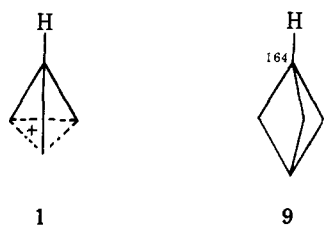


**A Critical Examination of the Applicability of  $J_{13CH}$  as a Criterion for the Presence of  $\sigma$  Bridging in Cyclopropylcarbinyl Cations** [*J. Am. Chem. Soc.*, **97**, 3897 (1975)]. By DAVID P. KELLY and HERBERT C. BROWN,\* Richard B. Wetherill Laboratory, Purdue University, West Lafayette, Indiana 47907.

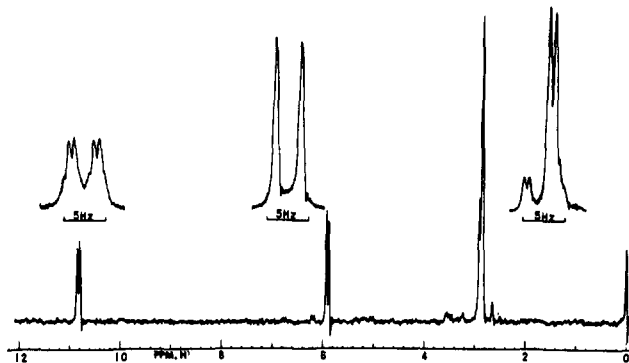
Structures **1** and **9** should be replaced by:



Page 3899 (right-hand column, last line of first paragraph): 5 should be 5.

**Stable Carbocations. CLXXXII. The Acetoacetylum and Diacetoacetylum Ions** [*J. Am. Chem. Soc.*, **97**, 5477 (1975)]. By G. A. OLAH,\* ALAIN GERMAIN, HENRY C. LIN, and KENNETH DUNNE, Department of Chemistry, Case Western Reserve University, Cleveland, Ohio 44106.

For p 5478, a clear print of Figure 1 is supplied.



## Book Reviews

**Physical Chemistry. Fourth Edition.** By FARRINGTON DANIELS and ROBERT A. ALBERTY (Massachusetts Institute of Technology). John Wiley & Sons, Inc., New York, N.Y. 1975. xii + 687 pp. \$15.95.

The new edition of this text shows rather strongly a patchwork character due to the many additions by which the authors have attempted to keep it current and comprehensive. The text is long (687 pp), quite comprehensive in the range of topics treated, with many problems ( $\geq 50$  per chapter). The organization is standard. The first section on thermodynamics takes about 40% of the volume and is more complete than most treatments at this level. The sections on dynamics and quantum chemistry are adequate, but the last section on structure is very weak. Statistical mechanics is given short shrift as an adjunct to thermodynamics only.

The weaknesses of this book as a text lie both in style and content. It is dry and unimaginative in the treatments of each separate topic, and the student can get no feel for the correlations between different areas of physical chemistry from it. The text has much information presented as facts, but many too few examples where the theory or basic science is worked out in depth, or the implications are discussed fully. Overall, this is, in my opinion, a comprehensive cookbook of physical chemistry—with a good instructor to add flavor and insight, it could be the basis for a good course, but a course based on this text alone would be neither very palatable or nourishing for a good student.

John C. Light, *The University of Chicago*

**Analytical Profiles of Drug Substances. Volume 4.** Edited by K. FLOREY (Squibb Institute for Medical Research). Academic Press, Inc., New York, N.Y. 1975. xi + 526 pp. \$26.50.

This volume continues the series being compiled under the aegis of the Pharmaceutical Analysis and Control Section, Academy of Pharmaceutical Sciences. For a group of compendial drug substances, Analytical Profiles are a source of information not found in the USP and NF. These Profiles are monographs typically covering physical and chemical data, methods of synthesizing the drug substances, and analytical methods. The latter include assays for the drug and its metabolites in blood, urine, and tissue. Pathways of physical and biological degradation of the drug substance are traced where possible.

Some of the 20 drug substances accorded monographs in this volume are chloramphenicol, diatrizoic acid, disulfiram, norethindrone, reserpine, and theophylline.

In view of the obvious care and expertise with which knowledgeable pharmaceutical analysts have compiled these Profiles, it may not be amiss to point out a misleading statement on page 151. In the diatrizoic acid Profile, under Free Iodine and Free Halide, "an alternate procedure . . ." implies a test for free iodine only. The addition of sodium nitrite to the acidified solution as described would oxidize free iodide ion to iodine, and the observed red color in the chloroform layer would be due to free iodine plus free iodide in the diatrizoic acid sample.

The series fills a need; particularly useful to workers in pharmaceutical analysis are data on stability and decomposition products of drug substances. In addition, valuable time-savers are easily located thin-layer and liquid chromatographic systems and Federal Register methods for widely used drug substances.

Betty B. Lubitz, *Sterling-Winthrop Research Institute*

**The Psychobiology of Depression.** Edited by J. MENDELS (University of Pennsylvania School of Medicine and Veterans Administration Hospital, Philadelphia). Spectrum Publications/Wiley/Halsted, New York, N.Y. 1975. 175 pp. \$15.00.

Considerable progress has been made in the past 20 years toward understanding the biochemistry of depressive illness. The amine hypotheses in particular have stimulated research, but "sadly, to date, have not led to a coherent basic biological theory of abnormal human behavior, nor have they led to the rational development of more powerful or safer therapies than those available nearly 20 years ago through the benefits of empiricism and simple good luck".

This book is a collection of 11 chapters by different authors, mostly M.D.'s, covering the results of a broad range of research approaches to the study of depression. Some of the topics dealt with, in addition to several on various aspects of biogenic amine hypotheses, are lithium distribution in depressed patients, clinical pharmacological strategies, and clinical biochemistry and the choice of the appropriate medication for the psychiatric patient. The chapter on lithium distribution should catch the interest of chemists; electrolyte metabolism in general and cell membrane function in depression are clearly presented.

Concerned with a subject of immediate personal interest to many people, this book is a good presentation of the state of the art in a complex field. It should be useful to both laymen and workers in the field of the chemistry of mental illness.

Betty B. Lubitz, *Sterling-Winthrop Research Institute*