

Atmospheric Pressure Photo-ionisation

APPI uses photons energy to excite and ionise molecules, to minimise concurrent ionization of solvents and ion source gases. (Cappiello, A. *et al.*, 2000).

Mass Analysers

Quadrupole Analysers

The quadrupole analyser consists of a set of four parallel metal rods. Quadrupole analysers, comes single or triple quadrupole Configuration.

Time-of-flight Analysers

The time-of-flight (TOF) analyser ionize the molecules by high voltage. The velocity of the ions, and the time required to travel down a flight tube to reach the detector depends on their m/z values. The TOF analyser is usfull for small molecules.

Ion Trap Analysers

Ion trap analysers use three hyperbolic electrodes to trap ions using static and radio frequency voltages. The ejection of Ions depends on m/z values to create a mass spectrum.

Hybrid Analysers

mass spectrometers that use combinations of different

mass analysers. Two configurations

that are particularly useful for LC-MS. The

third quadrupole of a triple quadrupole MS can be replaced by