

variable field magnet); Professor T. J. Katz (loan of a mini-grator); Professors G. Flynn (loan of a Varian-Aerograph VPC); Professor B. P. Dailey (loan of the space beside a supercon magnet); and Professor S. Hartmann (loan of a Hall gauss meter). We especially thank Professor R. Bernstein for enlightening discussions and variable advice concerning the relationship of  $\alpha$  to quantum yield data. The assistance of Mr. Chao Chung in identifying the products of  $\text{Cu}^{2+}$  scavenging and of Dr. Ming-Fea Chow and Mr. Gregory Weed in refining some data in Table I is gratefully noted. We thank the Francis Bitter National Magnet Laboratory at the Massachusetts Institute of Technology for access to and use of a 100 000 G magnet. Support of this work by the National Science Foundation and the Department of Energy is gratefully acknowledged. B.K. thanks the Swiss National Science Foundation for a Postdoctoral Fellowship.

## References and Notes

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- (5) Discussions of magnetic isotope effects on chemical reactions: (a) Buchachenko, A. L. *Russ. J. Phys. Chem.* **1977**, *51*, 1445. (b) Buchachenko, A. L.; et al. *Dokl. Akad. Nauk SSSR* **1976**, *228*, 379.
- (6) Bernstein, R. B. *J. Phys. Chem.* **1952**, *56*, 893; *Science* **1957**, *126*, 119.
- (7) In a previous publication<sup>2</sup> it was noted that micelles inhibited cross coupling of radicals produced by photolysis of asymmetrical ketones. The low yield of cross coupling was due not only to an enhanced "cage" effect due to sequestering of the geminate radical pair by micelles, but also to scavenging by  $\text{O}_2$ ; i.e., since the systems were air saturated, escaping radicals were trapped by  $\text{O}_2$  in the aqueous phase. In the present work, the systems were deoxygenated by  $\text{N}_2$  purging before photolysis.
- (8) The onset of significant external magnetic field effects on  $\alpha$  occurs at relatively low magnetic fields (<1000 G). A detailed report of the magnetic field dependence of  $\alpha$  will be reported in due course.
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## Additions and Corrections

**Crystal and Molecular Structure of the Free Base Porphyrin, Mesoporphyrin IX Dimethyl Ester** [*J. Am. Chem. Soc.*, **97**, 5363 (1975)]. By ROBERT G. LITTLE and JAMES A. IBERS,\* Department of Chemistry, Northwestern University, Evanston, Illinois 60201.

On p 5365 structures for **1** and **2** should be interchanged. In Table VI the coefficient  $A$  for the least-squares planes 1 through 6 should be multiplied by 10. A corrected Table VII is given below. The transannular separations for the title compound are no longer significantly different from those in other free base porphyrins. Thus the discussion of these differences, both in this paper and in Caughey, W. S.; Ibers, J. A. *J. Am. Chem. Soc.* **1977**, *99*, 6639–6645, is no longer applicable.

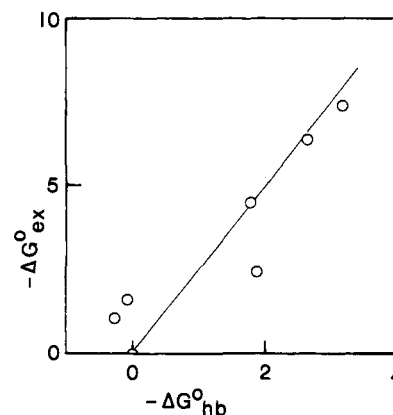
**Table VII.** Transannular Distances (Å) in Three Free-Base Porphyrins

| Atoms       | OEP <sup>a</sup> | Porphine <sup>b</sup> | MP-IX DME <sup>c</sup> |
|-------------|------------------|-----------------------|------------------------|
| HN(1)-HN(3) | 2.36 (4)         | 2.41 (4)              | 2.28 (10)              |
| N(1)-N(3)   | 4.195            | 4.112                 | 4.181                  |
| N(2)-N(4)   | 4.052            | 4.058                 | 4.060                  |
| N(1)-N(2)   | 2.917            | 2.886                 | 2.894                  |
| N(2)-N(3)   | 2.916            | 2.889                 | 2.937                  |
| N(3)-N(4)   | 2.917            | 2.901                 | 2.893                  |
| N(4)-N(1)   | 2.916            | 2.879                 | 2.932                  |
| C(5)-C(15)  | 6.841            | 6.853                 | 6.859                  |
| C(10)-C(20) | 6.844            | 6.834                 | 6.811                  |
| C(5)-C(10)  | 4.828            | 4.814                 | 4.815                  |
| C(10)-C(15) | 4.849            | 4.862                 | 4.844                  |
| C(15)-C(20) | 4.828            | 4.822                 | 4.825                  |
| C(20)-C(5)  | 4.849            | 4.860                 | 4.848                  |

<sup>a</sup> Reference 13, the errors on the C-C and N-N distances are  $\pm 0.002$  Å. <sup>b</sup> Reference 11, estimated errors  $\pm 0.007$  Å. <sup>c</sup> This work, estimated errors  $\pm 0.004$  Å.

