

PREFACE

Many important redox reactions involve the formal transfer of hydride from a carbon-hydrogen bond. Examples include catalytic cracking and reforming, as well as other basic reactions in the petrochemical industry; enzymatic and non-enzymatic redox reactions involving 1,4-dihydropyridines like NADH; and other well-known reactions like the Meerwein-Ponndorf-Verley reduction. Even after many years of study, these formal transfers of hydride continue to intrigue chemists and stimulate creative research. The last several years have been especially fruitful, since the mechanism of reduction of biochemically relevant substrates by dihydronicotinamides has been clarified; the transition states of various hydride transfers have been probed by a combination of theoretical and ingenious experimental studies; new synthetic applications have been developed; and the traditionally limited range of hydride donors has been extended to include many new organic and organometallic compounds. The purpose of this Symposium-in-Print is to draw attention to the fascinating diversity and broad significance of this recent work on formal transfers of hydride from carbon-hydrogen bonds.

The contributors to this Symposium include many of the groups responsible for these exciting developments. I would like to thank them and the reviewers of their papers for having made this Symposium-in-Print possible.

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