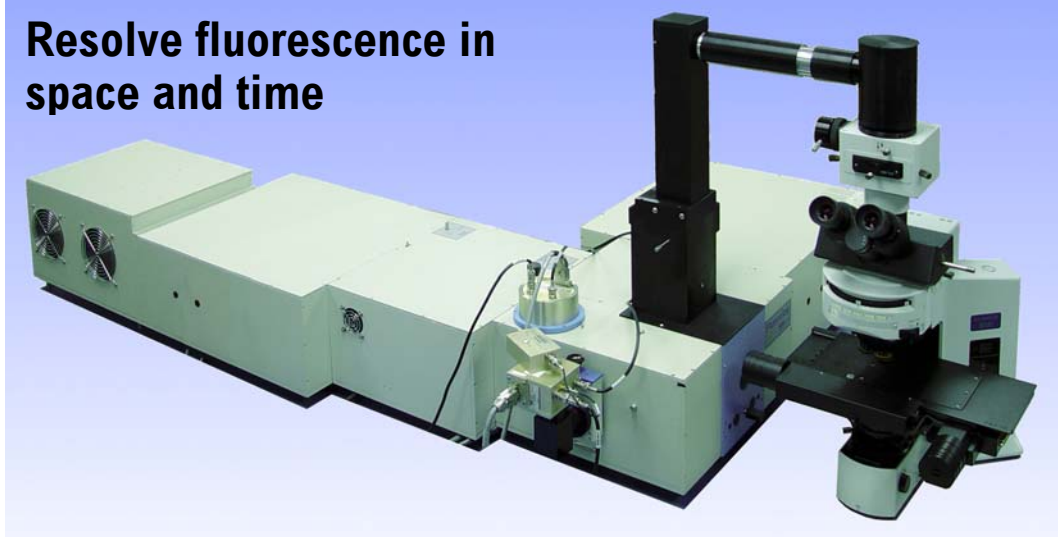


Spex[®] FluoroMap

In the fields of cell biology, biophysics, and materials science, important events occur on the microscale both in space and time. The new Spex[®] FluoroMap features high sensitivity, confocal microscopy with spatial resolution down to 1 μm , wide spectral response from the UV to near-IR, and time resolution down to the picosecond range, all in one modular instrument. The FluoroMap is a flexible, automated system for mapping fluorescence lifetime and emission, with the experience of Jobin Yvon behind it.

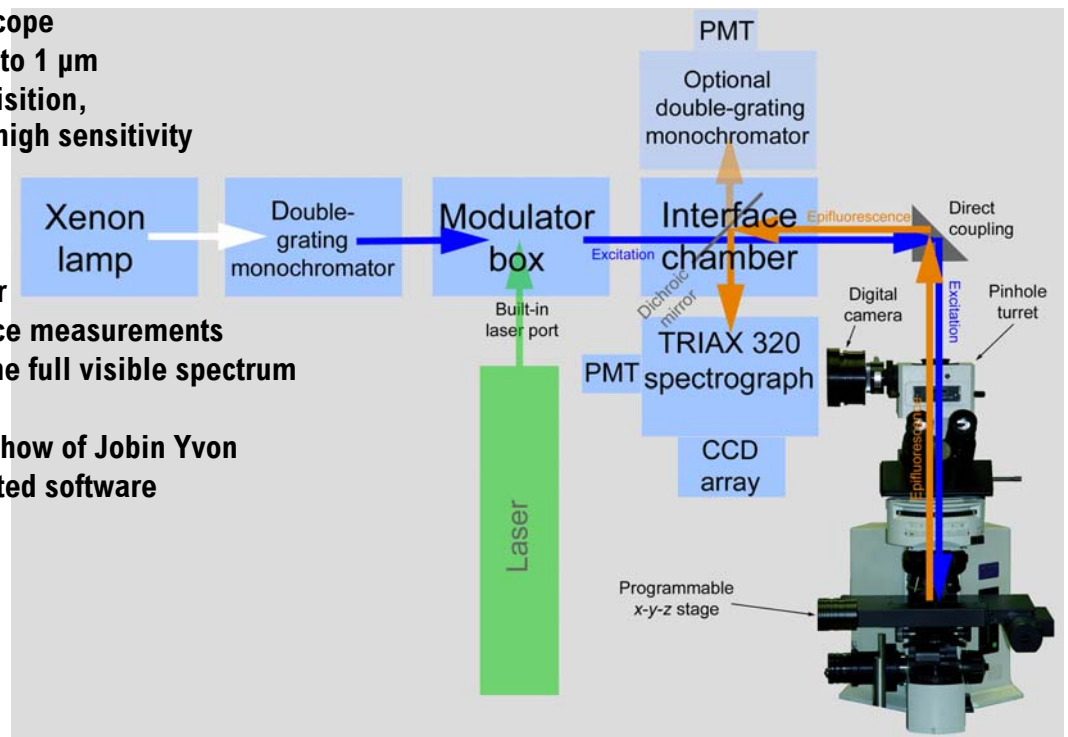
Now, you can study fluorescence dynamics, which are independent of fluorophore concentration, and gain more information about molecular motion, sizes, local environment, interaction, and binding, with the ability to discriminate microscopic locations in your sample. With the power of confocal microscopy, you can get sharp images and determine localized interactions in cells and dynamics of cellular structures. Steady-state spectra of microscopic areas on your sample are a snap, too!

