Electrophilic halogenation

Reaction pathways involving attack by electrophilic halogens on unsaturated compounds

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Electrophilic halogenation

Reaction pathways involving attack by electrophilic halogens on unsaturated compounds

Peter B. D. de la Mare
Professor of Chemistry
University of Auckland

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Preface

The separation of the chemistry of aromatic systems from that of other unsaturated organic compounds is convenient for some purposes. It tends, however, to set up a number of artificial barriers; for example, between systems which 'should' substitute and those which 'should' add; and between reactions involving 'Wheland' intermediates and those involving carbocationic intermediates. The result too often constrains our attention into paths which become unsatisfactory, particularly when the reactions of halogens with unsaturated compounds are considered.

My interest in these processes was first stimulated by association with the late Professor P. W. Robertson, of Victoria University College in the University of New Zealand. This book, which is intended in part as a tribute to his inspiration, is an attempt to survey organic electrophilic halogenations and to illustrate the variety of ways in which carbocationic character can be developed in such reactions. General principles are emphasised; details are given only where necessary for illustration, and no attempt has been made to be exhaustive. Attention has been drawn wherever possible, directly or by inference, to the potential preparative significance of mechanistic findings. References are usually to recent articles, and are not intended to attribute priorities for ideas or for findings. Although many references are made to reviews, important recent work has necessitated rather extensive documentation in some areas.

I am immediately indebted to Professor R. C. Cambie and to Dr B. E. Swedlund for discussions of their recent work; and to Professor K. Schofield for his valued comments, criticisms and advice. This survey would have been much more imperfect without the help, encouragement and stimulation which I have had over the years from the many research workers and colleagues with whom I have been associated scientifically.

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P. B. D. DE LA MARE

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