

Applications of Fluorescence Spectroscopy to Forensic Science

REFERENCE: Siegel JA: Applications of fluorescence spectroscopy to forensic science; *Forensic Sci Rev* 8:1–11; 1996.

ABSTRACT: Over the last decade, both ultraviolet and infrared fluorescence techniques have been applied to a number of areas of forensic science. Much of this work has been spurred on by the development of laser methods of visualization. One of the major beneficiaries of this attention to lasers and fluorescence has been in fingerprints. A great deal of research has been done on the development of new fluorescent dyes for visualizing fingerprints with a laser. Fluorescence has also been applied extensively to questioned-document analysis, principally in characterization of inks. Other types of evidence that use fluorimetric analysis include drugs, glass, petroleum products, and biological samples. This article will discuss these applications to forensic science and their advantages relative to other methods of analysis.

KEY WORDS: Drugs, fingerprints, fibers, fluorescence, glass, gunshot residues, luminescence, petroleum products, questioned documents.
