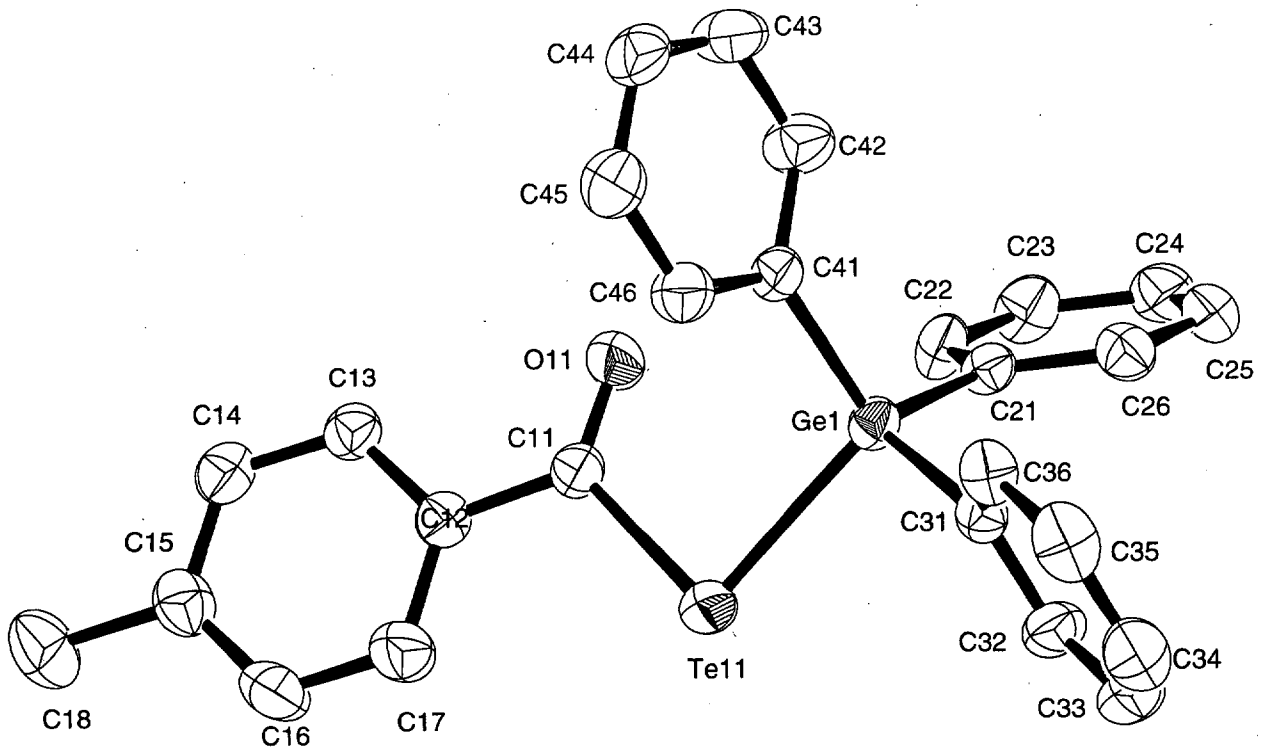

Figure 1. The ORTEP drawing of 4-$CH_3C_6H_4COTeGePh_3$ **2b**.

Table 1. Atomic coordinates and B_{iso}/B_{eq} of **2b**

atom	x	y	z	B_{eq}
Te(11)	0.15232(2)	0.34799(1)	-0.08235(2)	2.996(4)
Ge(1)	0.23670(3)	0.21113(2)	-0.19083(3)	2.310(5)
O(11)	0.4218(2)	0.3009(1)	0.2138(3)	3.56(4)
C(11)	0.3196(3)	0.3475(2)	0.1852(3)	2.63(5)
C(12)	0.2999(3)	0.4056(2)	0.3239(3)	2.63(5)
C(13)	0.3966(3)	0.4014(2)	0.4988(3)	2.77(5)
C(14)	0.3816(3)	0.4537(2)	0.6324(4)	3.14(6)
C(15)	0.2713(4)	0.5117(2)	0.5963(4)	3.44(6)
C(16)	0.1757(4)	0.5163(2)	0.4223(5)	4.49(8)
C(17)	0.1882(4)	0.4639(2)	0.2869(4)	4.02(7)
C(18)	0.2570(4)	0.5703(2)	0.7417(5)	4.73(8)
C(21)	0.4249(3)	0.2235(2)	-0.2398(3)	2.41(5)
C(22)	0.5525(3)	0.2708(2)	-0.1278(3)	3.03(5)
C(23)	0.6842(3)	0.2788(2)	-0.1688(4)	3.46(6)
C(24)	0.6896(3)	0.2388(2)	-0.3230(4)	3.45(6)
C(25)	0.5652(3)	0.1911(2)	-0.4341(4)	3.37(6)
C(26)	0.4326(3)	0.1831(2)	-0.3952(4)	2.96(5)
C(31)	0.0688(3)	0.1838(2)	-0.4144(3)	2.52(5)
C(32)	0.0416(3)	0.2388(2)	-0.5501(4)	3.31(6)
C(33)	-0.0767(4)	0.2214(2)	-0.7088(4)	4.11(7)
C(34)	-0.1707(3)	0.1500(2)	-0.7371(4)	4.38(7)
C(35)	-0.1449(3)	0.0952(2)	-0.6052(4)	3.95(7)
C(36)	-0.0252(3)	0.1116(2)	-0.4439(4)	3.08(6)
C(41)	0.2510(3)	0.1292(2)	-0.0172(3)	2.50(5)
C(42)	0.3799(3)	0.0845(2)	0.0479(4)	3.67(6)
C(43)	0.3901(4)	0.0260(2)	0.1710(4)	4.12(7)
C(44)	0.2728(4)	0.0117(2)	0.2313(4)	3.85(7)
C(45)	0.1453(4)	0.0570(2)	0.1712(5)	4.28(8)
C(46)	0.1329(3)	0.1150(2)	0.0463(4)	3.52(6)
H(11)	0.4738	0.3622	0.5255	3.4
H(12)	0.4395	0.4425	0.7511	4.9
H(13)	0.0974	0.5636	0.3884	4.9
H(14)	0.1096	0.4669	0.1593	4.9
H(15)	0.3157	0.5507	0.8560	5.8
H(16)	0.2969	0.6249	0.7359	5.8
H(17)	0.1545	0.5722	0.7346	5.8
H(21)	0.5445	0.2969	-0.0235	4.9
H(22)	0.7759	0.3144	-0.0936	4.9
H(23)	0.7806	0.2450	-0.3516	4.1
H(24)	0.5665	0.1635	-0.5482	4.9
H(25)	0.3347	0.1473	-0.4767	4.9
H(31)	0.0984	0.2938	-0.5332	4.9
H(32)	-0.0938	0.2607	-0.7989	4.9
H(33)	-0.2636	0.1398	-0.8397	4.9
H(34)	-0.2113	0.0462	-0.6258	4.9
H(35)	-0.0011	0.0705	-0.3320	4.9
H(41)	0.4622	0.0944	0.0057	4.4
H(42)	0.4803	-0.0045	0.2151	4.8
H(43)	0.2780	-0.0261	0.3166	4.9
H(44)	0.0649	0.0489	0.2178	5.1
H(45)	0.0426	0.1454	0.0032	4.2

Table 2. Bond Lengths(Å) of **2b**

atom	atom	distance	atom	atom	distance
Te(11)	Ge(1)	2.5742(3)	Te(11)	C(11)	2.181(3)
Ge(1)	O(11)	3.332(2)	Ge(1)	C(21)	1.944(2)
Ge(1)	C(31)	1.951(3)	Ge(1)	C(41)	1.945(3)
O(11)	C(11)	1.204(3)	C(11)	C(12)	1.483(4)
C(12)	C(13)	1.392(4)	C(12)	C(17)	1.396(4)
C(13)	C(14)	1.379(4)	C(13)	H(11)	0.95
C(14)	C(15)	1.383(4)	C(14)	H(12)	0.95
C(15)	C(16)	1.384(4)	C(15)	C(18)	1.509(4)
C(16)	C(17)	1.383(4)	C(16)	H(13)	1.05
C(17)	H(14)	1.04	C(18)	H(15)	0.97
C(18)	H(16)	0.95	C(18)	H(17)	0.94
C(21)	C(22)	1.389(4)	C(21)	C(26)	1.405(4)
C(22)	C(23)	1.388(4)	C(22)	H(21)	0.95
C(23)	C(24)	1.387(4)	C(23)	H(22)	1.00
C(24)	C(25)	1.372(4)	C(24)	H(23)	0.96
C(25)	C(26)	1.387(4)	C(25)	H(24)	1.00
C(26)	H(25)	1.05	C(31)	C(32)	1.403(4)
C(31)	C(36)	1.388(4)	C(32)	C(33)	1.377(4)
C(32)	H(31)	0.99	C(33)	C(34)	1.380(5)
C(33)	H(32)	0.96	C(34)	C(35)	1.378(5)
C(34)	H(33)	0.97	C(35)	C(36)	1.395(4)
C(35)	H(34)	0.95	C(36)	H(35)	1.11
C(41)	C(42)	1.382(4)	C(41)	C(46)	1.390(4)
C(42)	C(43)	1.384(4)	C(42)	H(41)	0.96
C(43)	C(44)	1.365(5)	C(43)	H(42)	0.96
C(44)	C(45)	1.375(5)	C(44)	H(43)	0.93
C(45)	C(46)	1.386(4)	C(45)	H(44)	0.96
C(46)	H(45)	0.96			

