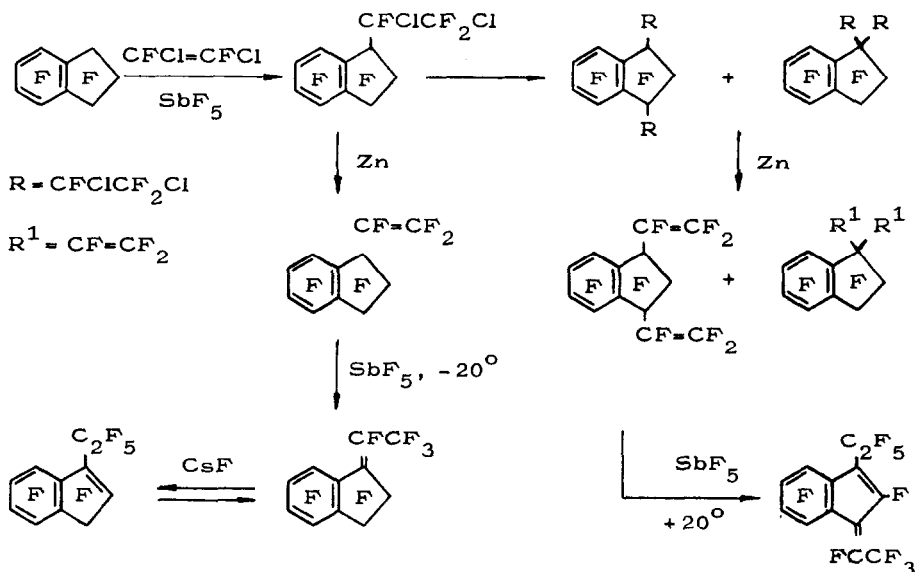


SYNTHESIS AND CHEMISTRY OF POLYFLUORINATED ALKYL- AND VINYL-BENZOCYCLOALKENES

I. P. Chuikov, V. M. Karpov, T. V. Mezhenkova, V. E. Platonov and G. G. Yakobson

Institute of Organic Chemistry, Novosibirsk, 630090 (U.S.S.R.)

A reasonably general method of synthesis of polyfluorinated alkyl- and dialkylbenzocycloalkenes by the reactions of perfluoro-benzocycloalkenes with fluoroolefins in the presence of SbF_5 has been elaborated. A variety of perfluorinated vinyl- and divinylbenzocycloalkenes have been synthesized by dehalogenation of the products of the reactions of benzocycloalkenes with difluorodichloroethylene. Perfluorinated 1-ethylidenindan and 3-ethylindene have been synthesized from perfluoro-1-vinylindan. Perfluoro-1,3-divinylindan reacts with antimony pentafluoride to give a perfluorinated fulvene.



Some chemical transformations of the products with nucleophilic and electrophilic agents have been studied. Routes of the above mentioned reactions have been discussed.