

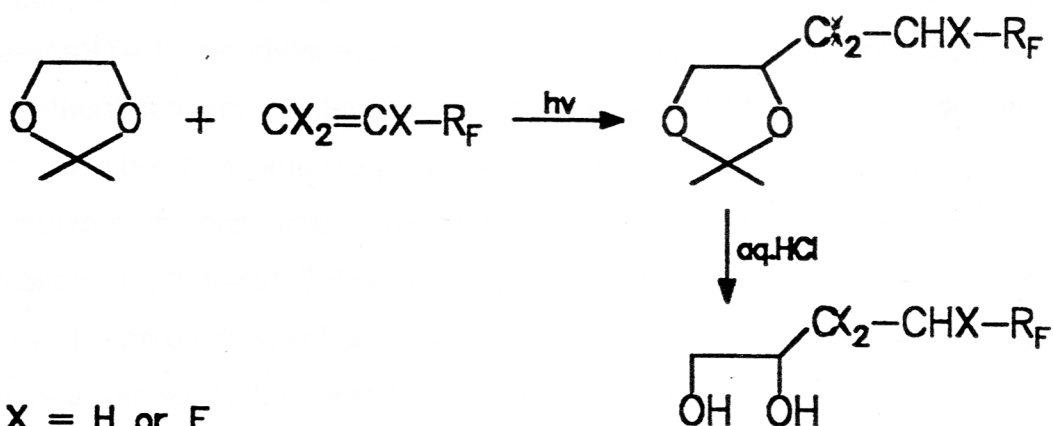
FLUOROALKYLATED 1,3-DIOXOLANES: SYNTHESIS AND CLEAVAGE

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The aim of the study was to use 1,3-dioxolanes for fluoroalkylation, which proceeds by a radical addition to fluoroolefins, vinyl perfluoroalkyls or to trifluorovinyl perfluoropolyethers; with 100% regioselectivity and with total conversion. Preparative yields were higher than 90%.

Fluoroalkylated 1,3-dioxolanes were transformed into diols by ring cleavage with hydrochloric acid in preparative yields of 85-90%. Diols are intermediates in the preparation of mono- and bifunctional monomers and polymers such as poly(meth)acrylates, polyurethanes and polyesters.



X = H or F

