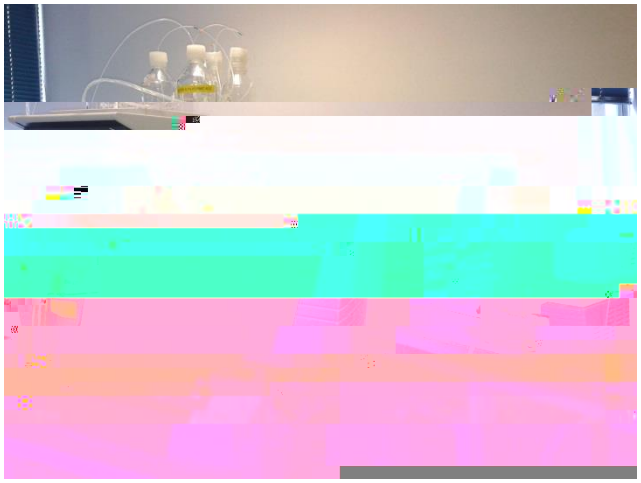
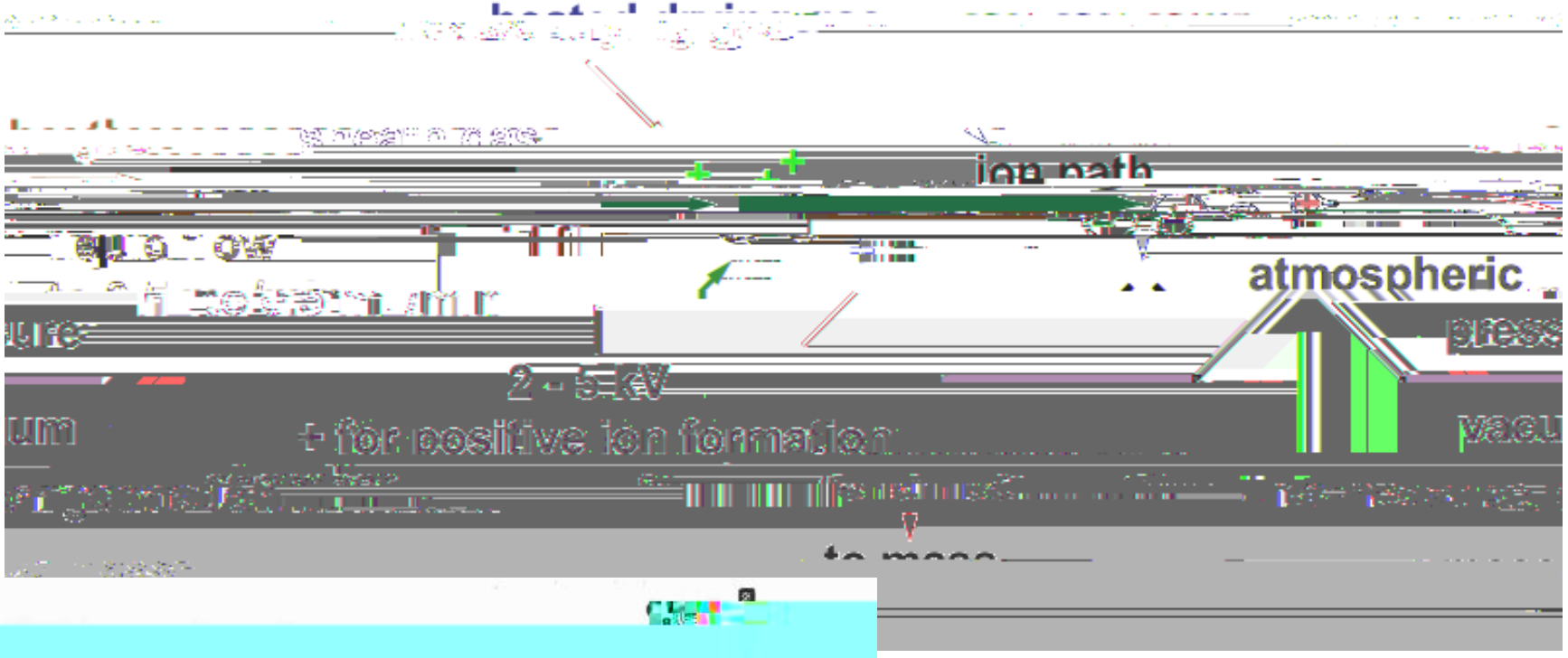
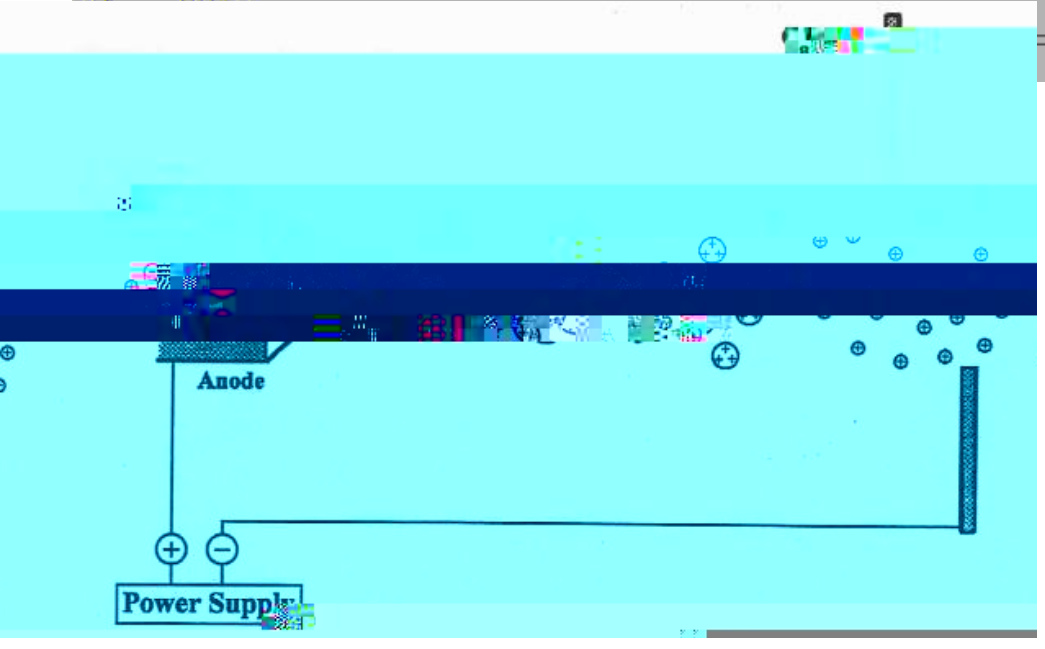
