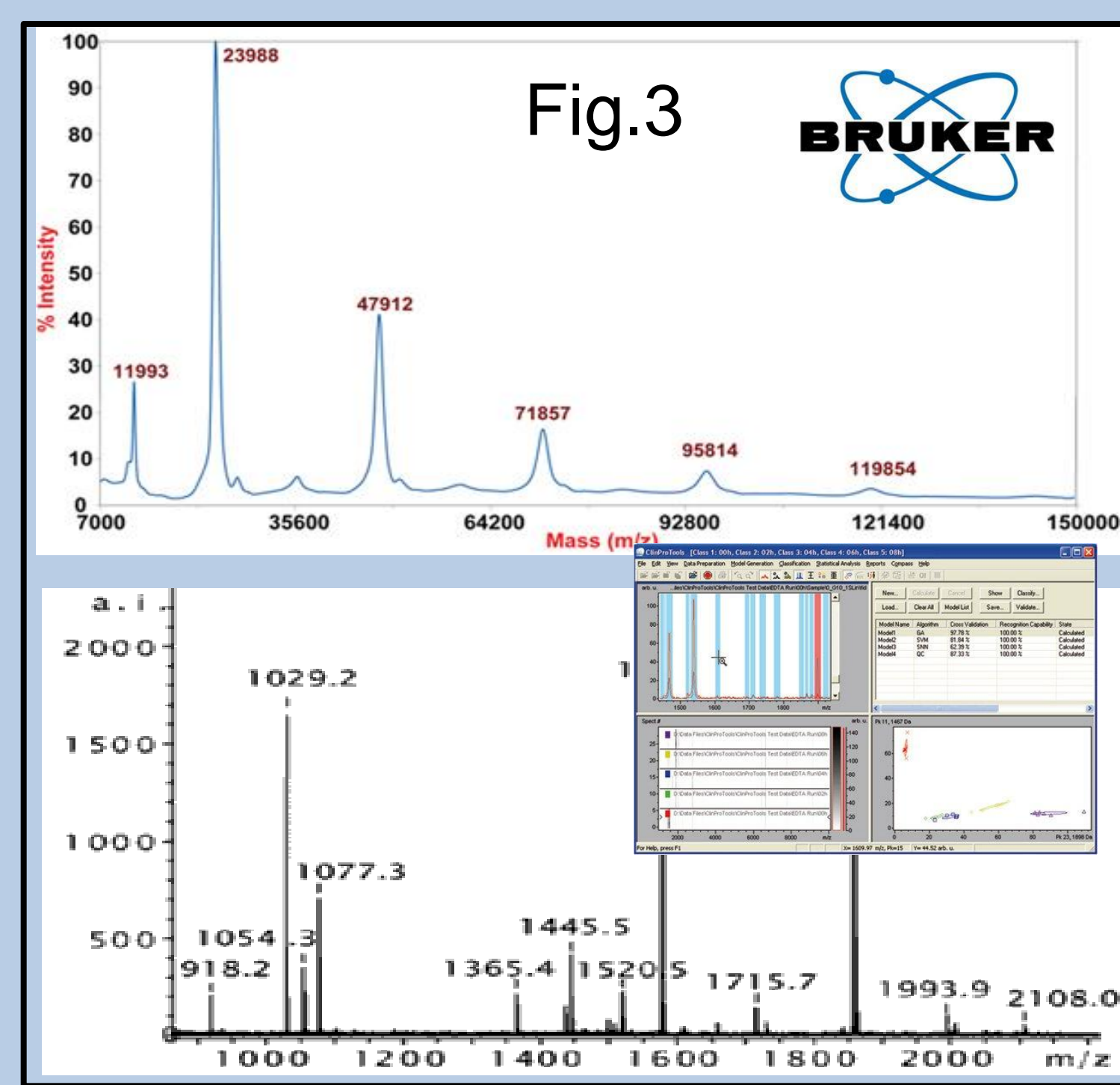
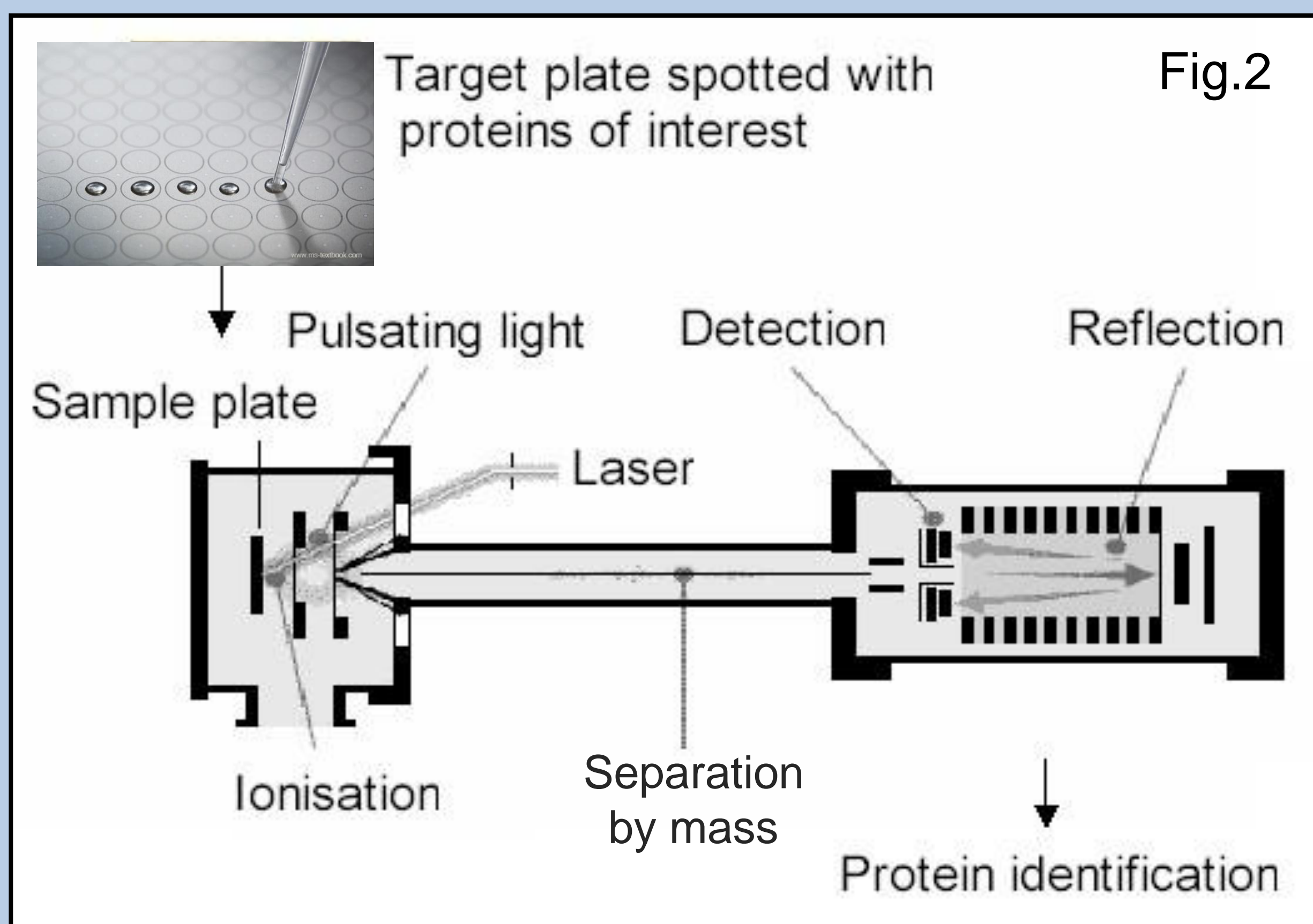
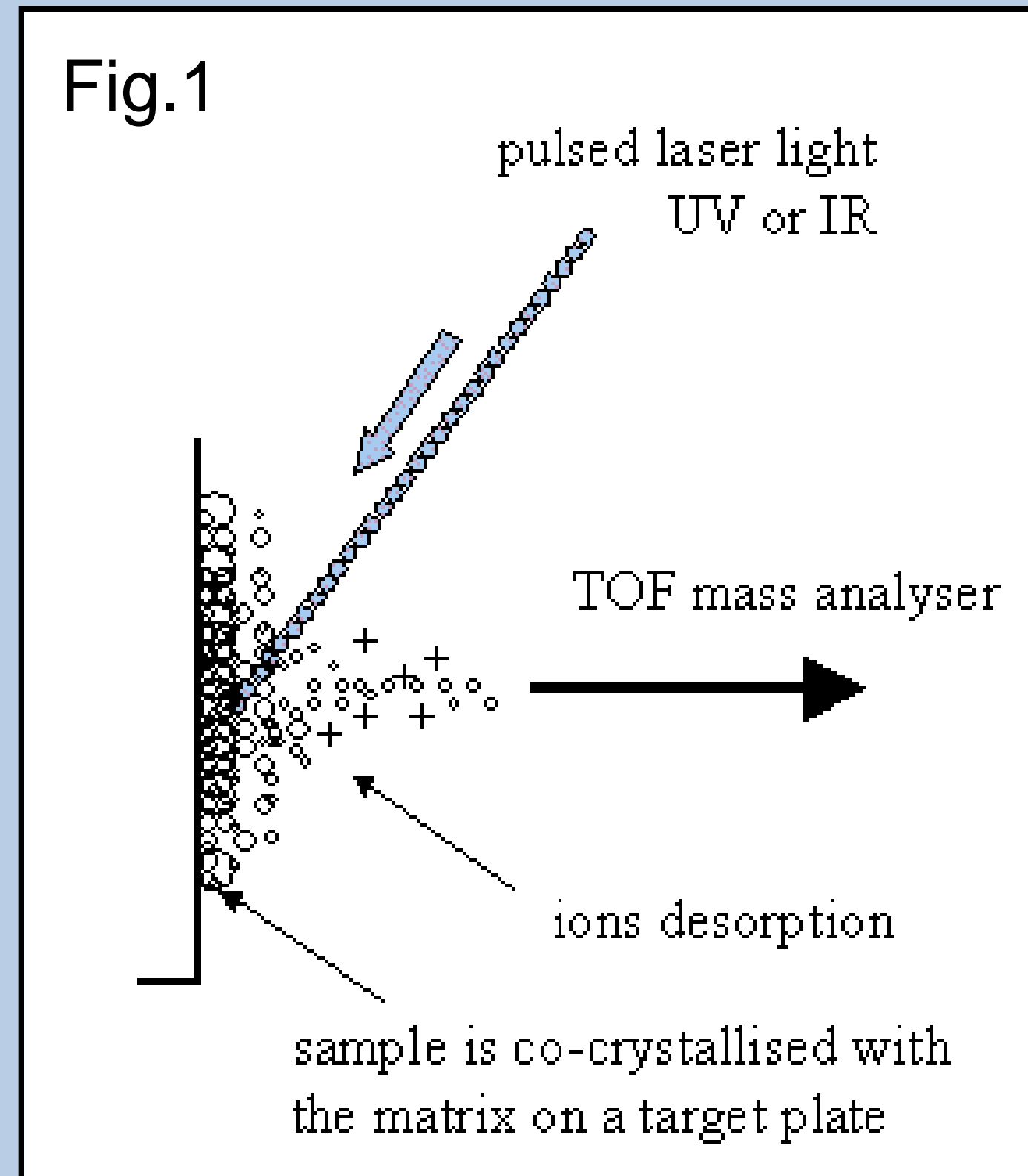




- MALDI (Matrix-assisted laser desorption / ionization) is a soft ionization technique used in mass spectrometry, allowing the analysis of biomolecules.
- TOF (Time-of-Flight) is an ion detector that is coupled to MALDI

## MALDI methodology :

- The laser energy is absorbed by the matrix (organic molecules such as dihydroxybenzoic acid), which prevents unwanted fragmentation of the biomolecules. The ionized biomolecules are accelerated in an electric field and enter the flight tube (Figure.1 and .2)
- During the flight in this tube, different molecules are separated according to their mass to charge ratio and reach the detector at different times (Figure.2). In this way each molecule yields a distinct signal (Figure.3)



## Applications of interest or importance:

MALDI is used for the rapid identification of proteins.

MALDI is a simple and fast analytical method that can allow chemists to rapidly analyze the results of such syntheses and verify their results.

MALDI/TOF spectra are used for the identification of microorganisms such as bacteria or fungi.

