REACTIONS OF ELECTROPHILIC ADDITION XENON OF FLUOROSULFATES

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Substitution of the fluoride on xenon difluoride with the oxygen of organic and inorganic acids [1] has been documented. Undoubtedly, these oxygen xenon compounds are stabilized with electron-withdrawing substituents can have synthetic application for the functionalization olefins, aromatic and others organic compounds.

We have shown that the reaction of xenon difluoride with sulfur trioxide with the formation of two electrophilic reagents: $FXeOSO_2F$ (1) and $Xe(OSO_2F)_2$ (2) on the ratio of starting components [2], which react at low temperatures with differents olefins to give halogenoalkylfluorosulfates.

On the basis of the experimental results, we suggest the mechanism of a electrophilic addition compounds (1) and (2).

The isolated yields of the product fluorosulfates are in the range of 50-85%, and structure were assigned by IR and NMR spectra.

¹ Wechsberg M., Bulliner P.A., Sladky F.O., Mews R., Barlett N. Inorg. Chem. 1972, 11, 3063.

² Brel V.K., Koz'min A.S, Uvarov V.I., Zefirov N.S., Zhdankin V.V., Stang P.J. Tetrahedron Letters. 1990, 31, No 36, 5225-5226.