

SUPPORTING INFORMATION

Reactivity of the Carbodiphosphorane, $(\text{Ph}_3\text{P})_2\text{C}$, towards Main Group Metal Alkyl Compounds: Coordination and Cyclometalation[†]

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Cartesian Coordinates and Spectroscopic Data

Cartesian Coordinates for Geometry Optimized Structures

[(Ph ₃ P) ₂ C]AlMe ₃			
atom	x	y	z
Al	8.946690318	3.271702779	13.28157703
P	8.334344153	4.964713738	10.5217366
P	7.128469626	6.111904878	13.00756383
C	8.074338308	4.935380822	12.21355485
C	10.14153776	4.005571008	14.72367221
H	10.75108727	3.185342585	15.13154684
H	9.618962115	4.457027526	15.57446328
H	10.85788242	4.756061432	14.35706044
C	7.423538467	2.111174488	13.96718267
H	7.348922581	2.133776731	15.06301751
H	7.600411768	1.059379263	13.69863335
H	6.420115963	2.356149465	13.58731114
C	10.0643786	2.165098583	12.01433837
H	10.23641625	1.211056659	12.5373097
H	11.05692775	2.586360084	11.81507921
H	9.636304553	1.895841993	11.04051132
C	10.12344755	4.843756807	10.09474628
C	11.05614792	5.341284373	11.01241862
H	10.71132609	5.680000977	11.98305158
C	12.41472418	5.359663318	10.69877187
H	13.12873669	5.740066281	11.4234297
C	12.85548569	4.8736617	9.468100392
H	13.91442433	4.881669801	9.225548475
C	11.93312408	4.362600483	8.554628687

H	12.27122541	3.967579003	7.600734816
C	10.57388007	4.347212187	8.863908629
H	9.87311622	3.932497719	8.148392876
C	7.793390529	6.458240498	9.568872108
C	8.711994006	7.457516852	9.217345122
H	9.754693249	7.358429054	9.497951816
C	8.297221918	8.579012501	8.499586428
H	9.022024012	9.342605404	8.232326106
C	6.962922746	8.716755256	8.120318509
H	6.643781408	9.587323309	7.554141737
C	6.039621143	7.729934832	8.466912586
H	4.998349677	7.827949339	8.172946535
C	6.450370314	6.608401396	9.185708135
H	5.722680658	5.844751201	9.438059215
C	7.495167874	3.604598474	9.588652377
C	6.994926426	2.500739425	10.29134193
H	7.099670291	2.455269996	11.36966943
C	6.358790266	1.461368311	9.611054766
H	5.979642304	0.611191501	10.17061694
C	6.211427651	1.513131155	8.225530511
H	5.715007514	0.703227034	7.69823752
C	6.69716335	2.613534616	7.518113635
H	6.575832927	2.667283998	6.43973685
C	7.331747204	3.654747402	8.193848215
H	7.679438068	4.515900537	7.632014463
C	7.600018708	7.860645889	12.62687798
C	8.956765482	8.199021556	12.76908424
H	9.668575502	7.439527852	13.07720777

C	9.398151341	9.495289247	12.51208113
H	10.44885979	9.741639252	12.63751734
C	8.493585831	10.47014352	12.08742261
H	8.836913163	11.47991678	11.8803212
C	7.150765247	10.13820149	11.91933112
H	6.444250197	10.88660492	11.57160509
C	6.703700328	8.843699809	12.19051915
H	5.657685043	8.603088107	12.04263306
C	5.287705765	6.036244957	12.7750064
C	4.736614801	5.04901229	11.95241493
H	5.394131867	4.347059259	11.44974369
C	3.351191271	4.944060814	11.79823133
H	2.93923849	4.168403295	11.15862316
C	2.503131005	5.823017534	12.47011038
H	1.426455441	5.74301636	12.35076012
C	3.044260276	6.797255852	13.31348194
H	2.389167172	7.473802512	13.85511208
C	4.424553499	6.897608926	13.47328655
H	4.829843004	7.640512435	14.15387376
C	7.216214846	6.002228525	14.84523084
C	7.906149142	6.93708987	15.62748713
H	8.43948703	7.757332642	15.16305854
C	7.910320152	6.829268458	17.01862355
H	8.452517668	7.562187429	17.60938642
C	7.225777179	5.789773334	17.64632714
H	7.233028551	5.70587475	18.72934747
C	6.527021562	4.860469537	16.87388777
H	5.988646147	4.046718534	17.35090956

