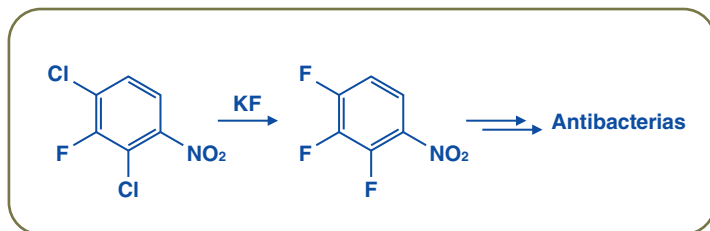
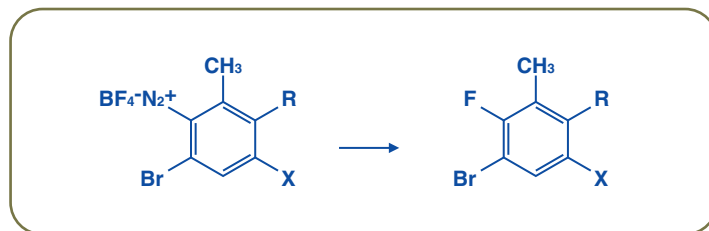


AGC Fluorine Technology (1)

1 HALOGEN EXCHANGE REACTION

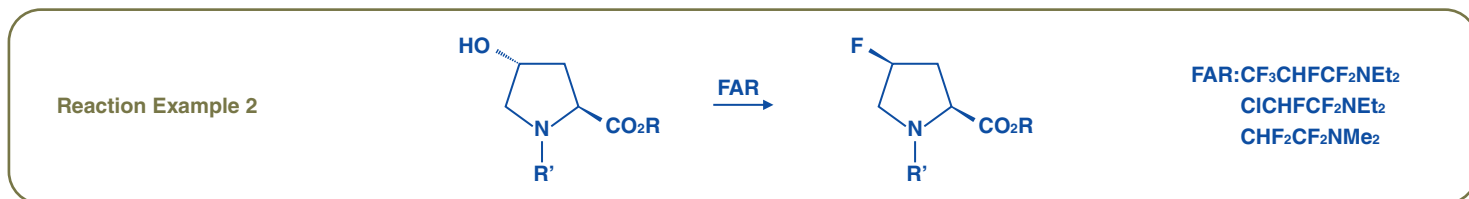
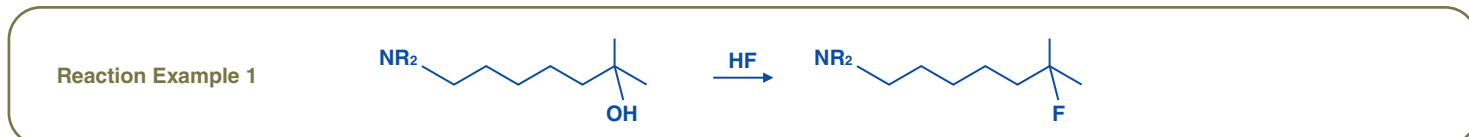


