgeon in the Head Quarters and their subordinate Medical Officers under their jurisdiction will carry out the post-mortem examination and give opinion.

(ii). The Medical officers in the Government Head Quarters and other Hospitals will give wound certificate for all injury cases.

1990. The investigating officers after collecting the physical clues shall properly label it, pack it and forward it to the court having jurisdiction, where the exhibits will be accounted, scaled and forwarded to the Central Forensic Science Laboratory, Hyderabad as required by the investigating officer. The Station House Officer shall ensure that the exhibits sealed and duly numbered are sent through the constables of the concerned Police Station to the laboratory and that after the receipt of the opinion, the remnants of the exhibits are collected for the purpose of conducting trial.

The investigating officer shall send the exhibits in the following.

**FORWARDING NOTE**

(In all cases where the examination of any material is required at the _______________________________ Forensic Science Laboratory, a copy of this form duly filled in should accompany the exhibits).

Case Number : 
Police Station : 
District : 
State : 
Section of Law:

I. NATURE OF CRIME

(This should cover nature of charge, brief history and any relevant details).
II. LIST OF EXHIBITS SENT FOR EXAMINATION

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description of the exhibits</th>
<th>How, when and by whom found?</th>
<th>Source of the exhibits **</th>
<th>Remarks</th>
</tr>
</thead>
</table>

** The exact place from where the exhibits were collected; If these exhibits were in the possession of a person (victim / suspect / witness); the other details of the owners should be furnished.

III. NATURE OF EXAMINATION REQUIRED

(Including any information which will assist the examination)

1.
2.
3.

and so on

Memo No: ............................................ dated, the .........................

Forwarding to the Director ................................................................. Central Forensic Science Laboratory ......................... Hyderabad.

SIGNATURE OF THE FORWARDING OFFICER
DESIGNATION OF THE FORWARDING OFFICER

SPECIMEN SEAL IMPRESSION

Note

In the “Nature of Crime” and “Nature of Examination”, care should be taken to ensure that all necessary information regarding individual samples submitted is included.

1991. In the packing of material for expert examination, it is important that the specimen samples should be well protected against contamination from outside sources. The specimen when received at the laboratory must be true unadulterated sample of the material found at the scene of crime.
1992. The exhibits should be collected, packed and transported according to the directions issued in the instruction sheet supplied to the investigating officers. Methods described under each type of exhibit should be meticulously observed.

1993. The specimen must be in a separate clean glass stoppered bottles and sealed.

1994. Specimen seal impression should be on sealing wax.

Certificate to be signed by a competent forwarding authority and forwarded to the Director ............................. Central Forensic Science Laboratory, ................................. Hyderabad with exhibits.

Certified that the Director ............................. Forensic Science Laboratory ............................. Hyderabad has the authority to examine the exhibits sent to him in ................................. and if necessary, to take them to pieces or remove portions for the purpose of the said examination.

SIGNATURE AND DESIGNATION
OF FORWARDING AUTHORITY

Place:  
Date:  

RECEIPT

No. ........................................ dated, the .................................

FORENSIC SCIENCE LABORATORY

Case No. :  Police Station :  
District :  
State :  
Section of law :  

This is to acknowledge the receipt of ..........................................................

..........................................................

..........................................................

in connection with the case referred to above.

DIRECTOR
LABEL ON THE PARCEL
FORENSIC SCIENCE LABORATORY

LAB No. ........................................... of the parcel

Form :
Place :
His No: 
Subject:  Dated:

DISTRIBUTION SHEET
FORENSIC SCIENCE LABORATORY

A. Return in inward parcel godown.

B. Forwarded to:
   1. Chemistry section
   2. Physics section
   3. Biology section
   4. Ballistics section

(by order)
DIRECTOR

C. Store in outward parcels godown

Return to the sender

(by order)
DIRECTOR

OPINION OF THE DOCUMENT EXPERT


(The forwarding note to be sent to the document expert is called the letter of advice, which shall be normally in the following form of letter).
LETTER OF ADVICE

Case No :        Police Station :
District :       
State :          
Section of Law:

1996. The details of crime, the modus operandi adopted by the accused in committing forgery, frauds, other types of falsification, manipulation and making of false and fabricated documents and the relevant details of the documents related to the crime and the accused persons. (Part I of the Letter of Advice).

1997. The details of documents, how and when from whom or from which place seized / collected; the documents to be of three kinds (i.e.) (i) Questioned or disputed documents, (ii) Admitted / genuine or standard writings (iii) Sample writings. (Part II).

Note

(i). Questioned or disputed documents shall normally be called Q series with numbers, Q1, Q2, etc. or D1, D2, etc. for which the opinion of the documents expert is required to identify the accused and match with the crime.

(ii). There are standard writings which are said to be admitted or genuine writings or signatures of a person – (may be arrested or victim). These documents are marked A1, A2, etc. (‘A’ Series).

(iii). Sample writings (as many as required shall be collected) shall be obtained from the accused person and if necessary from others in the presence of two reliable witnesses who should attest at the bottom of the sample writing sheet. This documents will contain ‘S’ series – No – S1, S2, S3 and so on.

1998. Part III of the letter of advice shall explain the details of questioned document, standard / admitted writings and sample writings with relevance to the crime and various instances.

1999. Under Part IV, the investigating officer shall frame questions as to what type of the opinion of the document expert is required.

Note

(i). Normal question is whether the person who wrote ‘A’ series and ‘S’ series could have written Q1 and Q2?. If so, reasoning and opinion of the document expert may be given.

(ii). The report or the opinion of the document expert shall be included in the list of prosecution papers and the name of the document expert shall be cited in the list of witnesses and the Memo of Evidence, while laying charge sheet in the Court.

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