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Editor's Page

An Introduction to the Review by Geiger in This Issue of Organometallics

One can hardly overstate the importance of electrochemistry in both basic and applied scientific research. In the review accompanying this issue of Organometallics, Bill Geiger presents a delightful account of organometallic electrochemistry. The narrative begins with a historical perspective of pre-ferrocene days, examines the early redox chemistry of metallocenes, continues on to discuss contemporary organometallic electrochemical studies, and then boldly hints at the future. Many organometallic chemists have been reluctant to add voltammetric equipment to their experimental arsenal, in spite of the relatively low cost of modern instrumentation and software. Professor Geiger's review beautifully demonstrates the wealth of exciting chemistry that can be revealed and subsequently utilized by the application of electrochemical techniques to organometallic compounds. The topics covered include redoxinduced structural changes (isomerization, migratory insertion, hapticity variation in cyclic π -hyrodrocarbon ligands), ligand substitution in 17- and 19-electron radicals, electrocatalysis in substitution and insertion reactions, the acidity of oxidized metal hydrides, and syntheses based on the use of targeted redox reagents. For those desiring more specialized detail, Professor Geiger includes appendixes on the use of the ferrocenium/ferreocene couple as the standard reference, on how to display cyclic voltammograms, and on digital simulations of voltammetric data. A useful list of general references is also provided.

The cover illustration was kindly provided by Dr. Jeffrey A. Reingold, who is a graduate of Brown University and currently Manager of R & D at Interpharm, Inc.

Dwight A. Sweigart

Associate Editor

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