RAMAN SPECTROSCOPY

BB-TICTAC

TICTAC Raman Drug Library

Innovation with Integrity

Why you need the TICTAC library?

The yearly reports from the European Monitoring Centre for Drugs and Drug Abuse (EMCDDA) (Fig. 1) clearly show the constant introduction of new illegal substances to the markets.

The TICTAC Raman Drug Library **includes spectra of more than 900 substances**, including spectra of several recently introduced drugs and new psychoactive substances (NPS), also known as "legal highs".

Combined with Bruker Raman instruments, this spectral library ensures quick and easy identification for many of these new drugs.

What the TICTAC library offers?

The library has been carefully compiled by TICTAC Communications Ltd. using their enormous experience in street drugs analysis.

It exclusively contains compounds that are likely to be encountered when testing contemporary street drugs. In addition to the new emerging drugs themselves, it also includes new "legal highs", traditional standard drugs of abuse as well as diluents and contaminants.

The library is composed of highest-quality spectra measured by TICTAC using a Bruker BRAVO handheld Raman spectrometer. As new drugs constantly enter the market the library is updated about once per year.

It contains new drugs such as:

- Aminoindanes
- Cannabinoids, synthetic
- Cannabinoid receptor antagonists
- Fentanyl & fentanyl derivatives
- NBOMe derivatives
- Phenethylamines
- Piperazines
- Tryptamines

And cutting agents such as:

- Organic and inorganic diluents
- Standard household substances (e.g. sugar)

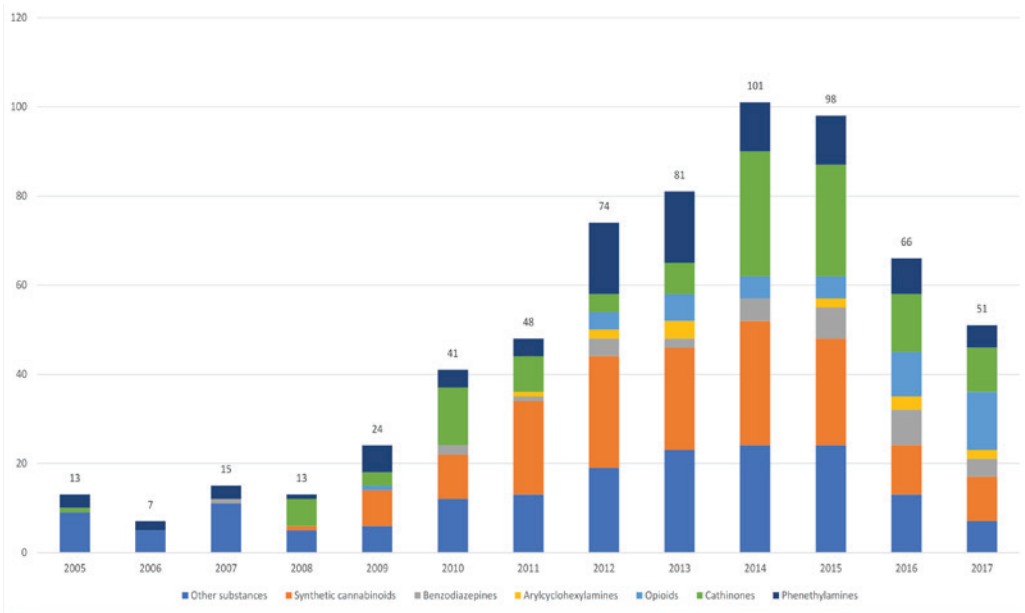
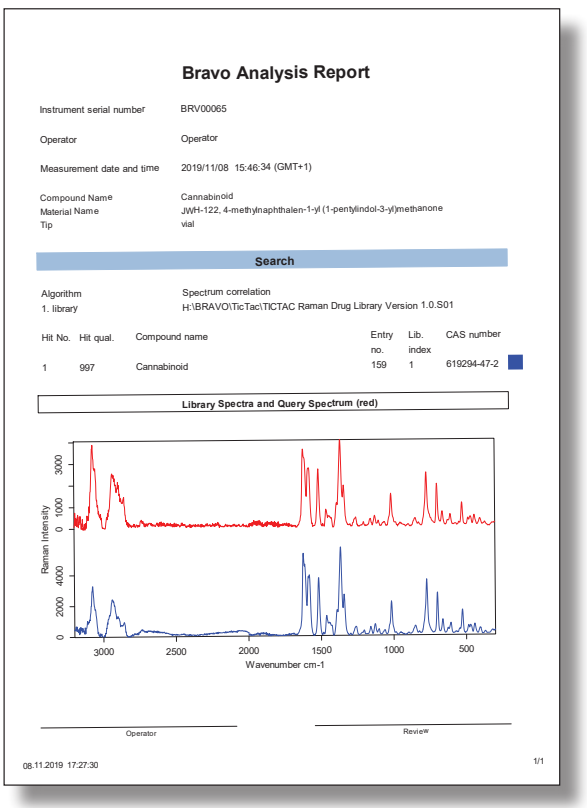


