Table 1. Data Collection and Processing Parameters for **4b**

Crystal data
$C_{32}H_{29}ClMo_2O_4Te_3 \cdot 2CH_2Cl_2$
Mr= 1257.58
Monoclinic
P21/c(#14)
F(000) = 2304
a= 9.856(3) Å
b =19.4599(6) Å
c =20.418(3) Å
β = 95.91(3) °
V = 3895(2)Å ^{3}
Z= 4
Dx=2.083 Mg m^{-3}

Data collection
Enraf-Nonius CAD4 diffractometer
ω /2 θ scans
Absorption correction: ψ scans
(*TEXSAN*; Molecular Structure Corporation, !989)
Tmin = 0.7530, Tmax =1.000
7502 measured reflection
7189 independent reflections
5953 observed reflections
[I>3 σ (I)]

Refinement
Refinement on F
R=0.034
wR=0.047
S=1.38
5953 reflections
434 parameters
w=1/ σ ^{2}(F)
(Δ / σ)max = 0.001

Crystal data
Mo Kα radiation
λ = 0.71073Å
cell parameters from 25 reflections
θ = 14.98 - 15.83°
μ = 3.218 mm^{-1}
T= 296K

0.90x0.40x0.30 mm

Rint : 0.019
θ max=25°
h = -11 → 0
k = 0 → 23
l = -24 → 24
3 standard reflections
monitored every 300 reflections
intensity decay: 7.1%
scan width:(0.75+0.35tan θ)°

Δ ρ $_{max}$ = 0.706 eÅ^{-3}
Δ ρ $_{min}$ = -0.495 eÅ^{-3}
extinction correction: 4.51 × 10^{-7}
atomic scattering factors from International Tables for X-Ray Crystallography (1974,Vol.IV)

Table 2. Atomic Coordinates and Equivalent Isotropic Temperature Factors for **4b**

atom	x	y	z	B(eq)
Te(1)	0.41292(4)	0.152990(19)	0.677924(17)	2.84(2)
Te(2)	0.81345(4)	0.256319(19)	0.607262(18)	2.89(2)
Te(3)	0.67706(4)	0.094944(18)	0.599988(17)	2.74(2)
Mo(1)	0.68409(5)	0.18807(2)	0.70096(2)	2.50(2)
Mo(2)	0.54381(5)	0.21803(2)	0.58295(2)	2.38(2)
Cl(1)	0.56880(14)	0.30028(7)	0.67652(7)	3.05(5)
O(1)	0.6737(5)	0.0148(2)	0.8199(2)	4.8(2)
O(2)	0.5074(5)	0.0875(3)	0.8415(2)	5.2(2)
O(3)	0.5737(5)	0.4051(2)	0.5226(2)	4.4(2)
O(4)	0.7107(5)	0.3476(2)	0.4620(2)	4.5(2)
C(11)	0.7068(6)	0.1302(3)	0.7995(3)	3.4(2)
C(12)	0.6918(7)	0.2026(3)	0.8102(3)	3.7(3)
C(13)	0.8082(7)	0.2348(3)	0.7886(3)	4.2(3)
C(14)	0.8952(6)	0.1847(4)	0.7675(3)	4.2(3)
C(15)	0.8330(6)	0.1196(3)	0.7736(3)	3.8(3)
C(16)	0.6157(7)	0.0764(3)	0.8218(3)	4.0(3)
C(17)	0.5918(9)	−0.0413(4)	0.8396(4)	6.1(4)
C(21)	0.5189(6)	0.2919(3)	0.4969(3)	3.1(2)
C(22)	0.5412(6)	0.2237(3)	0.4734(2)	3.2(2)
C(23)	0.4272(6)	0.1841(3)	0.4851(3)	3.6(3)
C(24)	0.3346(6)	0.2261(3)	0.5142(3)	3.8(3)
C(25)	0.3885(6)	0.2919(3)	0.5228(3)	3.5(3)
C(26)	0.6110(6)	0.3493(3)	0.4909(3)	3.3(2)
C(27)	0.6643(9)	0.4622(4)	0.5227(5)	6.1(4)
C(31)	0.3013(6)	0.2310(3)	0.7232(3)	3.2(2)
C(32)	0.3030(7)	0.2318(4)	0.7916(3)	4.1(3)
C(33)	0.2275(8)	0.2807(4)	0.8200(3)	5.1(3)
C(34)	0.1505(7)	0.3277(4)	0.7837(4)	5.0(3)
C(35)	0.1455(7)	0.3261(4)	0.7156(4)	4.7(3)
C(36)	0.2196(7)	0.2776(4)	0.6860(3)	4.2(3)
C(41)	0.9292(6)	0.1898(3)	0.5510(3)	3.5(3)
C(42)	0.9194(6)	0.1991(4)	0.4829(3)	4.0(3)
C(43)	0.9892(7)	0.1561(4)	0.4443(3)	5.1(4)
C(44)	1.0673(8)	0.1045(4)	0.4732(4)	5.7(4)
C(45)	1.0816(7)	0.0952(4)	0.5398(4)	5.2(4)
C(46)	1.0124(6)	0.1388(4)	0.5796(4)	4.5(3)
C(51)	0.5393(6)	0.0129(3)	0.6157(3)	3.1(2)
C(52)	0.4185(6)	0.0033(3)	0.5762(3)	3.7(3)
C(53)	0.3360(7)	−0.0528(3)	0.5862(4)	4.5(3)
C(54)	0.3739(9)	−0.0982(3)	0.6357(4)	5.1(4)
C(55)	0.4951(8)	−0.0918(3)	0.6728(4)	4.7(3)
C(56)	0.5792(7)	−0.0359(3)	0.6637(3)	4.2(3)
Cl(2)	1.0564(4)	0.00092(17)	0.69052(14)	10.1(2)
Cl(3)	1.1850(4)	−0.06631(18)	0.8022(2)	13.0(2)
Cl(4)	0.1452(4)	0.3802(3)	0.40721(17)	12.7(2)
Cl(5)	0.0715(3)	0.4053(2)	0.53571(17)	10.9(2)
C(1)	1.1896(11)	0.0030(5)	0.7521(6)	8.7(6)
C(2)	0.0199(12)	0.3942(10)	0.4512(7)	14(1)

