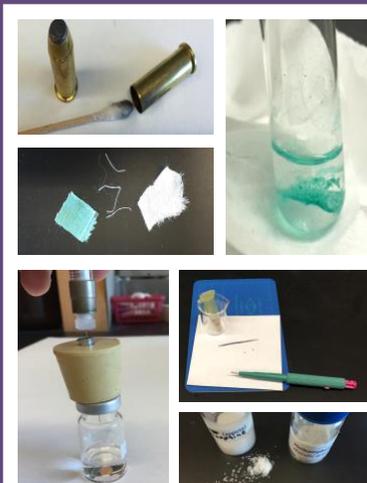


Instrumental Investigations

A Laboratory Manual of Forensic Analytical Chemistry

by
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Oberlin College



The laboratory manual is intended for faculty who teach undergraduate analytical chemistry or forensic chemistry courses. The manual describes 25 instrumental analysis experiments, covering 13 chapters and 270 pages. The experiments closely approximate those performed in actual crime labs. Included with the book is a flash drive holding student procedures in MS Word format, allowing editing, conversion to PDF files, and posting on your course site. Also on the drive are videos of common analytical skills and a weighted linear regression spreadsheet application.

Each experiment in the manual comes with up-to-date references, helpful instructor notes, and expected data and results. All the information one needs to set up the experiment and to make sure it works in an undergraduate lab is here.

As a vehicle to combine several experiments into an end-of-semester project, crime scenarios are provided with a list of expected analyses, names of suspects, police reports, witness statements, etc. An example is the Case of the Pilfered Painting that involves artists' oil paint, glass, documents, gunshot residue, drug evidence, and a crime scene inside an art museum.

Links to more information:

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Experiments involving:

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Mass Spectrometry
(GC-MS, LC-MS)

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