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REACTIONS OF PERFLUOROALKANE CARBOXYLIC ACID HYDRAZIDES WITH IMINOCOMPOUNDS

V. A. Lopyrev, E. N. Medvedeva, I. D. Kalikhman and T. I. Yushmanova*

Institute of Organic Chemistry, Sib. Div. Ac. Sci. USSR, 664033 Irkutsk (U.S.S.R.)

When investigating the interaction between perfluoroacylhydrazines (Ia) and 1-perfluoroacyl-2-alkyl(phenyl)hydrazines (Ib-d) on one hand and amidines on the other hand a difference in the reaction course was found.

R_F= CF₃,C₂F₅,C₃F₇,C₄F₉,C₆F₁₃; R=H(a),CH₃(b), i-CH₇(c),C₆H₅(d); R'= CH₃,C₆H₅. The reaction of (Ib-d) with acetamidine and benzamidine leads to N-perfluoroacylamidines (II) in 80-95% yield, whereas (Ia) react with amidines to give N-perfluoroacylamiderazones (III) which transform to the corresponding 3(5)-perfluoroalkyl-5(3)-methyl(phenyl)-1,2,4-triazoles (IV). Compounds (Ib) interact with S-methylisothiourea to afford N-methyl-N'-perfluoroacylaminoguanidines which, when heated in vacuum, undergo cyclization and form 1-methyl-3-perfluoroalkyl-5-amino-1,2,4-triazoles.

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OLIGOMERS OF F-ALKENES, -CYCLOALKENES AND RELATED COMPOUNDS

R. D. Chambers*, J. R. Kirk and G. Taylor

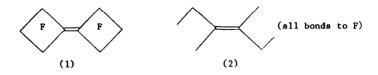
University of Durham, Durham City, DH1 3LE (U.K.)

H. C. Fielding and R. L. Powell

I.C.I. Ltd., Mond Division, Runcorn Heath (U.K.)

Some aspects of the chemistry of oligomers and related internal F-alkenes will be described, including:

(a) Effect of strain on reactivity, by comparing systems (1) and (2)



(b) Reactions with carbon nucleophiles, leading to heterocyclic compounds as products.