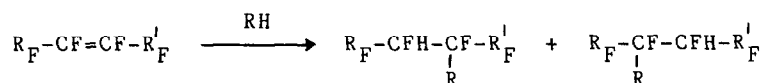


FREE RADICAL ADDITION OF OXYGEN CONTAINING COMPOUNDS
TO INTERNAL PERFLUOROOLEFINS


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Reactions of internal perfluoroalkenes with aliphatic alcohols, aldehydes or ethers under UV irradiation were studied. 1:1 adducts were found to be the dominant or the only products of the reactions in all cases.



R_F, R'_F - perfluoroalkyl;

R - CH_2OH , $\text{CH}(\text{CH}_3)\text{OH}$, $\text{C}(\text{CH}_3)_2\text{OH}$, $\text{C}-\text{H}$, 

Stereochemistry and regioselectivity of the transformations were investigated. Radical intermediates of the reactions were registered by ESR method, and their structure and reactivity were studied. Hindered rotation of the substituents in radical derivatives of perfluoro-4-methylpentene-2 was observed.