from lack of continuity, not only in terms of subject matter and prose style, but also in the approach taken by a particular author toward his subject. A brief consideration of each of the ten chapters illustrates the wide range of subject matter and approach encountered in this book. The first chapter, by P. D. Bartlett, entitled "Aspects of the Chemistry of Peresters," is virtually a progress report, preliminary findings being considered along with published results relating to several loosely connected problems. C. A. Bunton's chapter, "Nucleophilic Reactions of Peroxides," and M. C. R. Symon's chapter, "Photolysis of Hydrogen Peroxide in Fluid and Rigid Media," are surveys of current views in the fields under consideration, without detailed consideration of the experimental data which support these views, and with occasional comments indicating what is not known and what needs to be done. The chapter by Criegee, "Peroxide Pathways in Ozone Reactions," is a summary of published findings, based largely on a 1958 review article by Bailey in *Chemical Reviews*, with some of his own opinions added. The brief article by E. S. Shanley, "Hydrogen Peroxide," is also a review of published information on certain properties of hydrogen peroxide. The chapter by M. M. Crutchfield, "Peroxydiphosphoric Acid. The Kinetics of Hydrolysis and Decomposition," is a research paper, including an experimental section, tables of data, and a discussion of how the results pertain to the particular problems under study. The chapter by W. K. Wilmarth and A. Haim, "Mechanisms of Oxidation by Peroxydisulfate Ion," is a comprehensive, critical review of recent research, including unpublished data with detailed consideration of experimental results. The chapter by J. O. Edwards, "Nucleophilic Displacement on Oxygen in Peroxides," and the one by G. A. Russell, "Peroxide Pathways in Autoxidation," are both excellent review papers in which specific subjects are treated in such a way as to emphasize their general mechanistic implications. The chapter by M. Szwarc, "Decompositions Involving a Simultaneous Fission of Two or More Bonds," is a lucid discussion of the topic.

How useful one might find this book depends entirely upon how one generally reacts to symposia proceedings. The individual articles are well written, generally well annotated, and relatively free of errors. In Szwarc's chapter, Figures 2 and 3 should be interchanged with Figures 4 and 5, but even this leads to very little confusion, since the text leaves no doubt about which figure is being discussed. The reviewer found this book quite interesting to read, but not necessary to own.

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BOOKS RECEIVED

July 1, 1962–October 1, 1962

H. C. BROWN. "Hydroboration." W. A. Benjamin, Inc., 2465 Broadway, New York 25, N. Y. 1962. 283 pp.

G. CHARLOT, J. BADOZ-LAMBLING, AND B. TRÉMILLON. "Electrochemical Reactions." American Elsevier Publishing Co., Inc., 52 Vanderbilt Avenue, New York 17, N. Y. 1962. 371 pp.

H. J. EMELÉUS AND A. G. SHARPE. "Advances in Inorganic Chemistry and Radiochemistry." Vol. 4. Academic Press, Inc., 111 Fifth Avenue, New York 3, N. Y. 1962. 318 pp.

H. FRAUENFELDER. "The Mössbauer Effect." W. A. Benjamin, Inc., 2465 Broadway, New York 25, N. Y. 1962. 336 pp.

M. LEDERER, Editor. "Chromatographic Reviews." Vol. 4. American Elsevier Publishing Co., Inc., 52 Vanderbilt Avenue, New York 17, N. Y. 1962. 177 pp.

R. T. SANDERSON. "Chemical Periodicity." Reinhold Publishing Corp., 430 Park Avenue, New York 22, N. Y. 1960. 318 pp.

L. K. SHARP. "Inorganic Chemistry." The Williams and Wilkins Co., Baltimore 2, Maryland. 1962. 326 pp.