C	6.515411796	4.968397713	15.48490254
H	5.965222098	4.239653716	14.9017054

[(Ph ₃ P) ₂ C]AlF ₃			
atom	x	y	z
Al	8.696055206	3.348651091	13.15852562
P	8.308344152	4.940279306	10.50949716
P	7.083018568	6.150962973	13.01972425
C	7.99045066	4.96961431	12.19309746
F	9.746429677	3.774887924	14.40128046
F	7.34853418	2.460862331	13.70360983
F	9.487525762	2.473891002	11.94640949
C	10.11258792	4.815760855	10.17060685
C	11.0166762	5.022334875	11.21923247
H	10.64768111	5.18686874	12.2262663
C	12.39021578	4.98752229	10.97872648
H	13.08097413	5.138398305	11.80304541
C	12.8728809	4.744951315	9.693575374
H	13.94305585	4.715135965	9.508697891
C	11.97670826	4.528675092	8.645983168
H	12.34485356	4.328278884	7.643759163
C	10.60416109	4.561245124	8.882500707
H	9.923893055	4.377815401	8.058764287
C	7.77192509	6.419263707	9.549528522
C	8.68241429	7.430279089	9.213249055
H	9.723825047	7.339311462	9.501810896
C	8.25842645	8.553334903	8.503016344

H	8.974714713	9.328736272	8.247261108
C	6.923723668	8.678870139	8.11945063
H	6.596834876	9.552031356	7.561638156
C	6.009181225	7.678618167	8.451833977
H	4.968397165	7.76854739	8.153923436
C	6.429370177	6.554871906	9.161035503
H	5.710818111	5.779382998	9.403854578
C	7.487954346	3.556428599	9.602795555
C	6.932318174	2.483153774	10.31330643
H	6.944963338	2.466397242	11.39711133
C	6.327603072	1.429290762	9.627104653
H	5.904134587	0.603292906	10.19086323
C	6.266414209	1.433056694	8.234439245
H	5.795804738	0.608677886	7.705921233
C	6.799545495	2.507096161	7.521089315
H	6.739186077	2.528916043	6.436527905
C	7.40173583	3.564384865	8.20047578
H	7.776890382	4.409377733	7.631820834
C	7.543741968	7.885224832	12.60086616
C	8.90637342	8.21856273	12.68825882
H	9.628226459	7.45651677	12.96635447
C	9.335363338	9.515789976	12.41753644
H	10.39006891	9.76268151	12.49968186
C	8.412562121	10.49261105	12.03741094
H	8.747054969	11.5038219	11.82308423
C	7.062879825	10.16413523	11.92600867
H	6.342512378	10.91609798	11.61666038
C	6.627338861	8.868168844	12.20947617

H	5.574919442	8.626752892	12.11402299
C	5.245458704	6.048505007	12.85612211
C	4.678918992	5.067941008	12.03563173
H	5.326656624	4.385447116	11.4955307
C	3.29105997	4.93963463	11.94043031
H	2.865708695	4.169510751	11.30332964
C	2.456792476	5.785023476	12.67017545
H	1.377740843	5.683392849	12.59874324
C	3.014861551	6.75163901	13.51129212
H	2.371312035	7.400094077	14.09917667
C	4.39883492	6.877371433	13.61179422
H	4.82026959	7.612618318	14.29147968
C	7.290124462	6.027162692	14.84031402
C	7.779177877	7.093209466	15.60708861
H	8.090469669	8.016644758	15.13318102
C	7.872906604	6.974445821	16.99412616
H	8.259966251	7.805075623	17.57763049
C	7.476141415	5.797486893	17.62569343
H	7.555818535	5.705132867	18.70527027
C	6.981408495	4.736506237	16.86658127
H	6.679377497	3.811887892	17.3491812
C	6.878974823	4.847558132	15.48226333
H	6.527663787	3.998402776	14.9057074