Table 3. Bond Angles(°) of **2b**

atom	atom	atom	angle	atom	atom	atom	angle
Ge(1)	Te(11)	C(11)	93.76(7)	Te(11)	Ge(1)	O(11)	58.57(3)
Te(11)	Ge(1)	C(21)	114.20(8)	Te(11)	Ge(1)	C(31)	101.12(7)
Te(11)	Ge(1)	C(41)	108.40(7)	O(11)	Ge(1)	C(21)	88.38(8)
O(11)	Ge(1)	C(31)	158.28(8)	O(11)	Ge(1)	C(41)	71.09(8)
C(21)	Ge(1)	C(31)	108.6(1)	C(21)	Ge(1)	C(41)	111.4(1)
C(31)	Ge(1)	C(41)	112.8(1)	Ge(1)	O(11)	C(11)	86.9(2)
Te(11)	C(11)	O(11)	119.4(2)	Te(11)	C(11)	C(12)	117.3(2)
O(11)	C(11)	C(12)	123.3(2)	C(11)	C(12)	C(13)	118.6(2)
C(11)	C(12)	C(17)	122.9(2)	C(13)	C(12)	C(17)	118.5(2)
C(12)	C(13)	C(14)	120.6(3)	C(12)	C(13)	H(11)	119.3
C(14)	C(13)	H(11)	120.1	C(13)	C(14)	C(15)	121.1(3)
C(13)	C(14)	H(12)	117.0	C(15)	C(14)	H(12)	121.3
C(14)	C(15)	C(16)	118.5(3)	C(14)	C(15)	C(18)	121.1(3)
C(16)	C(15)	C(18)	120.4(3)	C(15)	C(16)	C(17)	121.3(3)
C(15)	C(16)	H(13)	120.4	C(17)	C(16)	H(13)	118.2
C(12)	C(17)	C(16)	120.1(3)	C(12)	C(17)	H(14)	121.1
C(16)	C(17)	H(14)	118.7	C(15)	C(18)	H(15)	109.2
C(15)	C(18)	H(16)	110.6	C(15)	C(18)	H(17)	111.2
H(15)	C(18)	H(16)	107.7	H(15)	C(18)	H(17)	108.2
H(16)	C(18)	H(17)	109.9	Ge(1)	C(21)	C(22)	122.8(2)
Ge(1)	C(21)	C(26)	118.8(2)	C(22)	C(21)	C(26)	118.4(2)
C(21)	C(22)	C(23)	121.0(2)	C(21)	C(22)	H(21)	116.7
C(23)	C(22)	H(21)	122.3	C(22)	C(23)	C(24)	119.8(3)
C(22)	C(23)	H(22)	122.8	C(24)	C(23)	H(22)	117.4
C(23)	C(24)	C(25)	119.9(2)	C(23)	C(24)	H(23)	119.6
C(25)	C(24)	H(23)	120.5	C(24)	C(25)	C(26)	120.8(3)
C(24)	C(25)	H(24)	120.7	C(26)	C(25)	H(24)	118.5
C(21)	C(26)	C(25)	120.1(3)	C(21)	C(26)	H(25)	116.7
C(25)	C(26)	H(25)	123.2	Ge(1)	C(31)	C(32)	119.1(2)
Ge(1)	C(31)	C(36)	122.2(2)	C(32)	C(31)	C(36)	118.7(2)
C(31)	C(32)	C(33)	120.4(3)	C(31)	C(32)	H(31)	122.4
C(33)	C(32)	H(31)	116.9	C(32)	C(33)	C(34)	120.8(3)
C(32)	C(33)	H(32)	118.6	C(34)	C(33)	H(32)	120.6
C(33)	C(34)	C(35)	119.5(3)	C(33)	C(34)	H(33)	122.8
C(35)	C(34)	H(33)	117.2	C(34)	C(35)	C(36)	120.6(3)
C(34)	C(35)	H(34)	118.7	C(36)	C(35)	H(34)	120.7
C(31)	C(36)	C(35)	120.1(3)	C(31)	C(36)	H(35)	116.3
C(35)	C(36)	H(35)	123.5	Ge(1)	C(41)	C(42)	120.9(2)
Ge(1)	C(41)	C(46)	120.8(2)	C(42)	C(41)	C(46)	118.3(2)
C(41)	C(42)	C(43)	120.9(3)	C(41)	C(42)	H(41)	118.8
C(43)	C(42)	H(41)	120.3	C(42)	C(43)	C(44)	120.4(3)
C(42)	C(43)	H(42)	120.0	C(44)	C(43)	H(42)	119.6
C(43)	C(44)	C(45)	119.5(3)	C(43)	C(44)	H(43)	122.1
C(45)	C(44)	H(43)	118.3	C(44)	C(45)	C(46)	120.6(3)
C(44)	C(45)	H(44)	119.6	C(46)	C(45)	H(44)	119.8
C(41)	C(46)	C(45)	120.2(3)	C(41)	C(46)	H(45)	119.7
C(45)	C(46)	H(45)	120.1				

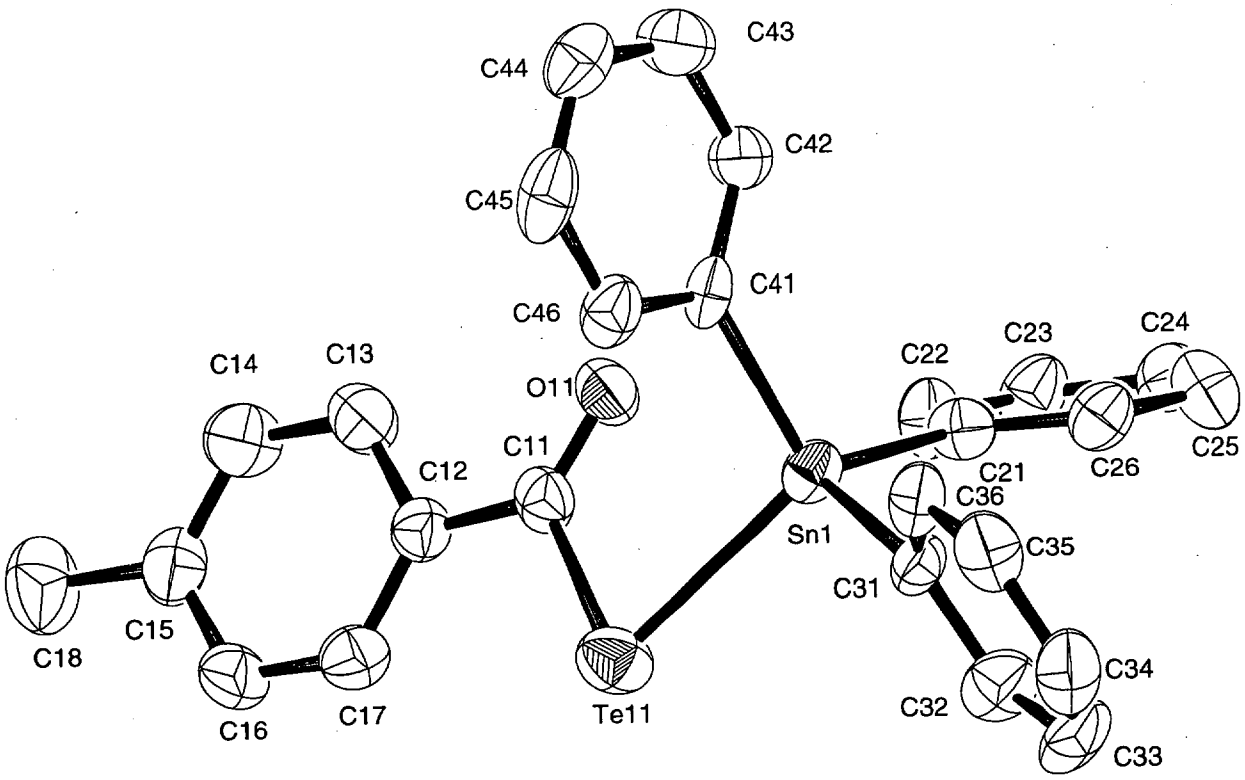

Figure 2. The ORTEP drawing of 4-$CH_3C_6H_4COTeSnPh_3$ **3b**.

Table 4. Atomic coordinates and B_{iso}/B_{eq} of **3b**

atom	x	y	z	B_{eq}
Te(11)	-0.11073(5)	-0.17761(7)	0.47232(4)	3.91(2)
Sn(1)	-0.29199(5)	-0.06968(6)	0.48088(3)	2.80(1)
O(11)	-0.2233(5)	0.0112(7)	0.3461(4)	3.8(1)
C(11)	-0.1473(7)	-0.0608(9)	0.3660(5)	3.1(2)
C(12)	-0.0774(7)	-0.0775(9)	0.3226(5)	3.1(2)
C(13)	-0.1103(8)	-0.020(1)	0.2485(6)	4.1(2)
C(14)	-0.0504(8)	-0.039(1)	0.2043(6)	4.3(2)
C(15)	0.0405(8)	-0.113(1)	0.2282(6)	3.9(2)
C(16)	0.0735(7)	-0.168(1)	0.3019(6)	4.2(2)
C(17)	0.0149(7)	-0.150(1)	0.3474(5)	3.8(2)
C(18)	0.1038(10)	-0.133(1)	0.1783(7)	5.8(3)
C(21)	-0.2833(7)	0.1512(9)	0.4980(5)	3.0(2)
C(22)	-0.2336(8)	0.2404(9)	0.4648(5)	3.5(2)
C(23)	-0.2293(9)	0.381(1)	0.4801(5)	3.9(2)
C(24)	-0.2754(8)	0.4351(10)	0.5275(5)	3.9(2)
C(25)	-0.3242(8)	0.348(1)	0.5626(6)	4.0(2)
C(26)	-0.3280(7)	0.2058(10)	0.5478(5)	3.2(2)
C(31)	-0.3141(7)	-0.1646(9)	0.5766(4)	2.9(2)
C(32)	-0.2452(9)	-0.143(1)	0.6515(6)	4.2(2)
C(33)	-0.268(1)	-0.202(1)	0.7128(5)	4.8(3)
C(34)	-0.354(1)	-0.282(1)	0.7007(6)	4.4(3)
C(35)	-0.4228(9)	-0.303(1)	0.6271(6)	4.1(2)
C(36)	-0.4026(8)	-0.2433(9)	0.5670(5)	3.4(2)
C(41)	-0.4198(7)	-0.1419(8)	0.3844(4)	2.7(2)
C(42)	-0.4939(7)	-0.0528(9)	0.3390(5)	3.2(2)
C(43)	-0.5787(8)	-0.103(1)	0.2789(6)	4.3(2)
C(44)	-0.5901(8)	-0.244(1)	0.2643(5)	3.9(2)
C(45)	-0.5176(9)	-0.3330(9)	0.3096(5)	4.1(2)
C(46)	-0.4321(8)	-0.2839(9)	0.3696(5)	3.5(2)
H(11)	-0.1742	0.0322	0.2309	4.8
H(12)	-0.0756	0.0008	0.1528	5.2
H(13)	0.1386	-0.2200	0.3202	5.0
H(14)	0.0393	-0.1909	0.3986	4.6
H(15)	0.1658	-0.1847	0.2030	6.9
H(16)	0.0637	-0.1810	0.1321	6.9
H(17)	0.1240	-0.0444	0.1631	6.9
H(21)	-0.2000	0.2025	0.4317	4.4
H(22)	-0.1978	0.4432	0.4533	4.7
H(23)	-0.2718	0.5332	0.5390	4.6
H(24)	-0.3566	0.3856	0.5966	4.6
H(25)	-0.3619	0.1457	0.5725	4.0
H(31)	-0.1824	-0.0869	0.6599	5.1
H(32)	-0.2230	-0.1845	0.7639	5.7
H(33)	-0.3679	-0.3223	0.7433	5.2
H(34)	-0.4849	-0.3591	0.6183	5.3
H(35)	-0.4512	-0.2578	0.5155	4.1
H(41)	-0.4866	0.0457	0.3488	3.9
H(42)	-0.6308	-0.0395	0.2476	4.9
H(43)	-0.6502	-0.2774	0.2231	4.7
H(44)	-0.5267	-0.4315	0.3007	4.8
H(45)	-0.3791	-0.3477	0.4002	4.1

