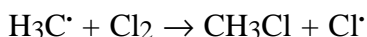
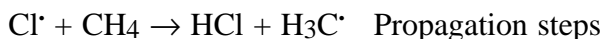
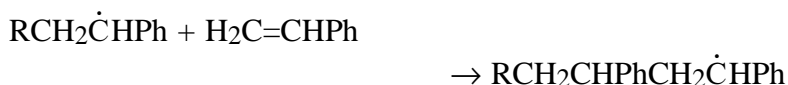


### chain reaction

A reaction in which one or more reactive reaction *intermediates* (frequently radicals) are continuously regenerated, usually through a repetitive cycle of elementary steps (the 'propagation step'). For example, in the chlorination of methane by a radical *mechanism*, Cl<sup>•</sup> is continuously regenerated in the chain propagation steps:



In chain polymerization reactions, reactive intermediates of the same types, generated in successive steps or cycles of steps, differ in relative molecular mass, as in:



See also *chain branching, chain transfer, degenerate chain branching, initiation, termination*.

1994, 66, 1094; 1993, 65, 2293; 1996, 68, 157; see also 1990, 62, 2179