



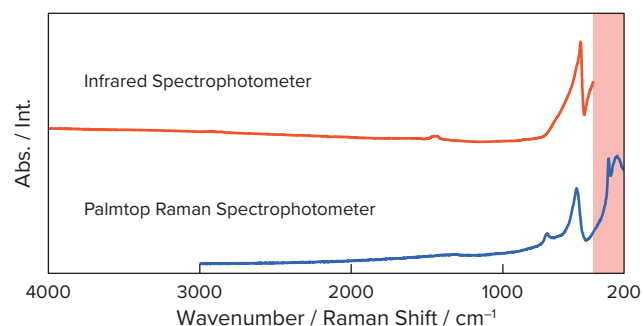
Easy solution to the 'difficulties and troubles of FTIR'

Palmtop Raman Spectrometer *PR-1W*

Low wavenumber measurement capability for inorganic samples

Raman spectroscopy has a wider measurement wavenumber range on the low wavenumber side than one of infrared spectroscopy.

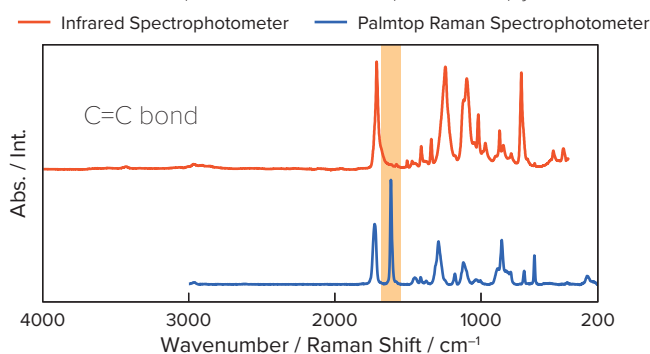
The Palmtop Raman spectrometer can measure up to 200 cm^{-1} , which is useful for measuring inorganic materials such as ceramics.



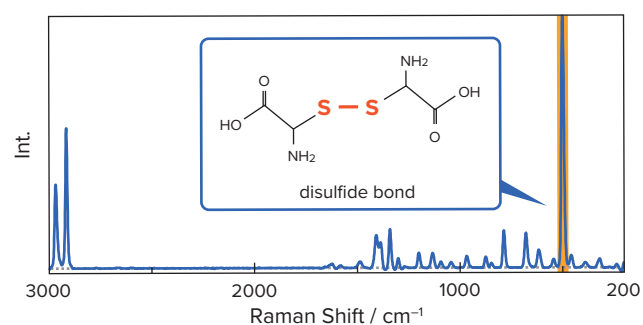
Infrared and Raman spectra of BaTiO₃

As complementary information of infrared spectroscopy

Raman spectroscopy shows strong peaks of skeletal vibrations such as C=C bonds and S-S bonds (disulfide bonds), which have weak peaks in infrared spectroscopy.



Infrared and Raman spectra of PET

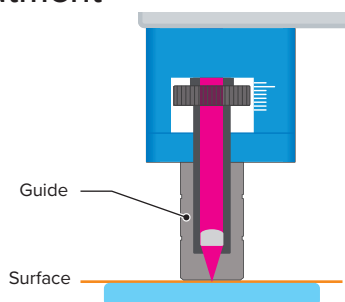


Raman spectrum of L-cystine

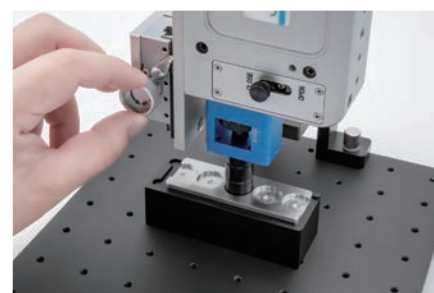
Measurement without pretreatment

Infrared spectroscopy generally requires sample preparation such as KBr tablet method.

Palmtop Raman spectrometer allows to measure samples without such pretreatment with ease and simple.



Schematic diagram
of Palmtop Raman spectrometer



Measurement using Z-stage unit

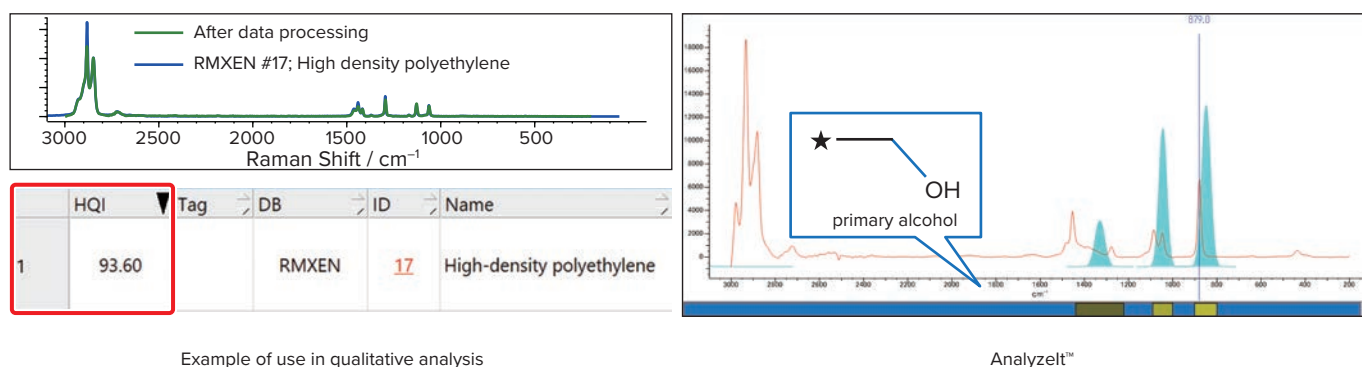
User-friendly interface ; Raman analysis

Easy operation and measurement

The screenshot displays the 'Spectra Measurement' software window. On the left, the 'Parameters' panel is open, showing settings for Exposure (1 sec), Accumulation (8), and Laser power (Low). A callout box titled 'Easy parameter setting' highlights the 'Laser power' dropdown menu, which is open to show options: Middle, Low, Middle, and High. On the right, a Raman spectrum is plotted with Raman Shift [cm⁻¹] on the x-axis (ranging from 1500 to 200) and intensity on the y-axis (ranging from 0 to 11000). A callout box titled 'Graphical buttons' points to three icons: a red square for 'Cancel', a blue play button for 'Sample', and a blue circular arrow for 'Preview'.

Support for sample identification of Raman spectra; KnowItAll

Wiley's KnowItAll enables qualitative analysis, and the Analyzelt™ function interprets the bands in Raman spectrum.



Example of use in qualitative analysis

Analyzelt™

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6813-2412ENG