Table 3. Bond Lengths (Å) for **4b**

atom	atom	distance	atom	atom	distance
Mo(1)	Mo(2)	2.714(6)	C(12)	C(13)	1.42(1)
Te(1)	Mo(2)	2.747(4)	C(13)	C(14)	1.39(1)
Te(1)	Mo(1)	2.752(2)	C(14)	C(15)	1.42(1)
Te(2)	Mo(1)	2.748(4)	C(21)	C(22)	1.436(8)
Te(2)	Mo(2)	2.756(3)	C(21)	C(25)	1.440(9)
Te(3)	Mo(2)	2.735(1)	C(21)	C(26)	1.453(8)
Te(3)	Mo(1)	2.741(1)	C(22)	C(23)	1.403(9)
Mo(1)	Cl(1)	2.487(2)	C(23)	C(24)	1.401(9)
Mo(2)	Cl(1)	2.486(2)	C(24)	C(25)	1.391(9)
Te(1)	C(31)	2.140(6)	C(31)	C(36)	1.384(9)
Te(2)	C(41)	2.137(7)	C(31)	C(32)	1.396(8)
Te(3)	C(51)	2.142(6)	C(32)	C(33)	1.37(1)
Mo(1)	C(12)	2.242(6)	C(33)	C(34)	1.36(1)
Mo(1)	C(13)	2.254(8)	C(34)	C(35)	1.39(1)
Mo(1)	C(11)	2.296(5)	C(35)	C(36)	1.37(1)
Mo(1)	C(14)	2.366(8)	C(41)	C(46)	1.377(9)
Mo(1)	C(15)	2.382(7)	C(41)	C(42)	1.395(8)
Mo(2)	C(22)	2.237(5)	C(42)	C(43)	1.38(1)
Mo(2)	C(21)	2.263(6)	C(43)	C(44)	1.36(1)
Mo(2)	C(23)	2.298(7)	C(44)	C(45)	1.36(1)
Mo(2)	C(25)	2.350(7)	C(45)	C(46)	1.40(1)
Mo(2)	C(24)	2.376(8)	C(51)	C(52)	1.381(9)
O(1)	C(16)	1.330(8)	C(51)	C(56)	1.392(8)
O(1)	C(17)	1.441(9)	C(52)	C(53)	1.391(9)
O(2)	C(16)	1.198(8)	C(53)	C(54)	1.36(1)
O(3)	C(26)	1.336(7)	C(54)	C(55)	1.35(1)
O(3)	C(27)	1.426(9)	C(55)	C(56)	1.39(1)
O(4)	C(26)	1.197(8)	Cl(2)	C(1)	1.72(1)
C(11)	C(15)	1.415(9)	Cl(3)	C(1)	1.70(1)
C(11)	C(12)	1.435(8)	Cl(4)	C(2)	1.62(1)
C(11)	C(16)	1.482(9)	Cl(5)	C(2)	1.76(1)

Distances are in angstroms. Estimated standard deviations in the least significant figure are given in parentheses.

