

## 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