

A Forensic Experiment: The Case of the Crime at the Cinema

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Supporting Information

ABSTRACT: This paper reports an experimental activity where students have to carefully analyze the evidence collected at the crime scene, namely fibers and lipstick traces. The fibers are analyzed by infrared spectroscopy, solubility tests, and optical microscopy, while in turn the lipstick traces are investigated by thin layer chromatography. Students also have the opportunity to propose alternative methods to be used in the analysis of the evidence. To solve the case, the students must incorporate the results within the context of the course to simultaneously improve their critical and creative thinking. Additionally, the work here reported is flexible and can be adjusted to diverse teaching needs.



KEYWORDS: Second-Year Undergraduate, Analytical Chemistry, Laboratory Instruction, Hands-On Learning/Manipulatives, Forensic Chemistry, IR Spectroscopy, Thin Layer Chromatography

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