

## Rice–Ramsperger–Kassel (RRK) theory

A theory of unimolecular gas reactions in which the rate with which the energized reactant molecule breaks down is treated as a function of the energy  $\varepsilon$  that it contains. The theory assumes that the rate is proportional to the number of ways of distributing  $\varepsilon$  among the internal degrees of freedom of the reactant molecule, in such a manner that the critical energy  $\varepsilon_c$  is localized in one particular degree of freedom.

**Source:**

PAC, 1996, 68, 149 (*A glossary of terms used in chemical kinetics, including reaction dynamics (IUPAC Recommendations 1996)*) on page 185