

Bridged Free Radicals

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PREFACE

While the possibility of bridging in free radicals is often considered or invoked in the research literature and for instructional purposes, the work which is frequently cited and the large amount of potentially relevant work which is usually ignored have not been discussed in a thorough and critical way. Hence, this book.

Although my primary goal has been to create a source for reference and teaching in an important area of free radical chemistry, its implementation has been guided without compromise by my belief that no harm should be done. I have tried to guide the reader, but have not made choices for him. I have tried to present accurately the work which I discuss, but have given no special weight to the views of the authors involved. I have tried to present the experimental observations in such a way as to enable the reader, without consulting the original literature, not just to formulate his own general conclusions but also to decide for himself whether the reaction mixture really was shown to contain 30% isopropyl chloride. Consequently, I have willfully obliged the reader to make his way through a "comprehensive" and somewhat critical book. My hope is that he will arrive at informed judgments with confidence and with the secure belief that he has not been misled.

My decision to base the primary organization of the book on the structure of the bridged(?) radical, rather than on the nature of the experiments performed or on the type of arguments employed, has led unavoidably to some repetition and referrals to other parts of the book. The result, however, is increased ease of obtaining information on specific points.

Lest the deceptively narrow title obscure the generality of the coverage, I should point out that I have discussed or tabulated in detail many areas of solution and gas phase kinetics, structural and mechanistic organic chemistry, free radical reactions, and stereochemistry.

My thanks to Barbara Kaplan for reading the manuscript and to George Zacharias for drawing the structures.

Leonard Kaplan

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