SOME NEW COMPOUNDS CONTAINING N(SO₂F)₂ GROUP

P. L. Dhingra and R. D. Verma*

Department of Chemistry, Panjab University, Chandigarh (India)

Imidobis(sulfuryl fluoride), $\operatorname{HN}(\operatorname{SO}_2\mathsf{F})_2$, is a strong protonic acid. Like other strong protonic acids it forms adducts with carboxylic acids having composition RCOOH.HN($\operatorname{SO}_2\mathsf{F})_2$; $\mathsf{R}=\operatorname{CH}_3$, $\operatorname{C}_2\mathsf{H}_5$, $\operatorname{n-C}_3\mathsf{H}_7$, CF_3 , $\operatorname{CH}_2\mathsf{Cl}$. The adducts are ionic. $\operatorname{N}(\operatorname{SO}_2\mathsf{F})_2$ is a potential pseudohalogen group. $\operatorname{MN}(\operatorname{SO}_2\mathsf{F})_2$, $\mathsf{M}=\operatorname{Co}$, Ni , Cu and $\operatorname{SbCl}_4\mathsf{N}(\operatorname{SO}_2\mathsf{F})_2$ have been prepared and characterized. Compounds of the type A_2 [$\operatorname{TiCl}_4\mathsf{Y}_2$], A [$\operatorname{FeCl}_3\mathsf{Y}$], A_2 [$\operatorname{MCl}_2\mathsf{Y}_2$], ($\operatorname{A}=\operatorname{Me}_4\mathsf{N}$ and/or $\operatorname{S}_4\mathsf{N}_3$; $\operatorname{Y}=\operatorname{N}(\operatorname{SO}_2\mathsf{F})_2$; $\operatorname{M}=\operatorname{Mn}$, Fe , Co , Ni , Cu) will also be discussed.