Table 4. Bond Angles (deg.) for **4b**

atom	atom	atom	angle	atom	atom	atom	angle
C(31)	Te(1)	Mo(2)	106.1(2)	C(11)	Mo(1)	C(14)	58.9(3)
C(31)	Te(1)	Mo(1)	106.4(2)	C(11)	Mo(1)	C(15)	35.2(2)
Mo(2)	Te(1)	Mo(1)	59.2(2)	C(11)	Mo(1)	Cl(1)	127.4(2)
C(41)	Te(2)	Mo(1)	113.1(2)	C(11)	Mo(1)	Mo(2)	151.3(2)
C(41)	Te(2)	Mo(2)	107.3(2)	C(11)	Mo(1)	Te(3)	109.1(2)
Mo(1)	Te(2)	Mo(2)	59.1(2)	C(11)	Mo(1)	Te(2)	146.8(2)
C(51)	Te(3)	Mo(2)	111.6(1)	C(11)	Mo(1)	Te(1)	91.9(3)
C(51)	Te(3)	Mo(1)	110.4(2)	C(14)	Mo(1)	C(15)	34.8(2)
Mo(2)	Te(3)	Mo(1)	59.4(1)	C(14)	Mo(1)	Cl(1)	119.7(2)
C(12)	Mo(1)	C(13)	36.7(3)	C(14)	Mo(1)	Mo(2)	148.6(2)
C(12)	Mo(1)	C(11)	36.9(2)	C(14)	Mo(1)	Te(3)	111.6(2)
C(12)	Mo(1)	C(14)	59.6(3)	C(14)	Mo(1)	Te(2)	88.2(2)
C(12)	Mo(1)	C(15)	59.7(3)	C(14)	Mo(1)	Te(1)	150.7(2)
C(12)	Mo(1)	Cl(1)	93.2(2)	C(15)	Mo(1)	Cl(1)	148.7(2)
C(12)	Mo(1)	Mo(2)	144.9(2)	C(15)	Mo(1)	Mo(2)	153.8(2)
C(12)	Mo(1)	Te(3)	145.9(2)	C(15)	Mo(1)	Te(3)	93.8(2)
C(12)	Mo(1)	Te(2)	131.3(2)	C(15)	Mo(1)	Te(2)	113.8(2)
C(12)	Mo(1)	Te(1)	97.7(3)	C(15)	Mo(1)	Te(1)	119.5(2)
C(13)	Mo(1)	C(11)	60.4(2)	Cl(1)	Mo(1)	Mo(2)	56.90(8)
C(13)	Mo(1)	C(14)	35.0(3)	Cl(1)	Mo(1)	Te(3)	117.0(1)
C(13)	Mo(1)	C(15)	58.8(3)	Cl(1)	Mo(1)	Te(2)	70.8(1)
C(13)	Mo(1)	Cl(1)	90.2(2)	Cl(1)	Mo(1)	Te(1)	76.63(7)
C(13)	Mo(1)	Mo(2)	143.5(2)	Mo(2)	Mo(1)	Te(3)	60.18(6)
C(13)	Mo(1)	Te(3)	146.5(2)	Mo(2)	Mo(1)	Te(2)	60.60(4)
C(13)	Mo(1)	Te(2)	96.0(2)	Mo(2)	Mo(1)	Te(1)	60.3(2)
C(13)	Mo(1)	Te(1)	132.4(3)	Te(3)	Mo(1)	Te(2)	76.93(8)
Te(3)	Mo(1)	Te(1)	76.0(2)	C(25)	Mo(2)	C(24)	34.2(2)
Te(2)	Mo(1)	Te(1)	120.9(2)	C(25)	Mo(2)	Cl(1)	90.9(2)
C(22)	Mo(2)	C(21)	37.2(2)	C(25)	Mo(2)	Mo(1)	147.1(2)
C(22)	Mo(2)	C(23)	36.0(2)	C(25)	Mo(2)	Te(3)	151.5(2)
C(22)	Mo(2)	C(25)	60.5(3)	C(25)	Mo(2)	Te(1)	108.8(2)
C(22)	Mo(2)	C(24)	59.1(3)	C(25)	Mo(2)	Te(2)	119.5(2)
C(22)	Mo(2)	Cl(1)	136.6(2)	C(24)	Mo(2)	Cl(1)	115.1(2)
C(22)	Mo(2)	Mo(1)	148.3(2)	C(24)	Mo(2)	Mo(1)	150.4(2)
C(22)	Mo(2)	Te(3)	97.2(2)	C(24)	Mo(2)	Te(3)	120.5(2)
C(22)	Mo(2)	Te(1)	140.4(2)	C(24)	Mo(2)	Te(1)	90.3(2)
C(22)	Mo(2)	Te(2)	94.5(3)	C(24)	Mo(2)	Te(2)	148.3(2)
C(21)	Mo(2)	C(23)	60.2(2)	Cl(1)	Mo(2)	Mo(1)	56.94(7)
C(21)	Mo(2)	C(25)	36.3(2)	Cl(1)	Mo(2)	Te(3)	117.2(1)
C(21)	Mo(2)	C(24)	58.8(2)	Cl(1)	Mo(2)	Te(1)	76.76(7)
C(21)	Mo(2)	Cl(1)	100.5(2)	Cl(1)	Mo(2)	Te(2)	70.7(2)
C(21)	Mo(2)	Mo(1)	146.0(1)	Mo(1)	Mo(2)	Te(3)	60.40(8)
C(21)	Mo(2)	Te(3)	131.8(2)	Mo(1)	Mo(2)	Te(1)	60.53(4)
C(21)	Mo(2)	Te(1)	145.0(1)	Mo(1)	Mo(2)	Te(2)	60.3(2)
C(21)	Mo(2)	Te(2)	89.6(3)	Te(3)	Mo(2)	Te(1)	76.2(1)
C(23)	Mo(2)	C(25)	58.7(3)	Te(3)	Mo(2)	Te(2)	76.90(5)
C(23)	Mo(2)	C(24)	34.8(3)	Te(1)	Mo(2)	Te(2)	120.8(2)
C(23)	Mo(2)	Cl(1)	148.8(2)	Mo(2)	Cl(1)	Mo(1)	66.2(1)
C(23)	Mo(2)	Mo(1)	150.9(2)	C(16)	O(1)	C(17)	114.9(6)
C(23)	Mo(2)	Te(3)	92.8(2)	C(26)	O(3)	C(27)	115.5(6)
C(23)	Mo(2)	Te(1)	104.6(2)	C(15)	C(11)	C(12)	107.9(6)
C(23)	Mo(2)	Te(2)	128.4(3)	C(15)	C(11)	C(16)	126.6(6)

