

MIXED ORGANOFLUORINE-ORGANOSILICON CHEMISTRY:  
 REACTIONS OF PERFLUOROORGANOMETALLIC REAGENTS WITH  
 ACYLSILANES

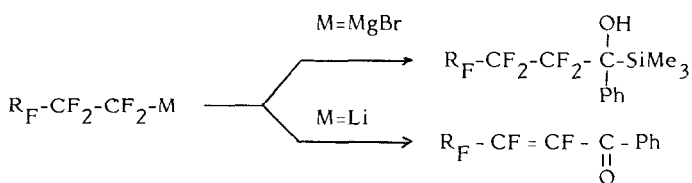
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The ability of fluorine to undergo  $\beta$ -elimination and its high affinity for silica were exploited to achieve new reactions.

Acylsilanes were chosen as organosilicon substrates as they were able, under nucleophilic attack, to undergo C to O migration (Brook rearrangement). When the nucleophile is a perfluoroalkyl group, elimination of fluoride may occur, with subsequent nucleophilic attack on silicon by the fluoride. To initiate this study, assays were made with benzoyltrimethylsilane and perfluoroalkyl lithium.

Results are quite different according to the organometallic species (scheme)



Reaction conditions and mechanism will be described.