D. Kinetics of the Reactions of Carbocations with Alkenes

The rules developed in A were used to develop a kinetic method for determining the rates of attack of carbocations at CC-double bonds.

$$R^+ BCI_4^- + SIOW R + BCI_4^- Fast R + BCI_3$$

Though this type of reaction represents the key-step of many transformations in organic and macromolecular chemistry as well as in biochemistry, prior to our work, rate constants for such processes were essentially unknown. Three communications in Angewandte Chemie (# 47, 56, 57) and three back to back full papers in *J. Am. Chem. Soc.* (# 95, 96, 97) changed this situation abruptly. Nowadays, hundreds of rate constants, mostly by us, are available, and electrophilic alkylations of alkenes are now among the best understood CC-bond forming reactions (# 100).