

Table A1: Crystal Data and Structure Refinement for C1

Empirical formula	C ₁₀ H ₁₂ Cl Mo N ₃ O ₄ S ₂
Formula weight	433.76
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	7.3148(3)
b (Å)	7.5035(3)
c (Å)	14.9713(6)
α (°)	85.005(2)
β (°)	85.616(2)
γ (°)	66.987(2)
Volume (Å ³)	752.65(5)
Z,	2
Calculated density (Mgm ⁻³)	1.914
Absorption coefficient (mm ⁻¹)	1.343
F(000)	432
Crystal size (mm)	0.50 x 0.30 x 0.20
Theta range for data collection (°)	1.37 to 26.00
Limiting indices	-9<=h<=8, -9<=k<=9, -17<=l<=18
Reflections collected / unique	5963 / 2925 [R(int) = 0.0154]
Data / restraints / parameters	2925 / 0 / 197
Goodness-of-fit on F ²	1.186
Final R indices [I>2sigma(I)]	R1 = 0.0269, wR2 = 0.0659
R indices (all data)	R1 = 0.0281, wR2 = 0.0665
Largest diff. peak and hole (e.A ⁻³)	0.843 and -0.902

Table A2: Crystal Data and Structure Refinement for C2

Empirical formula	C ₁₂ H ₁₇ Cl Mo N ₃ O ₄ S ₂
Formula weight	461.81
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	8.23390(10)
b (Å)	10.17390(10)
c (Å)	10.40170(10)
α (°)	78.4860(10)
β (°)	89.3120(10)
γ (°)	81.7320(10)
Volume (Å ³)	844.825(15)
Z,	2
Calculated density (Mgm ⁻³)	1.815
Absorption coefficient (mm ⁻¹)	1.202
F(000)	464
Crystal size (mm)	0.10 x 0.10 x 0.10
Theta range for data collection (°)	2.06 to 26.00
Limiting indices	-10<=h<=10, -12<=k<=12, -12<=l<=12
Reflections collected / unique	7256 / 3305 [R(int) = 0.0144]
Data / restraints / parameters	3305 / 0 / 211
Goodness-of-fit on F ²	1.035
Final R indices [I>2sigma(I)]	R1 = 0.0213, wR2 = 0.0591
R indices (all data)	R1 = 0.0233, wR2 = 0.0602
Largest diff. peak and hole (e.Å ⁻³)	0.623 and -0.465

Table A3: Crystal Data and Structure Refinement for C3

Empirical formula	C ₁₆ H ₁₆ Cl Mo N ₃ O ₄ S ₂
Formula weight	510
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	7.05910(10)
b (Å)	9.56030(10)
c (Å)	14.5762(2)
α (°)	76.2800(10)
β (°)	81.3510(10)
γ (°)	81.9850(10)
Volume (Å ³)	939.24(2)
Z,	2
Calculated density (Mgm ⁻³)	1.803
Absorption coefficient (mm ⁻¹)	1.116
F(000)	584
Crystal size (mm)	0.40 x 0.30 x 0.20
Theta range for data collection (°)	2.21 to 27.49
Limiting indices	-9<=h<=9, -12<=k<=12, -18<=l<=18
Reflections collected / unique	8953 / 4298 [R(int) = 0.0134]
Data / restraints / parameters	4298 / 0 / 246
Goodness-of-fit on F ²	1.116
Final R indices [I>2sigma(I)]	R1 = 0.0201, wR2 = 0.0602
R indices (all data)	R1 = 0.0206, wR2 = 0.0607
Largest diff. peak and hole (e.Å ⁻³)	0.360 and -0.729