[(Ph ₃ P) ₂ C]AlCl ₃			
atom	x	y	z
Al	8.924872582	3.417292963	13.28725873
P	8.283855033	4.91755457	10.50744013
P	7.094146883	6.099624746	13.0138714
C	8.042495136	4.891092716	12.22369566
Cl	10.31007596	4.28395476	14.72797733
Cl	7.418979957	2.151448909	14.24884869
Cl	10.03956311	2.093734746	11.96472219
C	10.06688224	4.868982692	10.05806972
C	11.00526832	5.356493201	10.97564276
H	10.68414204	5.647457631	11.96909916
C	12.35523395	5.423369564	10.63354712
H	13.07375223	5.790103078	11.36037331
C	12.7802987	5.000703309	9.375037949
H	13.83293353	5.046888672	9.110701328
C	11.85137352	4.501558433	8.460988499
H	12.17816605	4.154545267	7.484882217
C	10.5010399	4.434828795	8.798121611
H	9.796768958	4.026167282	8.082888251
C	7.670302664	6.411738898	9.612070748
C	8.554497411	7.440598812	9.255981719
H	9.60487047	7.367288671	9.513939024
C	8.092507947	8.560506431	8.565468105
H	8.789315516	9.348616636	8.295589514
C	6.745783417	8.666477647	8.219326408
H	6.389212347	9.537405059	7.676519002
C	5.858665888	7.64766175	8.567622582

H	4.809147956	7.719847199	8.297190934
C	6.316697022	6.525464904	9.256345531
H	5.617850304	5.735618822	9.506024076
C	7.4525054	3.544154796	9.593585859
C	6.984964626	2.420913585	10.28768905
H	7.093419795	2.354698292	11.3640606
C	6.364780109	1.376046407	9.601072732
H	6.013422633	0.511853845	10.15660839
C	6.20060906	1.439168384	8.217847136
H	5.718028996	0.623986327	7.686406814
C	6.651686324	2.560831587	7.519482298
H	6.516244958	2.627041001	6.44354629
C	7.269505376	3.608354537	8.201183911
H	7.587618965	4.484750651	7.645498384
C	7.616922126	7.824905324	12.61310588
C	8.982496634	8.123345028	12.76162221
H	9.674798431	7.342604271	13.06059018
C	9.45568512	9.413646898	12.53178612
H	10.51206638	9.630017161	12.66273149
C	8.575574222	10.42115268	12.13343491
H	8.943634395	11.42720161	11.95289454
C	7.224300708	10.12794789	11.95916235
H	6.536318001	10.90234636	11.6318839
C	6.744685077	8.838948798	12.19835385
H	5.693813076	8.62838923	12.04072803
C	5.269389564	6.017749317	12.73678951
C	4.728694348	4.975283023	11.97746046
H	5.389746982	4.236616481	11.53744169

C	3.345915007	4.861537553	11.81160267
H	2.942277116	4.042413553	11.22369406
C	2.48953247	5.785323088	12.40818846
H	1.414603514	5.697327576	12.27996391
C	3.019404544	6.813639712	13.19266362
H	2.357819171	7.523332938	13.68143982
C	4.397409361	6.923076433	13.36700993
H	4.791558538	7.704193159	14.01003728
C	7.158558486	6.014093544	14.84935427
C	7.945533665	6.886269082	15.61422781
H	8.573327193	7.627202263	15.13664482
C	7.926449773	6.813227752	17.00528408
H	8.544403684	7.492883545	17.58463072
C	7.123851582	5.871986824	17.64805392
H	7.115102739	5.813821257	18.73282021
C	6.332719888	5.005735338	16.89474689
H	5.708341377	4.265960085	17.38604829
C	6.341506874	5.079169295	15.50391215
H	5.72109482	4.398652924	14.93403569

[(Ph ₃ P) ₂ C]AlBr ₃			
atom	x	y	z
Al	8.968220799	3.47999811	13.25663562
P	8.222687103	4.943149312	10.46558697
P	7.054311508	6.110988071	12.99218692
C	8.018703163	4.908405079	12.19403072
Br	10.49260141	4.493344203	14.77160522

Br	7.420235292	2.044720079	14.36879935
Br	10.22064865	1.99957431	11.89261542
C	9.99470087	4.886685991	9.97413341
C	10.94855931	5.44813117	10.83308462
H	10.64668222	5.816807123	11.80658428
C	12.2923803	5.488776175	10.46270039
H	13.02374176	5.908755156	11.14705455
C	12.69482095	4.968911922	9.233034064
H	13.74323008	4.990836096	8.948695705
C	11.74963296	4.403223845	8.376185688
H	12.05979302	3.980766719	7.424599601
C	10.40606293	4.360855265	8.741660722
H	9.69083126	3.892839348	8.075382306
C	7.593922897	6.445477444	9.586519515
C	8.475018849	7.478133271	9.230601876
H	9.527315893	7.405378108	9.481981671
C	8.009462233	8.601108913	8.546625594
H	8.706303833	9.389851724	8.277813383
C	6.661253452	8.709190359	8.204072067
H	6.301988237	9.581602568	7.665375247
C	5.778012276	7.685281891	8.550251906
H	4.727464064	7.754821424	8.281836687
C	6.239231199	6.559762935	9.233169155
H	5.540646005	5.768011189	9.478432961
C	7.37765819	3.566508775	9.567451016
C	6.949055405	2.429336521	10.26542572
H	7.082662527	2.359068533	11.33921881
C	6.336423974	1.374009236	9.587572735