Table 5. Bond Lengths(Å) of **3b**

atom	atom	distance	atom	atom	distance
Te(11)	Sn(1)	2.745(1)	Te(11)	C(11)	2.189(9)
Sn(1)	O(11)	3.093(6)	Sn(1)	C(21)	2.147(9)
Sn(1)	C(31)	2.131(8)	Sn(1)	C(41)	2.140(8)
O(11)	C(11)	1.19(1)	C(11)	C(12)	1.47(1)
C(12)	C(13)	1.41(1)	C(12)	C(17)	1.37(1)
C(13)	C(14)	1.37(1)	C(13)	H(11)	0.96
C(14)	C(15)	1.36(1)	C(14)	H(12)	0.98
C(15)	C(16)	1.40(1)	C(15)	C(18)	1.50(1)
C(16)	C(17)	1.37(1)	C(16)	H(13)	0.97
C(17)	H(14)	0.98	C(18)	H(15)	0.95
C(18)	H(16)	0.96	C(18)	H(17)	0.97
C(21)	C(22)	1.37(1)	C(21)	C(26)	1.39(1)
C(22)	C(23)	1.38(1)	C(22)	H(21)	0.97
C(23)	C(24)	1.36(1)	C(23)	H(22)	0.97
C(24)	C(25)	1.38(1)	C(24)	H(23)	0.97
C(25)	C(26)	1.40(1)	C(25)	H(24)	0.97
C(26)	H(25)	0.96	C(31)	C(32)	1.40(1)
C(31)	C(36)	1.38(1)	C(32)	C(33)	1.41(1)
C(32)	H(31)	0.98	C(33)	C(34)	1.37(2)
C(33)	H(32)	0.95	C(34)	C(35)	1.38(1)
C(34)	H(33)	0.97	C(35)	C(36)	1.38(1)
C(35)	H(34)	0.97	C(36)	H(35)	0.97
C(41)	C(42)	1.37(1)	C(41)	C(46)	1.39(1)
C(42)	C(43)	1.39(1)	C(42)	H(41)	0.96
C(43)	C(44)	1.38(1)	C(43)	H(42)	0.97
C(44)	C(45)	1.36(1)	C(44)	H(43)	0.96
C(45)	C(46)	1.39(1)	C(45)	H(44)	0.96
C(46)	H(45)	0.97			

Table 6. Bond Angles(°) of **3b**

atom	atom	atom	angle
Sn(1)	Te(11)	C(11)	86.5(2)
Te(11)	Sn(1)	C(21)	112.4(2)
Te(11)	Sn(1)	C(41)	108.2(2)
O(11)	Sn(1)	C(31)	166.5(3)
C(21)	Sn(1)	C(31)	108.4(3)
C(31)	Sn(1)	C(41)	104.9(3)
Te(11)	C(11)	O(11)	118.4(7)
O(11)	C(11)	C(12)	123.8(8)
C(11)	C(12)	C(17)	124.6(8)
C(12)	C(13)	C(14)	119.6(9)
C(14)	C(13)	H(11)	121.8
C(13)	C(14)	H(12)	117.8
C(14)	C(15)	C(16)	117.5(9)
C(16)	C(15)	C(18)	121(1)
C(15)	C(16)	H(13)	118.5
C(12)	C(17)	C(16)	121.4(9)
C(16)	C(17)	H(14)	119.3
C(15)	C(18)	H(16)	110.8
H(15)	C(18)	H(16)	108.2
H(16)	C(18)	H(17)	106.7
Sn(1)	C(21)	C(26)	117.5(6)
C(21)	C(22)	C(23)	120.7(9)
C(23)	C(22)	H(21)	120.5
C(22)	C(23)	H(22)	119.3
C(23)	C(24)	C(25)	119.8(9)
C(25)	C(24)	H(23)	118.7
C(24)	C(25)	H(24)	120.3
C(21)	C(26)	C(25)	120.8(9)
C(25)	C(26)	H(25)	119.1
Sn(1)	C(31)	C(36)	120.2(6)
C(31)	C(32)	C(33)	119.5(10)
C(33)	C(32)	H(31)	121.5
C(32)	C(33)	H(32)	120.4
C(33)	C(34)	C(35)	119.3(9)
C(35)	C(34)	H(33)	120.6
C(34)	C(35)	H(34)	119.5
C(31)	C(36)	C(35)	122.6(9)
C(35)	C(36)	H(35)	119.4
Sn(1)	C(41)	C(46)	119.5(7)
C(41)	C(42)	C(43)	120.5(9)
C(43)	C(42)	H(41)	120.0
C(42)	C(43)	H(42)	119.6
C(43)	C(44)	C(45)	119.3(9)
C(45)	C(44)	H(43)	121.1
C(44)	C(45)	H(44)	119.5
C(41)	C(46)	C(45)	120.2(9)
C(45)	C(46)	H(45)	120.3

atom	atom	atom	angle
Te(11)	Sn(1)	O(11)	60.4(1)
Te(11)	Sn(1)	C(31)	106.7(2)
O(11)	Sn(1)	C(21)	81.8(3)
O(11)	Sn(1)	C(41)	77.5(2)
C(21)	Sn(1)	C(41)	115.7(3)
Sn(1)	O(11)	C(11)	94.7(5)
Te(11)	C(11)	C(12)	117.8(6)
C(11)	C(12)	C(13)	117.4(8)
C(13)	C(12)	C(17)	117.9(9)
C(12)	C(13)	H(11)	118.5
C(13)	C(14)	C(15)	122.7(10)
C(15)	C(14)	H(12)	119.4
C(14)	C(15)	C(18)	121(1)
C(15)	C(16)	C(17)	120.9(9)
C(17)	C(16)	H(13)	120.6
C(12)	C(17)	H(14)	119.2
C(15)	C(18)	H(15)	112.1
C(15)	C(18)	H(17)	111.0
H(15)	C(18)	H(17)	107.8
Sn(1)	C(21)	C(22)	124.1(7)
C(22)	C(21)	C(26)	118.4(8)
C(21)	C(22)	H(21)	118.7
C(22)	C(23)	C(24)	120.9(9)
C(24)	C(23)	H(22)	119.6
C(23)	C(24)	H(23)	121.4
C(24)	C(25)	C(26)	119.4(9)
C(26)	C(25)	H(24)	120.3
C(21)	C(26)	H(25)	120.1
Sn(1)	C(31)	C(32)	122.3(7)
C(32)	C(31)	C(36)	117.4(8)
C(31)	C(32)	H(31)	119.0
C(32)	C(33)	C(34)	121.3(9)
C(34)	C(33)	H(32)	118.3
C(33)	C(34)	H(33)	120.1
C(34)	C(35)	C(36)	119(1)
C(36)	C(35)	H(34)	120.7
C(31)	C(36)	H(35)	118.0
Sn(1)	C(41)	C(42)	121.8(6)
C(42)	C(41)	C(46)	118.7(8)
C(41)	C(42)	H(41)	119.5
C(42)	C(43)	C(44)	120.6(9)
C(44)	C(43)	H(42)	119.8
C(43)	C(44)	H(43)	119.6
C(44)	C(45)	C(46)	120.8(8)
C(46)	C(45)	H(44)	119.7
C(41)	C(46)	H(45)	119.4

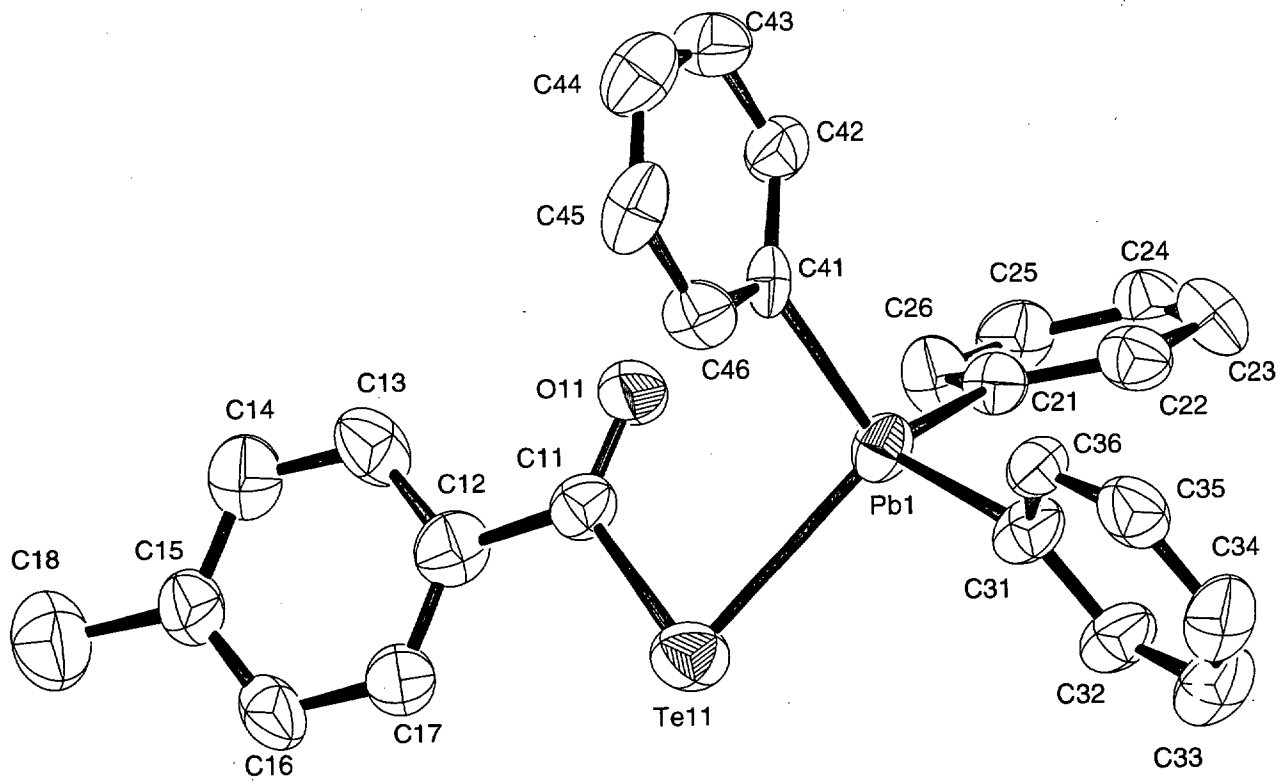

Figure 3. The ORTEP drawing of 4-$CH_3C_6H_4COTePbPh_3$ **4b**.