Angles are in degrees. Estimated standard deviations in the least significant figure are given in parentheses.

Intramolecular Bond Angles Involving the Nonhydrogen Atoms (cont)

atom	atom	atom	angle	atom	atom	atom	angle
C(15)	C(11)	Mo(1)	75.7(4)	C(23)	C(22)	Mo(2)	74.4(4)
C(12)	C(11)	C(16)	124.9(6)	C(21)	C(22)	Mo(2)	72.4(3)
C(12)	C(11)	Mo(1)	69.5(3)	C(24)	C(23)	C(22)	108.7(5)
C(16)	C(11)	Mo(1)	127.5(4)	C(24)	C(23)	Mo(2)	75.6(4)
C(13)	C(12)	C(11)	106.7(6)	C(22)	C(23)	Mo(2)	69.6(3)
C(13)	C(12)	Mo(1)	72.1(4)	C(25)	C(24)	C(23)	109.5(5)
C(11)	C(12)	Mo(1)	73.6(3)	C(25)	C(24)	Mo(2)	71.9(3)
C(14)	C(13)	C(12)	109.3(6)	C(23)	C(24)	Mo(2)	69.5(3)
C(14)	C(13)	Mo(1)	76.9(4)	C(24)	C(25)	C(21)	107.4(5)
C(12)	C(13)	Mo(1)	71.2(4)	C(24)	C(25)	Mo(2)	73.9(4)
C(13)	C(14)	C(15)	108.2(6)	C(21)	C(25)	Mo(2)	68.6(3)
C(13)	C(14)	Mo(1)	68.1(3)	O(4)	C(26)	O(3)	122.8(6)
C(15)	C(14)	Mo(1)	73.2(3)	O(4)	C(26)	C(21)	125.0(6)
C(11)	C(15)	C(14)	107.9(6)	O(3)	C(26)	C(21)	112.2(5)
C(11)	C(15)	Mo(1)	69.1(3)	C(36)	C(31)	C(32)	119.2(6)
C(14)	C(15)	Mo(1)	72.0(4)	C(36)	C(31)	Te(1)	121.5(4)
O(2)	C(16)	O(1)	124.9(6)	C(32)	C(31)	Te(1)	119.1(5)
O(2)	C(16)	C(11)	124.4(6)	C(33)	C(32)	C(31)	118.6(6)
O(1)	C(16)	C(11)	110.6(6)	C(34)	C(33)	C(32)	122.2(6)
C(22)	C(21)	C(25)	107.1(5)	C(33)	C(34)	C(35)	119.4(6)
C(22)	C(21)	C(26)	124.4(5)	C(36)	C(35)	C(34)	119.4(7)
C(22)	C(21)	Mo(2)	70.4(3)	C(35)	C(36)	C(31)	121.0(6)
C(25)	C(21)	C(26)	128.4(5)	C(46)	C(41)	C(42)	119.6(6)
C(25)	C(21)	Mo(2)	75.1(4)	C(46)	C(41)	Te(2)	122.3(5)
C(26)	C(21)	Mo(2)	122.4(4)	C(42)	C(41)	Te(2)	118.1(5)
C(23)	C(22)	C(21)	107.4(5)	C(43)	C(42)	C(41)	120.2(7)
C(44)	C(43)	C(42)	119.5(7)				
C(43)	C(44)	C(45)	121.7(7)				
C(44)	C(45)	C(46)	119.5(7)				
C(41)	C(46)	C(45)	119.6(7)				
C(52)	C(51)	C(56)	118.9(6)				
C(52)	C(51)	Te(3)	122.4(4)				
C(56)	C(51)	Te(3)	118.5(5)				
C(51)	C(52)	C(53)	120.2(6)				
C(54)	C(53)	C(52)	119.9(7)				
C(55)	C(54)	C(53)	120.9(7)				
C(54)	C(55)	C(56)	120.1(7)				
C(51)	C(56)	C(55)	119.9(7)				
Cl(3)	C(1)	Cl(2)	110.8(6)				
Cl(4)	C(2)	Cl(5)	113.8(7)				

