



B48 Unusual Use of Modified Fire Debris GC/MS Method to Analyze Hydrocarbons

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After attending this presentation, attendees will learn the adjustment of known GC/MS analysis of fire debris to identify common hydrocarbons. This poster will present the unusual use of GC/MS method for analysis of fire debris.

This presentation will impact the forensic community and/or humanity by demonstrating easy modification of existing method to analyse hydrocarbons.

Case History: The 4-year-old male was found unresponsive inside a tent in the yard of his home. The 911 call was placed about 1:00 p.m. A temperature reading was taken inside the tent, and registered 126°F. The child was taken to emergency room. The rectal temperature at that time was 108°F. The child was pronounced dead at 1:39 p.m. Toxicologic evaluation identified Ethylbenzene and Xylene in a blood at 0.85 mcg/ml and 4.1 mcg/ml respectively. Cause of death was ruled acute intoxication.

The boy's parents claimed that they were removing lice using "Ortho" and "Hot Shoot" sprays.

To preserve the evidence, immediate analysis was needed. The child's bedding from the tent was subject to analysis to look for trace of Xylene and Ethylbenzene.

Ethylbenzene, GC/MS, Xylene