Table A4: Crystal Data and Structure Refinement for C4

Empirical formula	C ₂₈ H ₂₀ Mo N ₂ O ₇
Formula weight	552
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Orthorhombic
Space group	Pbca
Unit cell dimensions	
a (Å)	18.8765(2)
b (Å)	7.60060(10)
c (Å)	27.1933(4)
α (°)	90
β (°)	90
γ (°)	90
Volume (Å ³)	3901.50(9)
Z,	8
Calculated density (Mgm ⁻³)	1.581
Absorption coefficient (mm ⁻¹)	0.695
F(000)	1936
Crystal size (mm)	0.15 x 0.10 x 0.10
Theta range for data collection (°)	1.50 to 27.50
Limiting indices	-24<=h<=24, -9<=k<=9, -35<=l<=35
Reflections collected / unique	34843 / 4482 [R(int) = 0.0375]
Data / restraints / parameters	4482 / 0 / 256
Goodness-of-fit on F ²	0.878
Final R indices [I>2sigma(I)]	R1 = 0.0620, wR2 = 0.1920
R indices (all data)	R1 = 0.0695, wR2 = 0.2024
Largest diff. peak and hole (e.Å ⁻³)	2.466 and -1.356

Table A5: Crystal Data and Structure Refinement for C6

Empirical formula	C ₁₇ H ₁₇ Cl Mo N ₂ O ₆ S
Formula weight	508.78
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	8.3916(8)
b (Å)	11.2114(10)
c (Å)	11.6265(11)
α (°)	67.5390(10)
β (°)	81.4410(10)
γ (°)	85.2190(10)
Volume (Å ³)	999.18(16)
Z,	2
Calculated density (Mgm ⁻³)	1.691
Absorption coefficient (mm ⁻¹)	0.931
F(000)	512
Crystal size (mm)	0.30 x 0.20 x 0.20
Theta range for data collection (°)	1.91 to 24.99
Limiting indices	-9<=h<=9, -13<=k<=13, -13<=l<=13
Reflections collected / unique	10368 / 3487 [R(int) = 0.0202]
Data / restraints / parameters	3487 / 0 / 256
Goodness-of-fit on F ²	1.055
Final R indices [I>2sigma(I)]	R1 = 0.0274, wR2 = 0.1089
R indices (all data)	R1 = 0.0284, wR2 = 0.1118
Largest diff. peak and hole (e.Å ⁻³)	0.820 and -0.660

Table A6: Crystal data and structure refinement for C7

Empirical formula	C ₁₄ H ₁₃ Cl Mo N ₂ O ₆ S
Formula weight	468.71
Temperature	100 (1) K
Wavelength	0.71073 Å
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a(Å)	8.28520(10)
b(Å)	10.0410(2)
c(Å)	10.4913(2)
α (°)	76.6300(10)
β (°)	86.4630(10)
γ (°)	87.7250(10)
Volume (Å ³)	847.23(3)
Z	2
Calculated density (Mgm ⁻³)	2.135
Absorption coefficient (mm ⁻¹)	1.099
F(000)	532
Crystal size (mm)	0.30 x 0.20 x 0.20
Theta range for data collection (°)	2.00 to 27.50
Limiting indices	-10 ≤ h ≤ 10, -13 ≤ k ≤ 13, -13 ≤ l ≤ 13
Reflections collected / unique	7878 / 3864 [R(int) = 0.0136]
Data / restraints / parameters	3864 / 0 / 228
Goodness-of-fit on F ²	0.888
Final R indices [I > 2σ(I)]	R1 = 0.0269, wR2 = 0.0978
R indices (all data)	R1 = 0.0299, wR2 = 0.1024
Largest diff. peak and hole (e.Å ⁻³)	0.925 and -0.714

