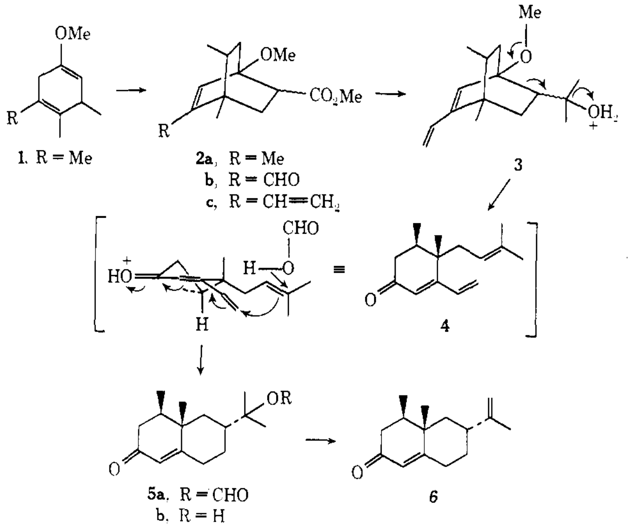
Scheme I[a]



[a] All compounds have satisfactory spectral data.

allylic position. Dropwise addition of ethereal methylenetriphenylphosphorane[10] to **2b** gave the diene **2c** (50%) which was converted to the carbinol **3** by the action of ethereal methyllithium at room temperature (96%).

Stirring of **3** with excess formic acid for 1 hr at room temperature gave rise to **5a** (50% after purification). Saponification (aqueous NaOH, *t*-BuOH, 20°) of **5a** produced **5b** (90%). The spectral properties of **5b** were identical with those reported for 11-hydroxy-11,12-dihydronootkatone.[4] Refluxing of **5a** in pure collidine for 15 hr in the presence of 30% by weight of neutral alumina (with respect to **5a**) gave a mixture of elimination products (70% after purification). A sample of the major component (75% by nmr and glc) obtained by preparative glc was found to be spectrally identical and superimposable on glc with an authentic sample of nootkatone.[11] The remaining 25% of the elimination product consisted mainly of α-vetivone (nmr analysis[12]). No 7-*epi*-nootkatone could be detected by careful pmr analysis,[13] showing that the final ring closure step (Scheme I) is stereospecific. The functionalized isopropyl side chain of **5a** therefore exists in the thermodynamically preferred equatorial configuration, as in natural nootkatone. Furthermore, since no trans (*C*)-4,5-dimethyl compound could be detected[14] the Diels–Alder reaction to give **2a** is stereoselective as previously discussed.

A full paper bearing experimental details will appear at a later date.

Acknowledgments. The author is indebted to Professor A. J. Birch for the suggestion that the Diels–Alder reaction should give the correct configuration of the methyl groups. The award of a Research Scholarship from the Australian National University is gratefully acknowledged.

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(10) G. Wittig and U. Schoellkopf, *Org. Syn.*, **40**, 66 (1960).

(11) The author is indebted to Dr. M. Pesaro, Givaudan-Esrolko, Zurich, for a gift sample of nootkatone.

(12) K. Endo and P. de Mayo, *Chem. Pharm. Bull.*, **17**, 1324 (1969).

(13) The pmr signal of the C(5)-methyl group is shifted 3 Hz downfield going from nootkatone to 7-*epi*-nootkatone. No signal corresponding to the latter compound could be detected at optimum resolution on a JEOL 100 MHz nmr spectrometer. Similar analysis has been employed previously.[4]

(14) In *trans*-4,5-dimethyleremophilanes the pmr signal of the C(5)-methyl group is shifted up to 30 Hz upfield with respect to the corresponding cis isomers.[4] No such signal is observed for **5b** and **6**.

Additions and Corrections

A Bell-Shaped pH–Rate Profile for an Oxidation. The Reaction of Permanganate with Hydroxycyclohexanecarboxylic Acids [*J. Amer. Chem. Soc.*, **93**, 4271 (1971)]. By Ross Stewart* and J. Anthony MacPhee, Department of Chemistry, University of British Columbia, Vancouver 8, Canada.

