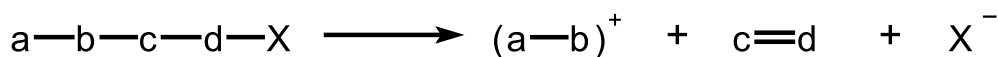
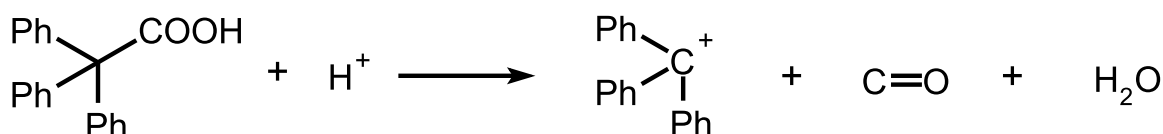


## fragmentation

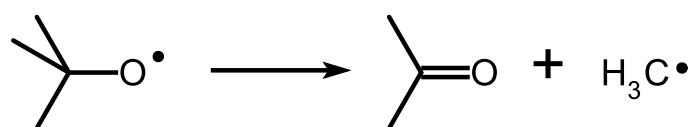
- The heterolytic cleavage of a molecule according to the general reaction:



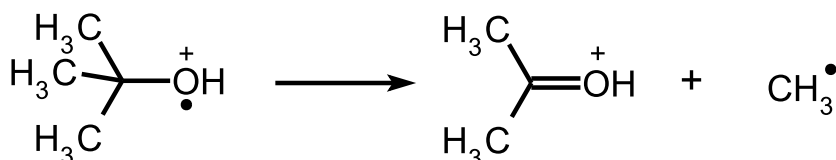
where a-b is an electrofuge and X is a nucleofuge (which may emerge from the reaction in combined form), and the middle group affords the unsaturated fragment c=d. For example,



- The breakdown of a radical into a diamagnetic molecule or ion and a smaller radical, e.g.



- The breakdown of a radical ion in a mass spectrometer or in solution, forming an ion of lower molar mass and a radical, e.g.



**See also:** fragmentation reaction *in mass spectrometry*

**Source:**

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1116