Table A7: Crystal Data and Structure Refinement for C8

Empirical formula	C ₁₆ H ₁₅ ClMoN ₂ O ₇ S
Formula weight	510.76
Temperature (K)	100 (1)
Wavelength (Å)	0.71073
Crystal system	Monoclinic
Space group	P21/n
Unit cell dimensions	
a (Å)	10.4049(3)
b (Å)	14.0625(5)
c (Å)	12.6463(4)
α (°)	90
β (°)	100.837(2)
γ (°)	90
Volume (Å ³)	1817.39(10)
Z,	4
Calculated density (Mgm ⁻³)	1.911
Absorption coefficient (mm ⁻¹)	1.030
F(000)	1048
Crystal size (mm)	0.40 x 0.30 x 0.20
Theta range for data collection (°)	2.19 to 25.50
Limiting indices	-12 ≤ h ≤ 12, -17 ≤ k ≤ 17, -15 ≤ l ≤ 15
Reflections collected / unique	13092 / 3357 [R(int) = 0.0417]
Data / restraints / parameters	3357 / 0 / 257
Goodness-of-fit on F ²	1.138
Final R indices [I > 2σ(I)]	R1 = 0.0396, wR2 = 0.0731
R indices (all data)	R1 = 0.0514, wR2 = 0.0775
Largest diff. peak and hole (e.Å ⁻³)	0.965 and -0.854

Table A8. Crystal Data and Structure Refinement for C9

Empirical formula	C ₂₁ H ₃₀ O ₇ N ₆ Cl P Mo
Formula weight	636.50
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Monoclinic
Space group	P2(1)/c
Unit cell dimensions	
a (Å)	9.5993(7)
b (Å)	21.8850(17)
c (Å)	13.8804(11)
α (°)	90
β (°)	106.5510(10)
γ (°)	90
Volume (Å ³)	2795.2(4)
Z,	6
Calculated density (Mgm ⁻³)	1.652
Absorption coefficient (mm ⁻¹)	0.949
F(000)	1350
Crystal size (mm)	0.40 x 0.40 x 0.30
Theta range for data collection (°)	1.79 to 27.50
Limiting indices	-12<=h<=12 -28<=k<=28 -18<=l<=18
Reflections collected / unique	35132 / 6419 [R(int) = 0.0258]
Data / restraints / parameters	6419 / 0 / 341
Goodness-of-fit on F ²	1.055
Final R indices [I>2sigma(I)]	R1 = 0.0686, wR2 = 0.1997
R indices (all data)	R1 = 0.0739, wR2 = 0.2068
Largest diff. peak and hole (e.Å ⁻³)	3.147 and -1.115

Table A9: Crystal Data and Structure Refinement for C10

Empirical formula	C ₁₉ H ₂₂ Mo N ₂ O ₇ S
Formula weight	518.40
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	7.9629(7)
b (Å)	10.3906(10)
c (Å)	13.0994(12)
α (°)	81.380(3)
β (°)	72.455(4)
γ (°)	88.026(3)
Volume (Å ³)	1021.68(16)
Z,	2
Calculated density (Mgm ⁻³)	1.685
Absorption coefficient (mm ⁻¹)	0.789
F(000)	528
Crystal size (mm)	0.30 x 0.30 x 0.20
Theta range for data collection (°)	2.20 to 25.49
Limiting indices	-9<=h<=9 -12<=k<=12 -15<=l<=15
Reflections collected / unique	14197 / 3324 [R(int) = 0.0331]
Data / restraints / parameters	3979 / 0 / 276
Goodness-of-fit on F ²	1.196
Final R indices [I>2sigma(I)]	R1 = 0.0429, wR2 = 0.1163
R indices (all data)	R1 = 0.0486, wR2 = 0.1631
Largest diff. peak and hole (e.Å ⁻³)	0.896 and -0.824

Table A10: Crystal Data and Structure Refinement for C12

Empirical formula	C ₂₀ H ₂₃ Mo N ₃ O ₇
Formula weight	513.35
Temperature	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	8.1339(3)
b (Å)	10.5258(4)
c (Å)	12.9452(6)
α (°)	85.077(2)
β (°)	72.828(2)
γ (°)	88.216(2)
Volume (Å ³)	1054.98(7)
Z,	2
Calculated density (Mgm ⁻³)	1.565
Absorption coefficient (mm ⁻¹)	0.669
F(000)	524
Crystal size (mm)	0.32 x 0.30 x 0.30
Theta range for data collection (°)	1.94 to 28.3
Limiting indices	-10<=h<=10, -14<=k<=14, -17<=l<=17
Reflections collected / unique	10571 / 5176 [R(int) = 0.0187]
Data / restraints / parameters	5176 / 0 / 284
Goodness-of-fit on F ²	1.022
Final R indices [I>2sigma(I)]	R1 = 0.0255, wR2 = 0.0807
R indices (all data)	R1 = 0.0267, wR2 = 0.0820
Largest diff. peak and hole(e.Å ⁻³)	0.590 and -1.203

