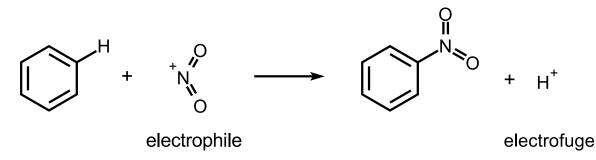
electrophile (electrophilic)

An electrophile (or electrophilic reagent) is a reagent that forms a *bond* to its reaction partner (the nucleophile) by accepting both bonding electrons from that reaction partner. An 'electrophilic substitution reaction ' is a heterolytic reaction in which the reagent supplying the entering group acts as an electrophile. For example:



Electrophilic reagents are Lewis acids. 'Electrophilic catalysis' is catalysis by Lewis acids. The term 'electrophilic' is also used to designate the apparent polar character of certain radicals as inferred from their higher relative reactivities with reaction sites of higher electron density.

See also: electrophilicity

Source:

PAC, 1994, 66, 1077 (Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)) on page 1111