

Abstract

The thesis is focused on the issues related to the Criminalistic Odourology as a branch of Criminal Science that analyses odours. The main aim of this thesis is to outline principles of scent identification, to explore current methods of scent compounds analysis and to evaluate the contribution of odourological findings for practice, especially for the purposes of detection and investigation of crime offences.

The thesis is composed of six chapters. Chapter One defines the concept of the term odourology, indicates its division into two parts, the Olfactronics and the Olfactorics, according to the prevailing method of odour identification, and briefly describes the historical development of this branch.

Chapter Two clarifies the meaning of two basic odoroulogical terms: odour and human odour. It also looks at the presumptions of individual person odour identification.

Chapter Three concentrates on odour traces. It describes their origin, distinguishes their forms and types and highlights some of their specifics in comparison with other types of criminalistic traces.

Chapter Four illustrates the procedure of detecting and securing of odour traces at the crime scene. Although the collection of the scent compounds can be done via a variety of techniques, the attention is devoted to the collection of trace scents by means of contact with the textile absorber ARATEX, which afterward is removed using deodorized tweezers, folded and then preserved in a glass jar.

Chapter Five refers to the methods of scent identification. At first it examines Criminalistic Olfactronics, an exact method of group odour identification of various substances (drugs, explosives) based on laboratory means, especially on gas chromatography and mass spectrometry. A detailed analysis of Criminalistic Olfactorics, which uses specially trained canines to find the association between a human odour trace collected from a crime scene and a comparative scent sample taken from the suspect and therefore have to be conducted under controlled conditions, follows.

In Chapter Six the focus is shifted to the legal aspects of canine human scent identification and the admissibility and probative validity of dog scent evidence is surveyed.

Conclusion corresponds with the initial assumptions about the importance of odour traces for the crime investigation purposes.