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### A180 2014 Update From the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG)

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After attending this presentation, attendees will be aware of up-to-date information regarding SWGDRUG and its documents and recommendations.

This presentation will impact the forensic science community by discussing revisions to SWGDRUG recommendations, new supplemental documents, and other work products in development, as they relate to the analysis of seized drugs.

The Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG) was formed in 1997 as a joint effort between the U.S. Drug Enforcement Administration (DEA) Office of Forensic Sciences and the Office of National Drug Control Policy (ONDCP). The mission of SWGDRUG is to recommend minimum standards for the forensic examination of seized drugs and to seek their international acceptance.

Current SWGDRUG recommendations are available to the general public via the group's website ([www.swgdrug.org](http://www.swgdrug.org)). The SWGDRUG core committee has revised its recommendations pertaining to the use of reference materials. Laboratories throughout the world are encountering difficulties obtaining and verifying new reference materials. These tasks have become more overwhelming with the appearance of new designer drugs like synthetic cannabinoids and bath salts. Revisions to the recommendations include minimum procedures for the verification of these materials, as well as alternative guidance when newly emerging materials are encountered and verification is limited to structural elucidation procedures.

During 2013, the SWGDRUG core committee finalized, approved, and posted Supplemental Document SD-4. This document provides three examples of measurement uncertainty calculations for purity determinations.

The SWGDRUG mass spectral library continues to be regularly updated and currently contains more than 1,880 spectra. Included in the library are many of the recently encountered synthetic cannabinoids, substituted cathinones, and hallucinogenic phenethylamines. Laboratory analysts throughout the world can download this library from the SWGDRUG website and into their 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.

Since November 2012 and continuing throughout 2013, SWGDRUG has made available numerous drug monographs containing detailed information and analytical data for 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. This document was posted for public comment during the spring of 2013. The document emphasizes the need for analysts to fully understand how analogues and structural classes are legally defined in their jurisdiction before rendering opinions about the classification of a substance.

During 2013, SWGDRUG also made available multiple training documents to be used as resources during the development of laboratory training programs. The documents include questions covering general as well as specific subject matters relevant to the analysis of seized drugs. Subjects included are color tests, infrared spectroscopy, gas chromatography/mass spectrometry, and separation techniques, among many others.

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, Drug Analysis**