

WS02: The Rise of Smoke Shops and Commercial Sales of NPS

Date: Monday, October 27

Time: 8:00 AM – 12:00 PM

Audience Knowledge: Basic – suitable for individuals new to the field, requires little prior knowledge to the subject matter

Rates:

Membership	Early Bird (June 25 - Sep 10)	Late (Begins Sept 11)	Onsite (Begins Oct 9)
Member	\$150	\$175	\$200
Student	\$150	\$175	\$200
Non-Member	\$200	\$225	\$250

Workshop Chairs

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Abstract

Novel psychoactive substances (NPS) continue to plague forensic toxicology laboratories who routinely struggle to identify, characterize, and update testing to include emerging drugs in a timely manner. Despite domestic and international control efforts on these purported “legal highs”, compounds with unknown pharmacology and toxicities are continuously emerging, resulting in adverse events and increased prevalence in toxicological investigations. The lifespans of NPS can range from a few months to a few years, as frequent shifts from control efforts result in regular changes in positivity rates. Often, NPS research has focused on emerging substances that may be classified into one of four main classes: benzodiazepines, stimulants/hallucinogens, opioids, and synthetic cannabinoids. Less emphasis has been placed on those miscellaneous or “oddball” NPS compounds that do not fall into traditional NPS classes, especially those found in commercial products sold in smoke shops across the country. The NPS classification of these compounds stems from the alternative definition that these compounds are being used for purposes different from those originally intended. For example, a drug can be prescribed therapeutically in another country but is recreationally misused at subtherapeutic doses in the United States for a different type of effect. The SOFT NPS Committee brings you a workshop exploring the rise of smoke shops and commercial sales of NPS, including updates on semi-synthetic cannabinoids, tianeptine, phenibut, mitragynine, kava, and mushroom products. Discussions will center around current trends, detection methods, pharmacology, general physiological and behavioral effects, toxicological case information, and challenges associated with these substances. Additionally, the workshop will also touch on emerging NPS adulterants such as xylazine, medetomidine, and etomidate. The recreational drug market continues to expand with the number of substances that can pose toxicological harm, and forensic toxicology laboratories must be able to remain responsive to its dynamic nature.

Learning Objectives

After attending this workshop, attendees will be able to:

1. Understand the evolving market of commercial NPS sales in smoke shops across the country and the challenges associated with them.
2. Evaluate their analytical methods and determine the importance of including specific “oddball” NPS compounds and/or adulterants to identify potential risks.
3. Recognize the pharmacological effects and potential adverse effects associated with these commercial products in toxicological investigations.

Speakers

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Workshop Agenda

Time	Topic	Speaker
8:00-8:05 am	Welcome & Objectives	Kayla Ellefsen Helen Chang
8:05-8:25 am	Different Day, Different Dragon to Chase: The Market, the Regulations and Legislation	Michelle Peace
8:25-8:50 am	Gas Station Heroin: Tianeptine, Enhances the Mood Without the Heroin	Helen Chang
8:50-9:15 am	Beyond Relaxation: Phenibut Toxicity and Analytical Insights	Erin Karschner
9:15-9:40 am	From Leaf to Lab: Investigating Kratom in Postmortem Casework	Bill Schroeder
9:40-10:00 am	The Changing Landscape of Mushroom Products in Human Performance and Postmortem Toxicology Cases	Josh Seither
10:00-10:30 am	Break	
10:30-10:50 am	Kava: A Replacement to your Evening Wine?	Kayla Ellefsen
10:50-11:10 am	Blurred Lines Between NPS and Adulterants: Continued Emergence of “Novel” Drugs in Recreational Supplies	Alex Krotulski
11:10-11:30 am	Oddball NPS: Prevalence and Trends in Clinical Specimens	Jillian Neifeld
11:30-11:50 am	Stirring Up Awareness: The NPS Gumbo in Louisiana	Amy Patton
11:50 am-12:00 pm	Q&A	All Speakers