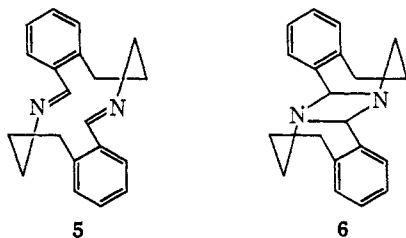


to 1,3-diazetidines and Schiff base exchange reactions *via* diazetidines have been reported.⁵ We saw no evidence for diazetidine intermediates in the present work. Examination of Dreiding and/or Corey-Pauling-Koltun models of all the various geometrical and conformational possibilities for both dimer **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-CH₂ protons in **2** relative to **1** ($\Delta = +0.25$ ppm) can be ascribed to the phenyl ring current effect in the unstrained

(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.

conformations of **2**. The deshielding of the benzylic protons in **2** relative to **1** ($\Delta = -0.17$ 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.

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.

(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 reported⁷ 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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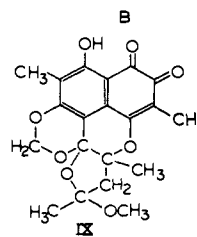
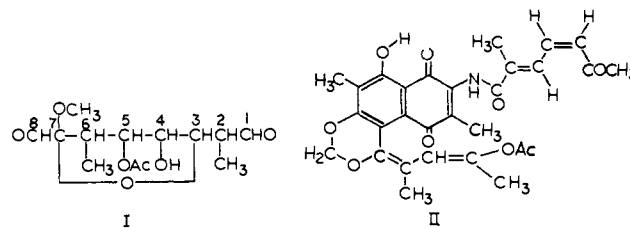
Additions and Corrections

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 C₆H₅-SSCH₃.

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.



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