

A Portable Raman Spectrometer...



...for Your Research and Teaching Labs

Easy to use...

"The remote communication and portable features make the Inspector Raman™ a real asset to our laboratory. It allows us to identify organometallic compounds under inert atmosphere conditions without resorting to special sample cells. In particular, the wireless connectivity allows us to collect spectra in our glove box to analyze starting materials and products in NMR tubes, reaction flasks, and MP capillaries. We are very impressed with how easy it is to maneuver and analyze samples with the bulky dry box gloves. I am very pleased with the Inspector Raman™ and look forward to using its results in our publications and presentations."

- Dean Roddick
Professor Inorganic/Organometallic Chemistry
University of Wyoming



From Research...

This lightweight, dispersive spectrometer has no moving parts and may be used in any position. Our academic customers have used the Inspector Raman™ for research in:

- nano-particle technology
- reaction monitoring and final product validation
- botanical research
- geology
- forensic science
- life sciences

to Teaching...

Use the Inspector Raman to demonstrate topics in analytical, physical, inorganic and organic chemistry; geology and forensic science. Choose from pre-tested experiments in:

- group theory and vibration spectroscopy
- periodic trends using Raman spectroscopy
- adsorption isotherms using SERS
- instrumental analysis: ethanol and water
- forensic science: investigate a mock crime scene

Raman in the box...

Characterizing organometallic products in inert environments is difficult because they can be exposed to oxygen or moisture during analysis.

Most often, the final product is inspected and characterized by sealing it in an NMR tube, MP tube or other container. The container must be passed through the airlock into normal atmospheric conditions. The Inspector Raman™ allows the inorganic chemist to characterize formation products in inert environments. The small footprint permits the entire device to be purged and passed through the airlock of the glove box. This portable device communicates wirelessly from within the glove box. A trigger mechanism allows the operator to manipulate and analyze samples while wearing cumbersome dry box gloves.

Applications Series: #17 – Characterization in Inert Environments

