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Editor's Page

In the short review accompanying this issue of *Organometallics*, Kevin Smith nicely illustrates how single electron transfer (SET) reactions in organometallic chemistry can be usefully applied in a variety of synthetic procedures. The focus is on the first-row transition-metal complexes that undergo single electron transfer to afford viable paramagnetic species. Professor Smith illustrates the utility of such chemistry in three sample reaction types: (1) the synthesis of Cr(II)/Cr(III) alkyl complexes containing β-diketiminato ligands that serve as single-component olefin polymerization catalysts, (2) the generation of three-coordinate Ni(I)/Ni(II) amido and imido complexes and the importance of ligand steric bulk in preventing bimolecular decomposition, and (3) the use of SET oxidation reactions to induce α-H abstraction in the directed conversion of V(III)−alkyl to V(IV)−alkylidene and then to V(V)−alkylidyne complexes. Open-shell paramagnetic organometallic complexes are often suspected as catalytic intermediates, and the review by Smith emphasizes the potential benefits of using SET oxidations, perhaps guided by electrochemical studies and theoretical calculations, as a way to access these important species.

The cover illustration was kindly provided by Mr. Jeffrey A. Reingold, who is a graduate student in chemistry at Brown University and also President of the Graduate Student Council.

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