

**Formation of Alkenes in the Pyrolysis and Photolysis of 1,2-Bis(phenylthio)ethanes** [*J. Amer. Chem. Soc.*, **94**, 8447 (1972)]. By PHILIP B. SHEVLIN\* and JOSEPH L. GREENE, JR., Department of Chemistry, Auburn University, Auburn, Alabama 36830.

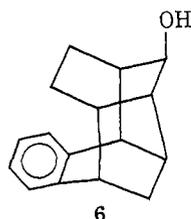
A reference to an earlier report of this type of thermal elimination [A. Schönberg and T. Stolpp, *Justus Liebigs Ann. Chem.*, **483**, 90 (1930)] was inadvertently omitted. Schönberg and Stolpp observed that 9,9'-bisphenylthio-9,9'-bifluorenyl eliminates phenyl disulfide to form 9,9'-bifluorenylidene.

**Unimolecular Decomposition of 1,2- and 2,2-Bis(di-fluoramino)propane** [*J. Amer. Chem. Soc.*, **94**, 8776 (1972)]. By DAVID S. ROSS,\* THEODORE MILL, and MARION E. HILL, Physical Sciences Division (Chemistry), Stanford Research Institute, Menlo Park, California 94025

In the by-line of the paper the name of the last author listed should read Marion E. Hill.

**Chemistry of 9,10-Benzotricyclo[4.2.2.<sup>2,5</sup>]dodeca-3,7,9-triene, a Novel Polycyclic Compound** [*J. Amer. Chem. Soc.*, **94**, 9228 (1972)]. By N. C. YANG\* and JACQUELINE LIBMAN, Department of Chemistry, University of Chicago, Chicago, Illinois 60637.

The correct structure for compound **6** is



**Mechanism of Metal Ion Promoted Hydrogen Exchange Reactions. Magnesium(II) and Acetonyl Phosphonate** [*J. Amer. Chem. Soc.*, **95**, 1071 (1973)]. By RONALD KLUGER\* and PHILIP WASSERSTEIN, Department of Chemistry, The University of Chicago, Chicago, Illinois 60637.

Page 1073, column 2, line 50 should read: equimolar (0.2 M) concentrations over 75% of both species are. . . .

**A Study of the Binding of Two Sulfonamides to Carbonic Anhydrase** [*J. Amer. Chem. Soc.*, **95**, 1616 (1973)]. By JITKA OLANDER, SIDNEY F. BOSEN, and E. T. KAISER,\* Department of Chemistry, The University of Chicago, Chicago, Illinois 60637.

We have been kindly informed by Professor T. H. Maren and Dr. R. W. King that the  $pK_a$  value we gave in our article for the ionization of pentafluorobenzene-sulfonamide was much too low. By the potentiometric titration at 29° of  $5.16 \times 10^{-3} M$  pentafluorobenzene-sulfonamide in 0.042 M  $Na_2SO_4$  ( $\mu = 0.13$ ), Dr. Y. Nakagawa in our laboratory has now found that  $pK_a = 8.05$  for the ionization of the sulfonamide group. Recalculation employing this  $pK_a$  indicates that the largest values of  $k_1^a$  and  $k_1^n$  for the binding of this compound to carbonic anhydrase as given in Table I should be  $2.1 \times 10^8 M^{-1} sec^{-1}$  and  $1.2 \times 10^7 M^{-1} sec^{-1}$ , respectively. Both of these rate constants are below the theoretical diffusion limit. Therefore, on the basis of our data, contrary to our published statements, we cannot rule out the hypothesis of eq 10, which corresponds to the binding scheme supported by Taylor, *et al.* (ref 24).

**Insensitivity to Steric Hindrance of E2 Olefin-Forming Elimination Induced by Mercaptide Ions in Methanol** [*J. Amer. Chem. Soc.*, **95**, 1900 (1973)]. By J. F. BUNNETT\* and DAVID L. ECK, University of California, Santa Cruz, California 95064.

There are discrepancies between the tabulated kinetic data and statements in the text as to the relative rates of elimination from isopropyl bromide (**3**) and 2-bromo-3,3-dimethylbutane (**4**). The tabulated data are correct, but two paragraphs of the text should be disregarded: that on page 1902, second column, starting "Second, . . ." and that on page 1903, first column, starting "That hindered. . .".

The reactivity of **3** relative to **4**, in the elimination mode, is 13.7 with methoxide ion and less than 4.5 with thioethoxide ion. After statistical correction, these ratios are 6.8 and <2.2, respectively. A modest amount of steric hindrance is evident; it is compatible with attack of the base on  $\beta$ -H, *via* transition states of type 2. That steric retardation is less with the mercaptide than with the alkoxide base is perhaps due to London dispersion interactions<sup>20</sup> which should be especially favorable in the transition state for attack of thioethoxide ion on **4**.

## Book Reviews\*

**Aromaticity, Pseudo-Aromaticity, Anti-Aromaticity.** Edited by E. D. BERGMANN (Hebrew University) and B. PULLMAN (Université de Paris). Israel Academy of Sciences, Jerusalem. 1971. 398 pp. \$21.50.

This is Volume III of the Jerusalem Symposium on Quantum Chemistry and Biochemistry and contains the proceedings of the

symposium held in the spring of 1970. Thirty-four papers by an international selection of chemists (from which representatives of eastern Europe were notably absent) document the efforts to achieve an acceptable definition of the term "aromaticity" from either a theoretical or experimental viewpoint. The problem was not resolved, but at least it was more clearly delineated. The discussions following each paper, reproduced in mildly edited form, are of greater interest than usual. A good index contributes to the reference value of this book.

\* Unsigned book reviews are by the Book Review Editor.