The value of k_1 for compound **3** in Table I should be 731 ± 25. The units on the *y* axes of Figures 2 and 3 should be l. mol⁻¹ min⁻¹.

The Mechanism of Reactions Involving Schiff Base Intermediates. Thiazolidine Formation from L-Cysteine and Formaldehyde [*J. Amer. Chem. Soc.*, **93**, 6236 (1971)]. By Roland G. Kallen, Department of Biochemistry, School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania 19104.

Equations 9 and 10 should read as shown below.

$$k_{\text{obsd}} = \frac{(k_{1a}\alpha_3 + k_{1b}\alpha_{13})[\text{F}]\alpha_{\text{RNH}_2\text{T}}/(\alpha_3 + \alpha_{13})}{\left\{\dfrac{k_{1a}\alpha_3/K_1 + k_{1b}\alpha_{13}/K_1}{(\alpha_3 + \alpha_{13})(k_2 + k_2'a_{\text{H}^+})}\right\} + 1} \qquad (9)$$

$$k_{\text{obsd}} = \frac{(k_{1a}\alpha_3 + k_{1b}\alpha_{13})[\text{F}]\alpha_{\text{RNH}_2\text{T}}/(\alpha_3 + \alpha_{13})}{\left\{\dfrac{k_{1a}\alpha_3/K_1 + k_{1b}\alpha_{13}/K_1}{(\alpha_3 + \alpha_{13})(k_2 + k_2'a_{\text{H}^+} + k_2''[\text{HA}])}\right\} + 1} \qquad (10)$$

Determination of the Tautomeric Form of the Imidazole Ring of L-Histidine in Basic Solution by Carbon-13 Magnetic Resonance Spectroscopy [*J. Amer. Chem. Soc.*, **95**, 328 (1973)]. By W. F. Reynolds,* I. R. Peat, M. H. Freedman, and J. R. Lyerla, Jr., Department of Chemistry and the Faculty of Pharmacy, University of Toronto, Toronto, Ontario, Canada, M5S 1A1.

In Table II, the entries listed for 3-methylhistidine are actually those for 1-methylhistidine, and the entries listed for 1-methylhistidine are those for 3-methylhistidine.

Photodissociation of Toluene Parent Cations [*J. Amer. Chem. Soc.*, **95,** 472 (1973)]. By Robert C. Dunbar, Department of Chemistry, Case Western Reserve University, Cleveland, Ohio 44106.

The Acknowledgment section of this paper was inadvertently omitted. Acknowledgment is made to the Research Corporation, to the donors of the Petroleum Research Fund, administered by the American Chemical Society, and to the National Science Foundation (Grant No. GP-33521X) for partial support of this research.

Thiadiaziridine 1,1-Dioxides. An Unusually Stable Strained Heterocyclic Ring System [*J. Amer. Chem. Soc.*, **95,** 634 (1973)]. By J. W. Timberlake* and M. L. Hodges, Department of Chemistry, Louisiana State University in New Orleans, New Orleans, Louisiana 70122.

The nmr chemical shifts of **6b** were incorrectly recorded for **4b**. The nmr of bis(1,1,3,3-tetramethylbutyl)thiadiaziridine 1,1-dioxide (**4b**) in CCl_4 is a singlet at 1.12 (18 H), a singlet at 1.49 (12 H), and a doublet at 1.76 ppm (4 H). The melting point of **4a** is 35.5–36° and that of **4b** is 49–49.5°.

Absorption and Exciplex Emission Spectra of the Naphthalene–Anthracene Sandwich Pair [*J. Amer. Chem. Soc.*, **95,** 1671 (1973)]. By Edwin A. Chandross* and Anne H. Schiebel, Bell Laboratories, Murray Hill, New Jersey 07974.

A similar broad fluorescence has been observed by Jones and Nicol for naphthalene crystals doped with anthracene, when pressure is applied. Mixed excimer fluorescence was also suggested to explain their observations. P. F. Jones and M. Nicol, *J. Chem. Phys.*, **48,** 5440, 5457 (1968).