Table 7. Atomic coordinates and B_{iso}/B_{eq} of **4b**

atom	x	y	z	B_{eq}
Pb(1)	0.79334(4)	0.43206(5)	0.51742(3)	3.22(1)
Te(11)	0.60986(8)	0.3220(1)	0.52963(5)	4.45(2)
O(11)	0.7217(7)	0.5165(10)	0.6531(5)	4.3(2)
C(11)	0.6450(10)	0.442(1)	0.6335(7)	3.4(3)
C(12)	0.577(1)	0.423(1)	0.6776(7)	4.1(3)
C(13)	0.610(1)	0.481(2)	0.7502(9)	4.6(4)
C(14)	0.553(1)	0.463(1)	0.7961(8)	4.7(4)
C(15)	0.462(1)	0.390(2)	0.7730(8)	4.6(4)
C(16)	0.426(1)	0.334(2)	0.6993(9)	5.2(4)
C(17)	0.485(1)	0.353(2)	0.6540(8)	4.2(3)
C(18)	0.400(1)	0.369(2)	0.823(1)	6.6(5)
C(21)	0.7834(9)	0.660(1)	0.5013(7)	3.0(3)
C(22)	0.827(1)	0.713(1)	0.4504(8)	3.8(3)
C(23)	0.823(1)	0.854(1)	0.4374(9)	4.4(4)
C(24)	0.776(1)	0.941(1)	0.4737(8)	4.3(3)
C(25)	0.731(1)	0.884(1)	0.5209(8)	4.2(3)
C(26)	0.733(1)	0.745(1)	0.5349(8)	4.1(3)
C(31)	0.816(1)	0.334(1)	0.4190(7)	3.7(3)
C(32)	0.749(1)	0.354(1)	0.3450(7)	4.1(3)
C(33)	0.767(1)	0.294(2)	0.2834(8)	5.3(4)
C(34)	0.857(1)	0.217(1)	0.2980(8)	5.2(4)
C(35)	0.924(1)	0.197(1)	0.3701(8)	4.4(4)
C(36)	0.905(1)	0.253(1)	0.4308(7)	3.4(3)
C(41)	0.9258(10)	0.356(1)	0.6186(6)	2.8(3)
C(42)	0.996(1)	0.445(1)	0.6631(7)	3.7(3)
C(43)	1.081(1)	0.396(2)	0.7234(8)	4.9(4)
C(44)	1.094(1)	0.257(2)	0.7379(8)	4.6(4)
C(45)	1.024(1)	0.169(1)	0.6918(7)	4.1(3)
C(46)	0.937(1)	0.215(1)	0.6307(7)	3.7(3)
H(11)	0.6748	0.5360	0.7687	5.4582
H(12)	0.5775	0.5048	0.8466	5.7734
H(13)	0.3603	0.2824	0.6809	6.1360
H(14)	0.4587	0.3124	0.6022	5.1744
H(15)	0.4197	0.4395	0.8632	7.8454
H(16)	0.3285	0.3738	0.7970	7.8454
H(17)	0.4178	0.2813	0.8493	7.8454
H(21)	0.8586	0.6504	0.4247	4.5804
H(22)	0.8537	0.8932	0.4028	5.1656
H(23)	0.7740	1.0407	0.4657	4.9513
H(24)	0.6963	0.9455	0.5456	5.1636
H(25)	0.6980	0.7066	0.5679	5.0777
H(31)	0.6871	0.4130	0.3361	5.0191
H(32)	0.7179	0.3061	0.2321	6.0532
H(33)	0.8726	0.1778	0.2563	6.0875
H(34)	0.9867	0.1385	0.3797	5.2897
H(35)	0.9526	0.2364	0.4821	4.0570
H(41)	0.9878	0.5440	0.6525	4.3054
H(42)	1.1308	0.4622	0.7559	5.8160
H(43)	1.1537	0.2237	0.7803	5.5178
H(44)	1.0345	0.0711	0.7015	4.8701
H(45)	0.8862	0.1506	0.5974	4.4947

Table 8. Bond Lengths(Å) of **4b**

atom	atom	distance	atom	atom	distance
Pb(1)	Te(11)	2.815(1)	Pb(1)	O(11)	3.159(9)
Pb(1)	C(21)	2.22(1)	Pb(1)	C(31)	2.20(1)
Pb(1)	C(41)	2.24(1)	Te(11)	C(11)	2.18(1)
O(11)	C(11)	1.22(1)	C(11)	C(12)	1.47(2)
C(12)	C(13)	1.40(2)	C(12)	C(17)	1.36(2)
C(13)	C(14)	1.37(2)	C(13)	H(11)	0.99
C(14)	C(15)	1.36(2)	C(14)	H(12)	0.98
C(15)	C(16)	1.41(2)	C(15)	C(18)	1.50(2)
C(16)	C(17)	1.38(2)	C(16)	H(13)	0.97
C(17)	H(14)	0.99	C(18)	H(15)	0.98
C(18)	H(16)	0.92	C(18)	H(17)	0.96
C(21)	C(22)	1.39(2)	C(21)	C(26)	1.37(2)
C(22)	C(23)	1.38(2)	C(22)	H(21)	0.97
C(23)	C(24)	1.39(2)	C(23)	H(22)	0.97
C(24)	C(25)	1.36(2)	C(24)	H(23)	0.98
C(25)	C(26)	1.37(2)	C(25)	H(24)	0.98
C(26)	H(25)	0.99	C(31)	C(32)	1.38(2)
C(31)	C(36)	1.40(2)	C(32)	C(33)	1.40(2)
C(32)	H(31)	0.99	C(33)	C(34)	1.37(2)
C(33)	H(32)	0.97	C(34)	C(35)	1.36(2)
C(34)	H(33)	0.97	C(35)	C(36)	1.38(2)
C(35)	H(34)	0.99	C(36)	H(35)	0.97
C(41)	C(42)	1.34(2)	C(41)	C(46)	1.39(2)
C(42)	C(43)	1.39(2)	C(42)	H(41)	0.97
C(43)	C(44)	1.37(2)	C(43)	H(42)	0.97
C(44)	C(45)	1.34(2)	C(44)	H(43)	0.97
C(45)	C(46)	1.40(2)	C(45)	H(44)	0.97
C(46)	H(45)	0.98			

Table 9. Bond Angles(°) of **4b**

atom	atom	atom	angle	atom	atom	atom	angle
Te(11)	Pb(1)	O(11)	59.0(2)	Te(11)	Pb(1)	C(21)	111.9(3)
Te(11)	Pb(1)	C(31)	107.8(4)	Te(11)	Pb(1)	C(41)	106.4(3)
O(11)	Pb(1)	C(21)	80.4(4)	O(11)	Pb(1)	C(31)	166.5(4)
O(11)	Pb(1)	C(41)	77.6(3)	C(21)	Pb(1)	C(31)	109.4(5)
C(21)	Pb(1)	C(41)	115.7(4)	C(31)	Pb(1)	C(41)	105.3(4)
Pb(1)	Te(11)	C(11)	87.5(3)	Pb(1)	O(11)	C(11)	94.9(7)
Te(11)	C(11)	O(11)	118.5(9)	Te(11)	C(11)	C(12)	117.5(9)
O(11)	C(11)	C(12)	123(1)	C(11)	C(12)	C(13)	117(1)
C(11)	C(12)	C(17)	125(1)	C(13)	C(12)	C(17)	117(1)
C(12)	C(13)	C(14)	120(1)	C(12)	C(13)	H(11)	119.6
C(14)	C(13)	H(11)	119.7	C(13)	C(14)	C(15)	121(1)
C(13)	C(14)	H(12)	119.0	C(15)	C(14)	H(12)	119.1
C(14)	C(15)	C(16)	118(1)	C(14)	C(15)	C(18)	122(1)
C(16)	C(15)	C(18)	119(1)	C(15)	C(16)	C(17)	118(1)
C(15)	C(16)	H(13)	120.2	C(17)	C(16)	H(13)	120.8
C(12)	C(17)	C(16)	122(1)	C(12)	C(17)	H(14)	118.6
C(16)	C(17)	H(14)	118.4	C(15)	C(18)	H(15)	108.8
C(15)	C(18)	H(16)	112.5	C(15)	C(18)	H(17)	109.7
H(15)	C(18)	H(16)	109.2	H(15)	C(18)	H(17)	105.8
H(16)	C(18)	H(17)	110.6	Pb(1)	C(21)	C(22)	116.1(9)
Pb(1)	C(21)	C(26)	123.4(9)	C(22)	C(21)	C(26)	120(1)
C(21)	C(22)	C(23)	119(1)	C(21)	C(22)	H(21)	119.5
C(23)	C(22)	H(21)	121.1	C(22)	C(23)	C(24)	120(1)
C(22)	C(23)	H(22)	120.7	C(24)	C(23)	H(22)	119.3
C(23)	C(24)	C(25)	118(1)	C(23)	C(24)	H(23)	120.8
C(25)	C(24)	H(23)	120.6	C(24)	C(25)	C(26)	122(1)
C(24)	C(25)	H(24)	118.2	C(26)	C(25)	H(24)	119.2
C(21)	C(26)	C(25)	118(1)	C(21)	C(26)	H(25)	120.5
C(25)	C(26)	H(25)	120.6	Pb(1)	C(31)	C(32)	123(1)
Pb(1)	C(31)	C(36)	119.0(9)	C(32)	C(31)	C(36)	117(1)
C(31)	C(32)	C(33)	122(1)	C(31)	C(32)	H(31)	118.1
C(33)	C(32)	H(31)	119.7	C(32)	C(33)	C(34)	117(1)
C(32)	C(33)	H(32)	120.9	C(34)	C(33)	H(32)	121.2
C(33)	C(34)	C(35)	121(1)	C(33)	C(34)	H(33)	119.6
C(35)	C(34)	H(33)	119.1	C(34)	C(35)	C(36)	120(1)
C(34)	C(35)	H(34)	120.2	C(36)	C(35)	H(34)	119.0
C(31)	C(36)	C(35)	120(1)	C(31)	C(36)	H(35)	119.2
C(35)	C(36)	H(35)	120.5	Pb(1)	C(41)	C(42)	120.4(9)
Pb(1)	C(41)	C(46)	118.3(9)	C(42)	C(41)	C(46)	121(1)
C(41)	C(42)	C(43)	119(1)	C(41)	C(42)	H(41)	119.9
C(43)	C(42)	H(41)	120.2	C(42)	C(43)	C(44)	120(1)
C(42)	C(43)	H(42)	118.9	C(44)	C(43)	H(42)	120.4
C(43)	C(44)	C(45)	118(1)	C(43)	C(44)	H(43)	119.9
C(45)	C(44)	H(43)	121.5	C(44)	C(45)	C(46)	122(1)
C(44)	C(45)	H(44)	118.0	C(46)	C(45)	H(44)	119.8
C(41)	C(46)	C(45)	117(1)	C(41)	C(46)	H(45)	120.5
C(45)	C(46)	H(45)	121.9				

