

cephalosporium caerulens, have a unique tricyclic system composed of fused five-, eight- and five-membered rings. The junction between rings A and B and between B and C in ceroplasteric acid and ceroplastol I, however, are both found to be *trans*, in contrast to the *cis/trans* disposition in ophiobolins A, B, and C. Furthermore, the absolute configurations at C₆, C₁₀, and C₁₁ are opposite to those found in ophiobolins A, B, and C. In ophiobolin D, the situation is the same as in

(10) A. Itai, S. Nozoe, K. Tsuda, S. Okuda, Y. Itaka, and Y. Nakayama, *Tetrahedron Letters*, 4111 (1967).

the other ophiobolins except that around C₆ which forms a double bond to C₇.

(11) Research Fellow from Yoshitomi Seiyaku Co. Ltd.

Yoichi Iitaka, Ichiro Watanabe¹¹

Faculty of Pharmaceutical Sciences, University of Tokyo
Hongo, Tokyo, Japan

Ian T. Harrison, Shuyen Harrison

Syntex Research
Palo Alto, California

Received December 8, 1967

Additions and Corrections

The Photoisomerization of the 2,3-Dihydrooxepin Ring. Long-Range Coupling in Some 2-Oxabicyclo[3.2.0]hept-6-enes [*J. Am. Chem. Soc.*, **87**, 3417 (1965)]. By LEO A. PAQUETTE, JAMES H. BARRETT, ROBERT P. SPITZ, and ROSS PITCHER. Department of Chemistry, The Ohio State University, Columbus, Ohio, and the Varian Associates Application Laboratory, Pittsburgh, Pennsylvania.

The calculations concerning the carbon-chlorine bond anisotropy effects should read as follows

$$[1 - 3(\cos 39.5^\circ)^2] = -0.788$$

$$\frac{\Delta\sigma_{\text{XIII}}}{\Delta\sigma_{\text{Va}}} = \frac{(2.92)^2(+0.427)}{(2.32)^2(-0.788)} = -1.08$$

$$\Delta\sigma_{\text{Vc}}(\text{calcd}) = -\frac{0.45}{1.08} = -0.417$$

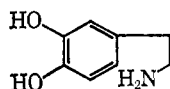
Also, the legends a and b in Figure 4 should be reversed.

Nuclear Magnetic Resonance Spectroscopy. Magnetic Nonequivalence Due to Slow Inversion in Amines [*J. Am. Chem. Soc.*, **87**, 4089 (1965)]. By DEAN L. GRIFFITH and JOHN D. ROBERTS. Gates and Crellin Laboratories of Chemistry, California Institute of Technology, Pasadena, California.

The legend to Figure 3 should read: Variation of E_a for nitrogen inversion of N-benzyl-O,N-dimethylhydroxylamine with solvent dielectric constant.

Electrochemical Studies of the Oxidation Pathways of Catecholamines [*J. Am. Chem. Soc.*, **89**, 447 (1967)]. By M. D. HAWLEY, S. V. TATAWAWADI, S. PIEKARSKI, and R. N. ADAMS. Department of Chemistry, University of Kansas, Lawrence, Kansas 66044.

Table II contains several errors. The structure of dopamine is



The two bottom lines should read as shown below

pK_a^c	9.90	9.78	9.75	10.63	9.87
$k_2^{a,b}$	7.7×10^4	3.8×10^2	6.4×10^2	1.6×10^2	1.2×10^4
	* G. P. Lewis, <i>Brit. J. Pharmacol.</i> , 9 , 488 (1954).				

Novel Analgesics and Molecular Rearrangements in the Morphine-Thebaine Group. III. Alcohols of the 6,14-endo-Ethenotetrahydrooripavine Series and Derived Analogs of N-Allylnormorphine and -norcodeine [*J. Am. Chem. Soc.*, **89**, 3281 (1967)]. By K. W. BENTLEY and D. G. HARDY. Research Laboratories, Reckitt and Sons Ltd., Kingston-upon-Hull, England.

In the abstract, line 1, for IV and V read III and IV; line 4, for XI and XII read VII and VIII; lines 5 and 6, for XIII and XII read IX and VIII.

Novel Analgesics and Molecular Rearrangements in the Morphine-Thebaine Group. V. Derivatives of 7,8-Dihydrocyclohexeno[1',2':8,14]codeinone [*J. Am. Chem. Soc.*, **89**, 3303 (1967)]. By K. W. BENTLEY, D. G. HARDY, C. F. HOWELL, W. FULMOR, J. E. LANCASTER, J. J. BROWN, G. O. MORTON, and R. A. HARDY, JR. Research Laboratories, Reckitt and Sons Ltd., Kingston-upon-Hull, England, and The Organic Chemical Research Section, Lederle Laboratories, Division of American Cyanamid Co., Pearl River, New York.

On page 3307, in formula XVIII, the C—R' bond should be C---R'. The question marks alongside the arrows between formulas XVIII and XXI and between formulas XXI and XXV should be deleted.

Nuclear Magnetic Resonance Studies in the 6,14-endo-Ethenotetrahydrothebaine Series [*J. Am. Chem. Soc.*, **89**, 3322 (1967)]. By WILLIAM FULMOR, JOHN E. LANCASTER, GEORGE O. MORTON, JOHN J. BROWN, CHARLES F. HOWELL, CAROL T. NORA, and ROBERT A. HARDY, JR. Organic Chemical Research Section, Lederle Laboratories, Pearl River, New York 10965, and the Research Service Department, Central Research Laboratories, Stamford, Connecticut, Divisions of American Cyanamid Company.

