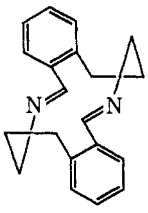
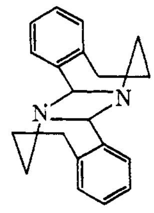
to 1,3-diazetidines and Schiff base exchange reactions *via* diazetidines have been reported.[5] We saw no evidence for diazetidine intermediates in the present work. Examination of Dreiding and/or Corey–Pauling–Koltun models of all the various geometrical and conformational possibilities for both dimer **2** and the assumed diazetidine intermediate suggests that the most stable configurations for **2** and the intermediate are the *trans*,-*trans* "chair" structure **5** and the *cis,anti,cis* structure **6**, respectively.[6] In **5** the imine dipoles are already closely aligned for facile bond formation to give **6**. The models of **5** also show that the diamagnetic shift of the N–CH_2 protons in **2** relative to **1** (Δ = +0.25 ppm) can be ascribed to the phenyl ring current effect in the unstrained conformations of **2**. The deshielding of the benzylic protons in **2** relative to **1** (Δ = −0.17 ppm) may be the result of the close proximity of these protons in **2** to the deshielding cones of the imine groups. The models of **5** and **6** show that introduction of methyl groups into the 2 and 9 positions of **5**, and into the corresponding positions of the diazetidine ring of **6**, would result in severe overcrowding, especially in **5**. This would result in the destabilization of dimer relative to monomer, thereby accounting for the observation that the 1-methyl analog of **1** showed no tendency to dimerize.



5



6

Identical dimerization–monomerization reactions also occur in the Bischler–Napieralski sequence with N-formyl-3,4-dimethoxyphenylpropylamine. In this regard we have repeated a portion of the work of Kanaoka, *et al.*,[7] and found that their structures "IVa" and "Va" are actually dimers corresponding to **2** and **3**.[8] We are presently investigating other examples of imine dimerizations as a route to medium-ring di-Schiff bases.

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[5] C. K. Ingold and H. A. Piggott, *J. Chem. Soc.*, 121, 2793 (1922); 123, 2745 (1923).

[6] Structures **5** and **6** appear to have the least strain and the fewest nonbonded interactions of the various possibilities. The tricyclic system in **6** has the four-membered ring fused in the most stable (*cis*, pseudo-equatorial) conformation to the seven-membered rings.

[7] Y. Kanaoka, E. Sato, O. Yonemitsu, and Y. Ban, *Tetrahedron Letters*, 2419 (1964).

[8] This conclusion is based on careful comparison of our data with the reported[7] data. Our melting points were higher than those reported. In our hands, the polyphosphoric ester procedure led to products showing appreciable and varying amounts of ether interchange; pure products were obtained using polyphosphoric acid and/or phosphorus pentoxide.

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Received June 4, 1969

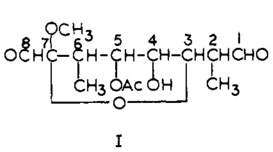
Additions and Corrections

Organic Sulfur Chemistry. I. The Disulfide–Phosphine Reaction. Desulfurization with Tris(diethylamino)phosphine [*J. Am. Chem. Soc.* **90,** 4181 (1968)]. By DAVID N. HARPP, JOHN G. GLEASON, and JAMES P. SNYDER, Department of Chemistry, McGill University, Montreal, Quebec, Canada.

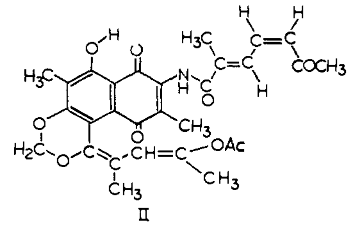
The fifth disulfide in Table I should appear as C_6H_5-$SSCH_3$.

Chemistry of the Streptovaricins. V. Structures of Streptovaricins A and C [*J. Am. Chem. Soc.*, **90,** 6241 (1968)]. By KENNETH L. RINEHART, JR., HARI H. MATHUR, KAZUYA SASAKI, PRESTON K. MARTIN, and CHARLES E. COVERDALE, Department of Chemistry and Chemical Engineering, University of Illinois, Urbana, Illinois 61801.

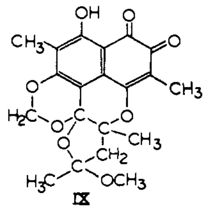
Structures I, II, and IX were omitted from the published manuscript.



I



II



IX

Triplet–Triplet Energy Transfer from the Second Triplet States of Anthracenes. Chemical Studies [*J. Am. Chem. Soc.*, **91** 1492 (1969)]. By ROBERT S. H. LIU and JAMES

R. Edman, Department of Chemistry, University of Hawaii, Honolulu, Hawaii 96822.

The order of appearance of Figures 2–4 is in error although the captions are correctly located. The graph appearing first is Figure 4, while the energy diagram and the second graph are Figures 2 and 3.

In Table IV, the quantum yield of reaction with mixed sensitizers should be read as 0.0002.

