

A simple mass spectrometer

This page presents a very simple schematic diagram of a mass spectrometer (specifically, a gas-source isotope-ratio mass spectrometer). This illustration assumes that the gas to be analyzed is CO₂, the gas generated by acid treatment of carbonate mineral samples, by oxidation of

samples of organic matter, and by equilibration of standard CO₂ gas with the H₂O of water samples. The fundamental action of the mass spectrometer is to separate the gas into beams of molecules of different mass (to separate the red line on the left into the three red lines on the right).

