

PERFLUOROALKYLATION INITIATING WITH SODIUM DITHIONITE  
AND RELATED REAGENTS SYSTEMS

W. Y. Huang

Shanghai Institute of Organic Chemistry, Academia Sinica  
345 Lingling Rd. Shanghai 200032, China

The discovery of sulfinatodehalogenation reaction and the addition of  $R_fI$  and related compounds to CC multiple bonds and perfluoroalkylation of aromatic and heteroaromatic systems initiated with sodium dithionite have aroused much interest recently. The present report will discuss the result of further study on this and related topics carried out in our laboratory, including the reactions with acetylenes, conjugated dienes, allenes, vinyl ethers and alpha -methylene cyclic ethers as well as with aromatic and heteroaromatic compounds. The results of some chemical conversion of the adducts obtained for the synthesis of useful synthetic intermediates will also be presented. A comparison between the dithionite initiated reaction with other related systems will be made and discussed.