H	6.017197668	0.499317765	10.14644646
C	6.141376579	1.439927549	8.208353522
H	5.666198573	0.616257369	7.682991666
C	6.554334453	2.574094291	7.505983924
H	6.397233617	2.640426148	6.432834192
C	7.164967153	3.631831285	8.17881825
H	7.459984515	4.51402294	7.619072801
C	7.599447518	7.837404998	12.6163333
C	8.964003287	8.1231961	12.80234301
H	9.641289841	7.337760002	13.12599833
C	9.455893974	9.409536952	12.58513614
H	10.51099592	9.613761393	12.74527401
C	8.597435703	10.42758061	12.16421896
H	8.980244933	11.42987508	11.99366671
C	7.247571981	10.14626166	11.95657485
H	6.574870865	10.9271797	11.61282555
C	6.748448408	8.861385763	12.18141227
H	5.699964212	8.662012866	11.99384945
C	5.23586317	6.02503393	12.67148991
C	4.711858132	4.96295778	11.92631699
H	5.381508293	4.216217811	11.51383552
C	3.332359488	4.839426557	11.7379966
H	2.943209035	4.00451903	11.16192376
C	2.461466882	5.773598015	12.2971346
H	1.389138701	5.677966663	12.15154739
C	2.974164474	6.821710241	13.06715302
H	2.301225285	7.539633849	13.52785784
C	4.348573442	6.940593501	13.26470542

H	4.726947401	7.736235733	13.89945652
C	7.067319242	6.01651756	14.83218541
C	7.834977162	6.882930197	15.62453295
H	8.488838265	7.615727406	15.16975516
C	7.765974355	6.813304227	17.01492987
H	8.372800742	7.487082344	17.61280202
C	6.931991933	5.882122958	17.63355131
H	6.885963927	5.825423236	18.71746287
C	6.157797876	5.024181013	16.85312244
H	5.508478058	4.291003984	17.32191346
C	6.216188952	5.094452618	15.46263153
H	5.604890152	4.420638512	14.87501412

[(Ph ₃ P) ₂ C]GaMe ₃			
atom	x	y	z
Ga	8.88943668	3.183774808	13.2967597
P	8.345157492	4.986692247	10.50385676
P	7.127744634	6.118049432	12.99113493
C	8.070706084	4.949734242	12.18976069
C	10.06834489	3.917695071	14.77013407
H	10.6979223	3.107322181	15.16450424
H	9.518966047	4.336039569	15.61968807
H	10.75749118	4.697368332	14.41682517
C	7.262942313	2.103945953	13.92040615
H	7.195907963	2.068107789	15.01558527
H	7.344125096	1.061742809	13.58174336
H	6.292116788	2.471420996	13.55936381

C	9.994360772	2.063009845	12.00825527
H	10.12608382	1.081242117	12.48685178
H	10.99906546	2.465787099	11.83795436
H	9.557994282	1.864337069	11.02261581
C	10.14352597	4.845492981	10.10838015
C	11.0638795	5.280662195	11.0696916
H	10.69912972	5.588019591	12.0444946
C	12.43194201	5.275936697	10.79363681
H	13.13383366	5.608206984	11.55351762
C	12.8964968	4.829722128	9.556016518
H	13.96170505	4.820022881	9.34226988
C	11.98543739	4.379453015	8.598850397
H	12.33900824	4.014177167	7.638406648
C	10.61778964	4.386594321	8.871044441
H	9.928163002	4.018069754	8.11981659
C	7.816416678	6.482397127	9.540502912
C	8.74104277	7.464233758	9.157812368
H	9.787497093	7.355891278	9.422818136
C	8.329492125	8.580795663	8.427897843
H	9.061154782	9.329580531	8.136977794
C	6.990888462	8.732685504	8.066578083
H	6.673808892	9.598558728	7.491867796
C	6.06140212	7.762429223	8.446076714
H	5.016109395	7.868667487	8.168358853
C	6.469543653	6.646771158	9.175653893
H	5.734288263	5.89829921	9.45182769
C	7.504434271	3.632522063	9.557558815
C	6.965675769	2.541193924	10.25165811