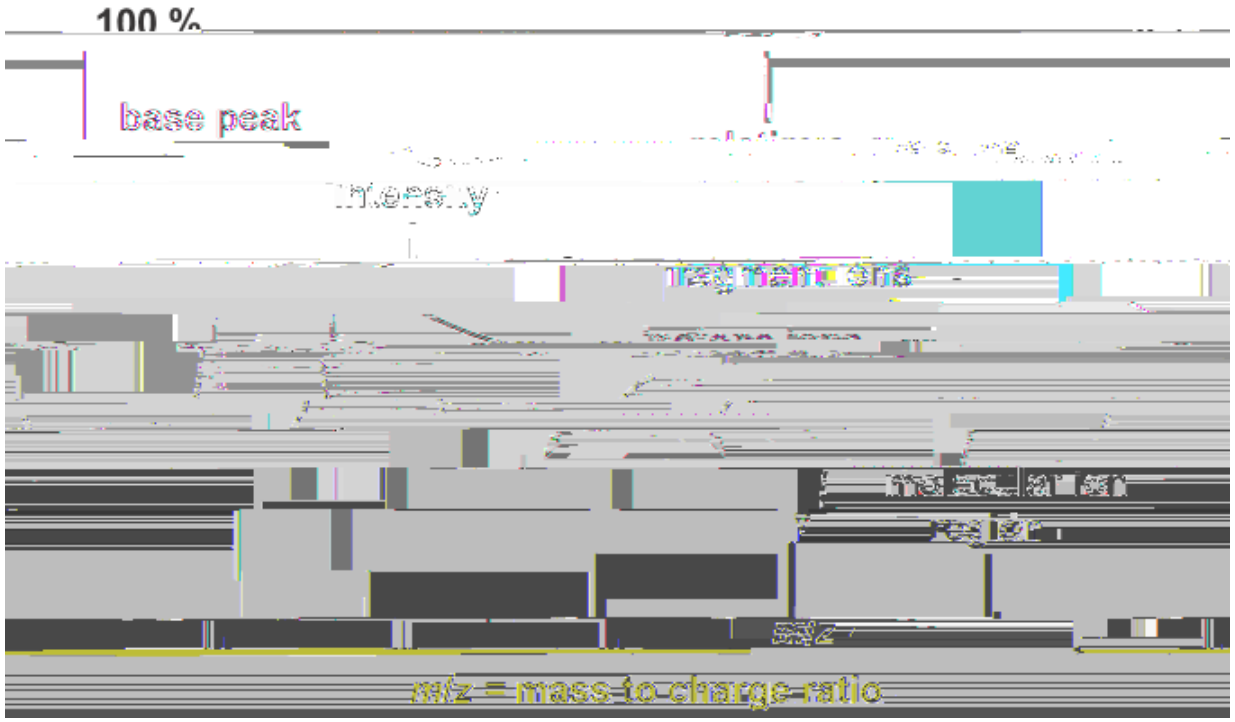
Introduction to UCL Chemistry Mass Spectrometry Facility