Fig. 1
Number of new psychoactive substances notified to the EU Early Warning System for the first time, 2005–17.
Source: European Monitoring Centre for Drugs and Drug Addiction (2018), European Drug Report 2018: Trends and Developments, Publications Office of the European Union, Luxembourg.



Bravo Analysis Report

Instrument serial number	BRV00065
Operator	Operator
Measurement date and time	2019/11/08 15:46:34 (GMT+1)
Compound Name	Cannabinoid
Material Name	JWH-122, 4-methylnaphthalen-1-yl (1-pentylindol-3-yl)methanone
Tip	vial

Search

Algorithm	Spectrum correlation
1. library	H:\BRAVO\TicTac\TICTAC Raman Drug Library Version 1.0.S01

Hit No.	Hit qual.	Compound name	Entry no.	Lib. index	CAS number
1	997	Cannabinoid	159	1	619294-47-2

Library Spectra and Query Spectrum (red)

Operator

Review

08.11.2019 17:27:30

1/1

Fig. 2
Analysis report of the identification of a street drug sample using the TICTAC Raman drug library.

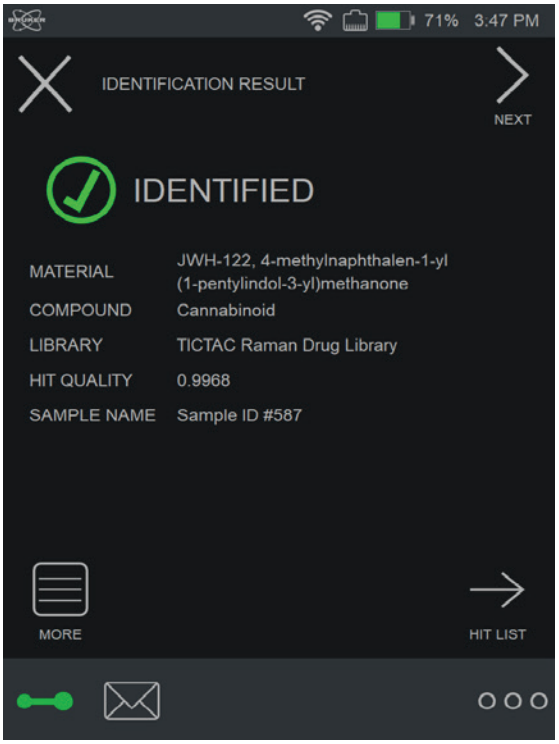


Fig. 3
Analysis result of the BRAVO handheld Raman spectrometer

Basic library with more than 900 entries:

- **B-TICTAC Raman Drug Library**
  Includes Raman spectra from new drugs, new psychoactive substances (NPS) and legal highs. Substances included in the library are acquired, referenced and recorded using BRAVO by TICTAC Communications Ltd. The library constantly is expanded by new drugs entering the market. Updated versions of the library are released typically once per year.

Compatibility

- The BB-TICTAC library can be used with all Bruker Raman spectrometers: BRAVO (supports onboard use) SENTERRA II, RAM II.

Upgrade option:

- **B-TICTAC-UP** TICTAC Raman Drug Library Update
  Update to the latest version of the TICTAC Raman Drug Library for BRAVO
  Required: TICTAC Raman Drug Library

Bruker Optics is continually improving its products and reserves the right to change specifications without notice.
© 2026 Bruker Optics BOPT-S44-02

Bruker Optics GmbH & Co. KG
info.bopt.de@bruker.com

bruker.com/optics

Bruker Optics is ISO 9001, ISO 13485, ISO 14001 and ISO 50001 certified.