2 DIAZO-FLUORINE REACTION

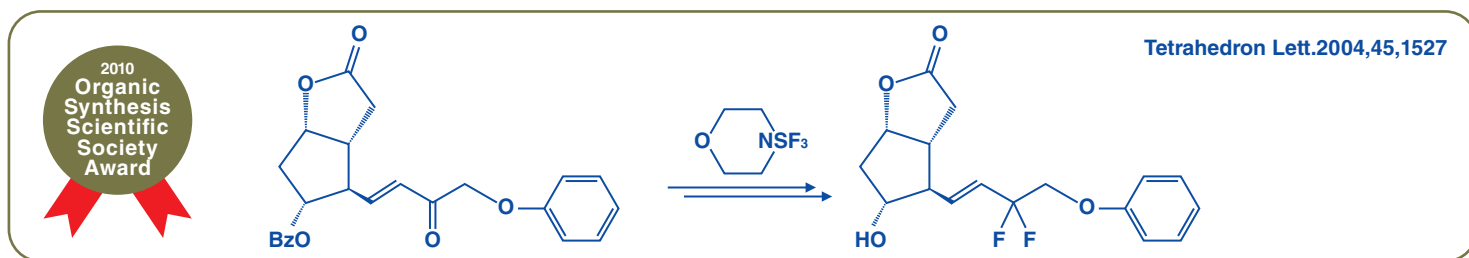
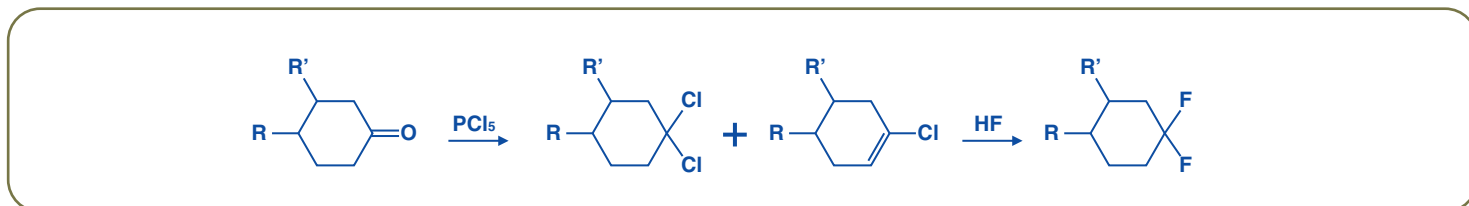


