GENERATION AND TRAPPING OF A STABILISED DIFLUOROVINYL ANION

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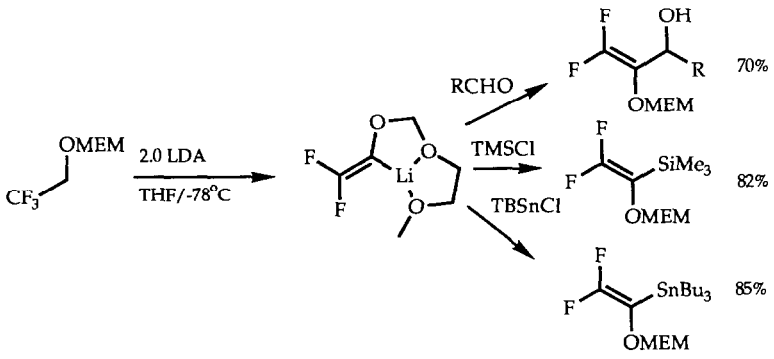
The generation of the anion is described; this species reacts with a range of electrophiles in good yield, according to the Scheme.



The adducts display synthetic utility; the adduct with chlorodimethylphenylsilane allows stereocontrolled replacement of the fluorine *anti*-to the silicon with an alkyl group. The adduct with tributyltin chloride serves as a convenient source for the anion under amine-free conditions while the aldehyde adducts, after suitable derivatisation undergo a range of sigmatropic rearrangements leading to interesting difluoromethylene-containing compounds. The anion represents a significant addition to the pool of fluorine-containing building blocks and approaches to fluorine-containing natural product analogues using this chemistry will be described.

J. Percy, *Tetrahedron Lett.*, 1990, **31**, 3931-2.