Additions and Corrections

R. G. Daniels and Leo A. Paquette: Silanes in Organic Synthesis. 18. Preparation and Reactivity of Optically Active Vinyl- and Dienylsilanes 1982, 1, 1449-1453.

On page 1449, it is the (-)-enantiomer of 1-naphthylphenylmethylchlorosilane that is meant in line 3 of the abstract and two lines above formula 4.

On page 1452, two peaks were omitted in the ¹H NMR data for 26/27: δ 0.77, 0.74 (2 s, 3 H total).

George R. Newkome, Vinod K. Gupta, and Frank Fronczek: Palladium(II) Complexes of Pyridine- and Pyrazine-Based Ligands with Bis(carbon-metal) Bonds. Ligand Synthesis, Complexation, and Crystal Structure 1982, 1, 907-1910.

In this paper, the crystal structure of $Pd(C_{11}H_{12}NO_4)_2$ was described in a space group of unnecessarily low symmetry. The published cell in triclinic space group $P\overline{1}$ (misprinted as P1) may be transformed by the matrix

$$\left(\begin{array}{ccc}
2 & 0 & 1 \\
0 & 0 & 1 \\
\hline
1 & \overline{1} & \overline{1}
\end{array}\right)$$

to a cell in monoclinic space group C2/c, with dimensions a = 20.997 (3) Å, b = 8.412 (2) Å, c = 15.419 (2) Å, $\beta =$ 122.96 (1)°, and Z = 4. The molecular symmetry is exactly, rather than approximately, C_2 . Refinement in the higher symmetry space group yielded $R=0.036,\,R_{\rm w}=0.056,\,{\rm and}$ GOF = 2.062, based on 1864 observed data and 151 variables. Coordinates relative to the C2/c cell are listed below. We thank R. E. Marsh for calling our attention to this error.

atom	x	У	z
Pd	0	-0.25284 (2)	-0.25
O(1)	0.1627(1)	-0.0727(3)	-0.0098(1)
O(2)	0.1438(1)	-0.0124(2)	-0.1625(1)
O(3)	0.1468 (1)	-0.4996(3)	-0.2057(1)
O(4)	0.2034 (1)	-0.2717(2)	-0.1939(2)
N(1)	-0.0009(2)	-0.2520(2)	-0.1182(3)
C(1)	-0.0535(1)	-0.1825(4)	-0.1071(2)
C(2)	-0.0490(2)	-0.1871(5)	-0.0146(2)
C(3)	0.0104 (3)	-0.2699(4)	0.0676(3)
C(4)	0.0653 (2)	-0.3364(4)	0.0568(2)
C(5)	0.0597(1)	-0.3233(3)	-0.0366(2)
C(6)	0.1169 (1)	-0.3836(4)	-0.0567(2)
C(7)	0.1192(2)	-0.2783(3)	-0.1363(2)
C(8)	0.1458 (1)	-0.1151(3)	-0.0944(2)
C(9)	0.1567 (1)	-0.3622(3)	-0.1811(2)
C(10)	0.1641(2)	0.1490 (4)	-0.1281(3)
C(11)	0.2405(2)	-0.3463 (5)	-0.2380 (2)
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D. K. Towle, S. J. Landon, T. B. Brill, and T. H. Tulip: A Double Michaelis-Arbuzov Rearrangement Involving $(\eta^5-C_5H_5)CoI_2(CO)$ and $P(OCH_3)_3$. Formation of the Cobalt "Supersandwich" Complex 1982, 1 (2), 295-301.

On pages 295 and 299, the space group in the abstract and in Table III, respectively, should be $P2_1/n$ rather than

Book Reviews

Gmelin Handbook of Inorganic Chemistry, 8th Edition, Si, Silicon. Supplement Volume B1. Silicon and Noble Gases; Silicon and Hydrogen (including SiH_n -Oxygen Compounds). E. Hengge, H. Keller-Rudek, D. Koschel, U. Kruerke, and P. Meriet, volume authors. U. Krüerke, volume chief editor. Gmelin Institut für Anorganische Chemie der Max-Planck-Gesellschaft zur Förderung der Wissenschaften and Springer-Verlag, Berlin/Heidelberg/New York. 1982. iv + 259 pages. DM 711, \$315.70 (in English).

The Gmelin silicon series B and C appeared in 1958 and 1959. In the intervening years, inorganic and, especially, organic silicon chemistry have been the subjects of continuous, brisk research activity in academic, government, and industrial laboratories throughout the world. The information that has accumulated on silicon compounds, old and new, during these years would fill a whole shelf full of Gmelin volumes, and it is the intention of the Gmelin Institute for Inorganic Chemistry to collect and publish all these new data in supplement volumes to both series B (Element and Compounds) and C (Organic Silicon Compounds). These volumes will be welcomed by many readers of this journal, and the Gmelin Institute is to be commended for making the decision to embark on this awesome task.

In the present book we have the first supplement volume to the silicon B series. The first topic covered, "Silicon and Noble Gases", is easily dealt with in one sentence. The rest of the book deals with the hydrides and oxyhydrides of silicon. After brief reports on the adsorption of hydrogen on crystalline silicon, the discussion of silicon hydrides begins with unstable SiH_n molecules (SiH, SiH₂, SiH₃) and ions (SiH_n⁺, n = 1-5; SiH_n⁻, n = 1-3 and 5). Of these, SiH₂ and SiH₃ have received a fair amount of experimental attention and have a well-developed chemistry.

Nearly half of the book is devoted to an account of all the information that has been gathered on monosilane, SiH₄, since 1958: preparation, purification, handling procedures, physical properties, spectroscopy, thermochemistry, properties of the condensed phase, mass spectroscopy, thermal decomposition and chemical reactivity, analytical methods, and applications. It is likely that monosilane will become an important commercial intermediate in the production of pure silicon and, without doubt, there will be substantial additions to this already large amount of data. Disilane also is being mentioned currently as a more specialized precursor of pure silicon, and 27 pages of text and tables bring all the available information on this molecule. Interest in compounds with a Si=Si bond is currently very high, and while the parent compound H2Si=SiH2 has not been observed ex-