Resolve fluorescence in space and time



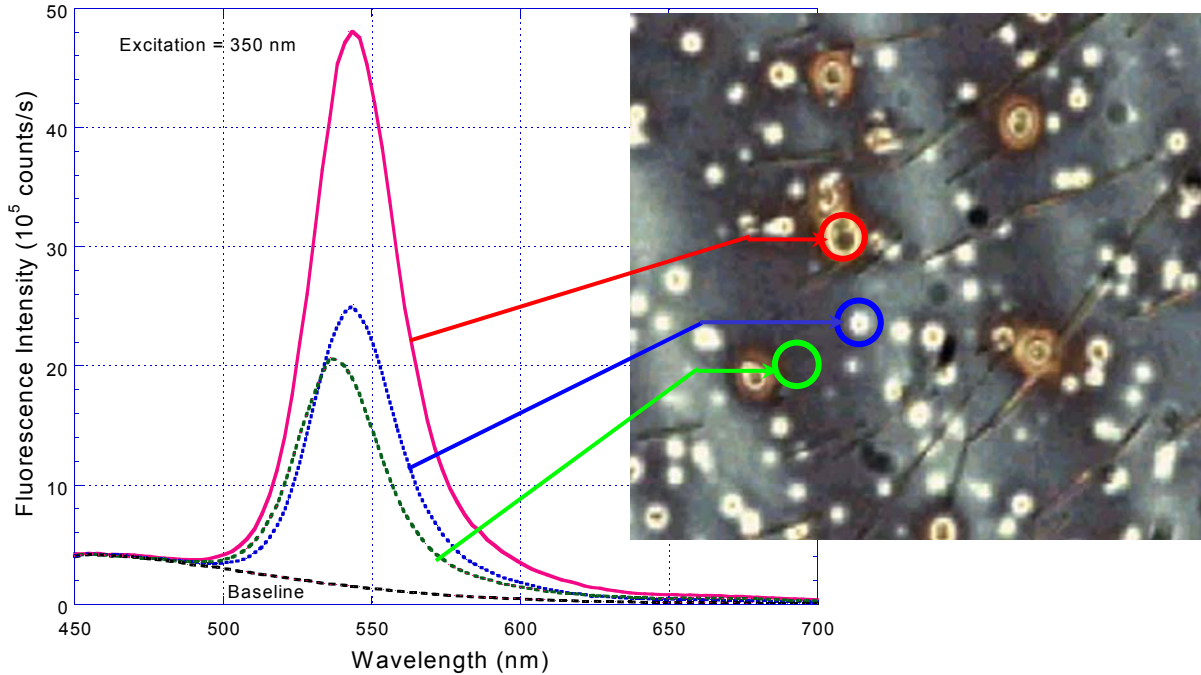
Features

- Wide-band steady-state spectra
- Lifetime spectra down to 10 ps
- Multiple scan-types
- Epi-fluorescence microscope
- *x-y* positional resolution to 1 μm
- CCD array for rapid acquisition, photomultiplier tube for high sensitivity
- Modularity
- Confocal mapping
- 450-W CW xenon lamp
- Optional near-IR detector
- Optional phosphorescence measurements
- High sensitivity across the full visible spectrum
- Built-in laser port
- The reliability and know-how of Jobin Yvon
- Automated with time-tested software

