

# Laser Raman Spectroscopy

**Make** : HORIBA

**Model** : LabRAM HR Evolution

**Laser (in Wave length)** : 514nm, 785nm , From UV to near IR,  
Automated laser switching

**Detectors:** CCD , InGaAs

**High performance Raman spectrometer:**

Ultimate spectral resolution performance, multiple gratings with automated switching, wide spectral range analysis for Raman and PL, full system automation.

True confocal microscope High spatial resolution, automated mapping stages, full microscope visualization options



Raman spectroscopy is the study of the interaction between light and matter in which the light that is inelastically scattered: a process called the Raman effect.

In a Raman spectroscopy experiment, photons of a single wavelength (in the visible range this would be light of a single color) are focused onto a sample. Most commonly a laser is used as it is a powerful monochromatic source. The photons interact with the molecules and are either reflected, absorbed, transmitted or scattered. With Raman spectroscopy, we study the scattered photons.

**Application:**

- Life Sciences
- Pharmaceuticals
- Materials
- Semiconductors