## A. Aliphatic Friedel-Crafts Reactions

Lewis acid induced reactions of alkyl halides with alkenes may either yield 1:1 adducts or lead to polymers. In the early 1980s, rules were developed how to selectively produce [1:1]-adducts and avoid the formation of polymers (# 19, 34): When catalytic amounts of Lewis acids are employed, the reactant RX must ionize more readily than the product R–C–C–X. With stoichiometric quantities of strong Lewis acids, this rule must be reversed (# 100, 136)

$$R-CI \nearrow R' \xrightarrow{MCI_n} R \xrightarrow{CI} R'$$