Preparation and Characterization of 2-Phenoxyethyl(thiophen-2-yl)tellane $(C_4H_3S)TeCH_2CH_2OC_6H_5$

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The synthesis and structure of $(C_4H_3S)TeCH_2CH_2OC_6H_5$ (**1**) (C_4H_3S = thiophen-2-yl) are reported and compared to those of the analogous selenium compound $(C_4H_3S)SeCH_2CH_2OC_6H_5$ previously synthesized by our group. The compound was characterized by ^{1}H, ^{13}C$\{^1$H$\}$-, and ^{125}Te-NMR spectroscopy as well as by X-ray single crystal crystallography. **1** crystallizes in the monoclinic crystal system, space group $P2_1$, with $Z = 2$, and unit cell dimensions $a = 10.618(2)$ Å, $b = 5.357(1)$ Å, $c = 10.684(2)$ Å, $\beta = 96.57(3)^\circ$. The lattice is composed of discrete molecules that are joined together by weak hydrogen bonds into a three-dimensional network. The thiophen-2-yl ring is disordered and shows two alternative orientations with the site occupation factors of 0.70(1) and 0.30(1). All bond parameters are quite normal. The comparison of the lattices in **1** and in its selenium anologue shows that while the closest intermolecular contacts are similar, the packing of the molecules is different.

Key words: Telluroether, 2-Phenoxyethyl(thiophen-2-yl)tellane, X-Ray Crystallography, NMR Spectroscopy