H	7.048546783	2.495078009	11.33173714
C	6.317302023	1.515519433	9.562063064
H	5.907035023	0.676163805	10.11661701
C	6.196686709	1.567090575	8.173931954
H	5.690358887	0.767946718	7.63900765
C	6.721507135	2.654513678	7.473779203
H	6.620196002	2.709130161	6.393039123
C	7.366530289	3.683024077	8.159877834
H	7.739751289	4.536564197	7.602346246
C	7.54280213	7.878058503	12.58477803
C	8.894910472	8.253948106	12.66125191
H	9.643662202	7.509698065	12.91562369
C	9.285259798	9.566946089	12.40523635
H	10.33407982	9.841513157	12.47961101
C	8.33246519	10.52223088	12.04685129
H	8.635333625	11.54546972	11.84163444
C	6.992498051	10.15354184	11.94128322
H	6.247246673	10.88673156	11.64471534
C	6.597418748	8.842010465	12.2116254
H	5.55152391	8.573890788	12.11647206
C	5.283353418	5.999495955	12.80501653
C	4.737217699	5.032677858	11.95521553
H	5.399409115	4.368615883	11.40957968
C	3.35221431	4.895079265	11.83085156
H	2.943908822	4.134260795	11.17115968
C	2.499418497	5.721117453	12.56030531
H	1.422107148	5.613909503	12.46619054
C	3.033987659	6.677754728	13.42739768

H	2.373840459	7.313234945	14.0116933
C	4.41494226	6.810293154	13.55657721
H	4.817628431	7.538033727	14.25549286
C	7.256807354	6.040769199	14.82953638
C	7.979332165	6.981636482	15.57573357
H	8.515701855	7.782143255	15.07994419
C	8.009950637	6.908770966	16.96962
H	8.575722097	7.647626689	17.53056262
C	7.319679664	5.89840313	17.63762566
H	7.345307405	5.842908554	18.72232881
C	6.590361031	4.962068364	16.9023751
H	6.046733489	4.170724176	17.41058586
C	6.552215681	5.035502939	15.51159585
H	5.977495101	4.301553025	14.95889021

[(Ph ₃ P) ₂ C]GaF ₃			
atom	x	y	z
Ga	9.163131161	3.680618116	13.08881593
P	8.04176359	4.810873435	10.41790722
P	7.149519636	6.153259127	13.02918548
C	7.854569429	4.887362099	12.12348105
F	9.963729779	4.625448871	14.30523158
F	8.30003523	2.322101235	13.76124425
F	10.25997949	3.052061076	11.91370874
C	9.786455359	5.058926812	9.871061761
C	10.63730686	5.809544859	10.69203991
H	10.28754683	6.158219123	11.65794318

C	11.94328337	6.085027031	10.28945592
H	12.59389691	6.662229699	10.94040017
C	12.41611038	5.603946418	9.069034932
H	13.43742293	5.809396286	8.759867801
C	11.57781282	4.843458778	8.253486699
H	11.94500155	4.450897803	7.309195263
C	10.26907998	4.572405374	8.649405451
H	9.640244213	3.962425952	8.011077909
C	7.124300979	6.066865812	9.424886724
C	7.745635792	7.281690604	9.093961919
H	8.770444803	7.46754255	9.398030546
C	7.058951693	8.251824985	8.36285906
H	7.556367107	9.184537081	8.11140142
C	5.746833248	8.021022643	7.9467323
H	5.215340987	8.774348241	7.372050704
C	5.123728565	6.8136057	8.266541534
H	4.103973056	6.623314571	7.944240658
C	5.806000134	5.843063944	8.99958574
H	5.312561583	4.905469538	9.230688691
C	7.493414371	3.185531202	9.752443339
C	7.300414695	2.107087798	10.62880079
H	7.428025981	2.22420435	11.70027575
C	6.934948655	0.856978816	10.12641327
H	6.800375432	0.029072678	10.81656159
C	6.745861972	0.668391747	8.757715341
H	6.462067353	-0.307615037	8.373837097
C	6.915319632	1.743027949	7.882821803
H	6.756658886	1.611177928	6.815963865

