

# Crack the Forensic Puzzle Using Fluid Mechanics

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## Abstract

To assist the observation of chronic drug usage among originators, a team of specialists from the National University of Singapore (NUS) has come up with a different alternative. Three novel urine biomarkers have been identified by the team, led by a professor from the NUS Department of Pharmacy, that could be used to detect use of the growing synthetic cannabinoid ADB-BUTINACA, a new psychoactive chemical (NPS). It is possible to discriminate between other natural and synthetic cannabinoids using the same ground-breaking technology.

**Keywords:** Drugs • Forensic medicine • Fluid mechanics

## Introduction

One of the victims was found guilty in 2009 for the face-to-face shooting homicide that occurred in 2003. Despite having a significant in reverse blood scatter, he was wearing white clothing with no signs of blood on it.

If he was the shooter, how was his clothing able to stay spotless? Scientists from Iowa State University and the University of Illinois at Chicago were motivated to look into the liquid material science involved by this actual forensic puzzle.

## Description

In recent years, users of NPS have accounted for the third-largest proportion of drug overdose casualties in Singapore, and synthetic cannabinoids have dominated the country's NPS industry for the past four years. The majority of synthetic cannabinoids are widely used by the body after usage, making them almost undetectable in urine tests.

After being sprinkled by an incoming gunshot, scatter droplets fly from the victim toward the shooter. The researchers then concentrated on the interaction between these blood beads and the powerful vortex ring of muzzle gases that was flowing from the shooter toward the victim.

They assume that the approaching violent vortex ring, in any case being complicated, can entangle, fuse, and clear along inside its stream the backward blood splash droplets [1-5].

## Conclusion

For the purpose of examining their attitudes and differentiating novel

biomarker metabolites in urine, the group synthesised critical ADB-BUTINACA compounds using human liver catalysts in the study facility. They found that using this method, a total of 15 ADB-BUTINACA metabolites and their unique biotransformation pathways in the body could be differentiated.

Due to their metabolic dependability, the researchers suggested four of the 15 novel metabolites-including one whose reference standard is currently available-as urine metabolite biomarkers. One or a combination of these four recently established urine biomarkers may have been used to diagnose ADB-BUTINACA use, according to a board.

In the future, the group wants to expand on their current methodology to make it easier to understand how kidneys process novel metabolites of synthetic cannabis and what might happen to them when they wind up in urine.

## References

1. Charles J, Lee., David J Scurr, Long Jiang, and Andrew Kenton, et al. "Imaging mass spectrometry of fingerprints on brass bullet casings using sample rotation." *The Analyst*, 2021.
2. Cappelli, R., Ferrara M, and Maltoni D. "Minutia Cylinder-Code: A New Representation and Matching Technique for Fingerprint Recognition", *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 32(2010):2128-2141.
3. Cappelli, R., Ferrara M, and Maltoni D. "Fingerprint Indexing Based on Minutia Cylinder Code", *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 33(2011):1051-1057.
4. Ferrara, M., Maltoni D, and Cappelli R. "Noninvertible Minutia Cylinder-Code Representation", *IEEE Transactions on Information Forensics and Security*, 7(2012):1727-1737.
5. Ferrara, M., Maltoni D, and Cappelli, R. "A Two-Factor Protection Scheme for MCC Fingerprint Templates", *Proceedings International Conference of the Biometrics Special Interest Group (BIOSIG)*. 2014.

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