

# ORGANOMETALLICS

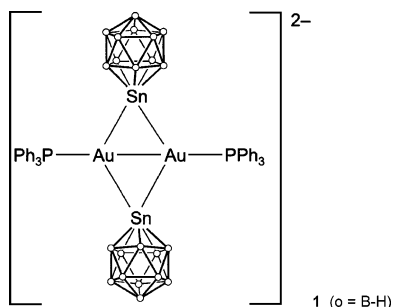
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## Editor's Page

### An Introduction to the Review by Gädt and Wesemann in This Issue of *Organometallics*

Our cover molecule is an unusual dimeric, dianionic gold complex,  $[(\text{Ph}_3\text{P})(\mu\text{-SnB}_{11}\text{H}_{11})\text{Au}]_2^{2-}$  (**1**). In addition to the two



triphenylphosphine ligands, it contains two bridging  $[\text{SnB}_{11}\text{H}_{11}]^{2-}$  ligands in which the tin atom is the donor site. This complex was isolated as its tri-*n*-butylammonium salt and structurally characterized by Lars Wesemann, the senior author of the review in this issue, and his co-workers in 2003 (*Angew. Chem., Int. Ed.* **2003**, *42*, 1501). This is one of many fascinating complexes of the  $[\text{SnB}_{11}\text{H}_{11}]^{2-}$  anion described by Torben Gädt and Professor Wesemann of the University of Tübingen in their review, which follows immediately after this Editor's Page.

Professor Lars Wesemann, who had been actively engaged in research on silicon-containing boron cluster compounds (silaboranes), became interested in the  $[\text{SnB}_{11}\text{H}_{11}]^{2-}$  dianion: in particular, in its reactivity as a nucleophilic reagent. The beautiful chemistry that was discovered during the course of his investigations is the subject of the present review.

Professor Wesemann's research career has been associated with boron compounds from the start. After chemistry studies at the Rheinisch Westfälische Technische Hochschule (RWTH) in Aachen, Germany, he carried out research there for his Diplom degree and, subsequently, his Ph.D. degree under the guidance of Professor Gerhard Herberich on heterocyclic organoboron compounds such as, for example, the 1,2-dibora-3-cyclopent-3-ene and 3,4-diborafulvene systems and on cyclic boranes containing two boron atoms, prepared by boration of the trimethylenemethane dianion. After he obtained his Ph.D. degree in June 1990, he came to Cambridge, Massachusetts, to spend a year as a postdoctoral research associate in my group at MIT. We had just published our serendipitous discovery of the first silicon analogue of an *o*-carborane, 1,2-dimethyl-1,2-disila-*closo*-dodecaborane ( $(\text{CH}_3)_2\text{Si}_2\text{B}_{10}\text{H}_{10}$ ), and wanted to

investigate this interesting compound more closely. Dr. Wesemann joined this project. This molecule was difficult to prepare and was air-sensitive, and the study of its chemistry initially was neither easy nor fruitful. When the time came for Dr. Wesemann to leave MIT, I encouraged him to continue research on the silaborane, since I had other active research projects in progress and did not intend to continue research in this area. Dr. Wesemann returned to the RWTH and spent the next six years (1991–1997) carrying out work on silaborane chemistry for his Habilitation research. As his publication list shows, he was outstandingly successful in this endeavor and some really original and very interesting chemistry was developed. In his silaborane research, the key reactions were the nucleophilic degradation of 1,2-dimethyl-1,2-disila-*closo*-dodecaborane to give, via loss of a  $\text{CH}_3\text{Si}$  group, the anion  $[\text{CH}_3\text{SiB}_{10}\text{H}_{12}]^-$  and then further degradation of the latter to the di- and trianionic species  $[\text{CH}_3\text{SiB}_{10}\text{H}_{11}]^{2-}$  and  $[\text{CH}_3\text{SiB}_{10}\text{H}_{10}]^{3-}$ . Reactions of these cluster anions provided a rich collection of interesting new neutral and anionic heterosilaboranes that contained, in addition to silicon, other main-group and transition-metal atoms.

In his subsequent academic career, Professor Wesemann spent a year at the University of Karlsruhe as a Heisenberg Fellow and then four years as a C3 (associate) professor at the University of Köln. In July 2003, he was appointed Professor in the Institute of Inorganic Chemistry of the University of Tübingen.

At Tübingen he is continuing research on heteroboranes with the present focus on stannaboranes. Here the most recent development is the synthesis of the interesting *o*-distannadodecaborate ion,  $[\text{Sn}_2\text{B}_{10}\text{H}_{10}]^{2-}$ , so we may look forward to exciting future publications from Professor Wesemann's laboratories.

Professor Wesemann's coauthor, Torben Gädt, was awarded the Ph.D. degree in October 2006 and will join Professor Ian Manners' research group at the University of Bristol in early 2007.

Thanks are due to Professor Arnold L. Rheingold for the cover figure.

**Dietmar Seyferth**

Editor

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