

Additions and Corrections

Mass Spectral Studies of Alkaloids Related to Morphine [*J. Am. Chem. Soc.*, **89**, 4494 (1967)]. By DESMOND M. S. WHEELER, THOMAS H. KINSTLE, and KENNETH L. RINEHART, JR., Department of Chemistry, University of Nebraska, Lincoln, Nebraska, and Department of Chemistry and Chemical Engineering, University of Illinois, Urbana, Illinois 61801.

In the Acknowledgment we should have thanked Dr. Y. Sawa, Shionogi Research Laboratory, Shionogi & Co. Ltd., for the samples of sinomenine and isosinomenine.

The Photochemical Decomposition of Geminal Diazides. I. Dimethyl Diazidomalonate [*J. Am. Chem. Soc.*, **89**, 5958 (1967)]. By ROBERT M. MORIARTY, JONATHAN M. KLIEGMAN, and CATHERINE SHOVLIN, Chemistry Department, The Catholic University of America, Washington, D. C.

We have recently described dimethyl diazidomalonate as being quite stable to shock. This was based upon rather qualitative observations. C. O. Parker, Rohm and Haas Co., Redstone Research Laboratories, Huntsville, Ala., has obtained the following more quantitative data on the stability of dimethylmalonamide and dimethyl diazidomalonate: (1) amide, mp 153° dec, 50% fire level was greater than 38 kg in.; (2) amide, mp 157° dec (crystallized from water), 50% fire level 2.8 kg in.; (3) amide, mp 153.5° dec, 60% fire level 4 kg in.; sample made from dibromomalonamide; (4) ester, extracted into CCl₄ but undistilled, clean H¹ nmr, 50% fire level 11.3 kg in.; (5) ester, distilled at 60° under vacuum, 20% fire level (one out of five samples) 4 kg in. RDX on above scale, 10.2 kg in.

Although the impact sensitivities of these compounds vary with their states of purity, these substances are clearly hazardous and proper caution should be exercised in handling them.

A Mass Spectrometric Investigation of the Low-Pressure Pyrolysis of Diphosphine-4 [*J. Am. Chem. Soc.*, **89**, 6477 (1967)]. By T. P. FEHLNER, Department of Chemistry, University of Notre Dame, Notre Dame, Indiana 46556.

The third equation on page 6480 should read

$$R = Sgbz$$

where z is the wall collision frequency.

The third equation on page 6481 should read

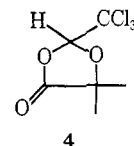
$$\log h(T) = 20.4 - 4800/T \text{ molecules cm}^{-2}$$

Finally, line 14 of paragraph 2 on page 6482 should read, "some three powers of ten..."

Cycloaddition Reactions of 2,2-Dimethylcyclopropane [*J. Am. Chem. Soc.*, **90**, 1926 (1968)]. By NICHOLAS J. TURRO, SIMON S. EDELSON, JOHN R. WILLIAMS, and THOMAS R. DARLING, Department of Chemistry, Columbia University, New York, New York 10027.

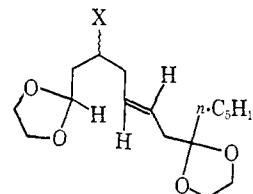
On page 1927, column 1, line 2, delete the word (reflux).

Structure 4 should appear as shown below.



A New Total Synthesis of Prostaglandins of the E₁ and F₁ Series Including 11-Epiprostaglandins [*J. Am. Chem. Soc.*, **90**, 3247 (1968)]. By E. J. COREY, ISIDOROS VLATTAS, NIELS H. ANDERSEN, and KENN HARDING, Department of Chemistry, Harvard University, Cambridge, Massachusetts 02138.

The drawing of formulas 5 and 6 should be



A Semiempirical Molecular Model for Cr(CO)₆, Fe(CO)₅, and Ni(CO)₄ [*J. Am. Chem. Soc.*, **90**, 3366 (1968)]. By A. F. SCHREINER and THEODORE L. BROWN, Noyes Chemical Laboratory, University of Illinois, Urbana, Illinois 61801.

In Table III, footnote *b* should read: C-O axial = 1.2886, C-O trigonal = 1.332.

Table IV contains a number of errors. The corrected table, in entirety, is printed below.

Table IV. Metal-Carbon Overlap Populations

Bond	Metal orbitals	—Overlap populations—	
		σ	π
Cr-C	3d	0.9696	0.7428
	4s	0.4416	...
	4p	0.5412	0.0808
Fe-C	3d	0.6300	0.5872
	4s	0.4672	...
	4p	0.4085	0.3032
Ni-C	3d	0.1386	0.1752
	4s	0.1700	...
	4p	1.062	0.0908

Table V contains a few corresponding errors. The corrected table is given below. The $2p\pi$ (C) populations are given on a per orbital basis.

The M-C overlap population for Ni(CO)₄ in Tables III and VI should be changed to 0.4076.

The only conclusion which requires modification as a result of these corrections relates to the relative importance of metal 3d and 4p orbitals in π bonding. It now appears that the 3d orbitals, in sum (Table IV), are more important in bonding in all three compounds,