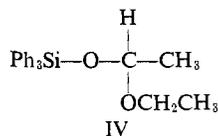


to substituent. The  $\rho$  values derived in this manner are  $-0.343$ ,  $-0.168$ , and  $-0.066$ , respectively, for 1-phenyl-1,2-propanesemidiones, nitrobenzene anion radicals (ref 1), and phenyl *t*-butyl nitroxides (ref 2).

**The Photochemistry of Silyl Ketones in Alcohol** [*J. Am. Chem. Soc.*, **89**, 454 (1967)]. By A. G. BROOK and J. M. DUFF, Department of Chemistry, University of Toronto, Toronto 5, Canada.

Formula IV on page 455 should be



**The Ionic Decomposition of 2-Substituted 2-Propyl *p*-Nitroperbenzoates. Migration to Electron-Deficient Oxygen and Anchimeric Acceleration of Peroxide-Bond Heterolysis** [*J. Am. Chem. Soc.*, **89**, 1661 (1967)]. By E. HEDAYA and S. WINSTEIN, Union Carbide Research Institute, Tarrytown, New York, and the Department of Chemistry, University of California, Los Angeles, California.

On page 1670, in the description of the preparation of 1-phenyl-2-methyl-2-propyl hydroperoxide, the first sentence should read: "Dimethylbenzylcarbinol (6 g) was combined with 30 ml of 90% hydrogen peroxide acidified with 12 drops of concentrated sulfuric acid."

The incorrect procedure is hazardous. Professor W. Adam has informed us that a violent and damaging explosion occurred when concentrated sulfuric acid was

added to the mixture of alcohol and 90% hydrogen peroxide. In our hands, no explosions occurred when the alcohol was added to acidified 90% hydrogen peroxide. Nevertheless, all safety precautions in this preparation and similar ones should be routinely taken.

**The Chemistry of Methylbornonyl Cations. V. Solvent Capture and Hydride Shift in the 3-endo-Methyl Series** [*J. Am. Chem. Soc.*, **89**, 2581 (1967)]. By JEROME A. BERSON, ROBERT G. BERGMAN, JAMES H. HAMMONS, and ARTHUR W. MCRLOWE, Departments of Chemistry, University of Wisconsin, Madison, Wisconsin, and University of Southern California, Los Angeles, California.

On page 2589, eq 12 can be factored and reduces to eq 11, as has been pointed out to us by Dr. Frank B. Miles. The value  $k_{\text{SOH}}/k_{\text{H}} = 2.88$  derived on the assumption  $k_{\text{H}} = k_{\text{T}}$  therefore applies also when  $k_{\text{H}} \neq k_{\text{T}}$ . This conclusion has been reached independently by Dr. Clair J. Collins. The other results of the Appendix remain unchanged.

**Anomalous Behavior of 3-endo-Hydroxy-3-exo-phenyl-2-endo-norbornylamine during Deamination** [*J. Am. Chem. Soc.*, **89**, 3940 (1967)]. By CLAIR J. COLLINS, VERNON F. RAAEN, BEN M. BENJAMIN, and IRVING T. GLOVER, Chemistry Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

On page 3941, column 1, line 12, "water" should read "acetic acid-sodium acetate"; in line 30, " $\sigma$ -hydrogen" should read "*o*-hydrogen."

## Book Reviews

**The Acridines. Their Preparation, Physical, Chemical, and Biological Properties and Uses.** Second Edition. By ADRIEN ALBERT, D.Sc. (London), Ph.D. Medicine (London), B.Sc. (Sydney), F.R.I.C., Professor of Medical Chemistry, John Curtin School of Medical Research, The Australian National University, Canberra. Fellow of the Australian Academy of Science. St. Martin's Press Inc., 175 Fifth Ave., New York, N. Y. 1966. xii + 604 pp. 15.5 × 23.5 cm. \$32.50.

The appearance of the first edition of "The Acridines" some 15 years ago represented the first comprehensive treatment of this group of compounds. In the meantime Professor Albert has continued his intense interest in this field which culminates with the production of a second edition, a volume of classic proportions. It contains a wealth of information of interest to such varied disciplines as those of the organic chemist, the industrial chemist, the medicinal chemist, the pharmacist, and the clinician. During this period many developments both in the chemistry and in the application of acridines have occurred. The magnitude of this trend may be illustrated by the fact that world production of acridine drugs has increased to over 500 tons a year and by the introduction of the "Monastral" pigments.

The book is divided into five parts, each of which is a rich lode of information. Part 1 deals with the general organic chemistry of the acridines—their interconversions and preparations. A number of detailed preparative procedures, all of which have been checked in Albert's laboratory, are a distinguishing feature as is a critical discussion on the choice of preferred synthetic methods not only for the final acridines but for many of the intermediates as well.

Part 2 covers the physical properties in depth including surface activity, association, and ionization, characteristics which play a major role in determining bacteriostatic effectiveness, as well as dipole moments, and spectra including fluorescence and phosphorescence. Relatively few of these data were available when the first edition of the book was written. This part will appeal to the

physical organic chemist interested in correlation of properties with electronic distribution.

The chemical properties of acridines and their functional derivatives comprise Part 3. Again many checked synthetic procedures for specific compounds are presented. Throughout the section detailed monographs dealing with groups of especial interest, *e.g.*, drugs, dyes, etc., are scattered. Included are Pharmacopoeia specifications and several formulations.

Part 4, comprising some 120 pages, is devoted to biological properties and uses of the acridines as therapeutic agents. The historical approach to the development of this subject results in a thoroughly readable narrative. Clinical aspects of therapeutic uses are gone into in considerable detail, and the relationship between biological properties and physical and chemical properties is emphasized.

The final part deals with applications of acridines as dyestuffs and pigments as well as other miscellaneous uses such as analytical reagents, photographic applications, energy cells, industrial disinfection, and preservation.

Throughout the volume numerous and voluminous tables are scattered with some 2000 literature citations so that one will have no difficulty in running down the literature on a given compound. The literature has been surveyed through September 1965, which is no small accomplishment in a book of this size. The style is free and fluid and the book is remarkably readable. Typography is excellent. Some redundancies between the various sections might have been eliminated with some saving in space. However, this is a minor criticism in view of the definitive and critical treatment of the over-all subject. Professor Albert is to be congratulated for providing an outstanding treatise.

Robert C. Elderfield

Department of Chemistry, The University of Michigan  
Ann Arbor, Michigan 48104