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Title

Correction to “Synthesis, Structure, and Spectroscopy of the Biscarboranyl Stannylenes (bc)Sn·THF and K₂[(bc)Sn]₂ (bc = 1,1’(ortho-Biscarborane)) and Dibiscarboranyl Ethene (bc)CH \square CH(bc)”

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Correction to “Synthesis, Structure, and Spectroscopy of the Biscarboranyl Stannylenes ($(bc)Sn \cdot THF$ and $K_2[(bc)Sn]_2$ ($bc = 1,1'(ortho$ -Biscarborane)) and Dibiscarboranyl Ethene ($(bc)CH=CH(bc)$)”

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In the original title publication the compound **2** was reported to have the formula $K_2[(bc)Sn]_2$ ($bc = 1,1'$ -bis(*ortho*-

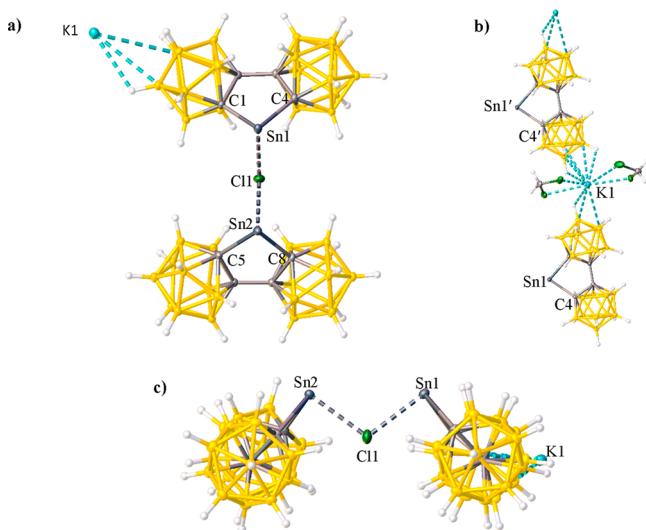


Figure 1. Thermal ellipsoid plot (50%) of **2**. (a) View of **2** to show coordination positions of K1 and Cl1. The CH_2Cl_2 solvent molecules are not shown for clarity. (b) Expanded view of **2** to show coordination of K1. (c) View of **2** to show coordination of Cl1. CH_2Cl_2 solvent molecules are not shown for clarity. Selected bond lengths (\AA) and angles (deg): C1–Sn1 = 2.276(3), C4–Sn1 = 2.309(3), C5–Sn2 = 2.288(4), C8–Sn2 = 2.289(3), Cl1–Sn1 = 2.5868(8), Cl1–Sn2 = 2.5874(8), C1–Sn1–C4 = 81.69(11), C5–Sn2–C8 = 81.86(12), Sn1–Cl1–Sn2 = 106.98(3), C1–Sn1–Cl1 = 88.27(7), C4–Sn1–Cl1 = 94.11(7), C5–Sn2–Cl1 = 92.62(7), C8–Sn2–Cl1 = 90.91(7).

biscarborane)). But a re-examination and rerefinement of the X-ray crystallographic data for **2** indicate that the correct formula is $[(bc)Sn]_2KCl$. As reported earlier, one of the K^+ ions acts as a counterion which is coordinated to the B–H vertices of the **bc** cage, but the second K^+ ion, which was said to bridge the two tin atoms in the original report, has been reformulated as a Cl^- ion, thereby forming a Sn–Cl–Sn bridging unit between two $(bc)Sn$ moieties, as in the $\{(bc)Sn-\mu-Cl-Sn(bc)\}^-$ anion, as

well as lowering the *R* value from 2.43% to 2.23%. Organotin complexes containing a Sn–Cl–Sn moiety typically have bridging Sn–Cl distances in the range 2.540(2)–2.967(1) \AA ,^{1–10} and this fragment of compound **2** features Sn–Cl bond distances of 2.5868(8) and 2.5874(8) \AA , which are at the lower end of the above range. The relatively short Sn–Cl distances in **2** indicate a strong interaction between the two ions, but whether this is a consequence of the rigid structure or electron-withdrawing influence of the **bc** ligand is not apparent. The drawings in Figure 1 below illustrate the corrected X-ray crystal formula for compound **2**, and Figure 1c in particular clearly illustrates the bridging atom as Cl^- seems more chemically sensible than when the species is formulated with a bridging K^+ cation.

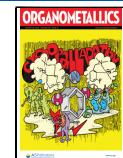
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