

## photochemical reaction

**Synonym:** photoreaction

Generally used to describe a chemical reaction caused by absorption of ultraviolet, visible or infrared radiation. There are many ground-state reactions, which have photochemical counterparts. Among these are photochemical nitrogen extrusions, photocycloadditions, photodecarbonylations, photodecarboxylations, photoenolizations, photo-Fries rearrangement, photoisomerizations, photooxidations, photorearrangements, photoreductions, photosubstitutions, etc.

**Note:**

Photochemical paths offer the advantage over thermal methods of forming thermodynamically disfavoured products, overcome large activation barriers in a short period of time, and allow reactivity otherwise inaccessible by thermal methods.

**Source:**

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 386