

## Raman imaging and spectrometers, the ultimate Raman microscopes and spectrometers

Jobin Yvon, a renowned spectroscopy and microscopy company, played a pivotal role in advancing Raman microscopy technology. Starting in the late 1960s, they developed cutting-edge Raman spectrometers, pioneering innovations like confocal Raman microscopy. Their dedication to precision and innovation has made Jobin Yvon a trusted name in the field, enabling scientists worldwide to explore molecular structures and chemical compositions at the microscale. Today, the Jobin Yvonr legacy lives on as part of HORIBA Scientific, continuing to push the boundaries of Raman microscopy for scientific and industrial applications.

#### Do you know the meanings behind the names of our Raman microscopes?

The name LabRAM Odyssey denotes a technological odyssey that propels us beyond the confines of conventional Raman spectroscopy.

The LabRAM Soleil stands as the radiant centerpiece, a fusion of power and cutting-edge technology that captures everyone's attention. It also pays homage to Jean-Baptiste Soleil, who was the founder of the company Jobin Yvon over 200 years ago.

Lastly, the XploRA is our explorer, guiding users on a journey of Raman discovery and its limitless potential. It serves as the gateway to an expansive universe of possibilities.



In addition to these Raman microscopes, we also have our **MacroRAM**, an affordable benchtop Raman spectrometer, perfect for bulk analysis of solids, liquid solutions, powders, and gels.

### **Discover the HORIBA Raman instruments**

# Calibration of the Raman microscope

Raman microscopy couples both submicron-scale spatial resolution and high spectral resolution. Thus, achieving the best performances is dependent on a good calibration in both spatial and spectral dimensions.

**Calibration Video** 

In this video, the 5 different calibration routines applied on Raman microscopy are designed to achieve ideal

measurements while remaining compliant with regulations.

Auto alignment to align the laser and attain the best spatial resolution
Auto calibration to spectrally calibrate the instrument using Si bands regardless the number of gratings
Video Raman Matching (VRM) for adjusting the video image and the Raman signal using a reference tag
Objective Adjustment to be able to do localization with different magnifications of the objective
navYX to enable correlation between different systems to relocate an image on the same sample position on different



RamanFest, The 10th International Conference on Advanced Applied Raman Spectroscopy

- If you are a researcher in an academic or industrial lab, and are:
- Doing research on a Raman microscope
- Searching for a proper characterization technique for your material
- Looking to optimize your processes
- and you want to network with other users to discuss your challenges.

📅 November 9-10, 2023,

📍 Paris

microscopes

Stay connected!



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#### Our mailing address is:

HORIBA 14, boulevard Thomas Gobert Passage Jobin Yvon - CS 45002 Palaiseau, 91120 France