C	7.285718747	2.99371097	8.375436669
H	7.393137775	3.823376218	7.683139401
C	8.106838819	7.729526938	13.03265113
C	9.32949449	7.719329865	13.73327346
H	9.643556638	6.821404306	14.26275118
C	10.15777058	8.840451834	13.70809294
H	11.09495964	8.822676605	14.25763798
C	9.792944546	9.97590055	12.97965155
H	10.44128882	10.84761066	12.96533786
C	8.599398096	9.978173263	12.25878099
H	8.315778291	10.8502688	11.67560812
C	7.760188259	8.860824238	12.27981412
H	6.844048381	8.875564195	11.69918051
C	5.397744006	6.539102281	12.59885044
C	4.617902557	5.502857538	12.06771047
H	5.089412761	4.553022284	11.83330099
C	3.249332565	5.678064478	11.8627144
H	2.658814106	4.862662731	11.45392051
C	2.639774754	6.890423408	12.18760139
H	1.574174378	7.027791999	12.02717032
C	3.404715106	7.920479531	12.73747831
H	2.936528773	8.862531979	13.00957415
C	4.771571351	7.744127193	12.95367654
H	5.341801773	8.546097384	13.41064625
C	6.978615505	5.71944897	14.80719069
C	6.941830303	6.736719983	15.77381198
H	7.126492344	7.768857903	15.49420125
C	6.683608964	6.429544299	17.10857926

H	6.669187684	7.225239808	17.84843702
C	6.455123069	5.107341976	17.49334487
H	6.262341528	4.868012895	18.53547931
C	6.485876825	4.095986887	16.53423622
H	6.326478639	3.061331074	16.82340358
C	6.736266433	4.395308396	15.1944243
H	6.80148856	3.585888859	14.47620965

[(Ph ₃ P) ₂ C]GaCl ₃			
atom	x	y	z
Ga	8.999844868	3.477003775	13.25621833
P	8.262554888	4.926294193	10.47152037
P	7.076109941	6.09413202	13.00208414
C	8.038536187	4.906923632	12.19228537
Cl	10.39001231	4.441435125	14.71327043
Cl	7.547348811	2.101433886	14.27443082
Cl	10.17855653	2.113675906	11.94078087
C	10.03899657	4.849263425	10.00743008
C	10.99037189	5.390852979	10.88163368
H	10.68070916	5.765711436	11.8506822
C	12.34056047	5.401856094	10.53315914
H	13.06984857	5.806505378	11.22894401
C	12.75233656	4.870570199	9.311329185
H	13.80573009	4.868451718	9.04474186
C	11.80958573	4.323327188	8.439846936
H	12.12637988	3.891136836	7.494717355
C	10.45962296	4.310877187	8.783521991

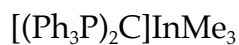
H	9.745600392	3.856507374	8.10650756
C	7.647087332	6.422962988	9.579236029
C	8.537845298	7.441990306	9.20946583
H	9.59002117	7.36091355	9.459703577
C	8.081972978	8.560533848	8.511654047
H	8.78605985	9.338548869	8.230306145
C	6.734224461	8.676402933	8.169625183
H	6.382743128	9.544340007	7.618664078
C	5.841359399	7.666462816	8.532093615
H	4.791092812	7.743213432	8.264912433
C	6.292662479	6.546024042	9.22916664
H	5.587276219	5.76443256	9.487600943
C	7.427071805	3.541835383	9.583932644
C	7.014466064	2.406020341	10.29274744
H	7.152434754	2.343953454	11.36609556
C	6.412337816	1.340194228	9.623517337
H	6.104671565	0.464867643	10.18780531
C	6.213003157	1.396449001	8.244879571
H	5.745377931	0.563603375	7.726686147
C	6.611043205	2.528572658	7.531749439
H	6.450112983	2.584025968	6.458508688
C	7.212186523	3.596771535	8.195832068
H	7.498577972	4.478034658	7.630104298
C	7.612574228	7.819065162	12.6265714
C	8.976725724	8.105043068	12.81498626
H	9.650810598	7.321606187	13.15013714
C	9.469668956	9.387167435	12.58119831
H	10.52397251	9.594927888	12.74169023