**Ion-Solvent Interaction. Effects of Added Polar Compounds on the Conductances of Several Alkali Metal Salts in 2-Butanone at 25 °C** [*J. Am. Chem. Soc.*, **101**, 328 (1979)]. By M. D. JACKSON and W. R. GILKERSON,\* Department of Chemistry, University of South Carolina, Columbia, South Carolina 29208.

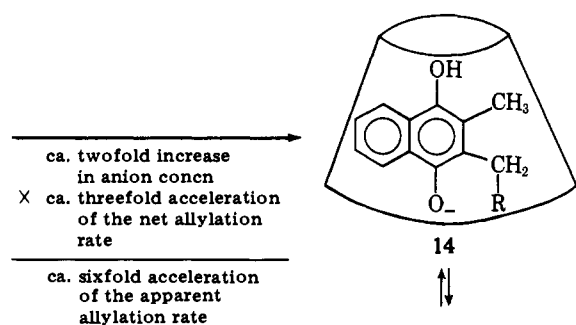
Page 333: The scale on the abscissa of Figure 6 is incorrect, as well as one point having been added inadvertently. The correct Figure 6 is below.



**Figure 6.** The free energy of exchange,  $\Delta G^{\circ}_{\text{ex}}$ , for the displacement of THF by ligand on lithium cation as a function of  $\Delta G^{\circ}_{\text{HB}}$ , the free energy of hydrogen-bond formation of the ligand with *p*-fluorophenol, both in kcal  $\text{mol}^{-1}$ .

**Specific Inclusion Catalysis by  $\beta$ -Cyclodextrin in the One-Step Preparation of Vitamin K<sub>1</sub> or K<sub>2</sub> Analogues** [*J. Am. Chem. Soc.*, **101**, 1019 (1979)]. By IWAO TABUSHI,\* KAZUO YAMAMURA, KAHEE FUJITA, and HIROMU KAWAKUBO, Department of Synthetic Chemistry, Kyoto University, Yoshida, Kyoto 606, Japan.

Page 1023: in Scheme I, an arrow was accidentally drawn in a wrong position with the legend "ca. sixfold acceleration of the apparent allylation rate"; the correct diagram follows:



**Tests of Pseudophase Model of Micellar Catalysis: Its Partial Failure** [*J. Am. Chem. Soc.*, **101**, 1253 (1979)]. By CLIFFORD A. BUNTON,\* LAURENCE S. ROMSTED, and GIANFRANCO SAVELLI, Department of Chemistry, University of California, Santa Barbara, California 93106.

The caption to Figure 3 should read:

**Figure 3.** Hydrolysis of the acetals **2a,b** with added HCl:  $\Delta$ , **2b** and 0.05 M **1a**;  $\blacktriangle$ , **2b** and 0.1 M **1a**;  $\circ$ , **2b** and 0.05 M **1c**;  $\bullet$ , **2b** and 0.1 M **1c**;  $\square$ , **2a** and 0.05 M **1c**;  $\blacksquare$ , **2a** and 0.1 M **1c**. The solid lines are predicted for the lower and the broken lines for the higher surfactant concentrations.

**Deuterium-Induced Differential Isotope Shift  $^{13}\text{C}$  NMR. 1. Resonance Reassignments of Mono- and Disaccharides<sup>1</sup>** [*J. Am. Chem. Soc.*, **101**, 1265 (1979)]. By PHILIP E. PFEFFER,\* KATHLEEN M. VALENTINE, and FREDERICK W. PARRISH, Eastern Regional Research Center, Agricultural Research, Science and Education Administration, U.S. Department of Agriculture, Philadelphia, Pennsylvania 19118.

In Table VI, column C-5, the entries for  $\alpha$ -D-glucopyranuronate **15a** and  $\beta$ -D-glucopyranuronic acid **15b** should be transposed. In column C-6 the entries for  $\alpha$ -D-glucopyranuronic acid **15a** and  $\beta$ -D-glucopyranuronic acid **15b** should be transposed as well as the entries for  $\alpha$ -D-glucopyranuronate **15a** and  $\beta$ -D-glucopyranuronic acid **15b**.

**On "Anomalous" Selectivities in Electrophilic Aromatic Substitutions** [*J. Am. Chem. Soc.*, **101**, 1337 (1979)]. By CIELO SANTIAGO, K. N. HOUK,\* and CHARLES L. PERRIN,\* Departments of Chemistry, Louisiana State University, Baton Rouge, Louisiana 70803, and University of California, San Diego, La Jolla, California 92093.

The arrangement of footnotes may have led to the impression that C. D. Johnson supports the validity of the "selectivity principle" for electrophilic aromatic substitutions; quite the contrary is true (also see Johnson, C. D.; Rose, S.; Taylor, P. G. *J. Org. Chem.*, **1979**, *44*, 753, and references therein), and we wish to correct this unintended implication.