Angles are in degrees. Estimated standard deviations in the least significant figure are given in parentheses.

Table 5. Data Collection and Processing Parameters for **9**

Crystal data
$C_{30}H_{24}Mo_2O_8Te_2$
Mr= 959.59
Triclinic
P-1(#2)
F(000) = 928
a= 11.949(4) Å
b =12.809(7) Å
c =11.503(4) Å
α =82.48(4) °
β = 78.62(2) °
γ = 73.92(4) °
V = 1653(3)Å ^{3}
Z= 2
Dx=1.960 Mg m^{-3}

Data collection
Rigaku-AFC5R diffractometer
ω/2 θ scans
Absorption correction: ψ scans
(*TEXSAN*; Molecular Structure Corporation, 1989)
Tmin = 0.8191, Tmax = 1.000
6128 measured reflection
5820 independent reflections
4148 observed reflections
[I>3 σ (I)]

Refinement
Refinement on F
R=0.073
wR=0.094
S=2.30
4148 reflections
388 parameters
$w=1/\sigma^2(F)$
$(\Delta/\sigma)_{max} = 0.09$

Crystal data
Mo K α radiation
λ = 0.71069Å
cell parameters from 20 reflections
θ = 7.21 - 8.81°
μ = 2.524 mm^{-1}
T= 296K

0.60x0.20x0.10 mm

Rint : 0.028
θ max=25°
h = 0 → 14
k = -15 → 15
l = -14 → 14
3 standard reflections
monitored every 250 reflections
intensity decay: 2.2%
scan width:(1.375+0.35tan θ)°

$\Delta\rho_{max}$ = 2.76 eÅ^{-3}
$\Delta\rho_{min}$ = -1.88 eÅ^{-3}
atomic scattering factors
from International Tables
for X-Ray Crystallography
(1974,Vol.IV)

Table 6. Atomic Coordinates and Equivalent Isotropic Temperature Factors for **9**

