

# SPSA Forensic Services

- [Any questions](#)
- [Print Page](#)
- [Site Map](#)
- [Accessibility Help](#)

Expert Support for Scotland's Police and Criminal Justice community



- [Home](#)
- [About Us](#)
- [Our Services](#)
- [News](#)
- [Work with Us](#)
- [FOI](#)
- [Contact Us](#)
- [Useful Links](#)

## OUR SERVICES

The practice of forensic science stems from two principles:

### Locard's Exchange Principle

**"Every contact leaves a trace"**, Locard's exchange principle is the cornerstone of forensic science.

Edmund Locard (1877-1966), was a French forensic scientist and fingerprint expert. He stated that whenever any two objects come into contact with one another, they affect one another in some way.

In essence, every time a crime scene is entered trace evidence is left behind and taken away from the scene. Thus we might find skin and blood under a deceased's fingernails and infer that they came from the attacker.

### Principle of Individuality

The second principle is the 'Principle of Individuality' which acknowledges "two objects may be indistinguishable but no two objects are identical."

Whether we are talking about a human being or a single grain of sand, the question simply is whether we have sufficient ability to distinguish between two objects with the information provided or with the measurement tools we have available.

## Trace Evidence

Every person who is physically involved in a crime scene leaves behind a **trace** of their presence. Forensic Scientists and related experts are concerned primarily with examining this trace material associated with a crime. Trace evidence can be difficult to find, and easily destroyed or lost, but when recovered and preserved for examination it can provide that vital evidence required to solve the crime and catch the criminal.

Trace material of interest can include: -

- paint flakes
- glass and metal fragments
- traces of accelerants (petrol, paraffin etc.)
- footwear marks/impressions
- tyre marks/impressions
- fingerprints
- documents and handwriting
- blood/saliva/semen and other body fluids
- hairs and fibres
- drugs
- blood and urine for alcohol content

By clicking through the menu on the left of this page you can find out how our forensic scientists and expert staff examine and analyse this trace evidence to assist the police in their investigations.

[> Go to the SPSA Web Site](#)

||| |

Printed from: <http://www.spsa-forensics.police.uk/services>