

Additions and Corrections

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Yitzhak Apeloig* and Amnon Stanger. α -Silicon-Substituted Vinyl Cations. A Theoretical ab Initio Investigation.

Page 1463. Chart II: STO-36 should read STO-3G.

Page 1466. Right column, first line, replace $(\text{CH}_3)_2\text{C}=\text{C}(\text{OTf})\text{-}t\text{-Bu}$ by $\text{CH}_2=\text{C}(\text{OTf})\text{-}t\text{-Bu}$.

Page 1467. Left column, lines 23–25 should read: $k(\text{CH}_2=\text{C}(\text{OTf})\text{SiMe}_3)/k(\text{CH}_2=\text{C}(\text{OTf})\text{-}t\text{-Bu}) \approx 10$,¹⁴ but $k(\text{CH}_2=\text{C}(\text{OTf})\text{C}\equiv\text{CSiMe}_3)/k(\text{CH}_2=\text{C}(\text{OTf})\text{C}\equiv\text{CBu-}t) = 0.019$.

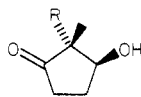
Additions: We have reoptimized all the structures 1–15 with the 3-21G basis set, except that in 3, 6, 9, 12, and 15 we used the geometry of the corresponding parent systems (e.g., 2 for 3) and substituted the allylic silyl or methyl hydrogens by "standard" methyl groups. In 3 and 9 all the geometrical parameters of these methyl groups, except for the C–H bond length, were also optimized. The following 3-21G energies were obtained (hartrees): 1H (-76.65577), 2Si (-365.24815), 2C (-115.51873), 3Si (-481.79255), 3C (-231.99486), 4H (-151.94657), 5Si (-440.53048), 5C (-190.79749), 6Si (-557.06624), 6C (-307.26793), 7H (-77.60099), 8Si (-366.15371), 8C (-116.42401), 9Si (-482.67345), 9C (-232.88096), 10H (-152.85622), 11Si (-441.42693), 11C (-191.68532), 12Si (-557.94781), 12C (-308.14743), 13H (-152.04166), 14Si (-440.59140), 14C (-190.86769), 15Si (-557.11160), 15C (-307.32664). The energies of the isodesmic equations 1–16 at 3-21G (Table II) change as follows (kcal/mol): eq 1 (25.1), eq 2 (24.9), eq 3 (12.0), eq 4 (15.5), eq 5 (-0.2), eq 6 (3.3), eq 7 (15.3), eq 8 (1.8), eq 9 (-1.9), eq 10 (-3.8), eq 11 (-3.6), eq 12 (-8.0), eq 13 (2.8), eq 14a (-13.7), eq 14b (-8.3), eq 15a (-18.9), eq 15b (-17.6), eq 16a (-5.3); eq 16b (-1.3). Most of the conclusions in our paper remain unchanged by these new calculations. The major difference is in the effect of a Si(CH₃) vs. a C(CH₃)₃ substituent. We find that at 3-21G//3-21G Si(CH₃)₃ is by 3–5 kcal/mol more stabilizing than C(CH₃)₃ (e.g., compare eq 3 and 4) while at STO-3G//STO-3G their effects were similar. Small changes in the discussion at the bottom of p 1466 and on p 1467 are therefore required. However, our conclusion regarding the different "transmission factor" of the electronic effect of the SiR₃ and the CR₃ groups by the acetylenic bond remains valid. Thus, at 3-21G//3-21G (kcal/mol): $E(\text{eq 2} - \text{eq 16a}) = 0.2 - (-5.3) = 5.5$ and $E(\text{eq 6} - \text{eq 16b}) = 3.3 - (-1.3) = 4.6$.

David A. Jaeger* and Mary Darlene Ward. Destructible Surfactants Based on a Silicon–Oxygen Bond.

Page 2222. Footnote 11 should read: Deuterium incorporation at the α -position would be expected as the result of elimination followed by nucleophilic addition of hydroxide to vinyltrimethylammonium nitrate.

