



## Criminalistics Section - 2016

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### **B118 2016 Update From the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG)**

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After attending this presentation, attendees will better understand the latest documents and resources developed by SWGDRUG.

This presentation will impact the forensic science community by informing attendees of current activities, including revisions to the SWGDRUG recommendations, development of new Supplemental Documents, and other resources available to the seized-drug community.

SWGDRUG was formed in 1997 in a joint effort between the United States Drug Enforcement Administration (DEA) Office of Forensic Sciences and the Office of National Drug Control Policy (ONDCP). **SWGDRUG works to improve the quality of the forensic examination of seized drugs and to respond to the needs of the forensic community by supporting the development of internationally accepted minimum standards, identifying best practices within the international community, and providing resources to help laboratories meet these standards.**

During the summer of 2015, the SWGDRUG core committee started revising Part IIIB and Part IVB of the SWGDRUG Recommendations. These sections pertain to the categorization of analytical techniques and the validation of analytical methods, respectively. The development of new instrumental technologies and their introduction to seized-drug laboratories have brought up the need to clarify the categorization of techniques into A, B, or C groups. Revisions to SWGDRUG Recommendations Part IIIB will not involve changes in these categories, but will focus on providing guidance regarding the different modes of operation and variations within a technique and how their categorization could be affected.

Revisions to Part IVB incorporate clarifications on the performance characteristics that should be evaluated during the validation of qualitative and quantitative methods. Also, examples of method validation schemes for routinely used techniques such as color test, Gas Chromatography/Mass Spectrometry (GC/MS), and Infrared (IR) spectroscopy will also be included and made available to users in the form of a supplemental document.

SWGDRUG committee members are also in the process of developing Supplemental Document 6 (SD-6) titled “Examples of Measurement Uncertainty for Net Weight and Count Extrapolations.” This document will assist seized-drug analysts by providing step-by-step examples for estimating uncertainty for scenarios where the net weight of an exhibit is obtained via extrapolation or when the total count of a dosage unit exhibit needs to be extrapolated.

This presentation will also summarize recent updates on some of the resources provided by SWGDRUG such as the MS library, the IR library, and the Drug Monographs. Laboratory analysts throughout the world can download the libraries from the SWGDRUG website and onto their laboratory instruments. Currently, the MS library contains more than 2,200 spectra, including many of the recently encountered synthetic cannabinoids, bath salt compounds, and their isomers. The IR library contains more than 150 reference materials which have been structurally characterized by the DEA Special Testing and Research Laboratory. More than 260 Drug Monographs are also available for use during reference material verifications.

The SWGDRUG core committee is comprised of representatives from federal, state, and local law enforcement agencies in the United States, Canada, Brazil, Great Britain, Germany, Austria, Switzerland, Australia, and Singapore. The following forensic organizations are represented: the European Network of Forensic Science Institutes (ENFSI), the Academia Iberoamericana de Criminalística y Estudios Forenses (AICEF), the Asian Forensic Science Network (AFSN), and the United Nations Office on Drugs and Crime (UNODC). Core committee members also include forensic science educators and representatives from forensic science organizations across the United States, the American Society of Crime Laboratory Directors (ASCLD), the American Society for Testing and Materials (ASTM), and the National Institute of Standards and Technology (NIST).

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#### **Criminalistics, SWGDRUG, Seized Drugs**