P-31

THE CRYSTAL STRUCTURE OF NO₂SeO₃F

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The single crystals of nitryl fluoroselenate have been prepared ba the reaction of anhydrous HNO_3 with $\mathrm{SeO}_2\mathrm{F}_2$ in nitromethane. $\mathrm{NO}_2\mathrm{SeO}_3\mathrm{F}$ is monoclinic, space group $\mathrm{C2/c}$ with a=9.45, b=38.64, c=7.54 Å, β =115.5°, Z=20. A characteristic feature of Weissenberg photographs is a presence of strong reflexions for index k=5n which are accompanied by a pair of weak ones. This indicates that the basic structure can be described in a smaller cell of 1/5 size. Thus obtained superpositional structural model is isostructural with $\mathrm{NO}_2\mathrm{ClO}_4$ and is a good starting point for the solution of real structure.