On page 3322, footnote 3 should read as follows: H. Rapoport and P. Sheldrick, *ibid.*, **85**, 1636 (1963), have used a slightly different numbering for a closely related system.

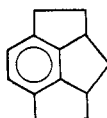
On page 3326, Table III, the data for H-8 β should read as follows and footnote *b* should be introduced at the bottom of the table.

Proton	No. of examples	Average chem shift, δ	Coupling constant, J (cps)	Exceptions
H-8 β	16	2.9 ± 0.15	8 β ,8 α (12 ± 2) ^b 8 β ,7 β (8 ± 0.5) ^b 8 β ,7 α (4.3 ± 0.7) ^b	IX (2.67)

^b Known only for the compounds in Table II.

Crowded Benzenes. VI. The Strain Energy in *o*-Di-*t*-Butylbenzenes [*J. Am. Chem. Soc.*, **89**, 5389 (1967)]. By EDWARD M. ARNETT, JOSEPH C. SANDA, J. M. BOLINGER, and M. BARBER. Department of Chemistry, University of Pittsburgh, and Mellon Institute, Pittsburgh, Pennsylvania 15213.

On page 5399, structure V should be



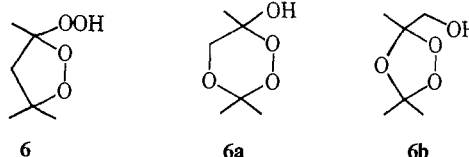
Deuterium Migration during the Acid-Catalyzed Dehydration of 6-Deuterio-5,6-dihydroxy-3-chloro-1,3-cyclohexadiene, a Nonenzymatic Model for the NIH Shift [*J. Am. Chem. Soc.*, **89**, 5488 (1967)]. By DONALD M. JERINA, JOHN W. DALY, and BERNHARD WITKOP. National Institutes of Health, Bethesda, Maryland.

Structures XII and XVI on the flow sheet on page 5488 should be interchanged so that loss of a proton (deuteron) leads from XI to XII and from XV to XVI.

Ozonolysis. Evidence for Carbonyl Oxide Tautomerization and for 1,3-Dipolar Addition to Olefins [*J. Am. Chem. Soc.*, **89**, 5726 (1967)]. By PAUL R. STORY and JOHN R. BURGESS. Department of Chemistry, The University of Georgia, Athens, Georgia 30601.

The structure assigned to compound **6** has been found to be incorrect. Although the evidence for carbonyl oxide tautomerization stands, the evidence for carbonyl

oxide addition to an olefin is not valid. The structure **6** was assigned on the basis of several pieces of information, all but two of which were equally consistent with **6a** and **6b**, structures which could result from the reaction of carbonyl oxide with hydroxy acetone.



The structure **6** was chosen (and **6a** and **6b** eliminated) principally on the basis of hydride reduction which yielded only isopropyl alcohol. We now find, after more careful searching, that 1,3-propanediol is also present. Furthermore, Professor R. Criegee has pointed out to us that **6** has been synthesized by Rieche [A. Rieche, E. Schmitz, and E. Gundemann, *Chem. Ber.*, **93**, 2443 (1960)]. Our compound is not identical with Rieche's. Although we cannot decide unequivocally between **6a** and **6b** for the structure in question, the nmr evidence favors **6a**.

σ - and π -Bonding Effects in the Coordination of the Cyano Group [*J. Am. Chem. Soc.*, **89**, 6139 (1967)]. By KEITH F. PURCELL. Department of Chemistry, Kansas State University, Manhattan, Kansas 66502.

In Table II, the experimental value of f_z for N¹⁴ in CH₃NC should be <0.05 and not 0.5.

On page 6141, column 2, the entry for "Cl, Exptl" should read 0.72 (not 0.92).

Conformations of Cyclic Peptides. The Folding of Cyclic Dipeptides Containing an Aromatic Side Chain [*J. Am. Chem. Soc.*, **89**, 6193 (1967)]. By KENNETH D. KOPPLE and DAVID H. MARR. Department of Chemistry, Illinois Institute of Technology, Chicago, Illinois 60616.

On page 6195, all of the entropy change values given in Table II are too small by a factor of *R*. The average entropy change referred to in the discussion is thus 6–8 cal/mole deg.

Book Reviews

Mechanistic Organic Photochemistry. By DOUGLAS C. NECKERS. Department of Chemistry, Hope College, Holland, Mich. Reinhold Publishing Corp., 430 Park Ave., New York, N. Y. 1967. xii + 320 pp. 16 × 23.5 cm. \$14.75.

The rapidly proliferating field of photochemical research has reached the point where there are four new textbooks, two new review series, and a new photochemical journal. Nearly all of these have appeared in the last four years, an observation which reflects the current popularity of photochemistry. This particular monograph, according to the author's preface, has been designed to fit the needs of undergraduate seniors and beginning graduate students who seek an introduction to the topic of organic photochemistry. In this respect, the author has done an admirable job.

The tone of the book is essentially descriptive and is quite comprehensive in its treatment of various classes of organic photoreactions. The first four chapters of the book provide background information and an introduction to photochemical reactions. After a brief introductory chapter (7 pp) dealing with the relationship of photochemistry to spectroscopy and kinetics, the next three chapters (47 pp) are devoted to a discussion of absorption processes, electronic transitions, the Franck-Condon principle, photophysical phenomena, excited-state multiplicity, and energy transfer. Although these three sections could have been much expanded, the present treatment provides both adequate orientation and entrée to the literature.

The longest part of the book, some 240 pages, is concerned with essentially all of the important aspects of photochemical reaction