ABSTRACT

INTRODUCTION

Many of the current methods for identifying human body fluids can be costly, in terms of both time and money, give varying levels of accuracy, and consume the sample, preventing further analysis. Raman spectroscopy has been an area of focus for the development of a non-destructive technique for body fluid identification. Raman spectroscopy has gained interest from the forensic science community due to its broad applications, requiring no reagents for preparation, as well as its non-destructive nature (Virkler & Lednev, 2010). Raman spectroscopy can be performed on minimal amounts of sample, making it ideally suited for work with trace evidence. The development of portable Raman spectrometers has also contributed to the technique's growing popularity, as they allow for analysis to be performed in the field as opposed to waiting for laboratory results (Eckenrode et al., 2001). Therefore, investigation of this method on simulated evidence samples is fully warranted requires exploration.

Eckenrode, B. A., Bartick, E. G., Harvey, S. D., Vucelick, M. E., Wright, B. W., & Huff, R. A. (2001, October). Portable Raman Spectroscopy Systems for Field Analysis (Forensic Science Communications). Retrieved July 28, 2015, from https://www.fbi.gov/about-us/lab/forensic-science-communications/fsc/oct2001/eknrode.htm

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