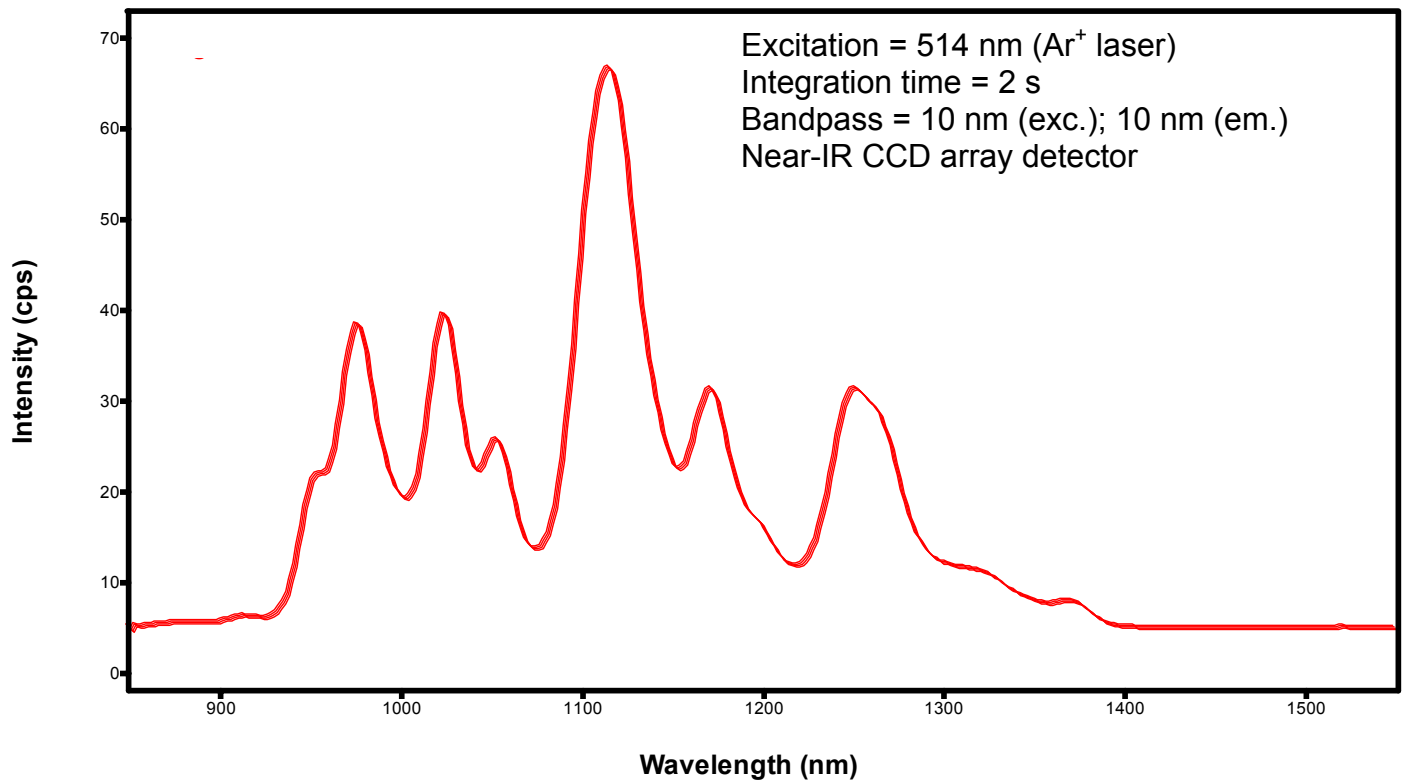


Look at what you can do with the FluoroMap...