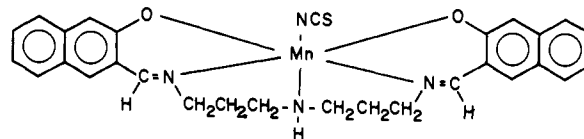
Professor L. L. Miller brought to our attention a more recent reference on product ratios from electrochemically generated  $\text{I}^+$  iodinations (Miller, L. L.; Watkins, B. F. *J. Am. Chem. Soc.*, **1976**, *98*, 1515). These data are  $\log p_r^{\text{Me}} = 1.78$  and  $\log (p_r^{\text{Me}}/m_r^{\text{Me}}) = 1.38$ , so that point  $\diamond -52$  now lies very close to the least-squares line shown in Figure 1;  $\log p_r^{\text{Me}}$  is predicted to be 1.73 by the least-squares correlation.

Professor F. P. DeHaan has reported new measurements on acylations and sulfonations (DeHaan, F. P.; Corey, W. D.; Delker, G. L.; Baker, N. J.; Feigon, J. F.; Miller, K. D.; Stelter, E. D. *J. Am. Chem. Soc.*, **1979**, *101*, 1336) which, like earlier data on ethylations (Carter, B. J.; Corey, W. D.; DeHaan, F. P. *J. Am. Chem. Soc.*, **1975**, *97*, 4783) and benzylations (DeHaan, F. P.; Corey, W. D.; Anisman, M. S.; Ezelle, R. L.;

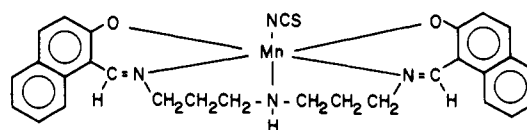
Margetan, J. E.; Miller, K. D.; Pace, S. A.; Pilmer, S. L.; Sollenberger, M. J.; Wolf, D. S.; *J. Am. Chem. Soc.*, **1978**, *100*, 5944), suggest that some of the other anomalous points in Figure 1 of our communication may be brought into agreement with the Brown-Stock selectivity relationship upon remeasurement of the data.

**Electrochemical Studies on a Series of Manganese(III) Complexes Containing Symmetrical Pentadentate Ligands** [*J. Am. Chem. Soc.*, **101**, 2311 (1979)]. By W. M. COLEMAN, R. R. GOEHRING, L. T. TAYLOR,\* J. G. MASON, and R. K. BOGGESE, Departments of Chemistry, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061, and Radford University, Radford, Virginia 24142.

The structure as given for Mn(NAPDPT)NCS is



However, the correct structure should be



**Sex Pheromone of the American Cockroach: Absolute Configuration of Periplanone-B** [*J. Am. Chem. Soc.*, **101**, 2495 (1979)]. By MICHAEL A. ADAMS, KOJI NAKANISHI,\* W. CLARK STILL, EDWARD V. ARNOLD, JON CLARDY,\* and C. J. PERSOONS,\* Departments of Chemistry, Columbia University, New York, New York 10027, Cornell University, Ithaca, New York 14853, and Centraal Laboratorium TNO, Delft, The Netherlands.

Page 2497, column 2, line 15: C(4)-C(3) and C(8)-C(9) should read C(4)-C(3) and C(8)-C(13).

**Rational Synthesis of Unidimensional Mixed Valence Solids. Structural, Spectral, and Electrical Studies of Charge Distribution and Transport in Partially Oxidized Nickel and Palladium Bis(diphenylglyoximates)** [*J. Am. Chem. Soc.*, **101**, 2921 (1979)]. By MARTIN COWIE, ALAIN GLEIZES, GREGORY W. GRYNKEWICH, DAVIDA WEBSTER KALINA, MALCOLM S. MCCLURE, RAYMOND P. SCARINGE, ROBERT C. TEITELBAUM, STANLEY L. RUBY, JAMES A. IBERS,\* CARL R. KANNEWURF,\* and TOBIN J. MARKS,\* Department of Chemistry, Department of Electrical Engineering, and the Materials Research Center, Northwestern University, Evanston, Illinois 60201, and the Physics Division, Argonne National Laboratory, Argonne, Illinois 60439.

There are several typographical errors which in no way affect the results or conclusions. In the abstract, the fifth line from the bottom should read: "(chain) direction is as high at 30 °C as  $1.1 \times 10^{-2}$  (Ni(dpg)<sub>2</sub>I) and  $4.7 \times 10^{-4}$  ( $\Omega \text{ cm}$ )<sup>-1</sup> (Pd(dpg)<sub>2</sub>I). Iodination brings about . . ."

In eq 11,  $h$  should be  $\hbar$ .

In Table XII, the mean free path for Ni(dpg)<sub>2</sub>I should be  $2.9\text{--}14 \times 10^{-5} \text{ \AA}$  and that for Pd(dpg)<sub>2</sub>I should be  $1.0\text{--}6.2 \times 10^{-6} \text{ \AA}$ .

**Rational Synthesis of Unidimensional Mixed Valence Solids. Structure Oxidation State-Charge Transport Relationships in Iodinated Nickel and Palladium Bisbenzoquinonedioximates** [*J. Am. Chem. Soc.*, **101**, 2937 (1979)]. By LEO D. BROWN, DAVIDA WEBSTER KALINA, MALCOLM S. MCCLURE,