Lightnovo

Raman Spectroscopy of Christmas Tree

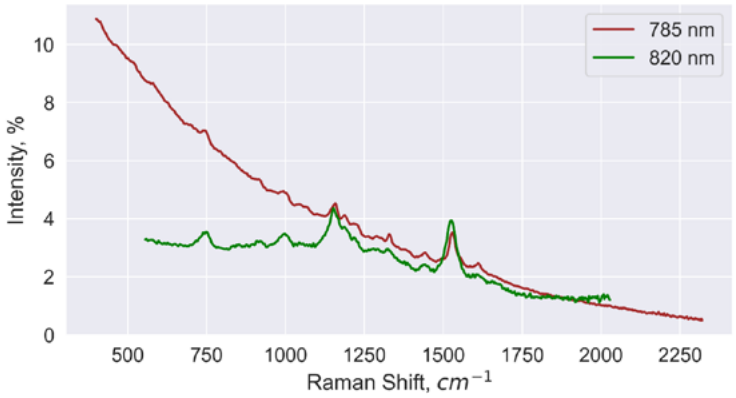
SPECIAL NOTE

We have collected Raman spectra of the needles of a Christmas tree using Lightnovo miniRaman 785 nm spectrometer and Lightnovo miniRaman 820 nm spectrometer. The following settings were used: 250 ms exposure time, 10 repetitions. Contact probe (0-20 µm) was used for the measurements.

Figure 1. miniRaman spectrometer and a Christmas tree branch.

The spectra of the needles of the Christmas tree are provided in Figure 2. As it can be seen from the figure, the 785 nm spectrum has a strong fluorescence background. The fluorescence background is significantly suppressed by shifting the excitation wavelength from 785 nm to 820 nm.

Figure 2. Raman spectra of Christmas tree needles collected with Lightnovo miniRaman 785 nm spectrometer (brown) and Lightnovo miniRaman 820 nm spectrometer (green).



CONCLUSION

- Christmas trees can be analyzed with miniRaman 785 nm and miniRaman 820 nm spectrometers.
- Shifting the excitation wavelength from 785 nm to 820 nm significantly reduces the fluorescence background.

Lightnovo

MERRY CHRISTMAS
AND HAPPY NEW YEAR

Lightnovo ApS
Blokken 15, 1. tv.
3460 Birkerød
Denmark (DK)
CVR: 40979603

+45 71 37 04 10
info@lightnovo.com
https://lightnovo.com