CdS nanoparticles on a semiconductor wafer



Single carbon nanotubes in the near-IR



Lifetime determination of green leaf with chlorophyll

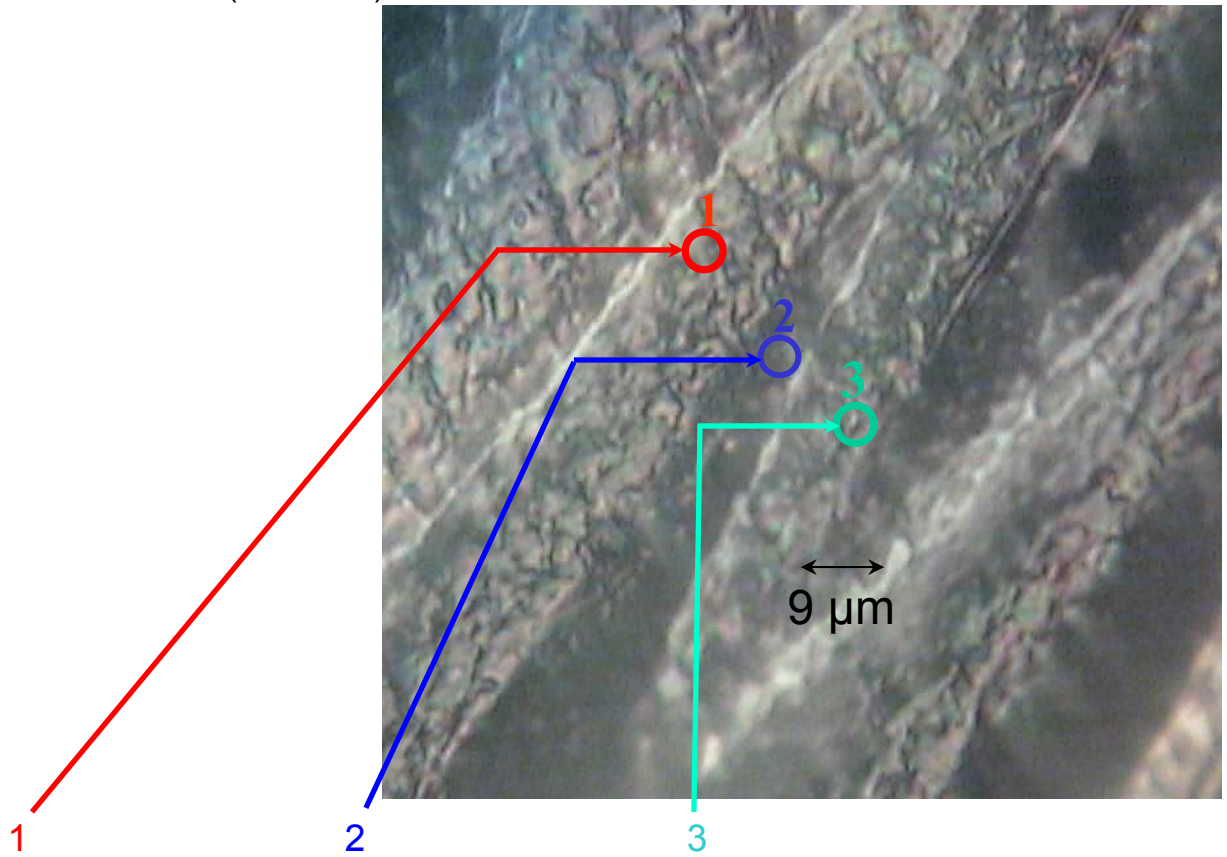
Excitation = 457 nm (Ar⁺ laser)