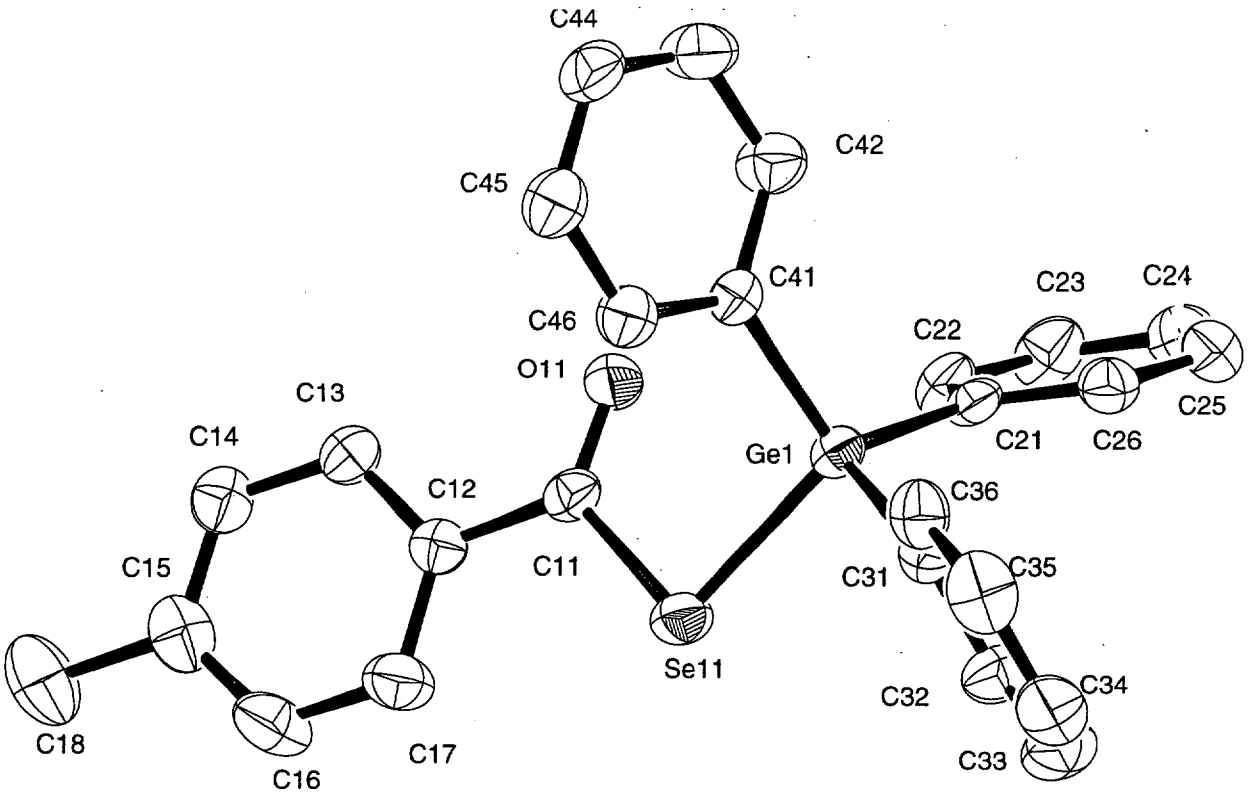

Figure 4. The ORTEP drawing of 4-$CH_3C_6H_4COSeGePh_3$ **6**.

Table 10. Atomic coordinates and B_{iso}/B_{eq} of **6**

atom	x	y	z	B_{eq}
Se(11)	-0.82491(3)	-0.16153(2)	-0.09508(4)	3.005(6)
Ge(1)	-0.74918(3)	-0.28707(2)	-0.19029(3)	2.274(6)
O(11)	-0.5711(2)	-0.2011(1)	0.1968(3)	3.23(4)
C(11)	-0.6767(3)	-0.1566(2)	0.1550(3)	2.47(5)
C(12)	-0.7036(3)	-0.0978(2)	0.2854(4)	2.54(5)
C(13)	-0.6133(3)	-0.1009(2)	0.4685(4)	2.72(5)
C(14)	-0.6363(3)	-0.0477(2)	0.5951(4)	3.16(6)
C(15)	-0.7456(4)	0.0097(2)	0.5432(4)	3.58(7)
C(16)	-0.8332(4)	0.0133(2)	0.3596(5)	4.31(8)
C(17)	-0.8143(4)	-0.0401(2)	0.2319(4)	3.74(7)
C(18)	-0.7658(4)	0.0689(2)	0.6815(6)	5.10(9)
C(21)	-0.5604(3)	-0.2717(2)	-0.2376(3)	2.43(5)
C(22)	-0.4331(3)	-0.2197(2)	-0.1305(3)	3.03(6)
C(23)	-0.3034(3)	-0.2093(2)	-0.1749(4)	3.65(7)
C(24)	-0.2984(3)	-0.2525(2)	-0.3244(4)	3.67(7)
C(25)	-0.4235(4)	-0.3054(2)	-0.4330(4)	3.61(7)
C(26)	-0.5534(3)	-0.3148(2)	-0.3890(4)	2.94(6)
C(31)	-0.9213(3)	-0.3135(2)	-0.4191(3)	2.43(5)
C(32)	-0.9486(3)	-0.2575(2)	-0.5574(4)	3.25(6)
C(33)	-1.0715(4)	-0.2735(2)	-0.7209(4)	4.03(7)
C(34)	-1.1680(3)	-0.3454(2)	-0.7503(4)	4.01(7)
C(35)	-1.1420(3)	-0.4015(2)	-0.6158(5)	3.94(7)
C(36)	-1.0191(3)	-0.3859(2)	-0.4508(4)	3.15(6)
C(41)	-0.7403(3)	-0.3698(2)	-0.0136(3)	2.35(5)
C(42)	-0.6145(3)	-0.4170(2)	0.0519(4)	3.53(7)
C(43)	-0.6083(4)	-0.4764(2)	0.1772(5)	4.09(7)
C(44)	-0.7270(4)	-0.4899(2)	0.2371(4)	3.75(7)
C(45)	-0.8519(4)	-0.4431(2)	0.1749(5)	4.14(8)
C(46)	-0.8583(3)	-0.3831(2)	0.0490(4)	3.45(7)
H(11)	-0.5396	-0.1447	0.5100	4.5229
H(12)	-0.5749	-0.0508	0.7209	3.8909
H(13)	-0.9041	0.0543	0.3295	4.5229
H(14)	-0.8767	-0.0371	0.1052	4.6006
H(15)	-0.6991	0.0579	0.7998	6.0720
H(16)	-0.8703	0.0626	0.6754	6.0720
H(17)	-0.7444	0.1254	0.6574	6.0720
H(21)	-0.4351	-0.1844	-0.0339	4.5229
H(22)	-0.2066	-0.1758	-0.0782	4.5229
H(23)	-0.2073	-0.2453	-0.3537	4.3458
H(24)	-0.4270	-0.3339	-0.5461	4.5229
H(25)	-0.6412	-0.3539	-0.4687	4.5229
H(31)	-0.8792	-0.2083	-0.5378	3.8498
H(32)	-1.0898	-0.2340	-0.8144	4.8467
H(33)	-1.2645	-0.3551	-0.8748	4.5229
H(34)	-1.2158	-0.4546	-0.6330	4.5229
H(35)	-1.0027	-0.4265	-0.3340	4.5229
H(41)	-0.5269	-0.4032	0.0035	4.5229
H(42)	-0.5271	-0.5166	0.2159	4.5229
(43)	-0.7094	-0.5330	0.3407	4.5229
H(44)	-0.9351	-0.4514	0.2173	4.9668
H(45)	-0.9526	-0.3533	0.0003	4.5229

Table 11. Bond Lengths(Å) of **6**

atom	atom	distance	atom	atom	distance
Se(11)	Ge(1)	2.3760(4)	Se(11)	C(11)	1.953(3)
Ge(1)	O(11)	3.131(2)	Ge(1)	C(21)	1.944(3)
Ge(1)	C(31)	1.944(3)	Ge(1)	C(41)	1.942(2)
O(11)	C(11)	1.210(3)	C(11)	C(12)	1.484(4)
C(12)	C(13)	1.390(4)	C(12)	C(17)	1.392(4)
C(13)	C(14)	1.388(4)	C(13)	H(11)	0.99
C(14)	C(15)	1.380(4)	C(14)	H(12)	0.96
C(15)	C(16)	1.389(5)	C(15)	C(18)	1.506(4)
C(16)	C(17)	1.379(4)	C(16)	H(13)	0.94
C(17)	H(14)	0.96	C(18)	H(15)	0.95
C(18)	H(16)	0.96	C(18)	H(17)	0.96
C(21)	C(22)	1.387(4)	C(21)	C(26)	1.396(4)
C(22)	C(23)	1.388(4)	C(22)	H(21)	0.95
C(23)	C(24)	1.376(4)	C(23)	H(22)	1.05
C(24)	C(25)	1.386(5)	C(24)	H(23)	0.97
C(25)	C(26)	1.387(4)	C(25)	H(24)	0.99
C(26)	H(25)	1.00	C(31)	C(32)	1.399(4)
C(31)	C(36)	1.388(4)	C(32)	C(33)	1.384(4)
C(32)	H(31)	0.96	C(33)	C(34)	1.376(5)
C(33)	H(32)	0.97	C(34)	C(35)	1.380(5)
C(34)	H(33)	1.06	C(35)	C(36)	1.390(4)
C(35)	H(34)	1.03	C(36)	H(35)	1.12
C(41)	C(42)	1.387(4)	C(41)	C(46)	1.378(4)
C(42)	C(43)	1.387(4)	C(42)	H(41)	1.04
C(43)	C(44)	1.371(4)	C(43)	H(42)	1.00
C(44)	C(45)	1.375(4)	C(44)	H(43)	1.06
C(45)	C(46)	1.395(4)	C(45)	H(44)	0.96
C(46)	H(45)	0.99			

