## B170 2019 Update From the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG)

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**Learning Overview:** The goal of this presentation is to provide the forensic chemistry (drug analysis) community with the most up-to-date information about resources and documents available from the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG).

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by increasing their awareness of latest developments in the seized drug discipline, as well as new documents and resources that can enhance and complement their practices.

The 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. This presentation will provide attendees with information on SWGDRUG activities during the past year.

Core committee members are currently working on revisions to PART IIIB of the SWGDRUG Recommendations. The purpose of PART III B is to recommend minimum requirements for the forensic identification of seized drugs or chemicals. A reliable and scientifically supported identification of a drug or chemical depends on the use of an appropriate analytical scheme by competent analysts in a quality-controlled process. PART III B addresses the overall selection of techniques, the rationale behind their categorization, and emphasizes the need to develop robust analytical schemes dependent on the scenario at hand or jurisdictional application.

A new supplemental document SD-7 (Construction of an Analytical Scheme) is also undergoing development. The purpose of this supplemental document is to provide guidance to practitioners on the construction and implementation of appropriate analytical scheme as required by SWGDRUG Recommendations PART IIIB. It will include more than a dozen examples of analytical schemes applicable to many jurisdictions. This annual update will include some of those examples, their rationale, limitations, and applicability.

SWGDRUG committee members are also working on revisions to PART IVB (Validation of Analytical Methods) of the Recommendations. Revisions will include additional background information and clarifications on the performance characteristics to be evaluated during the validation of both qualitative and quantitative methods. Furthermore, the currently existing Supplemental Document SD-2 (Validation of Analytical Methods) is also being revised and expanded to better assist seized-drug practitioners during method validation activities. Additions will include examples of qualitative method validation plans and studies for color test, gas chromatography-mass spectrometry (GC/MS) and infrared (IR) spectroscopy, as well as guidance on retrospective validations and method modifications.

This presentation will also summarize recent updates on SWGDRUG resources like the MS library, IR library, and Drug Monographs, available to practitioners via the SWGDRUG website (www.swgdrug.org). SWGDRUG continues its partnership with the National Institute of Standards and Technology (NIST) to verify the quality and reliability of the SWGDRUG MS Library to provide valuable and reliable resources to the community. Drug Monographs also continue to be added and disseminated and this highly-used resource has also been enhanced to allow searches and sorting by name, nominal mass, and base peak.

The SWGDRUG core committee includes representatives from federal, state and local law enforcement agencies in the United States, Canada, Brazil, Austria, Switzerland, Australia, and Singapore. The following international 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), the American Society for Testing and Materials (ASTM International), the National Institute of Standards and Technology (NIST), and the Federal Bureau of Investigations (FBI).

**Criminalistics, Seized Drugs, SWGDRUG**