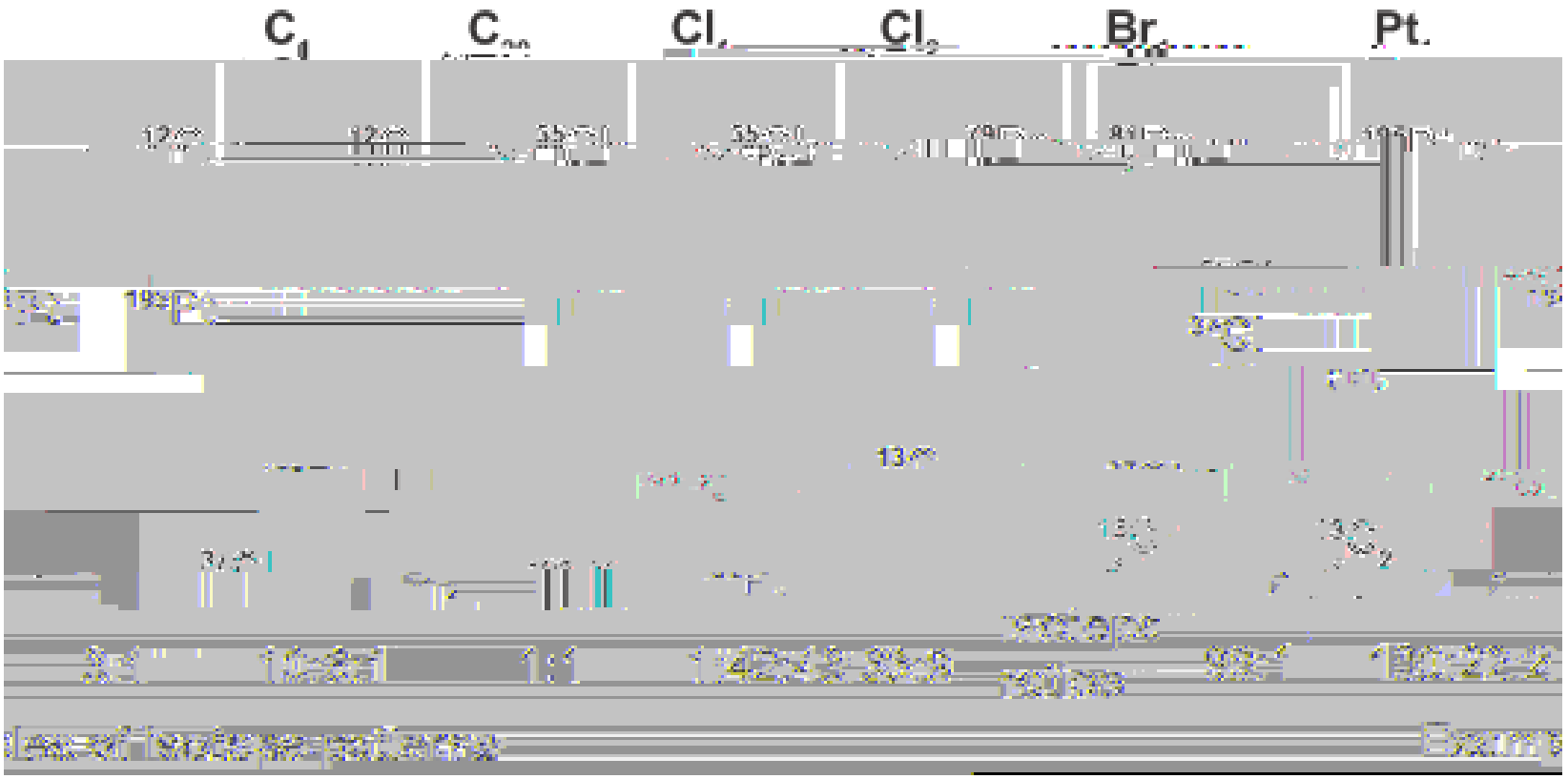


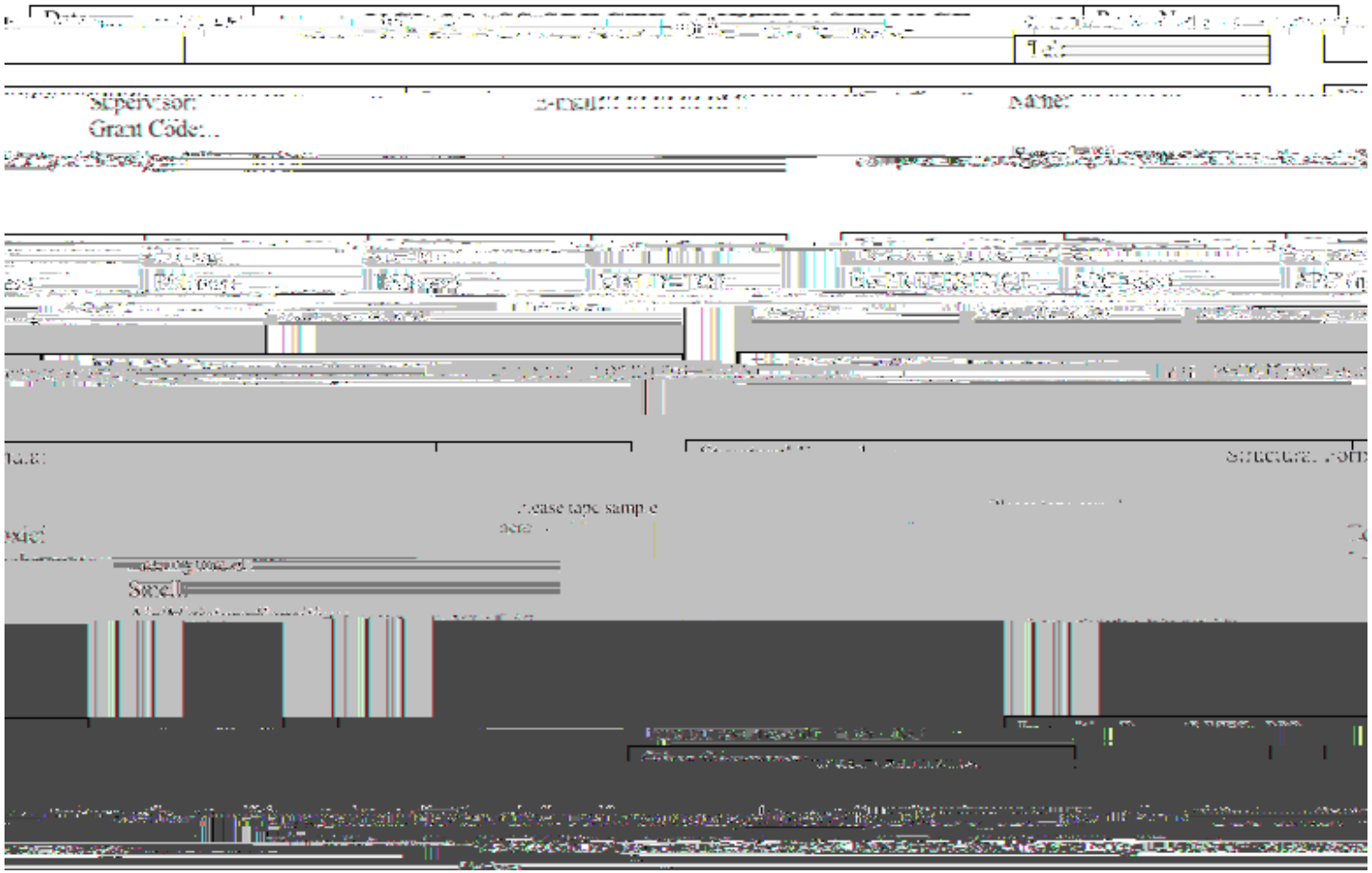

ion path
atmospheric
2 - 5 eV
+ for positive ion formation


