**photooxygenation**

The incorporation of molecular oxygen into a molecular entity. There are three common mechanisms: Type I: the reaction of triplet molecular oxygen with radicals formed photochemically. Type II: the reaction of photochemically produced singlet molecular oxygen with molecular entities to give rise to oxygen containing molecular entities. The third mechanism proceeds by electron transfer producing superoxide anion as the reactive species.

*See also:* photooxidation

**Source:**
PAC, 1996, 68, 2223 (Glossary of terms used in photochemistry (IUPAC Recommendations 1996)) on page 2264