

Criminalistics Section - 2015

B169 2015 Update From the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG)

Sandra E. Rodriguez-Cruz, PhD*, Drug Enforcement Admin, Southwest Laboratory, 2815 Scott Street, Vista, CA 92081

After attending this presentation, attendees will be informed concerning SWGDRUG activities during 2014 and be updated on current and future projects.

This presentation will impact the forensic science community by providing the latest information pertaining to SWGDRUG activities, current projects, and resources provided to seized-drug analysts and laboratories.

SWGDRUG was formed in 1997 as a joint effort between the United States Drug Enforcement Administration Office of Forensic Sciences and the Office of National Drug Control Policy. The mission of SWGDRUG is to recommend minimum standards for the forensic examination of seized drugs and to seek their international acceptance.

SWGDRUG recommendations are available to the general public via the group's website (www.swgdrug.org). They include a code of professional practice for drug analysts as well as recommendations in the areas of education and training, methods of analysis, and quality assurance. Recently, the SWGDRUG core committee revised its recommendations pertaining to the use of reference materials to address laboratory needs during the verification of new reference materials.

SWGDRUG continues to provide the forensic community with its Mass Spectrometry (MS) and Infrared (IR) spectroscopy libraries, both of which continue to be regularly updated. Version 2.1 of the MS library was made available June 3, 2014, and currently contains more than 1,880 spectra obtained under electron ionization conditions. Included in the library are many of the recently encountered synthetic cannabinoids, substituted cathinones, and hallucinogenic phenethylamines. Version 1.1 of the IR library was made available May 30, 2014. This library contains more than 150 compounds obtained under attenuated total reflectance conditions. Both of these libraries are available in various instrument formats and can be downloaded from the SWGDRUG website and into laboratory instruments. Feedback from analysts and library users continues to be highly positive. The library will continue to be updated on a regular basis and contributions from the forensic community are strongly encouraged.

In an effort to continue providing the seized-drug community with a variety of tools, SWGDRUG also continues to publish drug monographs containing detailed information and analytical data for reference materials. During the last two years, more than 210 monographs have been added, containing data from reference materials which have been analyzed, verified, and authenticated by the Drug Enforcement Administration Special Testing and Research Laboratory. These monographs, available via the SWGDRUG website, are intended to be used for the verification of acquired reference materials.

With the goal of assessing the current controlled substance analogue issue, SWGDRUG has drafted a document containing general recommendations regarding analogues and structural class determinations. A final version of this document will be posted on the SWGDRUG website during 2014. The document emphasizes the need for understanding how analogues and structural classes are legally defined in different jurisdictions prior to analysts rendering opinions about a substance's classification.

This presentation will also discuss future group directions resulting from the establishment of the National Institute of Standards and Technology's (NIST's) Organization of Scientific Area Committees and current SWGDRUG projects, including the development of a supplemental document to assist laboratories in the estimation of the uncertainty associated with net weights obtained via extrapolation exercises.

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 Criminalistica 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), ASTM International, and NIST.

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