Anode
Power Supply

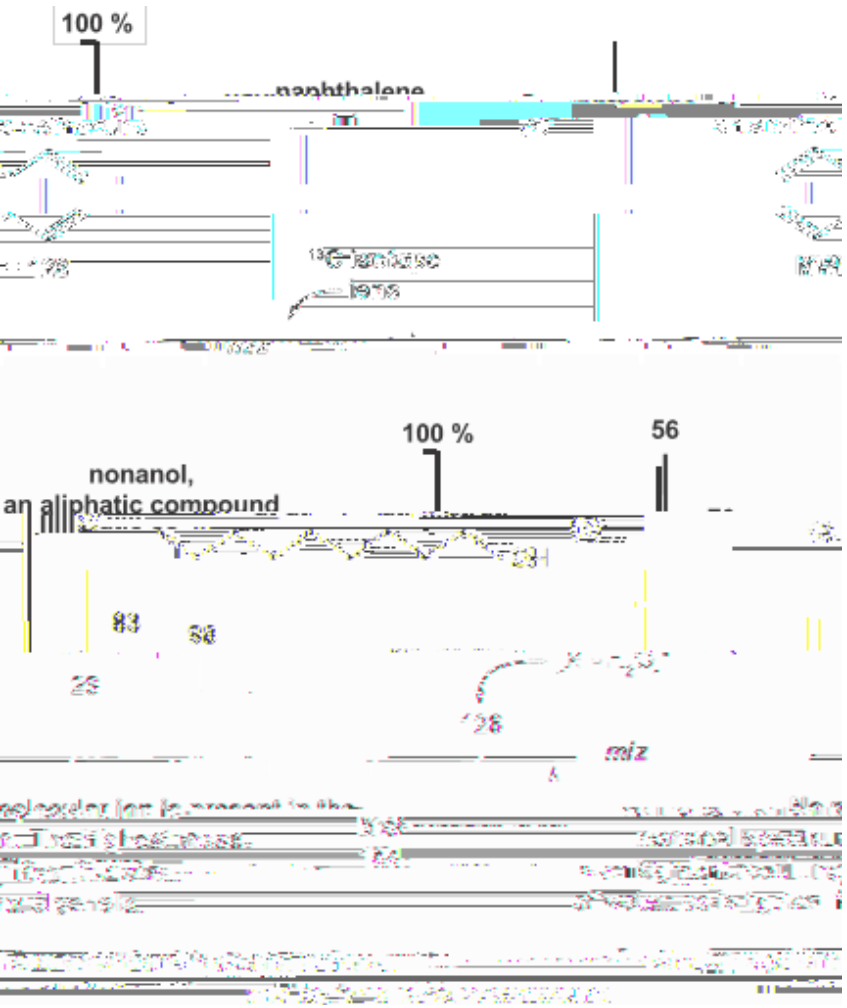
A mass spectrum is a graphical representation of the



