## **SWGDRUG WEBINAR SERIES #2**

## Topic: MS Techniques and Their use in the Seized-Drug Analytical Scheme





Presentation 1: Introduction to Mass Spectrometry Technology and Techniques

Mr. Benjamin Place, National Institute of Standards and Technology, USA

Mass spectrometers are extremely powerful instruments that are able to provide useful information regarding the identity and quantity of chemicals, including applications for identifying seized drugs. This presentation will provide a high-level overview of the fundamentals of mass spectrometry, an introduction to the different types of technologies and instruments that are available, and a description of specific analyses that can be performed using mass spectrometry. Topics such as ion fragmentation, mass spectrum interpretation, and library matching will be discussed in the presentation.



Presentation 2: Application of Mass Spectrometry into a Seized Drug Analytical Scheme

Mr. Christian C. Matchett, U.S. Army Criminal Investigation Laboratory, USA

The application of mass spectrometry in a seized drug analytical scheme requires an analyst to consider the selectivity of the data produced, which can be influenced by numerous factors. This presentation will discuss some of the factors which may be relevant to an analyst when applying mass spectrometry towards an analytical scheme. Attendees will be presented with examples of diminished selectivity within mass spectrometry and potential courses of action for when the mass spectra do not rise to Category A classification.





Date: 18th October 2024 (Friday)

Time: 12.00pm - 1.30pm (Brasilia Time, UTC-3)

Platform: Microsoft Teams

Facilitator

Dr. Adriano Otavio Maldaner Brazilian Federal Police , Brazil



Date: 25<sup>th</sup> October 2024 (Friday)

Time: 11.00am - 12.30pm (Singapore Time, UTC+8)

Platform: Zoom Facilitator:

Dr. Angeline Yap

Health Sciences Authority, Singapore