Table A11 Crystal Data and Structure Refinement for C13

Empirical formula	C ₂₁ H ₂₃ Mo N ₄ O ₇
Formula weight	539
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	8.82060(10)
b (Å)	9.6406(2)
c (Å)	12.9167(2)
α (°)	82.4180(10)
β (°)	84.6270(10)
γ (°)	71.9380(10)
Volume (Å ³)	1033.51(3)
Z,	2
Calculated density (Mgm ⁻³)	1.684
Absorption coefficient (mm ⁻¹)	0.685
F(000)	533
Crystal size (mm)	0.35 x 0.30 x 0.20
Theta range for data collection (°)	1.59 to 26.00
Limiting indices	-10<=h<=10, -11<=k<=11, -15<=l<=15
Reflections collected / unique	8701 / 4020 [R(int) = 0.0170]
Data / restraints / parameters	4020 / 0 / 300
Goodness-of-fit on F ²	1.085
Final R indices [I>2sigma(I)]	R1 = 0.0255, wR2 = 0.0691
R indices (all data)	R1 = 0.0269, wR2 = 0.0701
Largest diff. peak and hole (e.Å ⁻³)	0.764 and -0.470

Table A12: Crystal Data and Structure Refinement for C14

Empirical formula	C ₂₁ H ₂₄ Mo N ₂ O ₇ S
Formula weight	544.43
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	10.5921(4)
b (Å)	13.2852(5)
c (Å)	16.6410(6)
α (°)	70.8350(10)
β (°)	87.001(2)
γ (°)	81.736(2)
Volume (Å ³)	2188.91(14)
Z,	4
Calculated density (Mgm ⁻³)	1.652
Absorption coefficient (mm ⁻¹)	0.741
F(000)	1112
Crystal size (mm)	0.40 x 0.30 x 0.20
Theta range for data collection (°)	1.30 to 26.00
Limiting indices	-13<=h<=12, -16<=k<=16, -20<=l<=20
Reflections collected / unique	16942 / 8499 [R(int) = 0.0230]
Data / restraints / parameters	8499 / 0 / 581
Goodness-of-fit on F ²	1.087
Final R indices [I>2sigma(I)]	R1 = 0.0234, wR2 = 0.0693
R indices (all data)	R1 = 0.0253, wR2 = 0.0709
Largest diff. peak and hole (e.Å ⁻³)	0.353 and -0.682

Table A13. Crystal Data and Structure Refinement for C15

Empirical formula	C ₁₈ H ₂₀ MoN ₂ O ₇ S
Formula weight	504
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Monoclinic
Space group	P 21/c
Unit cell dimensions	
a (Å)	7.75270(10)
b (Å)	20.6173(4)
c (Å)	12.6506(2)
α (°)	90
β (°)	100.9310(10)
γ (°)	90
Volume (Å ³)	1985.38(6)
Z,	4
Calculated density (Mgm ⁻³)	1.677
Absorption coefficient (mm ⁻¹)	0.810
F(000)	1024
Crystal size (mm)	0.37 x 0.30 x 0.30
Theta range for data collection (°)	1.98 to 27.50
Limiting indices	-10 ≤ h ≤ 10, -26 ≤ k ≤ 26, -16 ≤ l ≤ 16
Reflections collected / unique	18375 / 4556 [R(int) = 0.0169]
Data / restraints / parameters	4556 / 0 / 266
Goodness-of-fit on F ²	1.153
Final R indices [I > 2σ(I)]	R1 = 0.0242, wR2 = 0.1191
R indices (all data)	R1 = 0.0245, wR2 = 0.1200
Largest diff. peak and hole (e.Å ⁻³)	0.473 and -1.683

