



Criminalistics Section – 2008

B44 A Practical Guide to Drug Identification Using Fast GC/MS

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After attending this presentation, attendees will understand some principles of drug identification using Fast GC/MS with hydrogen carrier gas, the necessary equipment for the application, and examples of various common drugs of abuse.

This presentation will impact the forensic community by demonstrating how this technique can improve sample throughput in dramatically reduced analysis time.

The use of helium has long been the preferred carrier gas for GC/MS applications, mainly in the United States. With the recent developments that suggest that the helium supply may become reduced, hydrogen gas is an excellent, viable, and economic alternative.

Safety precautions are very manageable. Utilization of proper precautions along with innovative engineering of today's GC/MS instruments makes the use of hydrogen easily accomplished.

The availability of new and free software downloads have taken much of the "trial and error" out of developing methods for GC/MS. Current method parameters are simply entered into a table format and the corresponding parameters are calculated and displayed.

A study comparison of two different capillary columns used for analysis as well as several examples of methods developed for practical applications will be presented.

Hydrogen, Helium, Fast GC/MS