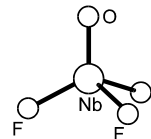


## Structure Data of Free Polyatomic Molecules

192 ED	<b>F<sub>3</sub>NbO</b>	<b>Trifluoro(oxo)niobium(V)</b>	<b>C<sub>3v</sub> assumed</b>
		Niobium(V) trifluoride oxide	NbOF <sub>3</sub>
	$r_g$	$\text{\AA}^a$	
	Nb=O	1.697(7)	
	Nb–F	1.872(4)	
	$r_g$	$\text{\AA}^a$	
	Nb=O	1.688(7)	
	Nb–F	1.861(4)	
	$\theta_g$	deg <sup>a</sup>	
	O=Nb–F	107.1(15)	
	F–Nb–F	111.6(14)	



NbOF<sub>3</sub> and NbF<sub>5</sub> molecules were detected in the vapor over NbF<sub>5</sub>·*n*H<sub>2</sub>O by a combined analysis of ED and mass spectrometric data. According to the ED data the amounts of NbOF<sub>3</sub> and NbF<sub>5</sub> were 98 and 2 mol%, respectively. The molecular parameters of NbF<sub>5</sub> were assumed at the values from the literature.

The temperature of the measurements was 595(7) °C.

<sup>a</sup>) 2.5 times the estimated standard errors including a systematic error.

Giricheva, N.I., Girichev, G.V.: J. Mol. Struct. **484** (1999) 1.

See also: Belova, I.N., Giricheva, N.I., Girichev, G.V., Shlykov, S.A.: Zh. Struct. Khim. **37** No.4 (1996) 708; J. Struct. Chem. (Engl. Transl.) **37** (1996) 609.