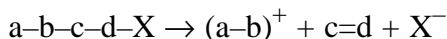
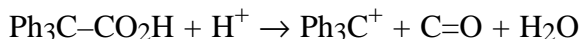


## fragmentation

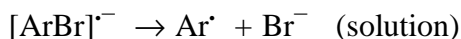
1. The *heterolytic* cleavage of a molecule according to the general reaction:



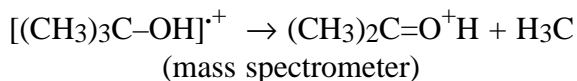
where a-b is an *electrofuge* and X is a *nucleofuge* (which may emerge from the reaction in combined form), and the middle group affords the unsaturated fragment c=d. For example,



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



3. 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)*.  
1994, 66, 1116