

Mass spectrometry – Frag out!

Pre-lesson assignment – Textbook Pg 247-9

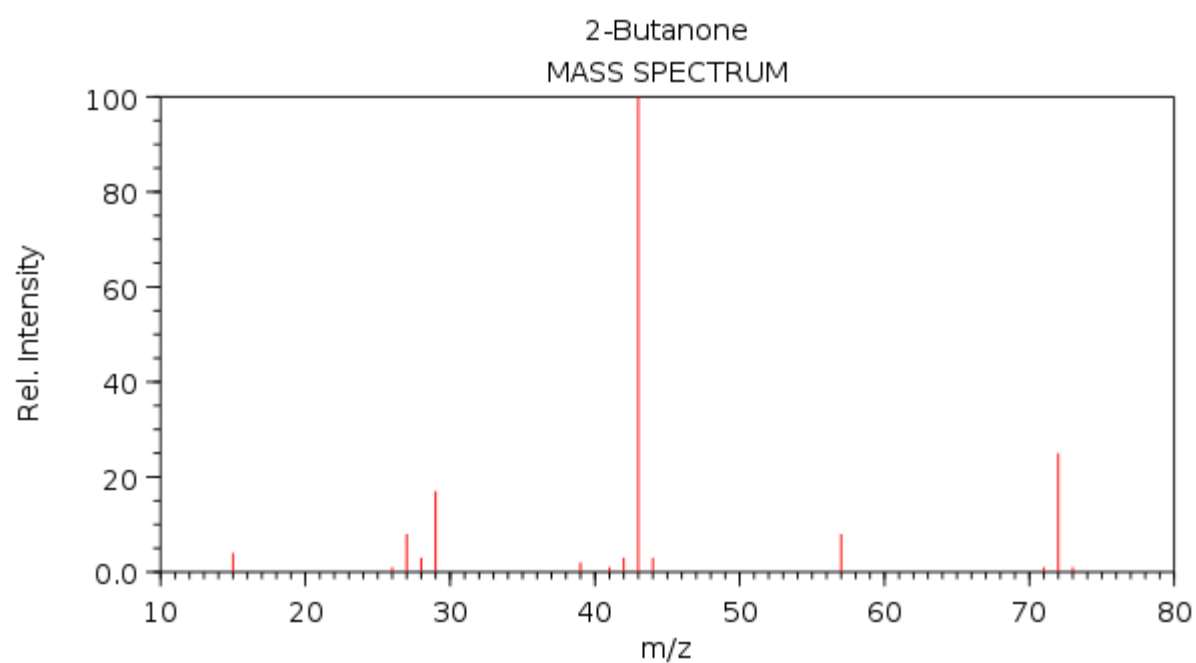
Define the following terms

- Fragmentation
- Fragmentation ions

Make notes on mass spectrometry

Use the following questions as a guide

1. Explain how a molecule of propan-1-ol is fragmented in the mass spectrometer, using an equation to show the simplest fragmentation.
2. Here is a mass spectrum of butanone.



NIST Chemistry WebBook (<http://webbook.nist.gov/chemistry>)

- a. Identify the M^+ and $M+1$ peaks.
- b. Suggest the identity of the peaks at $m/z=15$, 29, 43 and 57.
- c. Write an equation to show the molecular ion breaking down into the fragment at $m/z=15$