Table A14. Crystal Data and Structure Refinement for C16

Empirical formula	[Mo(C ₁₄ H ₉ ClN ₂ O ₄)O ₂ (CH ₄ O)]·C ₁₀ H ₈ N ₂
Formula weight	620.85
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Monoclinic
Space group	P2(1)/n
Unit cell dimensions	
a (Å)	6.9575(3)
b (Å)	7.4541(4)
c (Å)	47.197(2)
α (°)	90
β (°)	92.0073(6)
γ (°)	90
Volume (Å ³)	2446.2(2)
Z,	4
Calculated density (Mgm ⁻³)	1.686
Absorption coefficient (mm ⁻¹)	0.700
F(000)	1256
Crystal size (mm)	0.25 x 0.20 x 0.20
Theta range for data collection (°)	2.60 to 28.20
Limiting indices	-9<=h<=9 -9<=k<=9 -61<=l<=61
Reflections collected / unique	29717 / 5408 [R(int) = 0.032]
Data / restraints / parameters	5604 / 3 / 356
Goodness-of-fit on F ²	1.23
Final R indices [I>2sigma(I)]	R1 = 0.0490, wR2 = 0.1380
R indices (all data)	R1 = 0.0497, wR2 = 0.1203
Largest diff. peak and hole (e.A ⁻³)	0.550 and -1.250

Table A15. Crystal Data and Structure Refinement for C17

Empirical formula	[Mo(C ₁₄ H ₁₂ N ₂ O ₄)O ₂ (H ₂ O)]·0.5C ₁₀ H ₈ N ₂
Formula weight	443.27
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	7.9237 (1)
b (Å)	10.1869(1)
c (Å)	13.3215(2)
α (°)	78.7841(5)
β (°)	78.4605(5)
γ (°)	69.5728(5)
Volume (Å ³)	978.15(2)
Z,	2
Calculated density (Mgm ⁻³)	1.685
Absorption coefficient (mm ⁻¹)	0.720
F(000)	502
Crystal size (mm)	0.25 x 0.20 x 0.25
Theta range for data collection (°)	2.50 to 28.20
Limiting indices	-10<=h<=10 -13<=k<=13 -17<=l<=17
Reflections collected / unique	9175 / 4266 [R(int) = 0.019]
Data / restraints / parameters	4445 / 24 / 275
Goodness-of-fit on F ²	0.98
Final R indices [I>2sigma(I)]	R1 = 0.026, wR2 = 0.076
R indices (all data)	R1 = 0.0485, wR2 = 0.1367
Largest diff. peak and hole (e.Å ⁻³)	0.730 and -0.720

Table A16. Crystal Data and Structure Refinement for C18

Empirical formula	C ₂₈ H ₃₆ Mo ₂ N ₄ O ₁₂
Formula weight	814.50
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Monoclinic
Space group	P 21/c
Unit cell dimensions	
a (Å)	8.8304(4)
b (Å)	12.5291(5)
c (Å)	14.4997(6)
α (°)	90
β (°)	99.696(2)
γ (°)	90
Volume (Å ³)	1581.29(12)
Z,	2
Calculated density (Mgm ⁻³)	1.711
Absorption coefficient (mm ⁻¹)	0.862
F(000)	828
Crystal size (mm)	0.45 x 0.45 x 0.30
Theta range for data collection (°)	2.16 to 27.50
Limiting indices	-11 ≤ h ≤ 11 -16 ≤ k ≤ 16 -18 ≤ l ≤ 17
Reflections collected / unique	13584 / 3625 [R(int) = 0.0251]
Data / restraints / parameters	3625 / 0 / 214
Goodness-of-fit on F ²	1.133
Final R indices [I > 2σ(I)]	R1 = 0.0333, wR2 = 0.0866
R indices (all data)	R1 = 0.0372, wR2 = 0.0898
Largest diff. peak and hole (e.Å ⁻³)	0.589 and -0.805