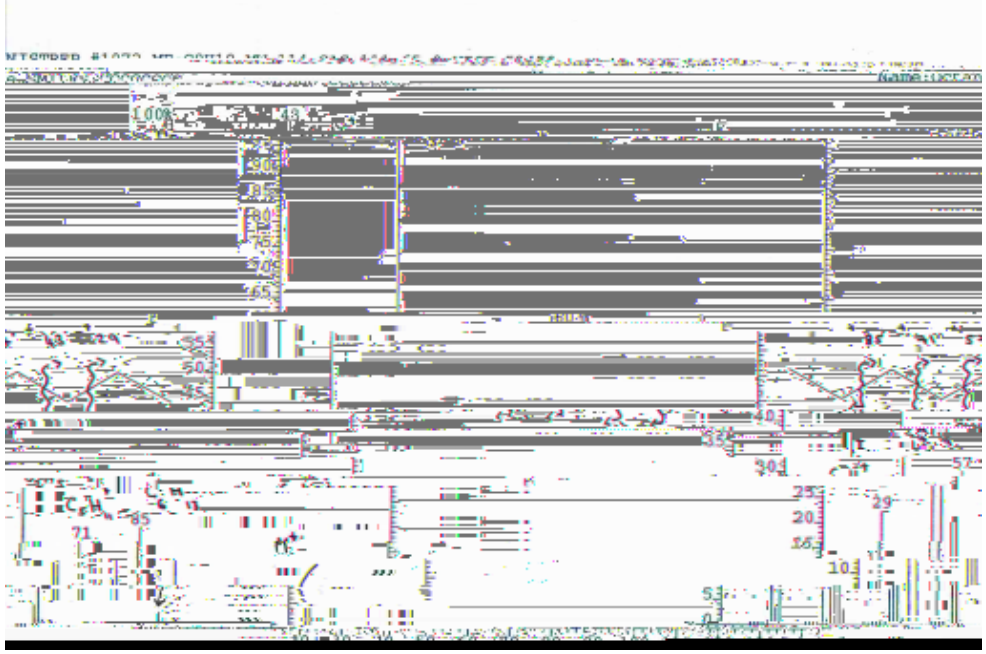

C
C
Cl
Cl
Br
Pt


Supervisor:
Grant Code:...
Please tape sample
Send

