prolate trochoidal mass spectrometer

A mass spectrometer in which ions of different mass/charge are separated by means of crossed electric and magnetic fields in such a way that the selected ions follow a prolate trochoidal path. The usual term 'cycloidal' used sometimes is incorrect because the path used is not cycloidal. A cycloid is a special case of a trochoid.

Source:

PAC, 1991, 63, 1541 (Recommendations for nomenclature and symbolism for mass spectroscopy (including an appendix of terms used in vacuum technology). (Recommendations 1991)) on page 1545
Orange Book, p. 203