Table 12. Bond Angles(°) of **6**

atom	atom	atom	angle	atom	atom	atom	angle
Ge(1)	Se(11)	C(11)	96.33(8)	Se(11)	Ge(1)	O(11)	58.33(4)
Se(11)	Ge(1)	C(21)	113.63(8)	Se(11)	Ge(1)	C(31)	100.01(8)
Se(11)	Ge(1)	C(41)	108.34(8)	O(11)	Ge(1)	C(21)	88.50(8)
O(11)	Ge(1)	C(31)	157.04(8)	O(11)	Ge(1)	C(41)	72.22(8)
C(21)	Ge(1)	C(31)	108.9(1)	C(21)	Ge(1)	C(41)	113.2(1)
C(31)	Ge(1)	C(41)	112.0(1)	Ge(1)	O(11)	C(11)	84.1(2)
Se(11)	C(11)	O(11)	119.9(2)	Se(11)	C(11)	C(12)	116.5(2)
O(11)	C(11)	C(12)	123.6(2)	C(11)	C(12)	C(13)	117.9(2)
C(11)	C(12)	C(17)	122.9(3)	C(13)	C(12)	C(17)	119.2(3)
C(12)	C(13)	C(14)	119.7(3)	C(12)	C(13)	H(11)	120.2
C(14)	C(13)	H(11)	119.9	C(13)	C(14)	C(15)	121.5(3)
C(13)	C(14)	H(12)	119.3	C(15)	C(14)	H(12)	119.3
C(14)	C(15)	C(16)	118.3(3)	C(14)	C(15)	C(18)	120.9(3)
C(16)	C(15)	C(18)	120.8(3)	C(15)	C(16)	C(17)	121.1(3)
C(15)	C(16)	H(13)	115.7	C(17)	C(16)	H(13)	123.2
C(12)	C(17)	C(16)	120.2(3)	C(12)	C(17)	H(14)	119.8
C(16)	C(17)	H(14)	120.0	C(15)	C(18)	H(15)	110.4
C(15)	C(18)	H(16)	110.1	C(15)	C(18)	H(17)	110.1
H(15)	C(18)	H(16)	108.8	H(15)	C(18)	H(17)	109.4
H(16)	C(18)	H(17)	108.0	Ge(1)	C(21)	C(22)	123.6(2)
Ge(1)	C(21)	C(26)	118.1(2)	C(22)	C(21)	C(26)	118.3(2)
C(21)	C(22)	C(23)	120.9(3)	C(21)	C(22)	H(21)	122.0
C(23)	C(22)	H(21)	116.7	C(22)	C(23)	C(24)	120.0(3)
C(22)	C(23)	H(22)	116.3	C(24)	C(23)	H(22)	123.0
C(23)	C(24)	C(25)	120.3(3)	C(23)	C(24)	H(23)	119.5
C(25)	C(24)	H(23)	120.2	C(24)	C(25)	C(26)	119.4(3)
C(24)	C(25)	H(24)	122.4	C(26)	C(25)	H(24)	118.1
C(21)	C(26)	C(25)	121.2(3)	C(21)	C(26)	H(25)	121.2
C(25)	C(26)	H(25)	117.6	Ge(1)	C(31)	C(32)	119.0(2)
Ge(1)	C(31)	C(36)	122.5(2)	C(32)	C(31)	C(36)	118.5(2)
C(31)	C(32)	C(33)	120.7(3)	C(31)	C(32)	H(31)	118.8
C(33)	C(32)	H(31)	120.5	C(32)	C(33)	C(34)	120.3(3)
C(32)	C(33)	H(32)	119.7	C(34)	C(33)	H(32)	120.0
C(33)	C(34)	C(35)	119.8(3)	C(33)	C(34)	H(33)	119.0
C(35)	C(34)	H(33)	121.2	C(34)	C(35)	C(36)	120.4(3)
C(34)	C(35)	H(34)	121.0	C(36)	C(35)	H(34)	118.5
C(31)	C(36)	C(35)	120.4(3)	C(31)	C(36)	H(35)	117.2
C(35)	C(36)	H(35)	122.0	Ge(1)	C(41)	C(42)	120.4(2)
Ge(1)	C(41)	C(46)	121.1(2)	C(42)	C(41)	C(46)	118.6(2)
C(41)	C(42)	C(43)	120.5(3)	C(41)	C(42)	H(41)	115.6
C(43)	C(42)	H(41)	123.9	C(42)	C(43)	C(44)	120.5(3)
C(42)	C(43)	H(42)	123.1	C(44)	C(43)	H(42)	115.9
C(43)	C(44)	C(45)	119.7(3)	C(43)	C(44)	H(43)	115.8
C(45)	C(44)	H(43)	124.2	C(44)	C(45)	C(46)	119.9(3)
C(44)	C(45)	H(44)	120.5	C(46)	C(45)	H(44)	119.7
C(41)	C(46)	C(45)	120.8(3)	C(41)	C(46)	H(45)	121.1
C(45)	C(46)	H(45)	118.0				

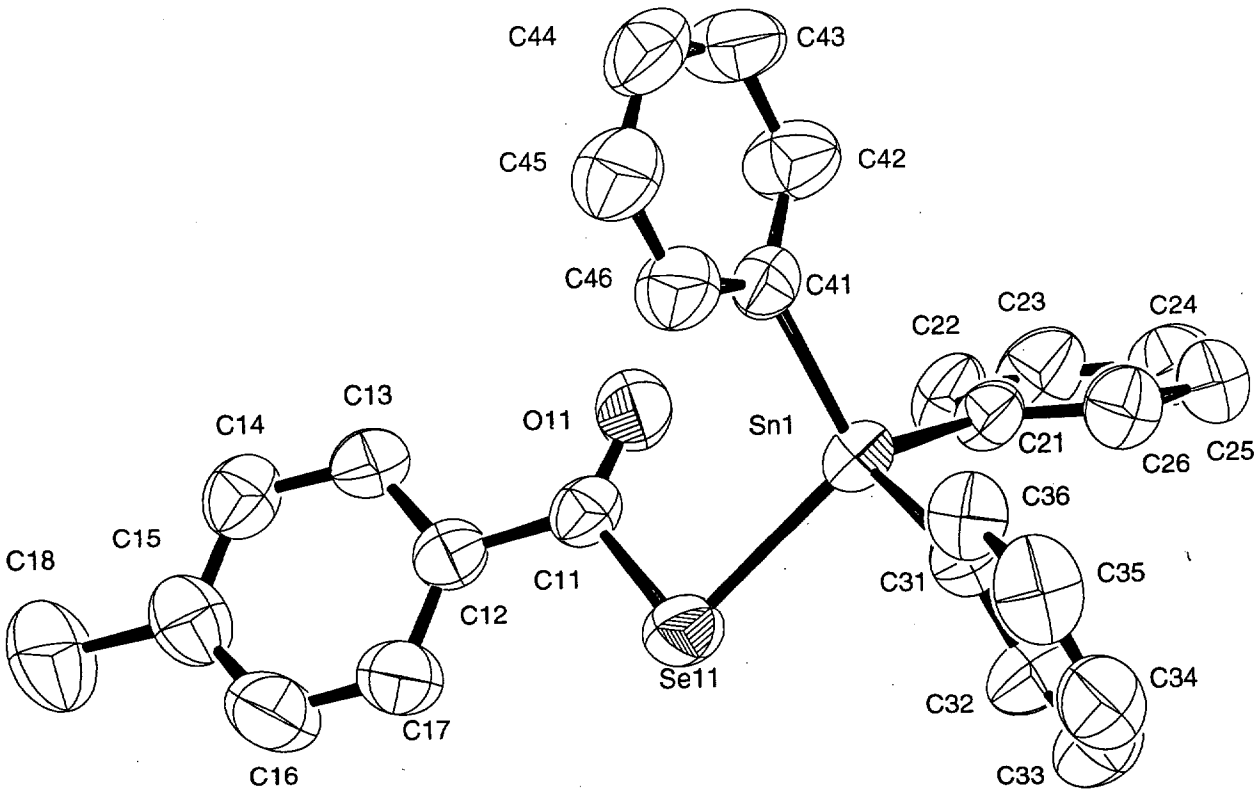

Figure 5. The ORTEP drawing of 4-$CH_3C_6H_4COSeSnPh_3$ **7**.

Table 13. Atomic coordinates and B_{iso}/B_{eq} of **7**

atom	x	y	z	B_{eq}
Sn(1)	0.25074(4)	0.21476(2)	0.30935(4)	4.222(8)
Se(11)	0.15044(7)	0.34333(4)	0.41312(7)	5.57(1)
O(11)	0.4113(4)	0.3084(3)	0.6740(5)	5.85(10)
C(11)	0.3057(6)	0.3497(3)	0.6472(7)	4.4(1)
C(12)	0.2853(6)	0.4073(3)	0.7887(7)	4.4(1)
C(13)	0.3838(6)	0.4049(3)	0.9656(7)	4.9(1)
C(14)	0.3676(7)	0.4549(4)	1.1014(7)	5.5(1)
C(15)	0.2574(7)	0.5107(4)	1.0677(9)	6.1(2)
C(16)	0.1611(8)	0.5140(4)	0.890(1)	7.4(2)
C(17)	0.1741(7)	0.4621(4)	0.7535(8)	6.1(1)
C(18)	0.2448(9)	0.5671(4)	1.217(1)	8.5(2)
C(21)	0.4493(5)	0.2334(3)	0.2508(6)	4.2(1)
C(22)	0.5707(6)	0.2814(4)	0.3600(7)	5.2(1)
C(23)	0.6956(6)	0.2927(4)	0.3114(8)	6.3(2)
C(24)	0.7028(7)	0.2542(4)	0.1556(10)	6.4(2)
C(25)	0.5847(7)	0.2063(4)	0.0478(8)	6.0(2)
C(26)	0.4594(6)	0.1956(3)	0.0943(7)	5.3(1)
C(31)	0.0729(5)	0.1844(3)	0.0599(7)	4.4(1)
C(32)	0.0457(7)	0.2381(4)	-0.0784(8)	5.8(1)
C(33)	-0.0711(8)	0.2219(5)	-0.2394(8)	7.3(2)
C(34)	-0.1606(7)	0.1522(5)	-0.2645(9)	7.1(2)
C(35)	-0.1357(7)	0.0995(5)	-0.131(1)	7.2(2)
C(36)	-0.0185(6)	0.1149(4)	0.0349(8)	5.5(1)
C(41)	0.2680(6)	0.1234(3)	0.4994(6)	4.3(1)
C(42)	0.3965(7)	0.0843(4)	0.5705(9)	6.7(2)
C(43)	0.4081(8)	0.0242(5)	0.692(1)	7.6(2)
C(44)	0.2928(9)	0.0031(4)	0.7463(8)	7.0(2)
C(45)	0.1662(9)	0.0436(5)	0.681(1)	7.8(2)
C(46)	0.1525(7)	0.1028(4)	0.5560(9)	6.7(2)
H(11)	0.4648	0.3680	0.9917	5.8060
H(12)	0.4339	0.4502	1.2237	6.8720
H(13)	0.0634	0.5567	0.8617	7.9265
H(14)	0.1034	0.4646	0.6308	7.3548
H(15)	0.2833	0.5416	1.3298	10.1530
H(16)	0.1416	0.5767	1.1977	10.1530
H(17)	0.2962	0.6180	1.2243	10.1530
H(21)	0.5675	0.3066	0.4726	6.3884
H(22)	0.7784	0.3292	0.3874	7.6661
H(23)	0.7906	0.2618	0.1230	7.4573
H(24)	0.5885	0.1791	-0.0611	7.2650
H(25)	0.3749	0.1613	0.0155	6.2944
H(31)	0.1119	0.2863	-0.0624	6.9490
H(32)	-0.0932	0.2604	-0.3318	8.9358
H(33)	-0.2413	0.1396	-0.3778	8.2424
H(34)	-0.1981	0.0504	-0.1536	8.7181
H(35)	0.0000	0.0759	0.1305	6.7490
H(41)	0.4794	0.0989	0.5337	7.9088
H(42)	0.5011	-0.0017	0.7427	8.9597
H(43)	0.2987	-0.0405	0.8276	8.4206
H(44)	0.0819	0.0315	0.7207	9.1166
H(45)	0.0620	0.1323	0.5103	7.9211