Heats of Reaction of Triphenyl Phosphite with Some Rhodium–Olefin Compounds [*J. Amer. Chem. Soc.*, **95,** 2840 (1973)]. By Walter Partenheimer* and Edgar F. Hoy, Department of Chemistry, Clarkson College of Technology, Potsdam, New York 13676.

Professor R. S. Drago points out that the relationship $\Delta H_{\text{solvent A}} = \Delta H_{\text{solvent B}} +$ constant (top of page 2843, second column) refers to reactions of the type A + B → C, not to the type stated in the paper. The following four equations can be rearranged to give

$$[\mathrm{Rh(acac)\,(C_8H_{12})}] + \mathrm{C_8H_8} \xrightarrow{\mathrm{CH_2Cl_2}} [\mathrm{Rh(acac)\,(C_8H_8)}] + \mathrm{C_8H_{12}}$$
$$\Delta H = 4.2 \text{ kcal/mol}$$

and the corresponding enthalpic value in CCl_4 of 4.5 kcal/mol. Thus the value found in CH_2Cl_2, where specific interactions are expected to occur, is the same as that in CCl_4, where they are not expected to occur.

Mössbauer Study of Stereochemistry Intermediate to Octahedral and Trigonal Prismatic [*J. Amer. Chem. Soc.*, **95,** 3048 (1973)]. By W. M. Reiff, Department of Chemistry, Northeastern University, Boston, Massachusetts 02115.

The figure captions were inadvertently omitted from the published paper. They are given below.

Figure 1. Schematic structural formulas and Mössbauer parameters for some tris diimine ferrous complexes.

Figure 2. Mössbauer spectrum of $[Fe(PccBF)]BF_4$ at (a) 300 K, $H = 0$; (b) 300 K, $H \approx 18$ kG.

Figure 3. Single electron d orbitals in the TAP and TP limits.

Figure 4. Mössbauer spectrum of $[Fe(py)_3tren](ClO_5)_2$ at 300 K, $H \approx 18$ kG.

Transition States in Chromium(VI) Oxidation of Alcohols [*J. Amer. Chem. Soc.*, **95,** 3394 (1973)]. By H. Kwart* and J. H. Nickle, Department of Chemistry, The University of Delaware, Newark, Delaware 19711.

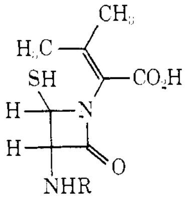
In Table I, all rate constants should be in units of sec^{-1} instead of min^{-1} as presently listed. Also the activation energy for deuterated di-*tert*-butylcarbinol should read $E_a = 17.1 \pm 0.1$.

Asymmetric Deuteration at the α Carbon of L-Aspartic Acid *via* the Template Action of a Dissymmetric Cobalt(III) Complex [*J. Amer. Chem. Soc.*, **95,** 3431 (1973)]. By William E. Keyes and J. Ivan Legg,* Department of Chemistry, Washington State University, Pullman, Washington 99163.

In Figure 2, D-Asp located at the bottom of the figure under Δ should be replaced by L-Asp.

Incorporation of (2*RS*,3*S*)-[4-^{13}C]Valine into Cephalosporin C [*J. Amer. Chem. Soc.*, **95,** 3797 (1973)]. By Norbert Neuss* and C. H. Nash, Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, Indiana 46206, J. E. Baldwin, Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139, P. A. Lemke, Carnegie-Mellon University, Mellon Institute, Pittsburgh, Pennsylvania 15213, and J. B. Grutzner, Department of Chemistry, Purdue University, West Lafayette, Indiana 47907.

The correct name for the title compound is (2*RS*,3*R*)-[4-^{13}C]valine. Also, the structure for compound **2** given in the paper is incorrect. It should be as shown below.



2

Use of Chiral Isopropyl Groups in Biosynthesis. Synthesis of (2*RS*,3*S*)-[4-^{13}C]Valine [*J. Amer. Chem. Soc.*, **95,** 3796 (1973)]. By J. E. Baldwin,* and J. Löliger, Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139, W.