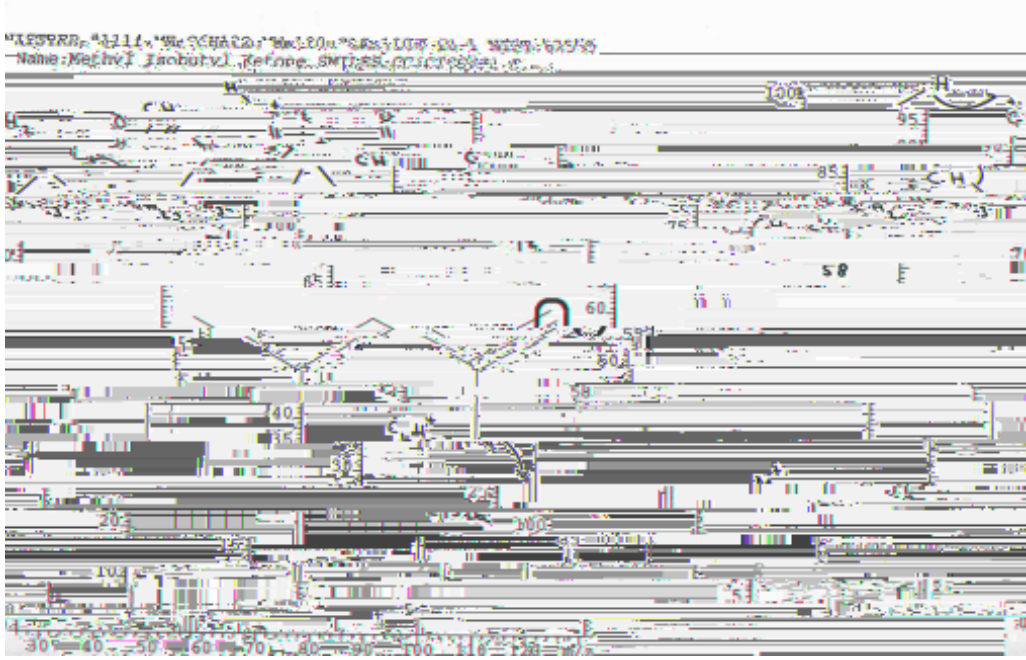
EI mass spectra



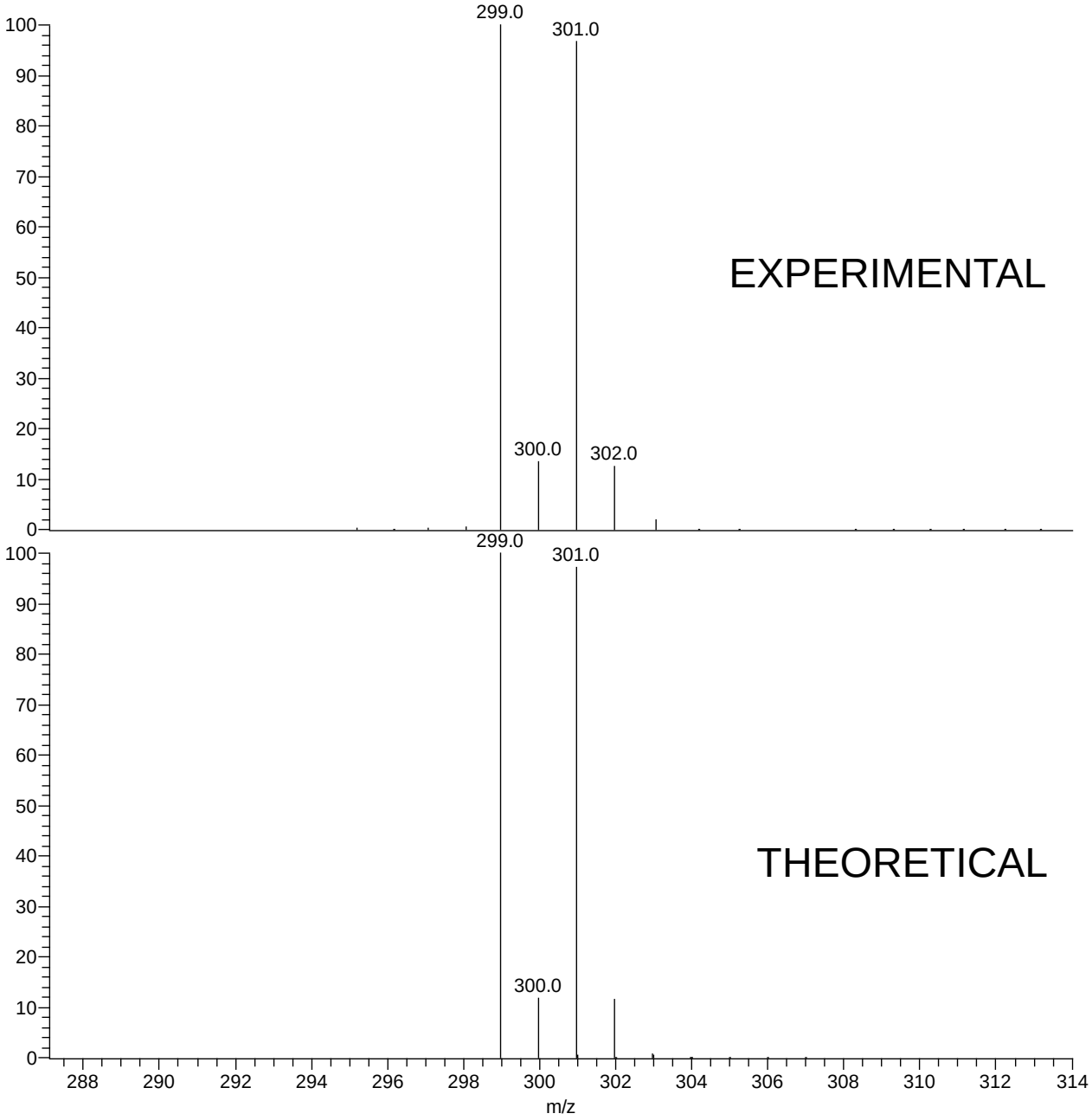
(c)