Emission = 500-nm low-pass filter

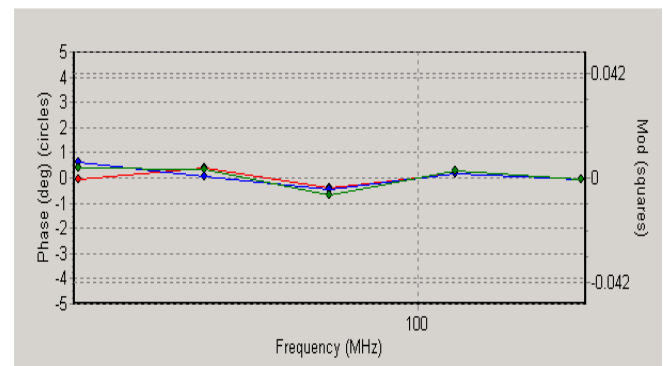
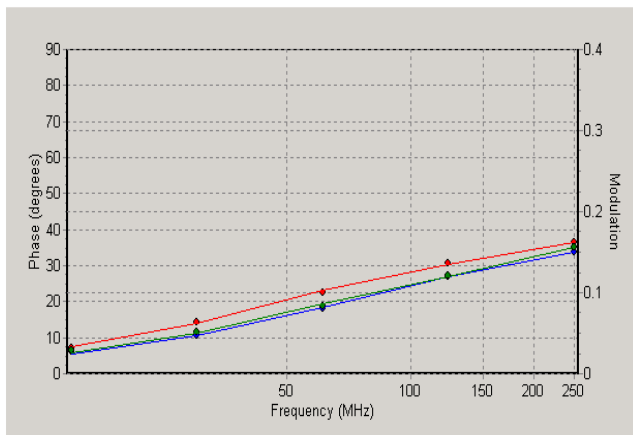
10× Objective