Dee W. Brooks,* Paul G. Grothaus, and William L. Irwin. Chiral Cyclopentanoid Synthetic Intermediates via Asymmetric Microbial Reduction of Prochiral 2,2-Disubstituted Cyclopentanediones.

Page 2820. Table I. The structures for compounds 3, 6, and 9 should be the corresponding enantiomers:



- 3 (2*R*,3*S*), R = CH₂CH₂CH₃
 6 (2*R*,3*S*), R = CH₂CH=CH₂
 9 (2*R*,3*S*), R = CH₂C≡CH

Page 2821. Scheme I. Compound 5 (2*S*,3*S*) was epimerized to 6 (2*S*,3*R*) by method c (0.5 M in pyridine, 1.2 equiv of p-

toluenesulfonyl chloride, room temperature, 64 h; 0.1 M in DMF, 15 equiv of KNO₂, 85 °C, 70%). Compounds 6 (2*R*,3*S*) and 9 (2*R*,3*S*) were hydrogenated to 3 (2*R*,3*S*). Compound 6 (2*S*,3*R*) was hydrogenated to 3 (2*S*,3*R*).

Ethan D. Sternberg and K. Peter C. Vollhardt*. Cobalt-Mediated [2 + 2 + 2] Cycloadditions En Route to Natural Products: A Novel Total Synthesis of Steroids via the One-Step Construction of the B,C,D Framework from an A-Ring Precursor.

Page 3447. This paper was submitted for publication as a communication but was published in the articles section in error. The editor expresses his regrets to the authors. Full details of this work will appear in the future.

Clifford G. Venier,* Thomas G. Squires,* Yu-Ying Chen, Gregory P. Hussmann, Juliana C. Shei, and Barbara F. Smith. Peroxytrifluoroacetic Acid. A Convenient Reagent for the Preparation of Sulfoxides and Sulfones.

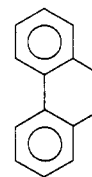
Page 3774. Compounds 9a, 9b, and 9c should be 1,8-bis(2-pyridyl)-3,6-dithiaoctane (Reg. No. 64691-70-9), its bis sulfoxide, 1,8-bis(pyridyl)-3,6-dithiaoctane 3,6-dioxide, and its bis sulfone, 1,8-bis(2-pyridyl)-3,6-dithiaoctane 3,3,6,6-tetraoxide, respectively.

Azeez Mubarak and Bert Fraser-Reid*. Synthetic Routes to 3-C-Cyano-3-deoxy-D-galactopyranose Derivatives.

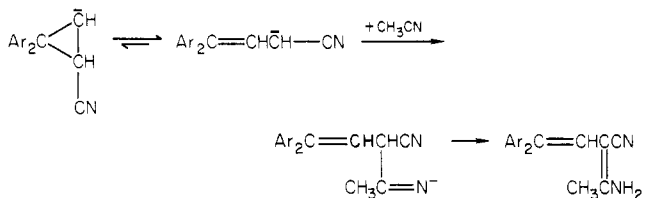
Page 4265. Column 1. The "epimerization of adjacent oxygen sites" mentioned in the last sentence of the fourth paragraph of the paper did not occur in the cited work of Davidson, Guthrie, and McPhail but in the work of: Williams, N. R. *Chem. Commun.* 1967, 1012. The full paper (Davidson, B. E.; Guthrie, R. D.; *J. Chem. Soc. Perkin Trans. 1* 1972, 658) gives a thorough discussion of the chemistry involved.

Chantal Degrand,* Paul-Louis Compagnon, and Françoise Gasquez. Addition of Electrogenerated Cyanomethyl Anions to Fluorenone and Its Schiff Bases. Indirect Evidence of the Formation of an Unstable Cyclopropyl Cyanide Derivative as a Key Intermediate.

Page 4586. Left column. The structural formula for F1 should be



Page 4587. Scheme II. Path a should be replaced by the following:



Page 4587. Left column. Structures 8, a, b, d, and e. Read 8, a, b, d, e = H, CH₃, CN, NH₂.

Page 4587. Line 3 from the bottom in the right column should be H, fluorenyl H), 7.5–7.8 (massif, 4 H, fluorenyl H); ...