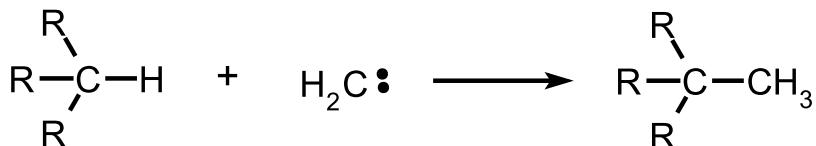


## insertion

1. A chemical reaction or transformation of the general type:



in which the connecting atom or group Y replaces the bond joining the parts X and Z of the reactant XZ. An example is the carbene insertion reaction:



The reverse of an insertion is called an extrusion.

*See also:*  $\alpha$ -addition

**Source:**

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1125

2. A general term given to a reaction involving the transfer of a guest atom, ion or molecule into a host crystal lattice.

*See:* intercalation reaction, topochemical reaction, topotactic reaction

**Source:**

PAC, 1994, 66, 577 (*Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)*) on page 583