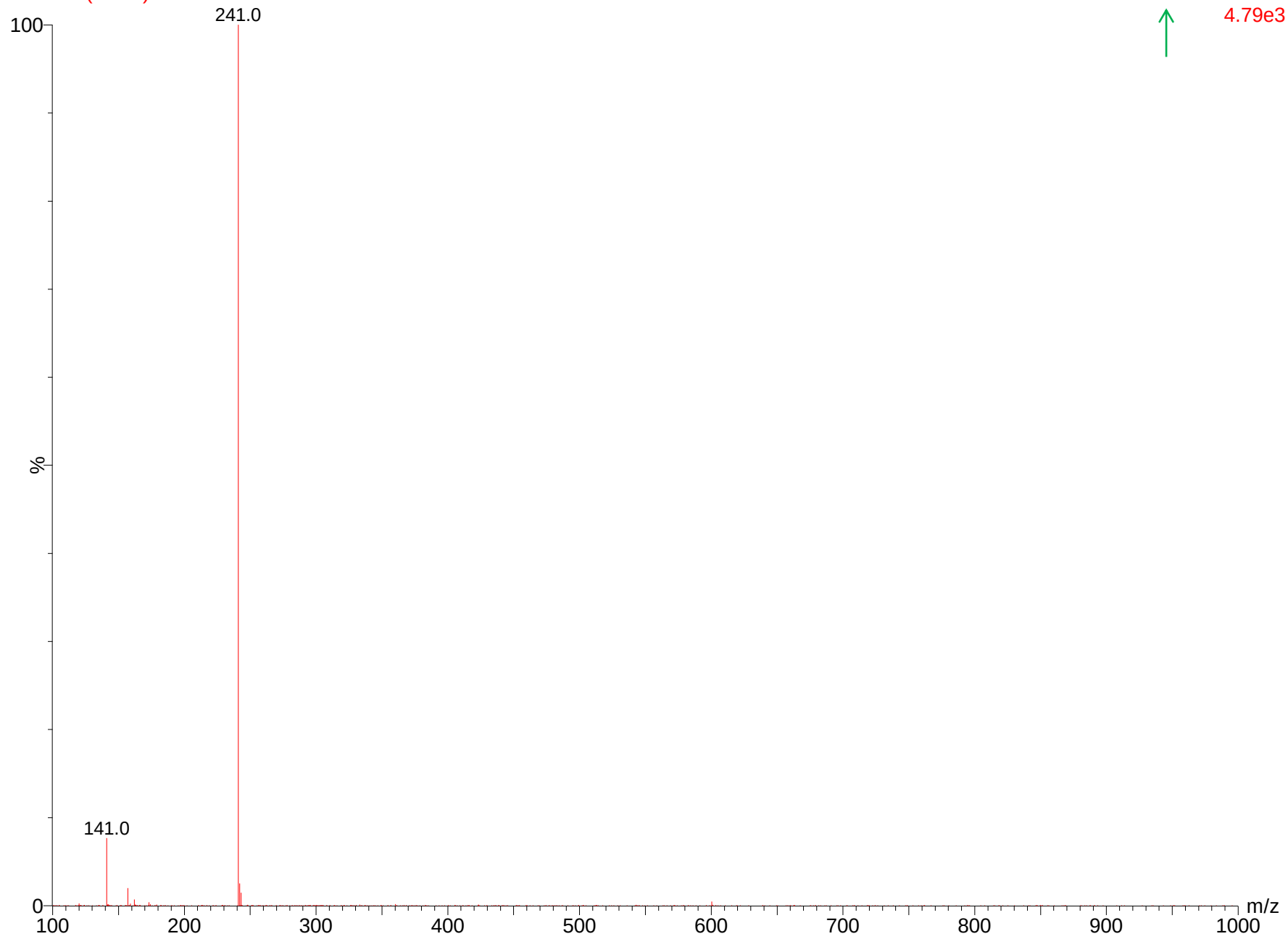
(d)

