Additions and Corrections

Energetic Approach to the Packing of α-Helices. 2. General Treatment of Nonequivalent and Nonregular Helices [*J. Am. Chem. Soc.* **1984**, *106*, 3161]. KUO-CHEN CHOU, GEORGE NÉMETHY, and HAROLD A. SCHERAGA*

Page 3164: Equation 22 should read as follows

$$\Omega_p = 0 \qquad \text{for } p = 0$$
$$= \tan^{-1}(p \tan \beta) \quad \text{for } -90° \leq \beta \leq 90°$$
$$= \tan^{-1}(p \tan \beta) + \frac{p}{|p|}180° \qquad \text{for } 90° < \beta \leq 180°$$
$$= \tan^{-1}(p \tan \beta) - \frac{p}{|p|}180° \qquad \text{for } -180° \leq \beta < -90°$$

Page 3164: Equation 23 should read as follows

$$f(S_1,S_2) = \{[t_f + (S_2L_2 - L_2/2)\sin\alpha\sin\beta]^2 +$$
$$[t_g - (S_2L_2 - L_2/2)\cos\alpha\sin\beta]^2 +$$
$$[S_1L_1 - L_1/2 - t_h - (S_2L_2 - L_2/2)\cos\beta]^2\}^{1/2}$$

Hapalindoles: New Alkaloids from the Blue-Green Alga *Hapalosiphon fontinalis* [*J. Am. Chem. Soc.* **1984**, *106*, 6456]. R. E. MOORE,* C. CHEUK, and G. M. L. PATTERSON

Page 6456, left column, line 9 from bottom: This line should read—After 3 weeks the alga was harvested by filtration...

Page 6457: In Table I and footnote 10 the carbon-13 chemical shift assignments for C-4 and C-8 should be reversed. This is supported by a heteronuclear long range coupling CSCM experiment.

Siderophore Iron-Release Mechanisms [*J. Am. Chem. Soc.* **1984**, *106*, 6983–6987]. ROBERT C. HIDER,* DAVID BICKAR, IAN E. G. MORRISON, and JACK SILVER

Page 6986: The last two sentences in the legend of Figure 1 should be replaced by:
Voltage potentials are reported in the figure as recorded and may be normalized to zero hydrogen potential by adding 105 mV

to their values. The reference electrode was standardized against a ferro/ferricyanide potential of 325 mV (430 mV vs. hydrogen electrode).

Cobalt–Carbon Bond Dissociation Energy of Coenzyme B_{12} [*J. Am. Chem. Soc.* **1984**, *106*, 8317–8319]. JACK HALPERN,* SOOK-HUI KIM, and T. W. LEUNG

Page 8318: (1) The ordinate label in Figure 1 should read: $10^{-4}[k_{obsd}]^{-1}$, s.

Stereochemistry of the Wittig Reaction. Effect of Nucleophilic Groups in the Phosphonium Ylide [*J. Am. Chem. Soc.* **1985**, *107*, 217]. BRUCE E. MARYANOFF,* ALLEN B. REITZ, and BARBARA A. DUHL-EMSWILER

Page 219: The compound number **5e** beneath the structural formula should be followed by $n = 8$, not $n = 6$.

Page 220: Footnote n of Table I should refer to γ-oxido ylide, not β-oxido ylide.

Figure 1 and Table I: A data point for reaction of the ylide from **5a** with hexanal is shown in Figure 1 (on page 219), but this experiment was mistakenly omitted from Table I and the figure caption (the open-circle symbol). The experiment was performed with 2.1 mol equiv of butyllithium, to give a Z/E ratio of 3:97 (GLC on column D).

Mechanism of the Oxidation of NADH by Quinones. Energetics of One-Electron and Hydride Routes [*J. Am. Chem. Soc.* **1985**, *107*, 479]. BRIAN W. CARLSON and LARRY L. MILLER*

Page 483, left column, line 15: The equation should read:

$$E^7{}_{H^-} = E°{}_{H_2} - 0.60pK_a + 0.030(pK_a - 7)$$

Page 483, left column, line 38: The sentence should read: Also given in Table VIII are $E^7{}_{H^-}$ values reported for other *o*-quinones measured electrochemically under similar conditions.[5a]

Page 483, Table VIII: The column headings should be:

2	$E^{7.1\,a}$	$pK_a{}^b$	$E^7{}_{H^-}$

Book Reviews *

Laboratory Techniques in Biochemistry and Molecular Biology. Volume 12. Photogenerated Reagents in Biochemistry and Molecular Biology. By H. Bayley (Columbia University). General Editors: T. S. Work (Cowes, Isle of Wright) and R. H. Burdon (University of Glasglow). Elsevier Science Publishing Co.: Amsterdam and New York. 1983. xiii + 187 pp. $22.50, Dfl. 58.00.

Photoaffinity labeling is the type of technique that many an investigator in biochemistry or molecular biology has contemplated using at one time or another to identify a specific receptor, to localize a ligand binding site, or to peruse the physiological neighborhood of a particular macromolecule. Such experiments, when successful, can be particularly elegant. When they do not work, they can be extremely frustrating. The investigator planning an initial foray into the field would be well advised to read Hagan Bayley's review. The author discusses the advantages and the potential pitfalls of the technique, presents the options available to the investigator and provides many examples of successful photolabeling experiments.

The author has written an admirably concise account of photoaffinity labeling and crosslinking that is really more akin to a review than a techniques manual. The book begins with an introductory chapter that describes the use of affinity reagents that are photoactivatable. Chapters 2 and 3 deal with the nature and properties of photoactivatable groups and photoaffinity probes. Chapter 4 gives the specifics of designing and

interpreting a successful photolabeling experiment. Chapter 5 details the use of photolabile crosslinking reagents, while chapter 6 discusses a relatively new area: photoaffinity reagents as probes of membrane structure. The approach adopted by the author is to teach by example. Basic fundamentals of experimental design are presented in the context of actual experiments drawn from the literature. In this fashion the author has provided both an excellent review of the pertinent literature with over 400 references and a very readable guide to the rational design and use of photogenerated reagents.

Robert L. Geahlen, *Purdue University*

The Physical Chemistry of Membranes. By Michael E. Starzak (State University of New York at Binghamton). Academic Press: Orlando, FL. 1984. x + 334 pp. $42.00.

Recent years have witnessed the maturation of experimental membrane science through the application of a wide variety of physical techniques. This text successfully bridges the gap between biologically oriented monograph series and vigorous texts in physical chemistry. The book is not intended to provide an overview of this rapidly expanding field, but rather to present physical chemistry as an invaluable tool for describing membrane association, composition, and transport. By enlisting basic concepts in thermodynamics, kinetics, and surface science, the author indeed demonstrates that membrane processes are governed by physical laws. Each chapter provides the basic mathematical tools necessary to understand the text as well as tackle current literature topics. Chapters are organized in the following manner: (I) Substantiates the