atom	x	y	z	B(eq)
Te(1)	0.38958(9)	−0.06931(8)	0.2821(1)	2.39(7)
Te(2)	0.17661(9)	−0.19144(9)	0.3186(1)	2.51(7)
Mo(1)	0.4189(1)	−0.2897(1)	0.2450(1)	2.44(9)
Mo(2)	0.1697(1)	0.0174(1)	0.2038(1)	2.20(8)
O(1)	0.611(1)	−0.312(1)	0.401(1)	6(1)
O(2)	0.129(1)	−0.094(1)	−0.003(1)	4(1)
O(3)	0.363(2)	−0.463(1)	0.449(1)	7(1)
O(4)	0.352(1)	0.068(1)	−0.014(1)	4(1)
O(5)	0.725(1)	−0.498(1)	0.172(1)	6(1)
O(6)	0.593(1)	−0.594(1)	0.199(1)	5(1)
O(7)	0.212(1)	0.322(1)	0.132(1)	5(1)
O(8)	0.275(1)	0.249(1)	0.300(1)	5(1)
C(1)	0.538(2)	−0.303(1)	0.345(2)	4(1)
C(2)	0.145(1)	−0.057(1)	0.081(2)	4(1)
C(3)	0.377(2)	−0.398(2)	0.373(2)	4(1)
C(4)	0.288(1)	0.047(1)	0.065(2)	3(1)
C(11)	0.353(1)	−0.060(1)	0.470(1)	1.8(9)
C(12)	0.345(1)	0.035(1)	0.513(2)	3(1)
C(13)	0.326(1)	0.047(2)	0.633(2)	4(1)
C(14)	0.324(2)	−0.042(2)	0.714(2)	4(1)
C(15)	0.334(2)	−0.138(2)	0.672(2)	4(1)
C(16)	0.346(1)	−0.149(1)	0.553(2)	3(1)
C(21)	0.076(1)	−0.263(1)	0.231(1)	3(1)
C(22)	−0.036(2)	−0.200(2)	0.212(2)	4(1)
C(23)	−0.108(2)	−0.246(2)	0.160(2)	5(2)
C(24)	−0.062(2)	−0.348(2)	0.125(2)	5(2)
C(25)	0.046(2)	−0.412(2)	0.139(2)	4(2)
C(26)	0.118(2)	−0.366(2)	0.193(2)	4(1)
C(31)	0.428(1)	−0.400(1)	0.102(1)	3(1)
C(32)	0.381(2)	−0.293(1)	0.044(2)	4(1)
C(33)	0.469(2)	−0.235(2)	0.038(1)	4(1)
C(34)	0.571(2)	−0.305(1)	0.085(2)	4(1)
C(35)	0.543(2)	−0.407(2)	0.123(2)	4(1)
C(36)	0.620(2)	−0.508(1)	0.172(2)	4(1)
C(41)	0.092(2)	0.134(1)	0.358(2)	3(1)
C(42)	0.000(1)	0.086(2)	0.353(2)	4(1)
C(43)	−0.030(1)	0.117(1)	0.237(1)	3(1)
C(44)	0.044(1)	0.185(1)	0.175(1)	3(1)
C(45)	0.121(2)	0.193(1)	0.251(2)	3(1)
C(46)	0.204(2)	0.264(2)	0.217(2)	4(1)
C(47)	0.361(2)	0.312(2)	0.285(2)	7(2)
C(37)	0.811(2)	−0.591(2)	0.209(4)	10(3)
O(9)	0.998(2)	0.402(1)	0.458(1)	6(1)

Table 7. Bond Lengths (Å) for **9**

atom	atom	distance	atom	atom	distance
Mo(1)	Mo(2)	4.259(3)	O(5)	C(37)	1.42(3)
Te(1)	Mo(1)	2.825(2)	O(6)	C(36)	1.22(2)
Te(1)	Mo(2)	2.829(2)	O(7)	C(46)	1.16(2)
Te(2)	Mo(2)	2.811(2)	O(8)	C(46)	1.36(2)
Te(2)	Mo(1)	2.824(2)	O(8)	C(47)	1.44(2)
Te(1)	C(11)	2.13(1)	C(11)	C(12)	1.34(2)
Te(2)	C(21)	2.15(2)	C(11)	C(16)	1.40(2)
Mo(1)	C(1)	1.95(2)	C(12)	C(13)	1.38(3)
Mo(1)	C(3)	1.97(2)	C(13)	C(14)	1.37(3)
Mo(1)	C(35)	2.22(2)	C(14)	C(15)	1.35(2)
Mo(1)	C(31)	2.27(2)	C(15)	C(16)	1.37(2)
Mo(1)	C(34)	2.30(2)	C(21)	C(26)	1.37(2)
Mo(1)	C(33)	2.40(2)	C(21)	C(22)	1.40(2)
Mo(1)	C(32)	2.45(2)	C(22)	C(23)	1.42(3)
Mo(2)	C(2)	1.92(2)	C(23)	C(24)	1.35(3)
Mo(2)	C(4)	1.99(2)	C(24)	C(25)	1.35(3)
Mo(2)	C(45)	2.28(2)	C(25)	C(26)	1.44(3)
Mo(2)	C(44)	2.28(2)	C(31)	C(35)	1.42(2)
Mo(2)	C(41)	2.35(2)	C(31)	C(32)	1.46(2)
Mo(2)	C(43)	2.35(2)	C(32)	C(33)	1.43(3)
Mo(2)	C(42)	2.42(2)	C(33)	C(34)	1.45(2)
O(1)	C(1)	1.16(2)	C(34)	C(35)	1.44(3)
O(2)	C(2)	1.18(2)	C(35)	C(36)	1.48(3)
O(3)	C(3)	1.15(2)	C(41)	C(45)	1.39(2)
O(4)	C(4)	1.12(2)	C(41)	C(42)	1.41(2)
O(5)	C(36)	1.30(2)	C(42)	C(43)	1.43(2)
			C(43)	C(44)	1.44(2)
			C(44)	C(45)	1.42(2)
			C(45)	C(46)	1.49(3)

Distances are in angstroms. Estimated standard deviations in the least significant figure are given in parentheses.

