

Mass Spectrometry Encyclopedia Article

Mass Spectrometry

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Mass Spectrometry

A technique of **elemental analysis** first developed by Sir Francis Aston in the early twentieth century. In a mass spectrometer, a sample is first vaporized and then converted to positively charged ions. These ions are accelerated to a high speed and then passed through a magnetic field. Since ions of different weight are bent by different amounts in the magnetic field, elements can be identified on the basis of how far they are bent in the field. Mass spectrometry is a very sensitive analytical technique that permits the detection of trace amounts of a substance, such as the amount of **ozone** in a sample of air.

See Also

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