

## HISTORY OF FORENSIC MEDICINE AND TOXICOLOGY

Mathieu Bonaventure Orifila [1787 – 1853 ] professor of medicinal and forensic chemistry of Paris university , publishes *Traite des poisons*. He is considered as Father of modern toxicology. He is credited as first to use microscope in examination of blood and semen.

Bateman 1817 first describes ecchymoses when he observes dark purple blotches and determines that they are due to extravasation of blood in to the skin.

Purkinji John Evangelist 1823; professor of anatomy at University Breslau in his thesis discusses Nine types of fingerprint patterns, but he do not mention there value for personal identification.

William Nichol 1828; invents polarizing microscope .

Sir Robert Christison 1797 -1882 ; professor of Forensic Medicine gives expert evidence in the trial of William Burke. He also published “*Treatise on Poisons*” [1829] in English language. It was regarded as standard work for many years.

Thomas Bell [1928] first describes “pink teeth” ,presumes that they are pathognomonic of Hanging or Drowning.

Lambert Adolphe Jacques Quetelet .1830; Belgian statistician reaffirms the belief that no human bodies are exactly alike.

Henry Goddard 1835; of Scotland yard first uses Bullet comparison to catch a murderer. He noticed a visible flaw in bullet which was traced back to mould.

James Marsh [1794- 1846] a English chemist develops a test to detect the presence of arsenic in the tissues. It is one of the sensitive tests for Arsenic.

Henry - Louis Bayard [ 1812- 1852] published first reliable procedure for the microscopic detection of Sperm. He also describes microscopic characteristics of different substrate fibers. He was conferred with doctor of medicine in 1836. After the death of d'Angers took over a large part of his Forensic Practice.

John Davey [1839] experiments with dead soldiers in Malta and Britain using mercury thermometer . It is one of the first attempts to determine the time since death from the cooling of the body.

Orifila [ 1787 – 1853] now the Dean of Paris medical faculty[1840] is summoned by the court in Lafarge case. He applies the Marsh Test correctly and finds Arsenic in the corpse. Marie Lafarge sentenced for life imprisonment. After 10 years in jail was released by Napoleon III in 1850 and dies in 1851 still declaring herself as innocent.

Britain passes Arsenic act to control the availability and sale. This was commonly used for homicidal purpose but purchased in the pretext of Rat Killer.

Jean Servais Stas – 1850 . Chemistry Professor and student of Orifila from Brussels successfully identify a vegetable poison from the body tissues of a murder victim had chemical burns in his mouth and tongue. It was Nicotine . the killer was convicted on Stas's testimony.

Tiechmann [1823 – 1895 ] professor of Anatomy at Gottingen , Germany , in 1853 describes the crystallization of blood compounds called as Hemin crystals. Simple and specific test developed by Tiechmann to detect blood in stains of cloths and other items.