Table 8. Bond Angles (deg.) for **9**

atom	atom	atom	angle
Tc(2)	Mo(1)	Tc(1)	70.81(6)
Te(2)	Mo(2)	Te(1)	70.94(6)
Mo(1)	Te(1)	Mo(2)	97.76(6)
Mo(2)	Te(2)	Mo(1)	98.19(6)
C(11)	Te(1)	Mo(1)	106.3(4)
C(11)	Te(1)	Mo(2)	105.8(4)
C(21)	Te(2)	Mo(2)	106.9(4)
C(21)	Te(2)	Mo(1)	108.3(4)
C(1)	Mo(1)	C(3)	78.8(8)
C(1)	Mo(1)	C(35)	92.0(8)
C(1)	Mo(1)	C(31)	126.8(7)
C(1)	Mo(1)	C(34)	86.9(8)
C(1)	Mo(1)	C(33)	117.0(8)
C(1)	Mo(1)	C(32)	146.4(8)
C(1)	Mo(1)	Te(2)	122.7(6)
C(1)	Mo(1)	Te(1)	78.7(5)
C(3)	Mo(1)	C(35)	97.2(7)
C(3)	Mo(1)	C(31)	91.9(7)
C(3)	Mo(1)	C(34)	131.6(7)
C(3)	Mo(1)	C(33)	150.6(7)
C(3)	Mo(1)	C(32)	120.3(7)
C(3)	Mo(1)	Te(2)	79.0(5)
C(3)	Mo(1)	Te(1)	123.0(5)
C(35)	Mo(1)	C(31)	36.9(6)
C(35)	Mo(1)	C(34)	37.0(6)
C(35)	Mo(1)	C(33)	59.7(6)
C(4)	Mo(2)	C(44)	92.2(6)
C(4)	Mo(2)	C(41)	122.8(7)
C(4)	Mo(2)	C(43)	124.2(6)
C(4)	Mo(2)	C(42)	149.0(7)
C(4)	Mo(2)	Te(2)	123.6(5)
C(4)	Mo(2)	Te(1)	75.6(5)
C(45)	Mo(2)	C(44)	36.3(6)
C(45)	Mo(2)	C(41)	35.1(6)
C(45)	Mo(2)	C(43)	59.9(6)
C(45)	Mo(2)	C(42)	58.9(6)
C(45)	Mo(2)	Te(2)	138.8(5)
C(45)	Mo(2)	Te(1)	102.2(5)
C(44)	Mo(2)	C(41)	58.4(6)
C(44)	Mo(2)	C(43)	36.0(6)
C(44)	Mo(2)	C(42)	58.8(6)
C(44)	Mo(2)	Te(2)	142.0(4)
C(44)	Mo(2)	Te(1)	137.3(4)
C(41)	Mo(2)	C(43)	57.7(6)
C(41)	Mo(2)	C(42)	34.3(6)
C(41)	Mo(2)	Te(2)	103.8(5)
C(41)	Mo(2)	Te(1)	94.0(4)
C(43)	Mo(2)	C(42)	34.8(6)
C(43)	Mo(2)	Te(2)	106.2(4)
C(43)	Mo(2)	Te(1)	150.7(4)
C(42)	Mo(2)	Te(2)	87.3(5)
C(42)	Mo(2)	Te(1)	117.0(5)
C(35)	Mo(1)	C(32)	60.2(6)
C(35)	Mo(1)	Te(2)	142.9(5)
C(35)	Mo(1)	Te(1)	135.2(5)
C(31)	Mo(1)	C(34)	61.0(6)
C(31)	Mo(1)	C(33)	58.7(6)
C(31)	Mo(1)	C(32)	35.7(6)
C(31)	Mo(1)	Te(2)	106.1(4)
C(31)	Mo(1)	Te(1)	142.1(4)
C(34)	Mo(1)	C(33)	35.8(6)
C(34)	Mo(1)	C(32)	59.6(7)
C(34)	Mo(1)	Te(2)	143.6(5)
C(34)	Mo(1)	Te(1)	98.4(5)
C(33)	Mo(1)	C(32)	34.2(7)
C(33)	Mo(1)	Te(2)	107.9(5)
C(33)	Mo(1)	Te(1)	85.7(5)
C(32)	Mo(1)	Te(2)	89.6(5)
C(32)	Mo(1)	Te(1)	107.0(4)
C(2)	Mo(2)	C(4)	76.5(7)
C(2)	Mo(2)	C(45)	135.9(7)
C(2)	Mo(2)	C(44)	101.0(6)
C(2)	Mo(2)	C(41)	149.3(6)
C(2)	Mo(2)	C(43)	92.0(6)
C(2)	Mo(2)	C(42)	117.0(6)
C(2)	Mo(2)	Te(2)	78.3(5)
C(2)	Mo(2)	Te(1)	115.0(5)
C(4)	Mo(2)	C(45)	91.5(7)
C(36)	O(5)	C(37)	118(2)
C(46)	O(8)	C(47)	119(2)
O(1)	C(1)	Mo(1)	178(2)
O(2)	C(2)	Mo(2)	173(2)
O(3)	C(3)	Mo(1)	174(2)
O(4)	C(4)	Mo(2)	177(2)
C(12)	C(11)	C(16)	117(1)
C(12)	C(11)	Te(1)	119(1)
C(16)	C(11)	Te(1)	124(1)
C(11)	C(12)	C(13)	123(2)
C(14)	C(13)	C(12)	120(2)
C(15)	C(14)	C(13)	118(2)
C(14)	C(15)	C(16)	122(2)
C(15)	C(16)	C(11)	120(2)
C(26)	C(21)	C(22)	120(2)
C(26)	C(21)	Te(2)	123(1)
C(22)	C(21)	Te(2)	118(1)
C(21)	C(22)	C(23)	120(2)
C(24)	C(23)	C(22)	118(2)
C(25)	C(24)	C(23)	125(2)
C(24)	C(25)	C(26)	117(2)
C(21)	C(26)	C(25)	121(2)
C(35)	C(31)	C(32)	110(2)
C(35)	C(31)	Mo(1)	70(1)
C(32)	C(31)	Mo(1)	79(1)
C(33)	C(32)	C(31)	105(2)

