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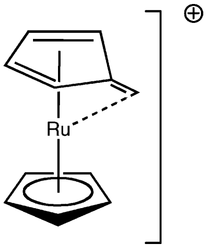
Editor's Page

An Introduction to the Review by Gleiter, Bleiholder, and Rominger in This Issue of *Organometallics*

The molecule on the cover is the ruthenocenylmethylium cation, **1**, prepared and structurally characterized as salts with various counterions by Barlow, Cowley, Green, Brunker, and Hascall of the University of Oxford (*Organometallics* **2001**, *20*, 5351). It serves to introduce the review by Rolf Gleiter, Christian Bleiholder, and Frank Rominger of the University of Heidelberg in the present issue of *Organometallics* on α-metallocenylmethylium ions and isoelectronic fulvene complexes of d^6 to d^9 metals. This review brings an old subject up-to-date: the α-metallocenylmethylium ions, which right from the start were of great interest to organometallic and organic chemists because of their novel structures, their novel bonding, which involves carbenium ion−transition metal interactions, and their high reactivity. Initially discovered during the exciting days of the early exploration of the organic chemistry of ferrocene and its organic derivatives, such species received much attention worldwide. The stabilization of carbenium ions by metals was found to be a general phenomenon, and examples of such interactions have been reported for complexes of ruthenium, osmium, chromium, molybdenum, tungsten, manganese, and cobalt. Not only monocations but also dications became known. Also discovered, but not covered in the present review, which is restricted to five-membered ring systems, were related species such as the η-cyclobutadienylmethylium ion and the cluster nonacarbonyltricobaltmethylidynylmethylium ion.



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The field is now mature, with a good understanding of structure and bonding, well-developed synthetic routes, and a good understanding of reactivity. Professor Gleiter and his coauthors have done an excellent job of summarizing what is known about this highly interesting area, to which Professor Gleiter has been an important contributor.

The reader who wishes to know more about Professor Gleiter is referred to my Editor's Page that introduced his earlier review in *Organometallics* on "Reactions of Metal-Complexed Carbocyclic 4π Systems" (*Organometallics* **2005**, *24*, 4316). The present review reflects yet another aspect of his varied interests.

Christian Bleiholder obtained his Ph.D. in chemistry under the guidance of Professor Gleiter. In his dissertation research in the field of applied quantum chemistry, he investigated the fragmentation pathways of protonated oligopeptides and the van der Waals forces between chalcogen-containing molecules. Frank Rominger is head of the X-ray structure analysis facility of the Institute of Organic Chemistry at the University of Heidelberg. He obtained his Ph.D. degree in 1996 at the University of Ulm with a thesis on heteronuclear complexes of chromium and other metals.

We are grateful to Professor Arnold L. Rheingold for the cover figure.

Dietmar Seyferth
Editor

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