

Mass Analyzers



Quadrupole Filters

- Four parallel rods with RF/DC voltages
- Sequential ion transmission
- Good for targeted analysis



Time-of-Flight (TOF)

- Velocity-based separation
- High mass accuracy
- Unlimited mass range



Orbitrap Technology

- Ion orbital trapping
- Ultra-high resolution ($> 100,000$)
- Excellent mass accuracy (< 1 ppm)



Ion Trap & Hybrid

- 3D ion confinement
- Multiple MS/MS stages
- Q-TOF, Q-Orbitrap combinations