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Editor's Page

The Editor's Introduction to the Review by Escudié and Ranaivonjatovo in This Issue of *Organometallics*

Our cover molecule is an unsaturated organoarsenic compound, the arsaallene 1. The reader will find many members of



this relatively new and very interesting class of unsaturated organometallic compounds in the review on "Group 14 and 15 Heteroallenes E=C=C and E=C=E'" by Jean Escudié and Henri Ranaivonjatovo in this issue of *Organometallics*. Dr. Escudié and his co-workers at the Université Paul Sabatier in Toulouse, France, are among the principal contributors to the chemistry of compounds containing group 14 (Si, Ge, Sn) and 15 (P, As, Sb) atoms double-bonded to carbon: heteroalkenes, as well as the heteroallenes discussed in this review.

Our cover molecule was prepared by a Peterson-type synthesis, the reaction of the α -lithio silicon derivative Mes*As=C-(Li)SiMe₃ with fluorenone. It is the first stable and still unique arsaallene to be prepared. The determination of its molecular structure by X-ray diffraction (reported by Bouslikhane, Gornitzka, Ranaivonjatovo, and Escudié: *Organometallics* **2002**, *21*, 1531–1533) conclusively proved its heteroallenic structure.

Dr. Escudié during his research career has done an outstanding job of continuing and creatively extending the pioneering work in the broad area of the organic chemistry of the group 14 elements (Si and, especially, Ge and Sn) and, in more recent years, the group 15 elements (P, As, Sb) begun at Toulouse by Professor Michel Lesbre and continued and expanded by Professor Jacques Satgé and Dr. Pierre Mazerolles. Dr. Escudié studied chemistry at the Université Paul Sabatier, obtaining a degree in chemistry and physics in 1968 and his "Doctorat de 3° Cycle" in 1970 with thesis research on group 14 phosphines of the type $R_3M - PR'_2$ (M = Si, Ge, Sn) under Professor Satgé. He continued research in collaboration with Professor Satgé to obtain his "Doctorat d'Etat" (habilitation) in 1978 with studies on four- and five-membered heterocyclic compounds that contained Si-P, Ge-P, and Sn-P bonds. During the course of these studies, Dr. Escudié entered the French research organization Centre National de la Recherche Scientifique (CNRS) as Attaché de Recherche in 1973. Promotions to Chargé de Recherche 1° classe (1981), Directeur de Recherche 2° classe (1985), and Directeur de Recherche 1° classe (2003) followed. During the 1979–1980 academic year, Escudié spent a post-doctoral stay at MIT in my research group, where he was highly valued as a talented and productive chemist and as an aggressive tennis player.

Dr. Escudié's very productive independent research has been focused exclusively on unsaturated compounds of the group 14 and 15 elements. In this exciting, fast-moving, and fruitful area, he has many "firsts" to his credit: the first stable compounds containing Ge=P, Sn=P, Ge=C, P=As, and As=As bonds, as well as the first stable Ge=C=P, As=C=P, As=C=As, and P(O)=C=P systems. Evidence also was obtained for the intermediacy of B=P and Ge=N species in reactions that were studied. As expected, such double-bonded compounds have an interesting reactivity and this path also has been followed in Dr. Escudié's research program. The research that Dr. Escudié and his co-workers have carried out at Toulouse represents an outstanding and original contribution to the organometallic chemistry of the group 14 and 15 elements.

Dr. Henri Ranaivonatovo, the coauthor of the review in this issue, is a native of Madagascar. After chemistry studies at the University of Madagascar, he came to Toulouse, where he obtained the "Doctorat de 3° Cycle" (1984) and "Doctorat de l'Université Paul Sabatier" (Ph.D., 1986) under the guidance of Professor Satgé. He has remained in Toulouse, where he holds a CNRS appointment and collaborates in research with Dr. Escudié, except for a postdoctoral stay at the University of Bonn with Professor Edgar Niecke in 1989.

The synthesis and chemistry of allenic compounds containing heteroatoms remains a very active area of research in Toulouse. As the authors point out, further efforts will be directed at new heteroallenes containing the heavier group 14 and 15 elements (Sn, Pb, Sb, and Bi) as well as the group 13 elements. The further development of the high reactivity of the heteroallene systems should be very interesting in view of the various possibilities for attack by external reagents: at the M=C, the C=C, and the R-M bonds. We look forward to the future results of Dr. Escudié and his co-workers.

Our thanks are due Professor Arnold L. Rheingold for the cover figure.

Dietmar Seyferth

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