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PRESENTATION ON

ANALYSIS OF HIGH EXPLOSIVES AND POST BLAST RESIDUES BY CHEMICAL METHODS

CUFS 2416 EXPLOSIVE AND POST BLAST INVESTIGATION

B.SC. FORENSIC SCIENCE (SEM 6)
SCHOOL OF FORENSIC SCIENCES
BHUBANESHWAR CAMPUS

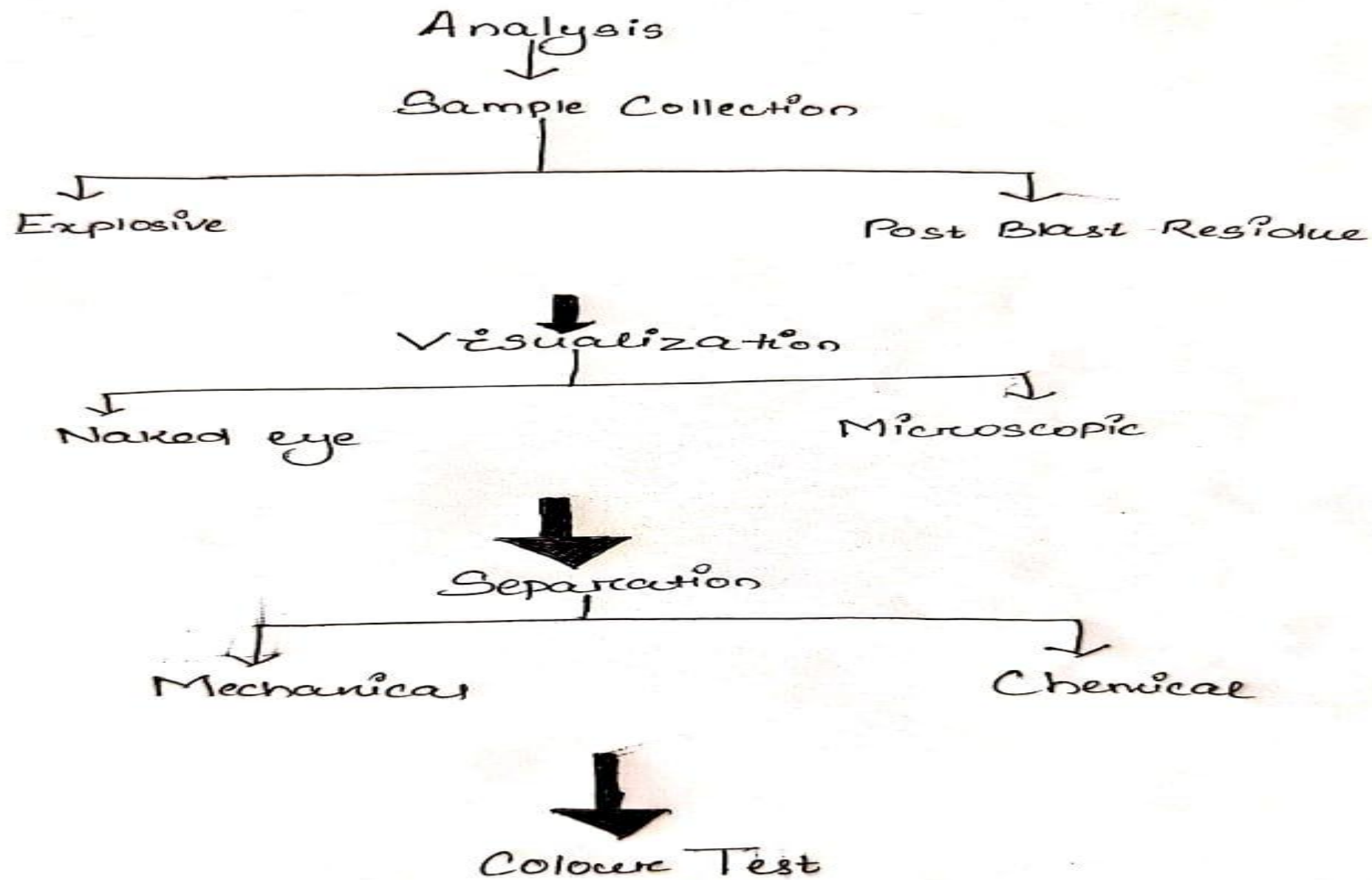
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- Analysis of high explosives

INTRODUCTION

- The 1993 Bombay bombings were a series of 12 terrorist bombings that took place in Bombay, Maharashtra, on 12 March. This bombing was organized by using high explosives like RDX on several cars at different locations.
- In investigation of the bombing scene different evidences were collected by the forensic team such as blood , soil, some liquids, slurry, fragments of explosive devices , explosive residues etc.
- All evidence are placed in metal airtight containers.





ANALYSIS OF HIGH EXPLOSIVE THROUGH COLOUR TEST

Preparation of Reagent:-

1. Reagent A : Dissolve 1 g of Diphenylamine in 10 ml of conc. Sulphuric acid.
2. Reagent B : Dissolve 1g of sulphanilic acid in 100ml of 33% acetic acid.
3. Reagent C: Dissolve 1g of Naphthylamine in 100ml of boiling distilled water, cool and mix with the 110ml of glacial acetic acid.
4. Reagent D: Dissolve 5g of brucinesulphate in 100 ml of 33% acetic acid.
5. Reagent E: Dissolve 10gms of potassium hydroxide in 100ml of absolute alcohol.

TEST FOR TNT

Procedure	Observation	Inference
1. 1ml extract + 2 drops of reagent A	No colour	Presence of TNT
2. 1ml extract + 1 drop of reagent B + 2 drops of reagent C	No colour	Presence of TNT
3. 1ml extract + 2 drop of reagent D	No colour	Presence of TNT
4. 1ml of extract + 2-3 drops of reagent E	Purple red	Presence of TNT

TEST FOR RDX

procedure	Observation	Inference
1. 1ml of extract + 2 drops of reagent A	Blue	Presence of RDX
2. 1ml of extract + 1 drop of reagent B + 2 drops of reagent C	Pink to red	Presence of RDX
3. 1ml of extract + 2 drops of reagent D	Orange to red	Presence of RDX

TEST FOR PETN

Procedure	Observation	Inference
1. 1ml of extract + 2 drop of reagent A	Blue	Presence of PETN
2. 1ml of extract + 1 drop of reagent B + 2 drops of reagent C	Pink to red	Presence of PETN
3. 1ml of extract + 2 drops of reagent D	Orange to red	Presence of PETN

TEST FOR TETRYL

Procedure	Observation	Inference
1. 1ml of extract + 2 drops of reagent A	Blue	Presence of TETRYL
2. 1ml of extract + 1 drop of reagent B + 2 drops of reagent C	Pink to red	Presence of TETRYL
3. 1ml of extract + 2 drops of reagent D	Orange to red	Presence of TETRYL
4. 1ml of extract + 2-3 drops of reagent E	Red violet	Presence of TETRYL

THANK YOU.

