

## Additions and Corrections

**Asymmetric Induction in an Enammonium–Iminium Rearrangement. Mechanistic Insight via NMR, Deuterium Labeling, and Reaction Rate Studies. Application to the Stereoselective Synthesis of Pyrroloisoquinoline Antidepressants** [*J. Am. Chem. Soc.* **1990**, *112*, 3567–3579]. KIRK L. SORGI, CYNTHIA A. MARYANOFF, DAVID F. MCCOMSEY, DAVID W. GRADEN, and BRUCE E. MARYANOFF\*

Page 3577, ref 39: Structure iii should have a double bond drawn between atoms C1 and C10b.

**Solid-State Voltammetry and Self-Diffusion Dynamics of a Linear Monotagged Redox Polymer:  $\omega$ -Ferrocenecarboxamido- $\alpha$ -methoxy poly(ethylene oxide)** [*J. Am. Chem. Soc.* **1990**, *112*, 3730]. M. J. PINKERTON, Y. LE MEST, H. ZHANG, M. WATANABE, and ROYCE W. MURRAY\*

The mentioned (ref 16) sublimation loss of ferrocene has been discovered to be substantial, so the monomer diffusion rate was re-determined with solutions of ferrocene carboxylic acid in unlabeled Me<sub>2</sub>PEG (Figure 5 (O, ●), available as Supplementary Material). The monomer diffusion coefficient is, at  $T > T_m$  and at 25 °C, 14× and 19× larger respectively than that of ferrocene-labeled polymer, rather than 3.4× and 12× as cited (Abstract, page 3733, left col, line 18–19, right col, line 10) for the incorrect ferrocene data, and contrary to p 3733, right column, lines 8–16,  $D_{FcMePEG}$  is a good measure of Fc-MePEG polymer chain self-diffusion at both  $T$  greater than and less than  $T_m$ . Other conclusions are unaffected.

**Supplementary Material Available:** Corrected Figure 5 showing the dependence of the apparent diffusion coefficient on temperature for ferrocenecarboxylic acid in Me<sub>2</sub>PEG/LiClO<sub>4</sub> and bulk

Fe-MePEG/LiClO<sub>4</sub> mixtures (1 page). Ordering information is given on any current masthead page.

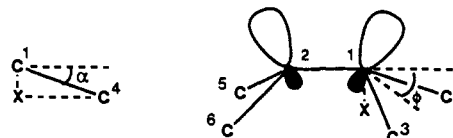
**A New Method for the Stereocontrolled Synthesis of Silyl Dienol Ethers Using (Naphthalene)chromium Tricarbonyl Catalyzed Isomerization** [*J. Am. Chem. Soc.* **1990**, *112*, 4906]. MIKIKO SODEOKA, HIROYOSHI YAMADA, and MASAKATSU SHIBASAKI\*

Reference 2 should include the following: (f) Wan, C. S. K.; Weedon, A. C.; Wong, D. F. *J. Org. Chem.* **1986**, *51*, 3335. (g) Krägeloh, K.; Simchen, G.; Schweiker, K. *Liebigs Ann. Chem.* **1985**, 2352. (h) Tominaga, Y.; Kamio, C.; Hosomi, A. *Chem. Lett.* **1989**, 1761.

Reference (3) should read: Some silyl dienol ethers can be prepared stereospecifically. See refs 2b, 2f, 2g, and 2h.

**Measure of Nonplanarity in Conjugated Organic Molecules: Which Structurally Characterized Molecule Displays the Highest Degree of Pyramidalization?** [*J. Am. Chem. Soc.* **1990**, *112*, 3385]. R. C. HADDON

I have received the following diagram from Professor Greene in clarification of his paper on 9,9',10,10'-tetrahydroanthracene [cited as ref 2: Viavattene, R. L.; Greene, F. D.; Cheung, L. D.; Majeste, R.; Trefonas, L. M. *J. Am. Chem. Soc.* **1974**, *96*, 4342]. The angle of 19.7° quoted in this work refers to  $\alpha$ , rather than  $\phi$ .



## Book Reviews

**Methoden der organischen Chemie (Houben-Weyl), 4th Edition. Carbene (Carbenoide). Volume E19b (Parts 1 and 2).** Edited by M. Regitz (Universität Kaiserslautern). G. Thieme Verlag: Stuttgart and New York. 1989. XXXVI + 1900 pp (in German). DM 2680. ISBN 3-13-219704-1.

This extraordinary two-part addition to the well-known Houben-Weyl series, *Methods of Organic Chemistry*, is a labor of love and scholarship. *Carbene (Carbenoide)* has been produced by 22 authors, from 6 countries, under the general direction of M. Regitz. Yet, despite the multiplicity of contributors, the work is well-integrated. Here are 1900 pages of text, followed by 314 pages of bibliography and indices. The coverage of the carbene literature is truly encyclopedic; on every page, the reader encounters treasures of remarkable rearrangements, little-known generative reactions, or unusual products.

In a work of this magnitude, an organizing principle must be chosen first, and then maintained. In deference to the synthetic thrust of the Houben-Weyl series, the choice for *Carbene (Carbenoide)* is to organize the text according to the structures of the carbenes. Of necessity, this leads to a fragmentation of mechanistic discussion, but, supported by the hyperdetailed table of contents, and the extensive indices, every interest can be satisfied.

The table of contents alone takes up 22 pages, with every sub and subsub heading included, so that it is easy to locate any type of carbene and, thereunder, methods of generation and various reactions. The main text is followed by a chronologically arranged, 13-page bibliography of the carbene literature, including serials, monographs, reviews, and topical treatments. Next comes a 100-page (3 columns/page) author index that includes citations for all authors of each work. This is followed by a double-column, 200-page subject index, where carbenes, carbynes, bis-

carbenes, their products, and other compounds are listed alphabetically by structural class. Cyclic carbenes and compounds are arranged in order of increasing ring complexity, with structural formulae and numbering illustrated. Finally, there is a general index to name reactions, compound classes, and trivial names.

The main text itself is felicitously produced, with lavish use of structural formulae, and literature citations at the foot of each page, repeated as often as required (a convenience that obviates page flipping, and improves concentration). Amazingly, coverage extends to 1988, and even early 1989. Part 1 begins with a 56-page introduction, meant to serve as a mechanistic overview of carbene chemistry, that includes electronic structure and substituent effects, reactivity and selectivity in intermolecular reactions, and the classes and characteristic features of various intramolecular reactions. A short (28 pages) section on carbynes follows, and then the text turns to the detailed consideration of carbenes by structural class.

Thus, a review of monocoordinated carbenes (e.g., alkylidene carbenes) is followed by surveys of dicoordinated carbenes, beginning with methylene, and proceeding through alkyl, dialkyl, and cycloalkylcarbenes. Part 1 also includes treatments of cycloalkylidenes, cycloalkenylcarbenes and cycloalkenylidenes, arylcarbenes, arylhalocarbenes, and various heteroarylcarbenes. Part 2 considers, in turn, acylcarbenes (including carbonyl and cyano carbenes), silyl, germyl, stannyl and other "metallo-carbenes" (but not carbene metal complexes), halo and dihalocarbenes (165 pages), oxacarbenes (with many examples, although their characteristic nucleophilicity or ambiphilicity are not explicitly treated here), sulfur-substituted carbenes, nitrogen-substituted carbenes, and, finally, phosphacarbenes.

Throughout the text there are many examples of detailed experimental