



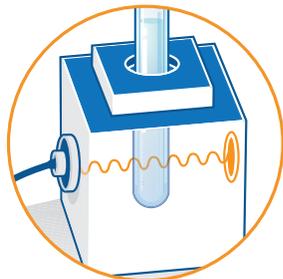
U.S. ARMY CHEMICAL MATERIALS AGENCY

## Raman Spectrometer

The Raman Spectrometer identifies the contents of Chemical Agent Identification Sets (CAIS), glass vials containing various agents and industrial chemicals once used to train Soldiers.

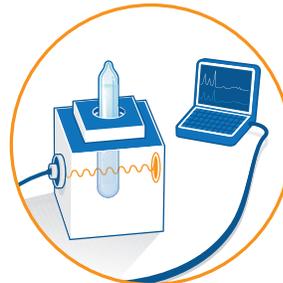
### STEP 1

The fiber-optic probe is placed against the glass wall of the CAIS item, directing a laser light.



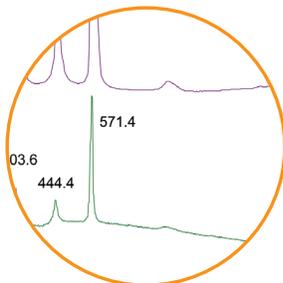
### STEP 2

As the laser light passes through the glass wall, it produces a unique spectrum signature.



### STEP 3

Operators then look for distinctive chemical signatures from the spectrum.



### STEP 4

Information from the spectrometer is analyzed and the contents identified.

The Raman Spectrometer rapidly obtains detailed information about suspect chemical warfare materiel and distributes that information to the appropriate authorities and responder personnel greatly reducing the risk to the public, workers and emergency response personnel.

For more information,  
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