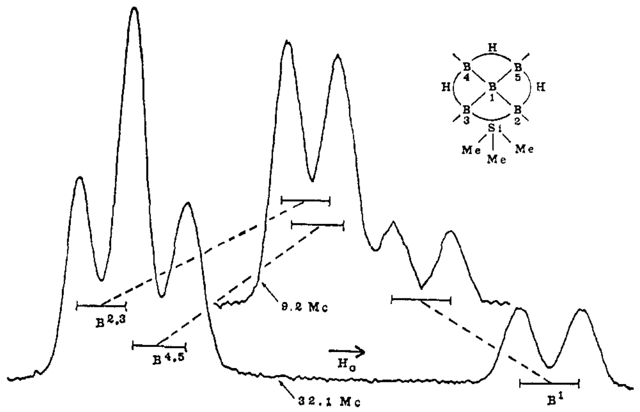

Figure 1. The ^{11}B nmr spectra of μ-$Si(CH_3)_3B_5H_8$ at 32.1 and 9.2 Mc. The assignments, chemical shifts (ppm from $BF_3 \cdot O(C_2H_5)_2$), and coupling constants (cps in parentheses) are: $B^{2,3}$, 8.5 (145); $B^{4,5}$, 13.2 (158); B^1, 48.0 (179).

The higher field doublet in this group has a chemical shift and coupling constant very nearly the same as that of B_5H_9 and has therefore been assigned as arising from $B^{3,4}$. The lower field doublet, arising from $B^{2,3}$, has a coupling constant somewhat smaller than usual, probably as a result of bonding of those boron atoms to the bridge silyl group. The 100-Mc ^1H nmr spectrum of μ-$(CH_3)_3SiB_5H_8$ agrees with the ^{11}B spectrum. Integration of the bridge and terminal hydrogen regions gives values which agree with those calculated, assuming five terminal and three bridge hydrogens.

Isomerization of μ-$(CH_3)_3SiB_5H_8$ to 2-$(CH_3)_3SiB_5H_8$ occurs at room temperature in the presence of dimethyl ether. After 1 day, 94% of the starting material was recovered as the 2 isomer, identified by its mass spectrum (which is indistinguishable from that of the bridge isomer) and by its ^{11}B and ^1H nmr spectra. Integration of the ^1H nmr spectrum agreed with that calculated, assuming four bridge and four terminal hydrogen atoms.

Bromination of μ-$(CH_3)_3SiB_5H_8$ occurs rapidly at room temperature to produce **1**-Br-μ-$(CH_3)_3SiB_5H_7$ in moderate yield. A single crystal X-ray study of this compound is presently under way in the laboratory of Professor Lawrence F. Dahl.

The bonding in the silicon bridge of μ-$(CH_3)_3SiB_5H_8$ can be viewed as similar to that suggested for the carbon bridge in dimeric trimethylaluminum.[4] Thus a three-center two-electron bond is probably formed using sp^3 orbitals from the silicon and the two adjacent boron atoms. There appear to be no previous examples of compounds in which silicon atoms are thought to participate in electron-deficient bonding.

Several other preliminary investigations suggest that trialkylgermanium and -tin halides react with LiB_5H_8 in the same manner as trimethylsilyl chloride to produce the corresponding bridged pentaborane(9) derivatives. There is no evidence as yet, however, for the existence of stable pentaborane(9) derivatives having carbon bridges between boron atoms.

Further studies of group IV bridged boron hydride derivatives are in progress and will be published shortly.

Acknowledgments. The authors wish to thank Dr. Jerry E. Dobson and Arthur O. Clause at Indiana University for the 9.2-Mc ^{11}B nmr spectra. This work was supported in part by a grant from the National Science Foundation. The nmr instrumentation was provided in part by an institutional grant from the National Science Foundation.

[4] P. H. Lewis and R. E. Rundle, *J. Chem. Phys.*, **21**, 986 (1953).

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Received May 25, 1967

Additions and Corrections

The Donor Properties of Pyrophosphate Derivatives. III. A Colorless Copper(II) Complex [*J. Am. Chem. Soc.*, **88**, 5465 (1966)]. By MELVIN D. JOESTEN and JAMES F. FORBES, Department of Chemistry, Southern Illinois University, Carbondale, Illinois 62903.

In Table III the experimental magnetic moments should be expressed as an average magnetic moment/metal ion. This results in values of 2.04, 2.04, 5.24, and 5.24 BM for $[Cu(OMPA)_2][CuBr_4]$, $[Cu(OMPA)_2][CuCl_4]$, $[Co(OMPA)_3][CoBr_4]$, and $[Co(OMPA)_3][CoCl_4]$, respectively. The calculated magnetic moments/metal ion from the spin-only formula are 1.73 BM for Cu(II) and 3.88 BM for Co(II).

On Hydroxyalkylcobaloximes and the Mechanism of a Cobamide-Dependent Diol Dehydrase [*J. Am. Chem. Soc.*, **89**, 143 (1967)]. By G. N. SCHRAUZER and R. J. WINDGASSEN, Shell Development Company, Emeryville, California.

On page 147, the side heading in the first line should read: Degradation of β-Hydroxy-*n*-propylpyridinatocobaloxime.

Catalytic Reactions Involving Azomethines. VIII. Water and Alanine Catalysis of the Transamination of 3-Hydroxypyridine-4-aldehyde by Alanine [*J. Am. Chem. Soc.*, **89**, 2090 (1967)]. By DAVID S. AULD and THOMAS C. BRUICE, Department of Chemistry, University of California at Santa Barbara, Santa Barbara, California 93106.

Equation 12 should read as follows