Teilweise Sauerstoff-Wanderung in der photochemischen Wolff-Umlagerung – α-Oxocarben-Oxiren-Isomerisierung oder intermolekularer Mechanismus?

Partial Oxygen Migration in the Photochemical Wolff Rearrangement – α-Oxocarben-Oxiren-Isomerization or Intermolecular Mechanism?

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Crossover experiments between isotopomeric species of 2-diazo-1-oxo-1-phenylethane (^{18}O, ^{13}C, D) establish beyond doubt that the oxygen migration accompanying the photochemical Wolff rearrangement is not the result of intermolecular processes. This is in agreement with a carbene-carbene rearrangement *via* an intermediate oxirene in competition to the rearrangement into a ketene, as reason for the partial oxygen migration in the Wolff rearrangement products.

Key words: α-Oxocarbenes, Oxirenes, Wolff Rearrangement