

Forensic Odorology

Abstract

The thesis deals with the topic of forensic odorology and its aim is to provide a comprehensive summary of the issue of odour traces with regard to current scientific knowledge, historical evolution and also to identify the risks of its application and possible recommendations *de lege ferenda*.

The thesis consists of twelve main chapters together with the introduction and conclusion. The diploma is also supplemented by illustrative pictures and four appendices that help to better describe the relevant topics. The introductory chapters of the thesis focus on the concept of forensic odorology and its historical evolution, while also discusses the theoretical concepts of criminal traces, whereby the acquired knowledge is subsequently applied in chapter three, which deals with odour traces. In this chapter, there are also defined the specific characteristics of odour traces such as invisibility, ability to be ventilated, difficulty to remove or easy contamination. This characteristic makes it necessary to treat this type of criminal trace with special care.

Body odour is crucial for the individual identification of a person and is the subject of chapter four. Here, the reader is introduced to its characteristics, the concept of an active odour signature or scientific experiments that investigate the effect of external influences on the human odour trace. In the following chapters, the procedure of collecting odour traces and the method of preservation of odour traces are described, as regulated by current legislation. Chapters seven and eight focus on forensic olfactronics and olfactorics, two separate disciplines that collectively constitute forensic odorology. Forensic olfactronics is based on the analysis of odour using special analytical devices, such as the gas chromatograph, which allow only generic identification. On the other hand, forensic olfactorics is based on the individual identification of a person on the basis of his or her body odour, which is possible thanks to the olfactory organ of specially trained service dogs. Without them, it would not be possible to identify a person on the basis of his or her smell at the moment, so they are an essential part of current forensic practice. The education and training of service dogs, as well as the specifics of their olfactory organ, is the subject of chapter nine of the thesis.

Forensic odorology is considerably developed in Russia, therefore the tenth chapter includes a comparison of the local practice with the Czech practice, from which we can

undoubtedly draw inspiration for the possible future development of the method of odour identification in our territory. The last chapters of the thesis discuss odour traces as a means of evidence and a selection of six court decisions in which the courts deal with various topics related to the issue of odour traces, in particular with olfactory comparison as circumstantial evidence.

Keywords: forensic odorology, odour traces, method of odour identification