Mass Spectrometry

Ion traps

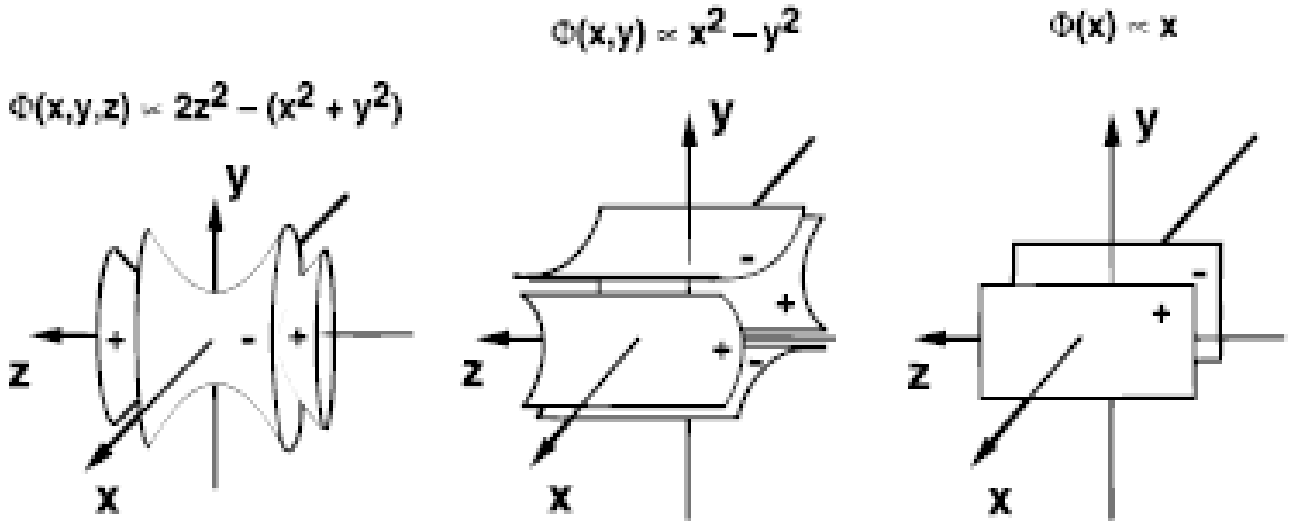
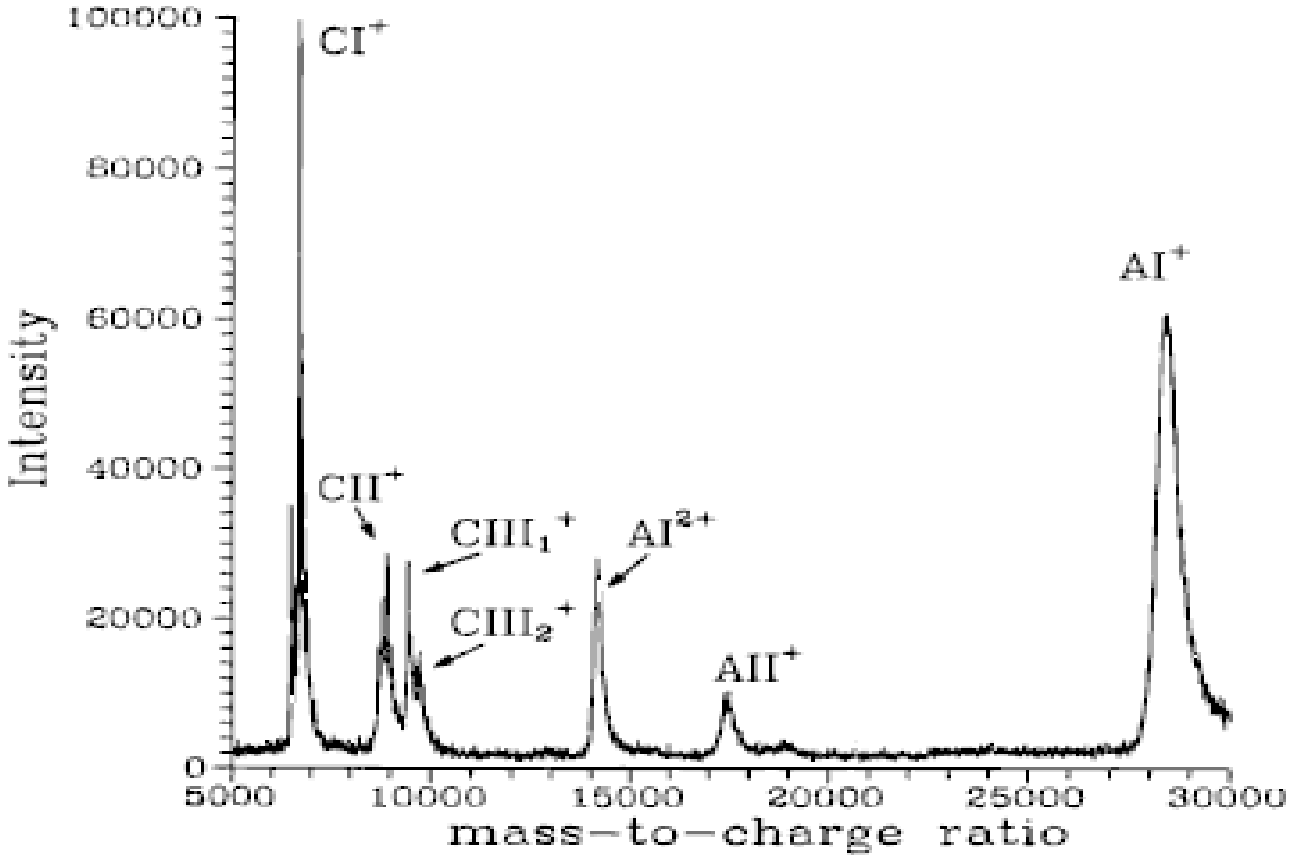
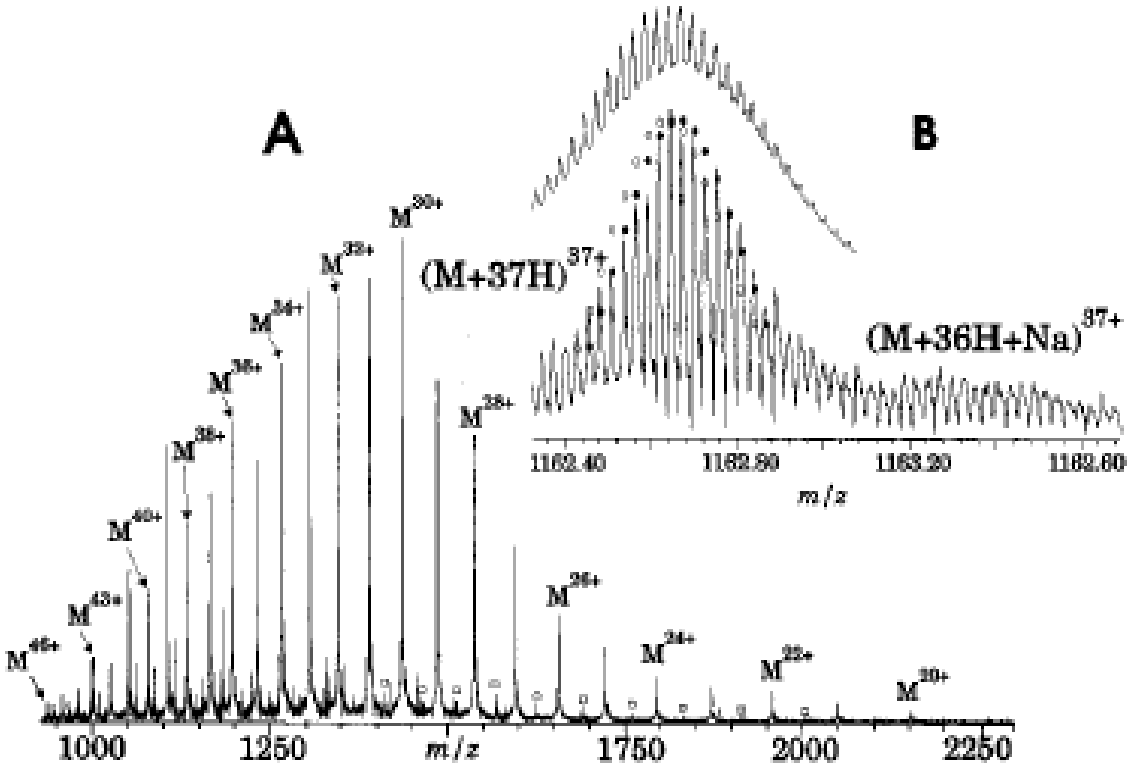


Figure 1. Three electric isopotential surfaces. (left) three-dimensional axial quadrupolar potential, for ion confinement in a Paul or Penning trap; (middle) two-dimensional axial quadrupolar potential, for a quadrupole mass filter or ion guide for an ion beam, or axialization of ions in a Penning trap. (right) one-dimensional dipolar potential, for excitation or detection of trapped ions. Reproduced with permission

MALDI-TOF


100000
80000
60000
40000
20000
0
Intensity
5000
10000
15000
20000
25000
30000
mass−to−charge ratio
CI+
CII+
CIII1+
CIII2+
AI2+
AII+
AI+

ESI-MS


A
B
M46+
M43+
M40+
M38+
M36+
M34+
M32+
M30+
M28+
M26+
M24+
M22+
M20+
(M+37H)37+
(M+36H+Na)37+
1162.40
1162.80
1163.20
1163.60
m/z
1000
1250
m/z
1750
2000
2250