Table 14. Bond Lengths(Å) of **7**

atom	atom	distance
Sn(1)	Se(11)	2.5515(7)
Sn(1)	C(21)	2.121(5)
Sn(1)	C(41)	2.128(5)
O(11)	C(11)	1.199(6)
C(12)	C(13)	1.397(7)
C(13)	C(14)	1.370(8)
C(14)	C(15)	1.382(8)
C(15)	C(16)	1.397(9)
C(16)	C(17)	1.380(9)
C(17)	H(14)	0.98
C(18)	H(16)	0.97
C(21)	C(22)	1.382(7)
C(22)	C(23)	1.385(8)
C(23)	C(24)	1.377(9)
C(24)	C(25)	1.358(9)
C(25)	C(26)	1.378(8)
C(26)	H(25)	0.98
C(31)	C(36)	1.374(7)
C(32)	H(31)	0.97
C(33)	H(32)	0.96
C(34)	H(33)	0.97
C(35)	H(34)	0.96
C(41)	C(42)	1.362(8)
C(42)	C(43)	1.382(9)
C(43)	C(44)	1.352(10)
C(44)	C(45)	1.355(10)
C(45)	C(46)	1.384(9)
C(46)	H(45)	0.97

atom	atom	distance
Sn(1)	O(11)	3.068(4)
Sn(1)	C(31)	2.145(5)
Se(11)	C(11)	1.934(5)
C(11)	C(12)	1.493(7)
C(12)	C(17)	1.379(7)
C(13)	H(11)	0.97
C(14)	H(12)	0.97
C(15)	C(18)	1.501(9)
C(16)	H(13)	1.15
C(18)	H(15)	0.96
C(18)	H(17)	0.94
C(21)	C(26)	1.388(7)
C(22)	H(21)	0.97
C(23)	H(22)	0.98
C(24)	H(23)	0.97
C(25)	H(24)	0.96
C(31)	C(32)	1.388(7)
C(32)	C(33)	1.386(8)
C(33)	C(34)	1.37(1)
C(34)	C(35)	1.35(1)
C(35)	C(36)	1.413(9)
C(36)	H(35)	0.98
C(41)	C(46)	1.364(8)
C(42)	H(41)	0.96
C(43)	H(42)	0.97
C(44)	H(43)	0.97
C(45)	H(44)	0.98

Table 15. Bond Angles(°) of **7**

atom	atom	atom	angle	atom	atom	atom	angle
Se(11)	Sn(1)	O(11)	57.56(7)	Se(11)	Sn(1)	C(21)	115.6(1)
Se(11)	Sn(1)	C(31)	99.1(1)	Se(11)	Sn(1)	C(41)	109.0(1)
O(11)	Sn(1)	C(21)	87.0(2)	O(11)	Sn(1)	C(31)	156.5(2)
O(11)	Sn(1)	C(41)	76.8(2)	C(21)	Sn(1)	C(31)	108.3(2)
C(21)	Sn(1)	C(41)	112.4(2)	C(31)	Sn(1)	C(41)	111.7(2)
Sn(1)	Se(11)	C(11)	92.4(2)	Sn(1)	O(11)	C(11)	88.5(3)
Se(11)	C(11)	O(11)	120.4(4)	Se(11)	C(11)	C(12)	116.6(4)
O(11)	C(11)	C(12)	123.0(5)	C(11)	C(12)	C(13)	118.1(5)
C(11)	C(12)	C(17)	123.3(5)	C(13)	C(12)	C(17)	118.6(5)
C(12)	C(13)	C(14)	120.4(5)	C(12)	C(13)	H(11)	119.5
C(14)	C(13)	H(11)	120.1	C(13)	C(14)	C(15)	121.6(6)
C(13)	C(14)	H(12)	118.9	C(15)	C(14)	H(12)	119.5
C(14)	C(15)	C(16)	117.8(6)	C(14)	C(15)	C(18)	120.8(7)
C(16)	C(15)	C(18)	121.3(6)	C(15)	C(16)	C(17)	120.8(6)
C(15)	C(16)	H(13)	118.5	C(17)	C(16)	H(13)	120.4
C(12)	C(17)	C(16)	120.7(6)	C(12)	C(17)	H(14)	120.1
C(16)	C(17)	H(14)	119.1	C(15)	C(18)	H(15)	109.4
C(15)	C(18)	H(16)	110.2	C(15)	C(18)	H(17)	111.7
H(15)	C(18)	H(16)	107.2	H(15)	C(18)	H(17)	109.5
H(16)	C(18)	H(17)	108.7	Sn(1)	C(21)	C(22)	123.7(4)
Sn(1)	C(21)	C(26)	118.8(4)	C(22)	C(21)	C(26)	117.5(5)
C(21)	C(22)	C(23)	120.8(5)	C(21)	C(22)	H(21)	118.8
C(23)	C(22)	H(21)	120.4	C(22)	C(23)	C(24)	120.4(5)
C(22)	C(23)	H(22)	119.6	C(24)	C(23)	H(22)	119.9
C(23)	C(24)	C(25)	119.3(5)	C(23)	C(24)	H(23)	120.1
C(25)	C(24)	H(23)	120.6	C(24)	C(25)	C(26)	120.5(6)
C(24)	C(25)	H(24)	120.0	C(26)	C(25)	H(24)	119.4
C(21)	C(26)	C(25)	121.4(5)	C(21)	C(26)	H(25)	118.7
C(25)	C(26)	H(25)	119.9	Sn(1)	C(31)	C(32)	119.1(4)
Sn(1)	C(31)	C(36)	122.1(4)	C(32)	C(31)	C(36)	118.8(5)
C(31)	C(32)	C(33)	120.8(6)	C(31)	C(32)	H(31)	119.0
C(33)	C(32)	H(31)	120.3	C(32)	C(33)	C(34)	120.2(6)
C(32)	C(33)	H(32)	120.7	C(34)	C(33)	H(32)	119.1
C(33)	C(34)	C(35)	119.7(6)	C(33)	C(34)	H(33)	120.8
C(35)	C(34)	H(33)	119.4	C(34)	C(35)	C(36)	121.3(6)
C(34)	C(35)	H(34)	118.1	C(36)	C(35)	H(34)	120.6
C(31)	C(36)	C(35)	119.2(6)	C(31)	C(36)	H(35)	119.9
C(35)	C(36)	H(35)	120.9	Sn(1)	C(41)	C(42)	120.7(4)
Sn(1)	C(41)	C(46)	121.5(4)	C(42)	C(41)	C(46)	117.9(5)
C(41)	C(42)	C(43)	121.0(6)	C(41)	C(42)	H(41)	118.8
C(43)	C(42)	H(41)	120.1	C(42)	C(43)	C(44)	121.0(6)
C(42)	C(43)	H(42)	119.5	C(44)	C(43)	H(42)	119.5
C(43)	C(44)	C(45)	118.3(6)	C(43)	C(44)	H(43)	121.4
C(45)	C(44)	H(43)	120.3	C(44)	C(45)	C(46)	121.1(6)
C(44)	C(45)	H(44)	120.5	C(46)	C(45)	H(44)	118.3
C(41)	C(46)	C(45)	120.6(6)	C(41)	C(46)	H(45)	118.2
C(45)	C(46)	H(45)	121.1				

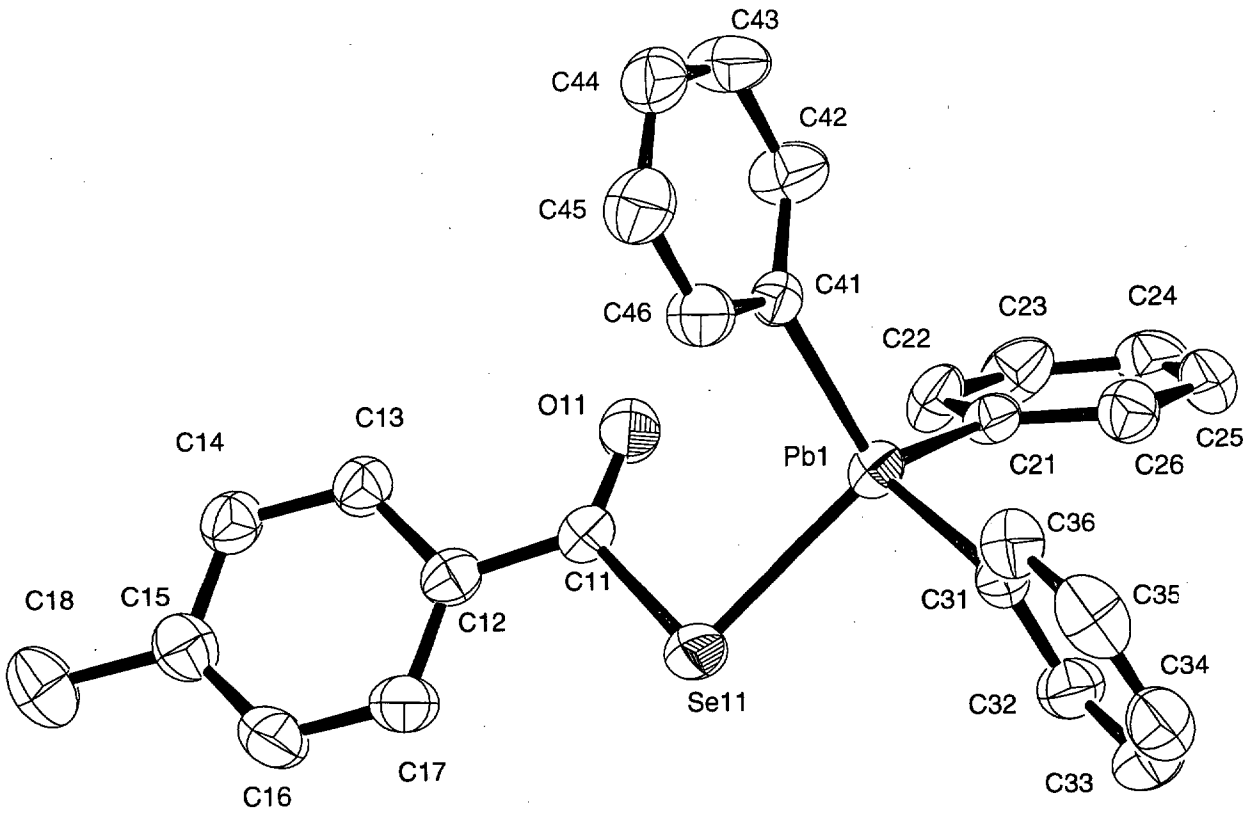

Figure 6. The ORTEP drawing of 4-$CH_3C_6H_4COSePbPh_3$ **8**.

