Schenck-sensitization mechanism

Chemical transformation of one molecular entity caused by photoexcitation of a sensitizer, which undergoes temporary covalent bond formation with the molecular entity (M).

\[ S + \text{hv} \rightarrow ^*S \]
\[ S + M \rightarrow (^*S \cdots \cdot M) \]

Notes:
1. This mechanism is the basis of the Type I photooxygenation.
2. The reactive molecular entity could be ground-state molecular dioxygen, O_2, in which case energy transfer may occur producing singlet molecular oxygen, this being the basis of the Type II photooxygenation.

Source:
PAC, 2007, 79, 293 (Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)) on page 418