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## FLUOROALKYLETHYLENES AND THEIR EPOXIDES

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Fluoroalkylethylenes of types 1 and 2 are unresponsive to the usual reagents for epoxidation, but recent methods have made the epoxides and related halohydrins readily available. Use of the reagent  $X_2/nSO_3$ , which readily attacks the double bond of both 1 and 2, will be described in detail and compared to two other effective reagents. Halohydrins of 1 and 2 are readily obtained and converted to epoxides 3 and 4, the latter of which is a previously unknown class.

$$R_FCH=CH_2$$
  $R_FCH=CHR_F$   $R_FCHCH_2$   $R_FCHCHR_F$   $O$   $O$   $O$ 

Some chemistry of the intermediates and epoxides, including polymerization, will also be presented.