Table A17. Crystal Data and Structure Refinement for C19

Empirical formula	C ₂₄ H ₂₄ Cl ₄ Mo ₂ N ₄ O ₁₂
Formula weight	862.15
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Monoclinic
Space group	C 2/c
Unit cell dimensions	
a (Å)	20.5338(2)
b (Å)	14.64580(10)
c (Å)	13.24770(10)
α (°)	90
β (°)	129.51(2)
γ (°)	90
Volume (Å ³)	3073.74(4)
Z,	4
Calculated density (Mgm ⁻³)	1.863
Absorption coefficient (mm ⁻¹)	1.224
F(000)	2216
Crystal size (mm)	0.40 x 0.30 x 0.20
Theta range for data collection (°)	2.07 to 27.50
Limiting indices	-26<=h<=26 -19<=k<=19 -17<=l<=17
Reflections collected / unique	14499 / 3536 [R(int) = 0.0182]
Data / restraints / parameters	3536 / 0 / 204
Goodness-of-fit on F ²	0.980
Final R indices [I>2sigma(I)]	R1 = 0.0193, wR2 = 0.0538
R indices (all data)	R1 = 0.0212, wR2 = 0.0553
Largest diff. peak and hole (e.Å ⁻³)	0.534 and -0.461

Table A18. Crystal Data and Structure Refinement for C20

Empirical formula	C ₃₀ H ₂₈ C ₁₂ Mo ₂ N ₈ O ₆ S ₂
Formula weight	923.52
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Monoclinic
Space group	P 21/n
Unit cell dimensions	
a (Å)	12.5483(2)
b (Å)	11.93150(10)
c (Å)	23.2930(3)
α (°)	90
β (°)	100.9000(10)
γ (°)	90
Volume (Å ³)	3424.51(8)
Z,	4
Calculated density (Mgm ⁻³)	1.791
Absorption coefficient (mm ⁻¹)	1.067
F(000)	1848
Crystal size (mm)	0.40 x 0.30 x 0.30
Theta range for data collection (°)	1.93 to 28.30
Limiting indices	-16<=h<=16, -15<=k<=15 -31<=l<=31
Reflections collected / unique	33860 / 8497 [R(int) = 0.0190]
Data / restraints / parameters	8484 / 0 / 453
Goodness-of-fit on F ²	1.081
Final R indices [I>2sigma(I)]	R1 = 0.0194, wR2 = 0.0502
R indices (all data)	R1 = 0.0216, wR2 = 0.0515
Largest diff. peak and hole (e.Å ⁻³)	0.454 and -0.419

Table A19. Crystal Data and Structure Refinement for C21

Empirical formula	C ₃₀ H ₂₆ C ₁₄ Mo ₂ N ₈ O ₈ S ₂
Formula weight	1024.41
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	9.0527(2)
b (Å)	9.2002(2)
c (Å)	12.3846(2)
α (°)	71.9720(10)
β (°)	72.5420(10)
γ (°)	89.1080(10)
Volume (Å ³)	932.25(3)
Z,	1
Calculated density (Mgm ⁻³)	1.825
Absorption coefficient (mm ⁻¹)	1.132
F(000)	510
Crystal size (mm)	0.25 x 0.20 x 0.10
Theta range for data collection (°)	2.34 to 26.00
Limiting indices	-11<=h<=11, -11<=k<=11 -15<=l<=15
Reflections collected / unique	7899 / 3614 [R(int) = 0.0190]
Data / restraints / parameters	3614 / 0 / 249
Goodness-of-fit on F ²	0.982
Final R indices [I>2sigma(I)]	R1 = 0.0263, wR2 = 0.0886
R indices (all data)	R1 = 0.0295, wR2 = 0.0919
Largest diff. peak and hole (e.Å ⁻³)	0.866 and -0.524

