

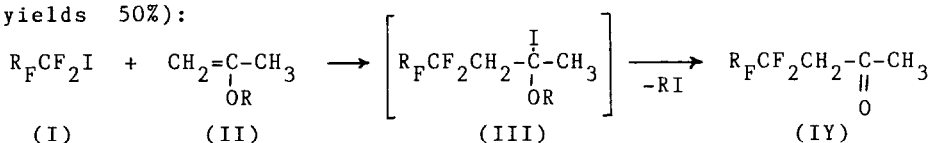
051

PERFLUOROALKYL IODIDES INTERACTION WITH UNSATURATED  
ETHERS

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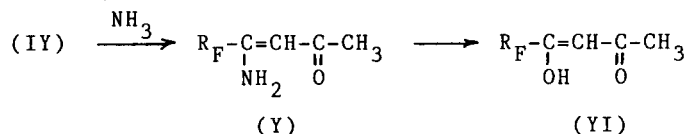
Reaction of primary perfluoroalkyl iodides -  $R_FCF_2I$  (I) with isopropenol ethers (II) resulted in polyfluoroalkylacetones (IY) (yields 50%):



The process is accompanied by some side reactions, the main of which are reduction of adducts (III) and ketones (IY), as well as oligomerization and polymerization of ethers (II).

We studied the dependence of main product (IY) yield on substituents nature ( $R_F$ , R) in starting material, the way of radical process initiation, solvents, etc.

The synthesised ketones (IY) were used to obtain polyfluorinated  $\beta$ -diketones (YI) and their aza-analogs (Y):



$R_F$  - perfluoroalkyl

R - alkyl

Some physical properties of  $\beta$ -dicarbonyl compounds (Y) and (YI) are discussed.