## ● Rice wine and Fake wine by MRI Micro Raman Spectrometer

MRI Micro Raman Identify is a powerful tool for forensic science and you will find out the specific Raman Shift when measuring the different functional groups of each sample. It would be helpful for identification and easy to reveal the result where the sample actually come from and the original source either. We can also use MRI with all available databases for Forensics and quickly identify all suspicious evidences from crime scene.
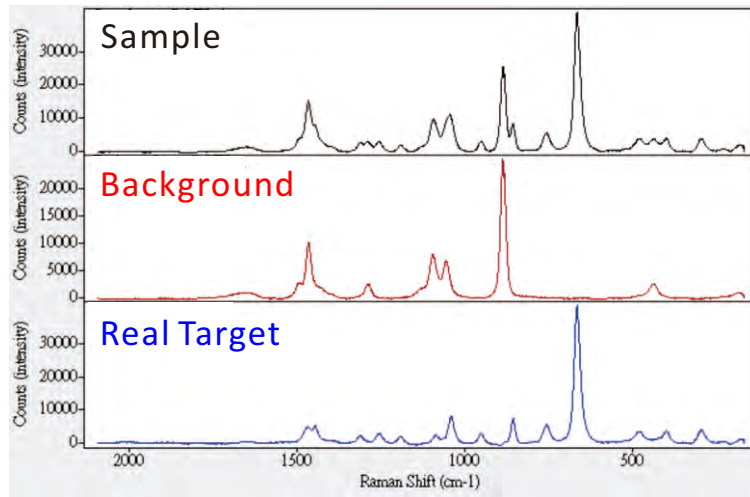
For example, there are two samples, one sample is unknown and the other is Rice wine from Government entrusted. Both samples were replaced in 2 cc Vial and precipitated. After that, both of them were pipette into another vial with clear solution only and then measured with Raman. In this, we intended to identify the real sample in unknown, by doing so, we define the spectra of standard rice wine as back ground spectra. We also get the spectra of real target sample which is form the spectra of unknown sample and then subtracted with the back ground spectra. Reveal the real target sample is 2-chloroethanol after searching all database and the quality is 95%. In conclusion, MRI is a powerful and efficient Micro Raman Identify measurement system for Forensics.
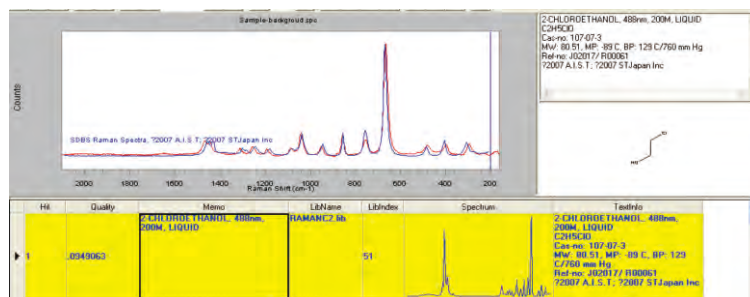
System Specification

Excitation Source	473,488,532,633,785,1064nm
Power	50~300mW or higher on request
Sensitivity in counts	At least 16,000 counts/sec @ 532nm test by Si wafer
Integration time	1.1ms-600s
Visible Image	Auto-exposured 9M pixels real-time image with scale
Dimension	195x195x130 mm (not including objective)
Operation	peak/FWHM searching, Spectra Overlaid, Kinetic, Baseline Correction, 3D Spectra, Zoom-in, Raman calibration, Autosave and history functions, Quantitation