Topological Representation of Stereoisomerism. I. Polytopal Rearrangements [*J. Am. Chem. Soc.*, **91,** 1636 (1969)]. By E. L. Muetterties, Frick Laboratory, Princeton University, Princeton, New Jersey 08540.

On page 1642, the second sentence in column one should read: "The stereoisomeric class is not closed although *I·δ* products are equivalent."; and the tenth sentence should read "number of steps for this process is eight." The numbering sequence for the icosahedron to the right in Figure 14 should be 1, 3, 6, 11, 12, 7, 2, 5, 10, 8, 4, 9.

Diamagnetic Susceptibility Exaltation in Hydrocarbons [*J. Am. Chem. Soc.*, **91,** 1991 (1969)]. By Hyp J. Dauben, Jr., James D. Wilson, and John L. Laity, Department of Chemistry, University of Washington, Seattle, Washington 98105.

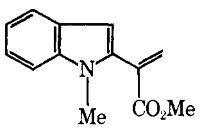
The first citation in footnote 56 should be: J. Musher, *J. Chem. Phys.*, **43,** 4081 (1965).

Photolysis of Diene–Iron Tricarbonyls. Evidence for Norbornadien-7-one [*J. Am. Chem. Soc.*, **91,** 2120 (1969)]. By J. M. Landesberg and J. Sieczkowski, Department of Chemistry, Adelphi University, Garden City, New York 11530.

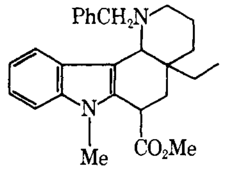
On page 2120, paragraph 4, line 6, **9** should read **3.**

A Synthesis of Quebrachamine and 3,4-Dehydroquebrachamine [*J. Am. Chem. Soc.*, **91,** 2342 (1969)]. By Frederick E. Ziegler, James A. Kloek, and Phillip A. Zoretic, Sterling Chemistry Laboratory of Yale University, New Haven, Connecticut 06520.

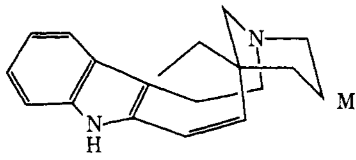
The following corrections in diagrams should be noted.



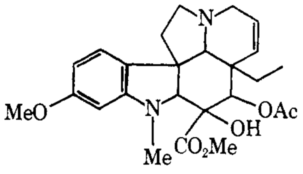
i



ii



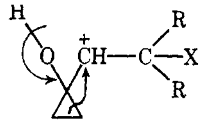
18



19

Cyclopropanone Reactions. Cyclobutanone Derivatives from Vinylic and Acetylenic Cyclopropanols [*J. Am. Chem. Soc.*, **91,** 2376 (1969).] By Harry H. Wasserman, Robert E. Cochoy, and Mark S. Baird, Department of Chemistry, Yale University, New Haven, Connecticut 06520.

On page 2376 the formula between IV and V should have a positive charge as shown below.



a, X = H
b, X = Cl
c, X = OH
d, X = $CH_2N(R')_2$

Book Reviews

Inorganic Electronic Spectroscopy. By A. B. P. Lever, B. Sc., A.R.C.S., Ph.D., D.I.C., Associate Professor of Chemistry, York University, Toronto, Canada. American Elsevier Publishing Co. Inc., 52 Vanderbilt Ave., New York, N. Y. 1968. xii + 420 pp. 15.5 × 23 cm. $31.50.

This book fills a much neglected gap for the beginning researcher in the field of inorganic electronic spectroscopy. The book describes in nonmathematical terms the basics for understanding and interpreting the phenomenon of the absorption spectroscopy of transition metal complexes and is a convenient starting point for the more advanced texts in this area.

The first five chapters give the basic foundation for much of the rest of the book. The chapters titled Atomic Structure, Molecular Symmetry, Group Theory, Crystal Field Diagrams, and Term Diagrams are reasonably well written; however, much of the material is presented with no attempt to justify it. This would be very dissatisfying to the serious student, but should present little problem if one is *only* trying to obtain an overview of the field of inorganic electronic spectroscopy.

The next two chapters—Selection Rules, Band Intensities and Dichroism and Some Theoretical Aspects of Electronic Spectra—provide valuable information and techniques for assignments and interpretations of spectra not found in any one book. Again, since the theory considerations occupy only about 30 pages, they cannot be too satisfying, but the essentials are presented. The discussion of the variation of the Racah parameter *B* should of course be taken with a grain of salt.

Perhaps the most important contribution of this book is in the last two chapters which deal with applications of the ideas presented earlier in the book. There is a short chapter on charge-transfer spectra which adequately conveys the message that this type of spectra is not well understood. The last and in my opinion the most important chapter is a compilation of spectra for individual transition metals ions in various steriochemistries and oxidation states. Many spectra are reproduced in this chapter, and their assignments are discussed in detail utilizing the techniques such as dichroism and band intensities where applicable. The author has also pointed out many of the pitfalls that one can run into and has alerted the reader to those assignments which may be incorrect or still under question. The large number of references in these chapters gives a key to the literature up to early 1967.

The appendices contain character tables for various groups, a method for calculating one-electron d-orbital energies, and a novel