


Q. Other observation method with the exception of visible observation by using IR Microscope?

A. Fluorescence Observation, Polarization Observation and Differential Interference

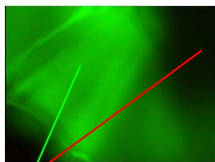
Observation methods are useful optional observation function. These observation methods make possible to observe measurement points more clear than the visible observation.

Jasco IRT-5000/ 7000 Microscope system has the high resolution CMOS camera and 3x optical zoom function as standard, which helps to observe microscopical foreign substance very clearly. Additionally, it is possible to set measurement condition accurately by using those various types of observation accessories since it can identify the fluorescence characteristics or polarization characteristics and the difference of uneven and refractive index visibly even if the sample looks even as visible observation.

Fluorescence observation



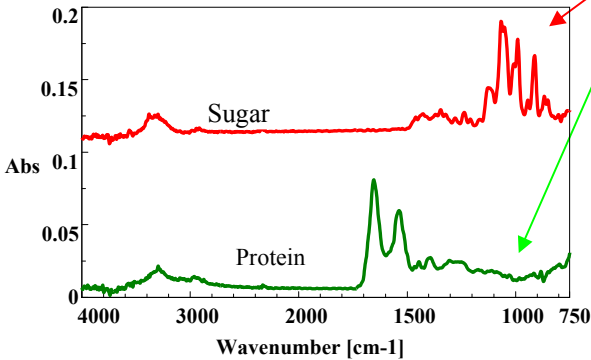
Visible observation view



Fluorescence observation view

Fluorescence observation condition

Ex	330 nm+/-70 nm
Em	450 nm+/-40 nm




The powder sample that can't be identified by visible observation was observed by using of the fluorescence observation accessory and it's IR spectrum was measured at both green color area which observed as fluorescence and black color area.

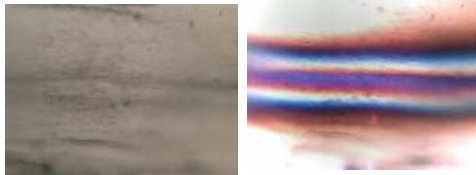
As the result of this measurement, IR spectrum of Protein was obtained in this green color area, and also IR spectrum of Sugar was obtained in black color area.

This fluorescence observation method is very useful measurement method for selective measurement the sample which has fluorescence characteristics.

Polarization observation




Visible observation view




Polarization observation view

As the result of polarization observation about stretched vinyl sample, the stretched condition point of the sample was observed very clearly. This polarization observation is useful method for observation about sample has orientation characteristics.

Differential Interference Observation



Visible observation view



Differential Interference observation view

As the result of differential interference observation about board, uneven point and scratch on the sample was observed clearly.

The difference of refractive index and the difference of light path due to shapes of sample surface was observed as contrast between light and darkness.