Introduction
The Fourier Transform Infrared spectroscopy (FT-IR) is a technique to record the infrared absorbance spectrum of materials, in order to study and identify the chemical composition.

Principle
Infrared spectroscopy exploits the property that molecules absorb infrared (IR) light depending on the chemical composition. These absorptions occur at resonant frequencies characteristic to their chemical structure. An FT-IR spectrophotometer collects the absorption spectrum over a wide IR range, and using this information we are able to identify the chemical composition of liquids, gasses and solids.

Application
FT-IR is a versatile and fast technique that can be used to analyze many different materials. Some applications are:
- Membrane autopsy and fouling studies
- Material identification
- Surface analysis
- Quality control