Intramolecular Bond Angles for SYC-3-19 (cont.)

atom	atom	atom	angle	atom	atom	atom	angle
C(33)	C(32)	Mo(1)	71(1)	C(45)	C(44)	C(43)	108(1)
C(31)	C(32)	Mo(1)	65(1)	C(45)	C(44)	Mo(2)	72(1)
C(32)	C(33)	C(34)	111(2)	C(43)	C(44)	Mo(2)	75(1)
C(32)	C(33)	Mo(1)	75(1)	C(41)	C(45)	C(44)	107(2)
C(34)	C(33)	Mo(1)	68(1)	C(41)	C(45)	C(46)	131(2)
C(35)	C(34)	C(33)	106(2)	C(41)	C(45)	Mo(2)	75(1)
C(35)	C(34)	Mo(1)	68(1)	C(44)	C(45)	C(46)	122(2)
C(33)	C(34)	Mo(1)	76(1)	C(44)	C(45)	Mo(2)	72(1)
C(31)	C(35)	C(34)	109(2)	C(46)	C(45)	Mo(2)	122(1)
C(31)	C(35)	C(36)	124(2)	O(7)	C(46)	O(8)	123(2)
C(31)	C(35)	Mo(1)	73(1)	O(7)	C(46)	C(45)	127(2)
C(34)	C(35)	C(36)	128(2)	O(8)	C(46)	C(45)	110(2)
C(34)	C(35)	Mo(1)	75(1)				
C(36)	C(35)	Mo(1)	120(1)				
O(6)	C(36)	O(5)	123(2)				
O(6)	C(36)	C(35)	125(2)				
O(5)	C(36)	C(35)	112(2)				
C(45)	C(41)	C(42)	111(2)				
C(45)	C(41)	Mo(2)	70(1)				
C(42)	C(41)	Mo(2)	75(1)				
C(41)	C(42)	C(43)	106(2)				
C(41)	C(42)	Mo(2)	70(1)				
C(43)	C(42)	Mo(2)	70.2(9)				
C(42)	C(43)	C(44)	108(1)				
C(42)	C(43)	Mo(2)	75.0(9)				
C(44)	C(43)	Mo(2)	69.4(8)				

Angles are in degrees. Estimated standard deviations in the least significant figure are given in parentheses.