

H. Quantification of the Reactivities of Synthetically Important Reagents

Apart from species which are relevant for organocatalytic processes (Section G), recent studies have focused on the nucleophilic reactivities of hydride donors (#319, 339, 363), nucleobases (# 316), P-, S-, N-ylides (# 264, 293, 299, 307, 357), and organoborates (# 318, 346) and the comparison with stabilized carbanions. Though some reactions of quinones with π -nucleophiles were found to proceed via inner sphere electron transfer processes, the rate constants of the reactions of DDQ and halogen-substituted quinones with amines and π -nucleophiles were found to follow eq. (1), which allows us to define the synthetic potential of quinones (# 355, 364). Different pathways for hydride abstractions from C-H, B-H, and Sn-H groups by DDQ were established (# 365).