



**Centurion**  
**UNIVERSITY**

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PRESENTATION ON

# *ROLE OF FORENSIC SCIENTIST IN POST BLAST INVESTIGATION*

CUFS 2416 EXPLOSIVE AND POST BLAST INVESTIGATION

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

# CONTENT

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- Introduction
- Role of Forensic Scientist in post blast scene.
- Forensic Scientists involved in a post blast investigation.
  - Crime scene experts
  - Lab experts
- Crime scene experts at post blast scene
- Lab expert in post blast investigation

# INTRODUCTION

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## FORENSIC SCIENCE

- The application of scientific methods and techniques to matters under investigation by a court of law.
- Forensic scientists use analytical and scientific techniques to examine evidence from crimes and prepare legal statements that summarize the results for court cases.



# ROLE OF FORENSIC SCIENTIST IN POST BLAST SCENE

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- Identification of the explosive material with the help of field detection kits.
- Identification of the component of IED.
- Technical assistance in handling and disposal of live bombs.
- Proper collection and preservation of evidences at the scene of crime.
- Identification and analysis of evidences.
- Reconstruction of crime scene
- Photography and videography of the scene.
- Sketching and documentation of the scene.
- Maintaining the chain of custody.



# FORENSIC SCIENTISTS INVOLVED IN POST BLAST INVESTIGATION

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In a post blast investigation there are two types of experts i.e.

## CRIME SCENE EXPERT

EXPLOSIVE EXPERT

FORENSIC BIOLOGIST

FORENSIC PSYCHOLOGIST

FINGERPRINT EXPERT, ETC

## LAB EXPERTS

FORENSIC BIOLOGIST

FORENSIC CHEMIST

FINGERPRINT EXPERT

MEDICO-LEGAL EXPERT, ETC

# CRIME SCENE EXPERT AT POST BLAST SCENE

FORENSIC EXPERT	ROLE IN EXPLOSION SCENE OF CRIME
EXPLOSIVE EXPERT	<ul style="list-style-type: none"><li>• To determine the type of explosive material used.</li><li>• To ascertain effectiveness and fatal intensity of bomb.</li><li>• Type of any Improvised Explosive Device, IED involved in the explosion</li><li>• To ascertain the cause of explosion, whether it was an intentional act or result of any negligence.</li></ul>
BOMB SQUAD	<ul style="list-style-type: none"><li>• Type of mechanism of live bomb.</li><li>• Handling of live bomb at the crime scene.</li><li>• Diffusion of live bomb as per standard measures.</li></ul>
FORENSIC EXPERT	<ul style="list-style-type: none"><li>• Searching of crime scene</li><li>• Collection and preservation of evidence such as physical evidence, trace evidence, debris, parts of IED, etc.</li><li>• Documentation of crime scene.</li><li>• Reconstruction of crime scene.</li></ul>
FORENSIC BIOLOGIST	<ul style="list-style-type: none"><li>• Collection and preservation of body fluid.</li><li>• Collection of body part and tissue.</li></ul>

<b>FORENSIC EXPERT</b>	<b>ROLE IN EXPLOSION SCENE OF CRIME</b>
FINGERPRINT EXPERT	<ul style="list-style-type: none"><li>• Search for possible fingerprints on different places.</li><li>• To develop and make latent fingerprint visible.</li><li>• Lifting of developed fingerprint from immovable objects.</li><li>• To develop fingerprint from the skin of finger tips taken from the deceased hands.</li></ul>
PHOTOGRAPHY AND VIDEOGRAPHY EXPERT	<ul style="list-style-type: none"><li>• To prepare a video film of the scene before collecting the evidences.</li><li>• The location of the clues should be documented through photography.</li><li>• Photograph should be taken from every appropriate angle to establish exact location of various object including dead bodies.</li></ul>
DOCUMENT EXPERT	<ul style="list-style-type: none"><li>• Collect and preserve any sort of document evidence.(Letter, Papers, etc.)</li></ul>
FORENSIC PSYCHOLOGIST	<ul style="list-style-type: none"><li>• Forensic Psychologists help to better understand the human behavior of criminals, witnesses, victims.</li></ul>

# LAB EXPERT IN POST BLAST INVESTIGATION

FORENSIC EXPERT	ROLE IN EXPLOSION SCENE OF CRIME
FORENSIC CHEMIST	<ul style="list-style-type: none"><li>• To extract or separate explosive residue or their decomposed product from the debris.(Debris from the crater surface and underneath soil)</li><li>• To conduct preliminary test and confirmatory test.</li><li>• To carry out instrumental analysis of residue.</li></ul>
FINGERPRINT EXPERT	<ul style="list-style-type: none"><li>• Examination of print both visible and latent.</li></ul>
FORENSIC BIOLOGIST	<ul style="list-style-type: none"><li>• To analyze the body tissues found on the crime scene.</li><li>• To carry out DNA profiling.</li><li>• Blood grouping.</li></ul>
MEDICO-LEGAL EXPERT	<ul style="list-style-type: none"><li>• They perform postmortem of the dead bodies found on the crime scene.</li><li>• Identification of unknown dead bodies, It's age, race, sex, etc.</li><li>• Evaluation of injuries and wound.</li><li>• To establish linkage between human organ whether belong to the same individual.</li></ul>



**THANK YOU.**

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