C	8.611964884	10.39677492	12.14003428
H	8.996596029	11.39577705	11.95382042
C	7.262955398	10.11550754	11.93008649
H	6.593919207	10.89217149	11.57021613
C	6.762112211	8.835093248	12.17350349
H	5.714081039	8.631554539	11.986694
C	5.255863067	6.003199857	12.69619697
C	4.731369449	4.944376841	11.94727401
H	5.402161156	4.203890019	11.52504333
C	3.35139158	4.817693355	11.76881588
H	2.96027787	3.985957137	11.18981405
C	2.482104876	5.744830336	12.34132288
H	1.409166175	5.646532683	12.20309402
C	2.996107168	6.789883411	13.1142895
H	2.323952779	7.502679467	13.58400276
C	4.371498538	6.912815809	13.30193799
H	4.75363598	7.707197672	13.93659215
C	7.121604575	5.969641985	14.83689563
C	7.856291073	6.859849804	15.6343185
H	8.456007903	7.640714322	15.18395045
C	7.82378003	6.750196098	17.02353406
H	8.404036465	7.442722076	17.6264889
C	7.060498888	5.755313417	17.63379808
H	7.04423968	5.667163045	18.71637496
C	6.319842946	4.873436651	16.8476105
H	5.727271434	4.090522527	17.3106974
C	6.340685169	4.982383453	15.45881904
H	5.7607084	4.28587383	14.86559003

[(Ph ₃ P) ₂ C]GaBr ₃			
atom	x	y	z
Ga	8.836675115	3.42035178	13.23933453
P	8.251112866	4.956984634	10.45832544
P	7.048741867	6.144659558	12.97617098
C	8.003573856	4.930492395	12.18207967
Br	10.38457654	4.244621925	14.94308582
Br	7.096789624	1.951749363	14.21255705
Br	10.14335797	1.870000935	11.85831096
C	10.03661679	4.895886799	10.01954046
C	10.97598099	5.3852162	10.9362418
H	10.6545734	5.68698422	11.92688564
C	12.32780682	5.442672092	10.59695337
H	13.04597227	5.808320694	11.32483697
C	12.75483685	5.011559751	9.341372421
H	13.80833254	5.050181729	9.079459254
C	11.82424179	4.510861407	8.428737588
H	12.15097668	4.154741716	7.455704757
C	10.47299697	4.450768969	8.763153668
H	9.769567293	4.037552345	8.049434188
C	7.638421473	6.461462915	9.579724348
C	8.527124431	7.480687574	9.207755842
H	9.579646409	7.401877738	9.456509085
C	8.066720867	8.596852228	8.509751729
H	8.766696669	9.37746825	8.225732017
C	6.718260595	8.70742939	8.171358574

H	6.363273397	9.574508801	7.62084686
C	5.826970781	7.697820358	8.536599826
H	4.775907603	7.773394427	8.271957055
C	6.282547988	6.579530435	9.232782251
H	5.579966829	5.79601524	9.492980189
C	7.408381276	3.59930686	9.532691705
C	6.921486728	2.47226943	10.20813087
H	7.01697657	2.385472657	11.28438612
C	6.291264576	1.444104458	9.504596682
H	5.925836308	0.578379801	10.04882848
C	6.137022876	1.526428687	8.121417486
H	5.646960971	0.72448248	7.576495338
C	6.608299908	2.650855276	7.440534952
H	6.481310197	2.732365986	6.364470367
C	7.235010448	3.681823438	8.13895608
H	7.567610033	4.560129918	7.594566868
C	7.568164725	7.867649206	12.55443417
C	8.931344538	8.179330331	12.70000647
H	9.632140753	7.407493767	13.00346175
C	9.393401619	9.473139629	12.46384484
H	10.44860434	9.697335081	12.5927501
C	8.505267729	10.47348594	12.06309681
H	8.864526774	11.48195982	11.87842042
C	7.155765573	10.16652584	11.89295134
H	6.459389157	10.93332055	11.56479376
C	6.686940994	8.874061232	12.13803281
H	5.636742375	8.655202395	11.98461213
C	5.225900265	6.039969772	12.69684839

