

Volume 24, Number 22, October 24, 2005

© Copyright 2005 American Chemical Society

## Editor's Page

This issue of *Organometallics* contains a review on the synthesis and reactivity of heteropentadienyl-transition-metal complexes by John R. Bleeke. The cover molecule is  $[((1,2,5-\eta)-5-\text{thiapentadienyl})\text{iridium}][\text{tris}(\text{trimethylphosphine})]$ , a sulfurcontaining member of this class of complexes that was reported by Professor Bleeke in 1992 (Bleeke, J. R.; Ortwerth, M. F.; Chiang, M. Y. *Organometallics* **1992**, *11*, 2740). This compound, isolated as yellow crystals, was prepared by the reaction of potassium thiapentadienide with (Me<sub>3</sub>P)<sub>3</sub>IrCl. In his review, Professor Bleeke covers comprehensively the known oxa-, aza-, and phosphapentadienyl- as well as the thiapentadienyl-transition-metal complexes prepared in his laboratories as well as those reported by other workers.

Professor Bleeke, who obtained his Ph.D. under the supervision of Earl Muetterties at Cornell University in 1981, joined the chemistry faculty at Washington University in St. Louis in that year and has been there ever since. His earlier, very interesting research on metallabenzenes was summarized in an excellent review (Bleeke, J. R. *Chem. Rev.* **2001**, *101*, 1205). Other research was devoted to pentadienyl-metal complexes, which led him to the heteropentadienyl complexes that are the subject of this review. However, in Professor Bleeke's publications one encounters an array of interesting and novel organometallic species such as metallafurans, metallapyryliums, metallathiophenes, and metallathiabenzenes, to mention a few. All in all, Professor Bleeke's research publications represent an outstanding contribution to organometallic chemistry.

The heteropentadienyl-metal complexes that are the subject of this review will be of particular interest to the reader because of their unique reactivity, much of which, as Professor Bleeke says, "stems from the ability of the heteropentadienyl ligand to adopt a variety of bonding modes and shuttle easily between them."

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

## **Dietmar Seyferth**

Editor OM050746B