Table A20. Crystal Data and Structure Refinement for C22

Empirical formula	C ₃₆ H ₆₂ Mo ₂ N ₁₀ O ₁₂ P ₂
Formula weight	1080
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P -1
Unit cell dimensions	
a (Å)	8.2462(4)
b (Å)	8.3898(4)
c (Å)	18.9782(10)
α (°)	86.238(2)
β (°)	83.245(2)
γ (°)	68.532(2)
Volume (Å ³)	1213.05(10)
Z,	1
Calculated density (Mgm ⁻³)	1.480
Absorption coefficient (mm ⁻¹)	0.648
F(000)	558
Crystal size (mm)	0.40 x 0.20 x 0.08
Theta range for data collection (°)	1.08 to 26.00
Limiting indices	-10 ≤ h ≤ 10 -10 ≤ k ≤ 10 -23 ≤ l ≤ 21
Reflections collected / unique	10168 / 4715 [R(int) = 0.0193]
Data / restraints / parameters	4715 / 0 / 287
Goodness-of-fit on F ²	1.167
Final R indices [I > 2σ(I)]	R1 = 0.0321, wR2 = 0.0969
R indices (all data)	R1 = 0.0335, wR2 = 0.0977
Largest diff. peak and hole (e.Å ⁻³)	1.369 and -0.732

Table A21. Crystal Data and Structure Refinement for C23

Empirical formula	C ₂₈ H ₃₆ Mo ₂ N ₄ O ₁₂
Formula weight	868.56
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	
a (Å)	8.36030(10)
b (Å)	10.18100(10)
c (Å)	11.94300(10)
α (°)	94.2080(10)
β (°)	107.7120(10)
γ (°)	112.4400(10)
Volume (Å ³)	874.054(15)
Z,	1
Calculated density (Mgm ⁻³)	1.650
Absorption coefficient (mm ⁻¹)	0.787
F(000)	442
Crystal size (mm)	0.27 x 0.14 x 0.10
Theta range for data collection (°)	1.83 to 27.50
Limiting indices	-10 ≤ h ≤ 10 -12 ≤ k ≤ 13 -15 ≤ l ≤ 15
Reflections collected / unique	8361 / 3984 [R(int) = 0.0133]
Data / restraints / parameters	3984 / 0 / 229
Goodness-of-fit on F ²	1.160
Final R indices [I > 2σ(I)]	R1 = 0.0207, wR2 = 0.0602
R indices (all data)	R1 = 0.0214, wR2 = 0.0606
Largest diff. peak and hole (e.Å ⁻³)	0.463 and -0.452

Table A22. Crystal Data and Structure Refinement for C24

Empirical formula	C ₁₅ H ₁₃ Mo N ₃ O ₅
Formula weight	443.27
Temperature (K)	100(1)
Wavelength (Å)	0.71073
Crystal system	Monoclinic
Space group	P2(1)/c
Unit cell dimensions	
a (Å)	10.04650(10)
b (Å)	14.5139(2)
c (Å)	12.6256(2)
α (°)	90
β (°)	113.0800(10)
γ (°)	90
Volume (Å ³)	1693.63(4)
Z,	4
Calculated density (Mgm ⁻³)	1.738
Absorption coefficient (mm ⁻¹)	0.814
F(000)	896
Crystal size (mm)	0.40 x 0.30 x 0.20
Theta range for data collection (°)	2.20 to 25.99
Limiting indices	-12<=h<=12 -17<=k<=17 -15<=l<=15
Reflections collected / unique	14197 / 3324 [R(int) = 0.0331]
Data / restraints / parameters	3324 / 0 / 238
Goodness-of-fit on F ²	1.121
Final R indices [I>2sigma(I)]	R1 = 0.0429, wR2 = 0.1163
R indices (all data)	R1 = 0.0497, wR2 = 0.1203
Largest diff. peak and hole (e.Å ⁻³)	0.896 and -0.824