1.0-mm pinhole

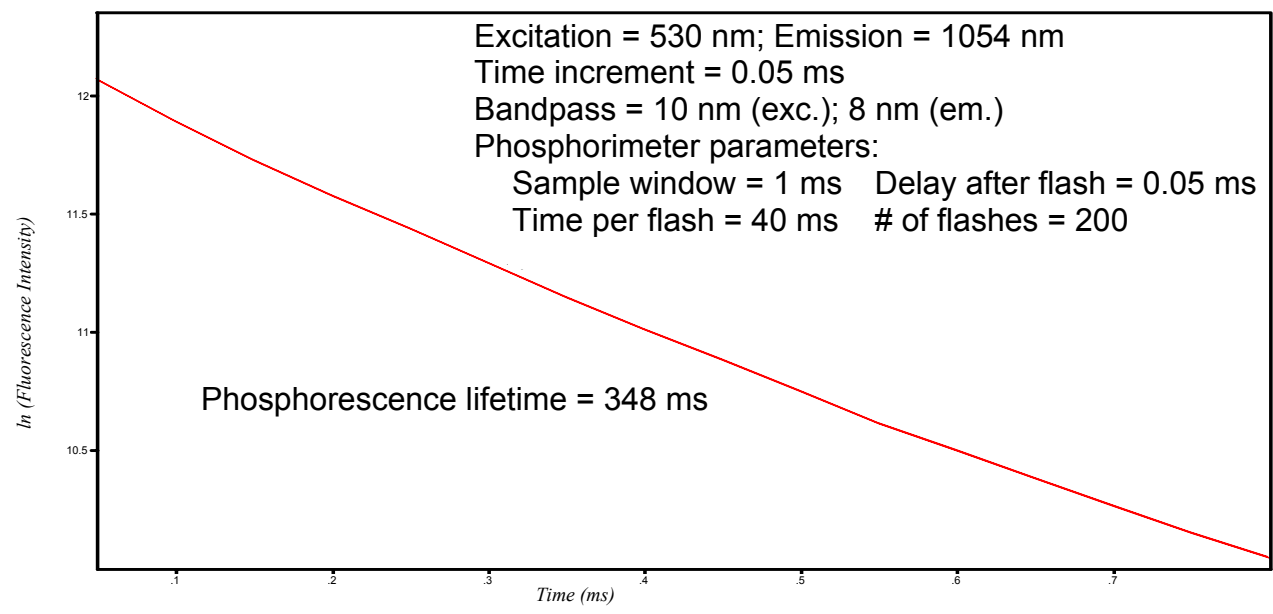
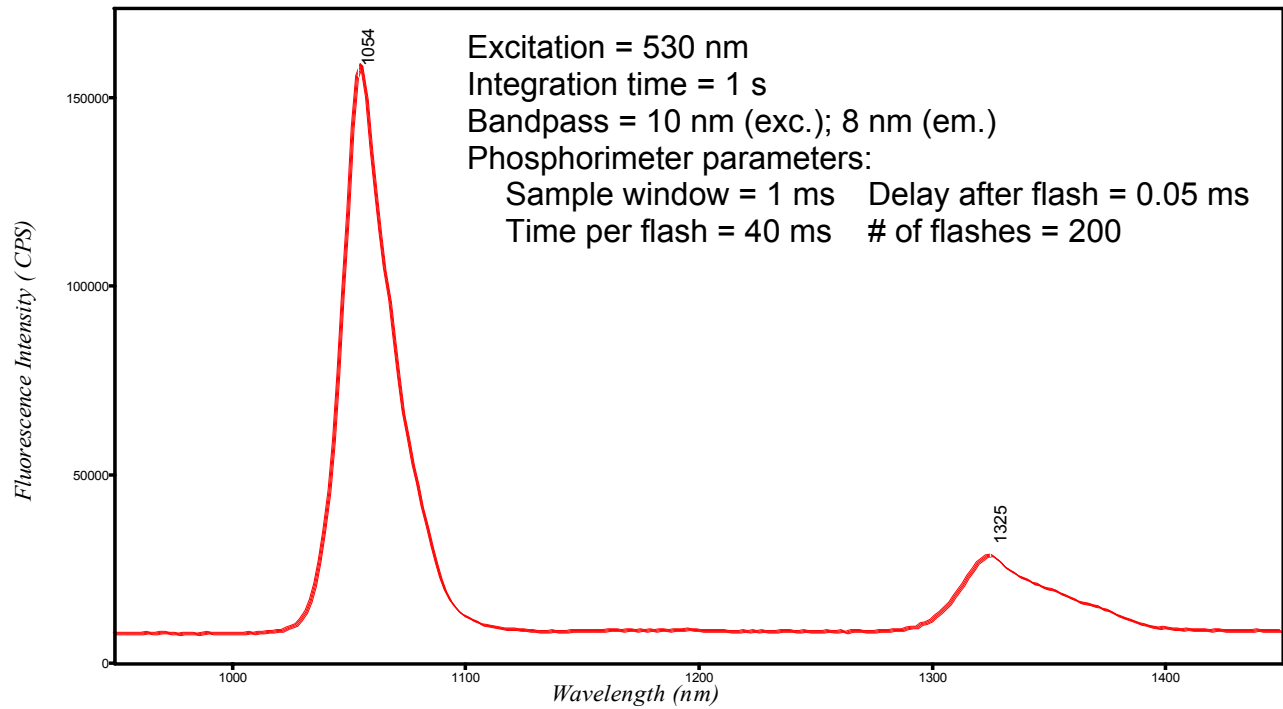
Lifetime reference: rhodamine ($\tau = 1.7$ ns)



Point	τ_1 (ns)	τ_1 (%)	τ_2 (ns)	τ_2 (%)	χ
1	2.3	55%	0.28	45%	0.24
2	1.8	49%	0.25	51%	0.367
3	2.1	46%	0.30	54%	0.476



Near-IR phosphorescence of laser glass



FluoroMap specifications

Spatial resolution	1 μ m in x-y plane; 2 μ m in z-direction
Wavelength sensitivity	240–1000 nm (to 1700 nm with optional near-IR detector)
Time resolution	10 ps–10 μ s (to \gg 10 μ s with optional phosphorimeter)
Illumination	450-W CW xenon lamp, plus built-in laser port
Detectors	Photomultiplier tube and CCD array



Jobin Yvon is ISO-9001 certified!

Printed in the USA



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