3 NUCLEOPHILIC FLUORINATION

1. Deoxofluorination of Alcohols

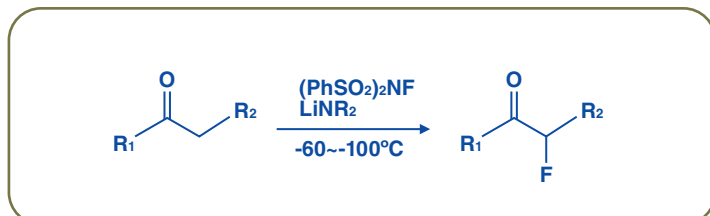


2. Deoxofluorination of Ketones

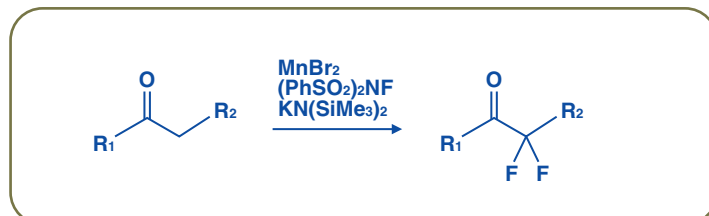


4 ELECTROPHILIC FLUORINATION

1. Monofluorination



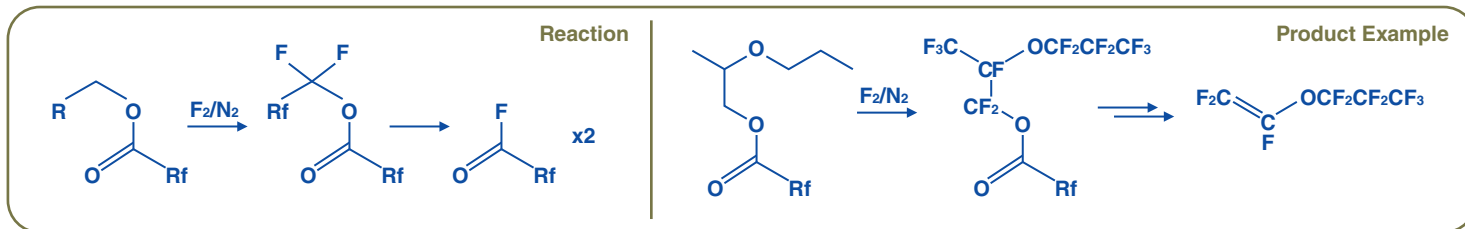
2. Difluorination



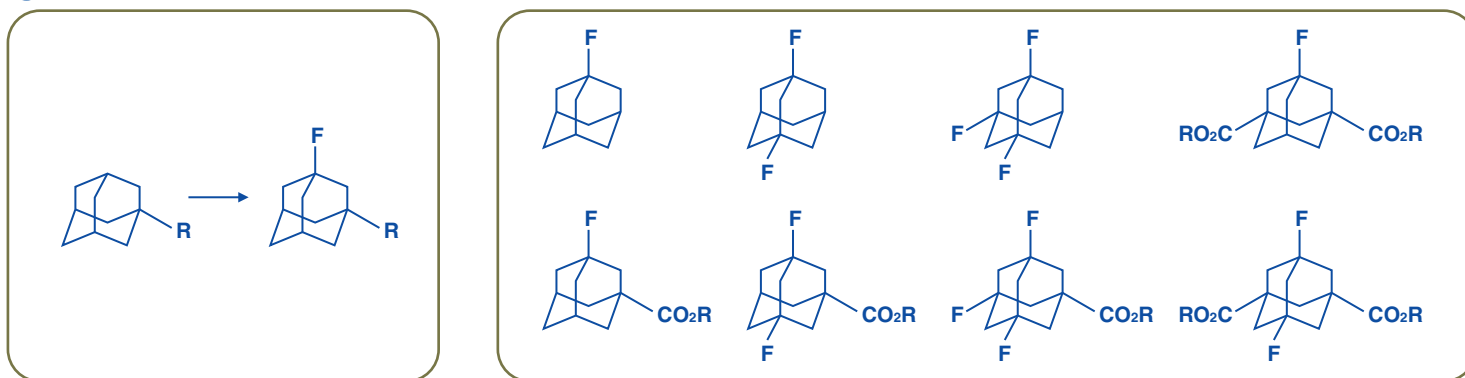
R_1 : alkyl, aryl, OR', NR'2

AGC Fluorine Technology (2)

5 "PERFECT" PROCESS

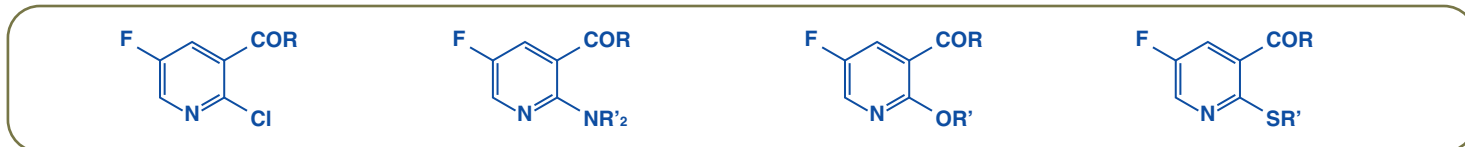


6 ELECTRO CHEMICAL FLUORINATION (ECF)



7 OTHERS

Fluorine - Containing Pyridine Derivatives



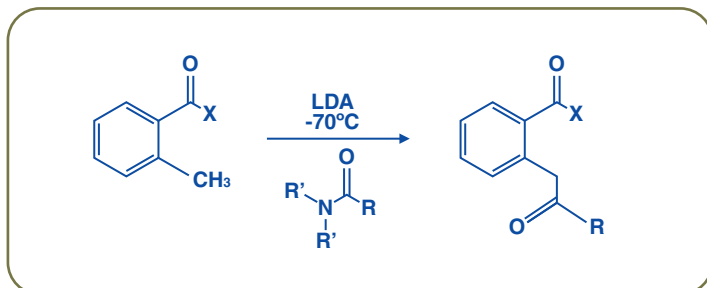
R:OH,OR,NR₂'

Ultra Low Temp. Reaction 50-100 kg scales

1. Ortho-Lithiation



2. Condensation



3. Coupling

