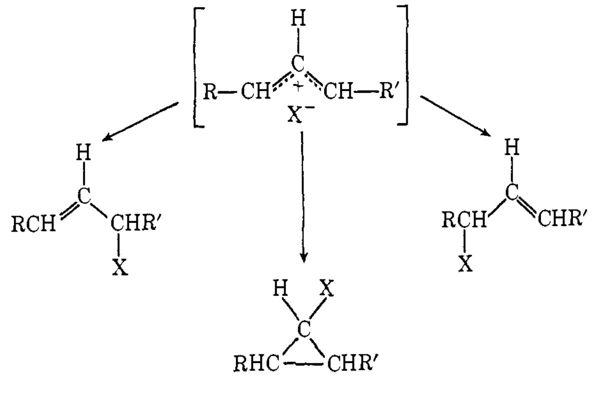
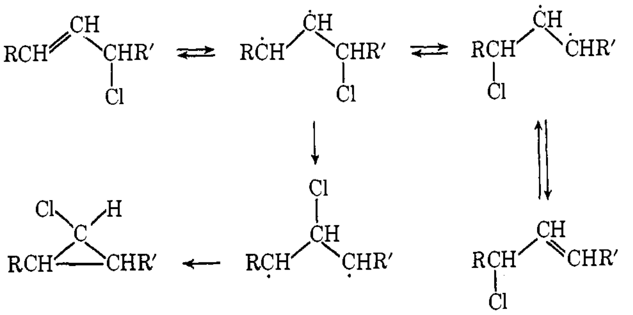
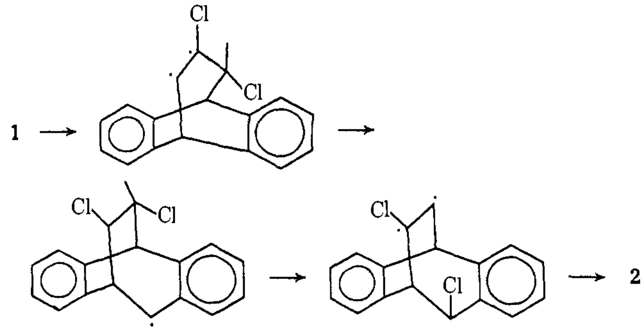


Scheme I



products. Support for such ideas may be found in the photochemical solvolysis experiments described by Zimmerman[11] and in the work of Beugelmans,[12] who has reported photochemical rearrangements, solvolyses, and eliminations, which also appear to involve carbonium ion intermediates.

On the other hand, our work on halides can be rationalized *via* triplet diradical intermediates, for example, as in Scheme I. A similar process can be imagined for the **1** → **2** conversion *via* triplet intermediates, but with a 1,4-chlorine shift, rather than a 1,2 or 1,3 shift.



Further exploratory and mechanistic work on such rearrangements is in process or planned.

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[11] H. E. Zimmerman and V. R. Sandel, *J. Amer. Chem. Soc.*, **85**, 915 (1963); H. E. Zimmerman and S. Somasekhara, *ibid.*, **85**, 922 (1963).

[12] (a) J. Pusset and R. Beugelmans, *Tetrahedron Lett.*, 3249 (1967); (b) H. C. de Marcheville and R. Beugelmans, *ibid.*, 6331 (1968); (c) R. Beugelmans and H. C. de Marcheville, *Chem. Commun.*, 241 (1969).

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Additions and Corrections

Radical Additions of $Cl-CCl_3$ to *cis*-Cyclooctane [*J. Am. Chem. Soc.*, **89**, 3205 (1967)]. By James G. Traynham and Thomas M. Couvillon, Coates Chemical Laboratories, Louisiana State University, Baton Rouge, Louisiana 70803.

The correct symmetry number for $BrCCl_3$ was used for the calculations summarized on page 3308, although the number itself is erroneously printed.

Addition of Electronegatively Substituted Azides to Allenes [*J. Am. Chem. Soc.*, **90**, 2131 (1968)]. By R. F. Bleiholder and H. Shechter, Department of Chemistry, The Ohio State University, Columbus, Ohio 43210.

On page 2133, paragraphs 1 and 2, and page 2134, paragraphs 1 and 2, the unusual nmr spectra of N-(1,2-3-trimethyl-2-butenylidene)benzenesulfonamide (XVII) and N-(1,2,3-trimethyl-2-butenylidene)-*p*-toluenesulfonamide (XIX) were discussed on the basis of hindered rotation of their α-methyl groups or *syn–anti* isomerism of the arylsulfonimino groups. Reevaluation of the nmr spectra of XVII and XIX reveals that the absorptions of the methyl groups in the τ 7.8–7.9 and the 7.4 regions are singlets. The interpretation that the nmr results from a barrier to rotation of one of the methyl groups in XVII and XIX is untenable in that the nonequivalent protons should thus constitute an A_2X group with a minimum of 5 lines and J_{AX} quite large. The nmr spectra of XVII and XIX are interpretable however in that in solution the sulfonimines exist as equilibrium mixtures of *syn* and *anti* isomers. Confirmation of the latter conclusion is derived from observations that in various solvents the singlets for the α-methyl groups in XVII and XIX occur in ratios of less than 2:1. The long-range deshielding, the rapid *syn–anti* isomerization upon heating, and the crystallization of single geometric isomers from *syn* and *anti* mixtures of XVII and XIX, respectively, in solution parallel the behavior reported previously for N-(3b,4,-5,6,6,6a-hexachlorodecahydro-2,5,7-metheno-3H-cyclopenta[*a*]pentalen-3-ylidene)-*p*-toluenesulfonamide [R. J. Stedman, A. C. Swift, and J. R. E. Hoover, *Tetrahedron Lett.*, 2525 (1965); R. J. Stedman, private communication]. We wish also to acknowledge communication with M. Raban on this subject.

Temperature Effect on Sulfur Dioxide Vapor Luminescence [*J. Am. Chem. Soc.*, **90**, 2972 (1968)]. By H. D. Mettee, Department of Chemistry, University of Texas at Austin, Austin, Texas 78712.

Reactions 1, 2, and 3 between SO and O_3 do *not* require the third body M as shown. The bimolecular