



## Fourier Transform Infrared Spectroscopy (FT-IR)

FT-IR is a molecular analysis technique in which a compound is irradiated with infrared radiation. Its absorption causes a variation of energy in the covalent bonds, that pass from a state of lower vibrational energy to a higher one. This technique provides information on the functional groups present in the molecules of the sample, and thus on the molecules themselves. The information obtained is mainly qualitative. Since infrared spectroscopy can simultaneously recognize organic and inorganic compounds, it is particularly useful for the characterization of cultural heritage materials, including many pigments, paint binders, paints and inks. The technique requires the collection of micro-samples.