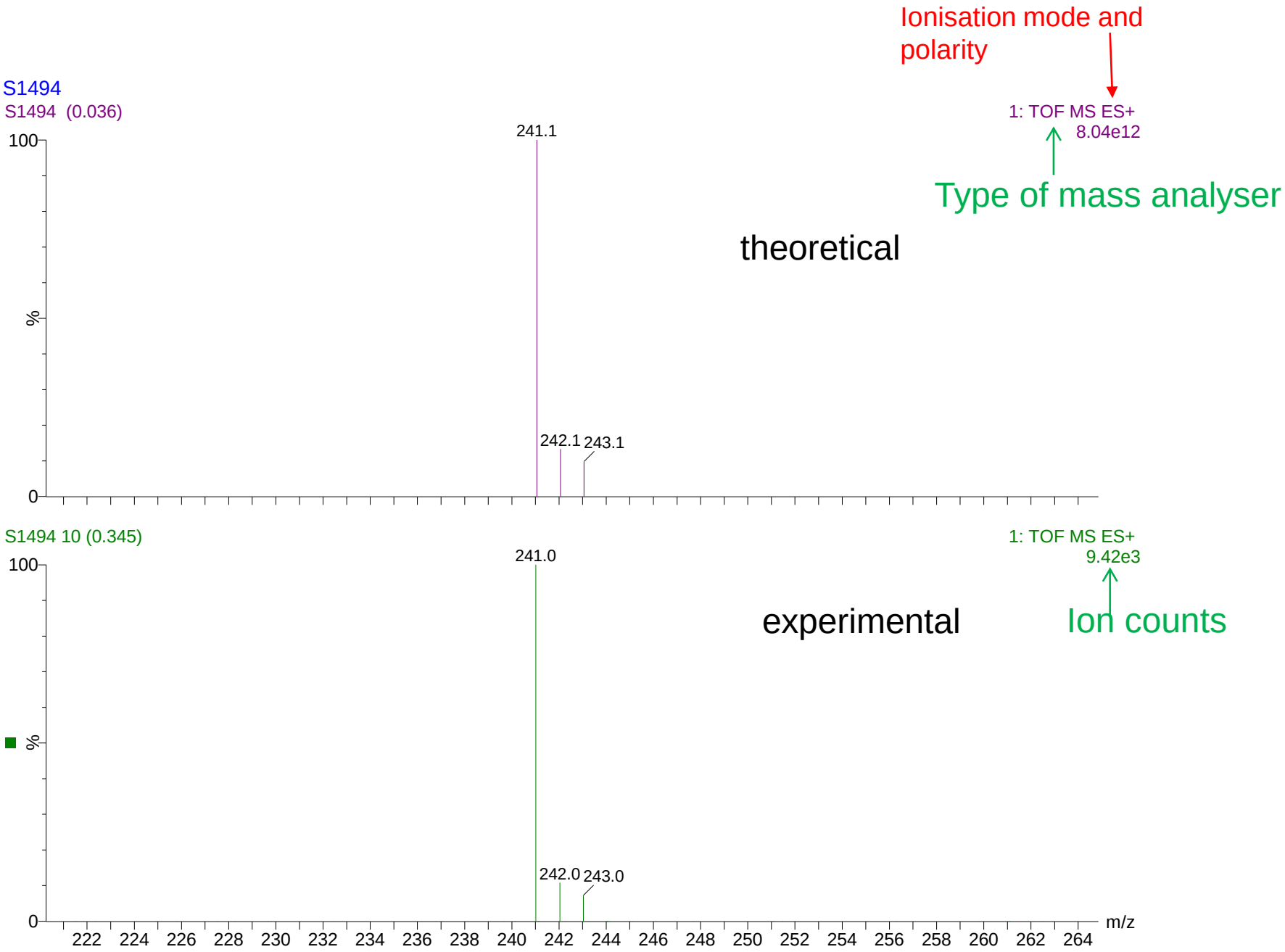


$[M]^+$


299.0
301.0
300.0
302.0
EXPERIMENTAL
299.0
301.0
300.0
THEORETICAL
100
90
80
70
60
50
40
30
20
10
0
288
290
292
294
296
298
300
302
304
306
308
310
312
314
m/z

x10 4
+ESI Scan (rt: 1.373 min) Frag=175.0V Tag_01.d
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
417.0363
319.0596
833.0650


S1494
Electrospray ionisation (+) mode
Ionisation mode and polarity
S1494 9 (0.317)
1: TOF MS ES+
4.79e3
241.0
141.0
100
%
0
100
200
300
400
500
600
700
800
900
1000
m/z


Ionisation mode and polarity
S1494
S1494 (0.036)
1: TOF MS ES+
8.04e12
Type of mass analyser
241.1
100
%
0
242.1
243.1
theoretical
S1494 10 (0.345)
1: TOF MS ES+
9.42e3
241.0
100
%
0
242.0
243.0
experimental
Ion counts
222 224 226 228 230 232 234 236 238 240 242 244 246 248 250 252 254 256 258 260 262 264
m/z