Table 16. Atomic coordinates and B_{iso}/B_{eq} of **8**

atom	x	y	z	B_{eq}
Pb(1)	0.25350(2)	0.21197(1)	0.29916(2)	2.669(4)
Se(11)	0.14796(6)	0.34573(3)	0.41339(7)	3.59(1)
O(11)	0.4139(4)	0.3129(2)	0.6683(5)	3.87(8)
C(11)	0.3062(5)	0.3534(3)	0.6458(6)	2.81(9)
C(12)	0.2854(5)	0.4096(3)	0.7892(6)	2.88(9)
C(13)	0.3856(5)	0.4069(3)	0.9670(6)	3.05(9)
C(14)	0.3681(6)	0.4573(3)	1.1073(7)	3.5(1)
C(15)	0.2553(6)	0.5125(3)	1.0769(7)	3.6(1)
C(16)	0.1566(7)	0.5159(3)	0.9019(8)	4.4(1)
C(17)	0.1702(6)	0.4651(3)	0.7591(7)	3.8(1)
C(18)	0.2425(7)	0.5697(4)	1.2293(9)	4.9(1)
C(21)	0.4579(5)	0.2338(3)	0.2375(6)	2.66(8)
C(22)	0.5759(5)	0.2828(3)	0.3500(6)	3.4(1)
C(23)	0.6997(5)	0.2963(4)	0.2984(7)	4.0(1)
C(24)	0.7073(5)	0.2577(4)	0.1391(8)	3.9(1)
C(25)	0.5906(6)	0.2099(3)	0.0278(7)	3.8(1)
C(26)	0.4648(5)	0.1974(3)	0.0748(7)	3.4(1)
C(31)	0.0700(5)	0.1828(3)	0.0426(6)	2.69(8)
C(32)	0.0471(6)	0.2367(3)	-0.0959(7)	3.8(1)
C(33)	-0.0702(7)	0.2210(4)	-0.2572(8)	4.6(1)
C(34)	-0.1619(6)	0.1519(4)	-0.2821(8)	4.5(1)
C(35)	-0.1401(6)	0.0980(4)	-0.1454(9)	4.5(1)
C(36)	-0.0251(6)	0.1134(3)	0.0176(7)	3.5(1)
C(41)	0.2718(5)	0.1185(3)	0.5018(6)	2.59(8)
C(42)	0.4032(6)	0.0800(4)	0.5789(8)	4.1(1)
C(43)	0.4125(7)	0.0196(4)	0.7026(9)	4.8(1)
C(44)	0.2956(7)	-0.0008(3)	0.7541(7)	4.0(1)
C(45)	0.1655(7)	0.0387(4)	0.6808(9)	5.0(2)
C(46)	0.1531(6)	0.0986(3)	0.5547(8)	3.9(1)
H(11)	0.4659	0.3700	0.9910	3.7
H(12)	0.4344	0.4521	1.2290	4.2
H(13)	0.0888	0.5693	0.8764	4.9
H(14)	0.0897	0.4652	0.6266	4.9
H(15)	0.2994	0.6197	1.2423	6.1
H(16)	0.2762	0.5421	1.3422	6.1
H(17)	0.1415	0.5823	1.2075	6.1
H(21)	0.5650	0.3080	0.4537	4.9
H(22)	0.7804	0.3326	0.3731	4.8
H(23)	0.7939	0.2651	0.1070	4.6
H(24)	0.5943	0.1850	-0.0841	4.6
H(25)	0.3830	0.1632	-0.0037	4.0
H(31)	0.1138	0.2845	-0.0816	4.5
H(32)	-0.0886	0.2597	-0.3504	5.7
H(33)	-0.2408	0.1407	-0.3951	5.3
H(34)	-0.2040	0.0495	-0.1637	5.3
H(35)	-0.0109	0.0755	0.1137	4.3
H(41)	0.5005	0.1012	0.5534	4.9
H(42)	0.5046	-0.0077	0.7540	5.6
H(43)	0.3064	-0.0480	0.8553	4.9
H(44)	0.0807	0.0248	0.7170	5.9
H(45)	0.0628	0.1268	0.5050	4.6

Table 17. Bond Lengths(Å) of **8**

atom	atom	distance
Pb(1)	Se(11)	2.6365(5)
Pb(1)	C(21)	2.198(4)
Pb(1)	C(41)	2.202(4)
O(11)	C(11)	1.205(6)
C(12)	C(13)	1.408(6)
C(13)	C(14)	1.387(7)
C(14)	C(15)	1.384(7)
C(15)	C(16)	1.387(8)
C(16)	C(17)	1.393(8)
C(17)	H(14)	1.07
C(18)	H(16)	0.97
C(21)	C(22)	1.382(6)
C(22)	C(23)	1.393(7)
C(23)	C(24)	1.387(8)
C(24)	C(25)	1.361(8)
C(25)	C(26)	1.388(7)
C(26)	H(25)	0.96
C(31)	C(36)	1.388(6)
C(32)	H(31)	0.97
C(33)	H(32)	0.95
C(34)	H(33)	0.96
C(35)	H(34)	0.96
C(41)	C(42)	1.383(7)
C(42)	C(43)	1.386(8)
C(43)	C(44)	1.352(8)
C(44)	C(45)	1.376(9)
C(45)	C(46)	1.389(7)
C(46)	H(45)	0.96

atom	atom	distance
Pb(1)	O(11)	3.130(4)
Pb(1)	C(31)	2.209(4)
Se(11)	C(11)	1.941(4)
C(11)	C(12)	1.470(6)
C(12)	C(17)	1.404(7)
C(13)	H(11)	0.96
C(14)	H(12)	0.96
C(15)	C(18)	1.507(7)
C(16)	H(13)	1.08
C(18)	H(15)	0.94
C(18)	H(17)	0.96
C(21)	C(26)	1.394(6)
C(22)	H(21)	0.93
C(23)	H(22)	0.96
C(24)	H(23)	0.95
C(25)	H(24)	0.95
C(31)	C(32)	1.382(7)
C(32)	C(33)	1.392(8)
C(33)	C(34)	1.365(9)
C(34)	C(35)	1.372(9)
C(35)	C(36)	1.390(8)
C(36)	H(35)	0.97
C(41)	C(46)	1.373(6)
C(42)	H(41)	1.07
C(43)	H(42)	0.97
C(44)	H(43)	1.10
C(45)	H(44)	0.97

Table 18. Bond Angles(°) of **8**

atom	atom	atom	angle
Se(11)	Pb(1)	O(11)	56.28(6)
Se(11)	Pb(1)	C(31)	98.3(1)
O(11)	Pb(1)	C(21)	86.0(1)
O(11)	Pb(1)	C(41)	76.9(1)
C(21)	Pb(1)	C(41)	113.6(2)
Pb(1)	Se(11)	C(11)	92.6(1)
Se(11)	C(11)	O(11)	120.4(3)
O(11)	C(11)	C(12)	123.1(4)
C(11)	C(12)	C(17)	123.7(4)
C(12)	C(13)	C(14)	120.1(4)
C(14)	C(13)	H(11)	120.1
C(13)	C(14)	H(12)	118.8
C(14)	C(15)	C(16)	118.6(5)
C(16)	C(15)	C(18)	120.5(5)
C(15)	C(16)	H(13)	116.2
C(12)	C(17)	C(16)	120.5(5)
C(16)	C(17)	H(14)	120.4
C(15)	C(18)	H(16)	109.5
H(15)	C(18)	H(16)	108.7
H(16)	C(18)	H(17)	107.5
Pb(1)	C(21)	C(26)	117.4(3)
C(21)	C(22)	C(23)	119.6(5)
C(23)	C(22)	H(21)	123.4
C(22)	C(23)	H(22)	120.1
C(23)	C(24)	C(25)	120.1(4)
C(25)	C(24)	H(23)	120.0
C(24)	C(25)	H(24)	120.1
C(21)	C(26)	C(25)	119.9(5)
C(25)	C(26)	H(25)	120.2
Pb(1)	C(31)	C(36)	122.2(3)
C(31)	C(32)	C(33)	119.9(5)
C(33)	C(32)	H(31)	120.2
C(32)	C(33)	H(32)	119.7
C(33)	C(34)	C(35)	119.7(5)
C(35)	C(34)	H(33)	120.0
C(34)	C(35)	H(34)	119.5
C(31)	C(36)	C(35)	120.3(5)
C(35)	C(36)	H(35)	119.8
Pb(1)	C(41)	C(46)	120.3(3)
C(41)	C(42)	C(43)	120.2(5)
C(43)	C(42)	H(41)	119.7
C(42)	C(43)	H(42)	119.4
C(43)	C(44)	C(45)	119.2(5)
C(45)	C(44)	H(43)	121.2
C(44)	C(45)	H(44)	120.1
C(41)	C(46)	C(45)	119.7(5)
C(45)	C(46)	H(45)	120.9

atom	atom	atom	angle
Se(11)	Pb(1)	C(21)	115.3(1)
Se(11)	Pb(1)	C(41)	106.6(1)
O(11)	Pb(1)	C(31)	154.5(1)
C(21)	Pb(1)	C(31)	109.1(2)
C(31)	Pb(1)	C(41)	113.2(2)
Pb(1)	O(11)	C(11)	89.5(3)
Se(11)	C(11)	C(12)	116.5(3)
C(11)	C(12)	C(13)	118.2(4)
C(13)	C(12)	C(17)	118.1(4)
C(12)	C(13)	H(11)	119.8
C(13)	C(14)	C(15)	121.6(5)
C(15)	C(14)	H(12)	119.6
C(14)	C(15)	C(18)	120.8(5)
C(15)	C(16)	C(17)	121.0(5)
C(17)	C(16)	H(13)	120.9
C(12)	C(17)	H(14)	118.9
C(15)	C(18)	H(15)	111.4
C(15)	C(18)	H(17)	110.1
H(15)	C(18)	H(17)	109.6
Pb(1)	C(21)	C(22)	122.9(3)
C(22)	C(21)	C(26)	119.6(4)
C(21)	C(22)	H(21)	116.9
C(22)	C(23)	C(24)	120.2(5)
C(24)	C(23)	H(22)	119.7
C(23)	C(24)	H(23)	120.0
C(24)	C(25)	C(26)	120.5(5)
C(26)	C(25)	H(24)	119.4
C(21)	C(26)	H(25)	119.9
Pb(1)	C(31)	C(32)	118.8(3)
C(32)	C(31)	C(36)	119.0(4)
C(31)	C(32)	H(31)	119.9
C(32)	C(33)	C(34)	120.8(5)
C(34)	C(33)	H(32)	119.4
C(33)	C(34)	H(33)	120.2
C(34)	C(35)	C(36)	120.2(5)
C(36)	C(35)	H(34)	120.3
C(31)	C(36)	H(35)	119.9
Pb(1)	C(41)	C(42)	120.6(3)
C(42)	C(41)	C(46)	119.2(4)
C(41)	C(42)	H(41)	119.8
C(42)	C(43)	C(44)	120.9(5)
C(44)	C(43)	H(42)	119.8
C(43)	C(44)	H(43)	119.6
C(44)	C(45)	C(46)	120.9(5)
C(46)	C(45)	H(44)	119.1
C(41)	C(46)	H(45)	119.4