C	4.694997788	4.988053559	11.94252224
H	5.361127793	4.251521702	11.50649829
C	3.313108036	4.860447395	11.77750435
H	2.917611501	4.0332733	11.19490119
C	2.44781514	5.779263157	12.36924136
H	1.373560685	5.679606085	12.24210899
C	2.968171303	6.816773994	13.14817358
H	2.299764612	7.522466152	13.6336947
C	4.345090506	6.940789092	13.3219596
H	4.731366863	7.729035913	13.96148032
C	7.120184867	6.076148995	14.8113373
C	7.8932487	6.970362612	15.56700556
H	8.50559909	7.719853877	15.08192079
C	7.880564678	6.908496591	16.95923541
H	8.489308258	7.60463635	17.52888593
C	7.101124854	5.956266044	17.61544783
H	7.100976788	5.904767812	18.70047272
C	6.322613285	5.070338391	16.87142065
H	5.715741043	4.320233611	17.36908869
C	6.320917538	5.13400511	15.47961093
H	5.708195505	4.436313499	14.92174995



atom	x	y	z
In	9.022682201	3.136642889	13.36501729
P	8.276537516	5.009724547	10.47836538
P	7.062797533	6.146681576	12.96789706

C	7.998494806	4.981518063	12.16091767
C	10.29948834	4.097253018	14.86453715
H	10.95478488	3.350463747	15.3328355
H	9.735689901	4.581981627	15.66800645
H	10.95889076	4.857347674	14.42437199
C	7.325839253	1.914707859	14.09540123
H	7.192436385	1.990787295	15.18178091
H	7.512517594	0.855121604	13.87470179
H	6.357150188	2.162123763	13.63910811
C	10.1717987	1.970927405	11.89234539
H	10.35317158	0.978435211	12.32851701
H	11.15206165	2.407052414	11.67130809
H	9.670326875	1.800449212	10.93295018
C	10.07431743	4.858231796	10.07792229
C	11.00307013	5.342568116	11.00772414
H	10.64917006	5.698335722	11.96977147
C	12.36809611	5.333121169	10.71722547
H	13.07612948	5.704411359	11.45294536
C	12.82203428	4.832759787	9.496307748
H	13.88500292	4.818379226	9.271873722
C	11.90329369	4.334745952	8.570814905
H	12.24874647	3.926920958	7.624669683
C	10.53850089	4.346811685	8.857402149
H	9.842685192	3.940952765	8.131391156
C	7.761366378	6.500617449	9.500745933
C	8.692806409	7.483138159	9.134712348
H	9.736126851	7.370735411	9.410134992
C	8.291960586	8.605310232	8.40784971

H	9.028864403	9.353829074	8.12951744
C	6.957544089	8.762860087	8.033055675
H	6.649092891	9.63302772	7.460117782
C	6.021738638	7.792173891	8.395607264
H	4.979913105	7.902729027	8.106872015
C	6.418878822	6.670731943	9.122978804
H	5.678995316	5.922414018	9.387315185
C	7.440234492	3.641363349	9.551583259
C	6.939949543	2.543220763	10.26404829
H	7.035892949	2.513048366	11.34405273
C	6.30920704	1.493702068	9.594304692
H	5.930064092	0.648747108	10.16226357
C	6.165846496	1.529947874	8.20768501
H	5.672727575	0.712805775	7.687927305
C	6.650769239	2.624220303	7.489650506
H	6.532062803	2.665439409	6.410153383
C	7.281371686	3.674724655	8.155812402
H	7.629920499	4.530039716	7.584913391
C	7.532033466	7.901120348	12.60545501
C	8.888828481	8.239209784	12.75054401
H	9.599172683	7.480391955	13.06516738
C	9.332321551	9.533966464	12.48976765
H	10.38323396	9.779728776	12.61729351
C	8.429629532	10.5081396	12.05850965
H	8.77477112	11.51679889	11.8475631
C	7.08624068	10.17749317	11.89015144
H	6.38098567	10.92611671	11.53932352
C	6.637000572	8.884065968	12.16513185

H	5.589979046	8.64414716	12.01883146
C	5.21710296	6.075090115	12.75043205
C	4.658521059	5.104425557	11.91273791
H	5.312133203	4.414986641	11.38748983
C	3.271775563	4.9981338	11.77258898
H	2.854345483	4.234874484	11.12137483
C	2.428403439	5.859296522	12.4732124
H	1.350338891	5.777501858	12.36553086
C	2.97673231	6.81825634	13.32994823
H	2.325815039	7.481391965	13.89350606
C	4.359120829	6.919529896	13.47581805
H	4.770430674	7.650599566	14.16644818
C	7.161186364	6.009712662	14.80499194
C	7.800431542	6.964276317	15.6074976
H	8.291237232	7.820221472	15.15931513
C	7.80820724	6.828910736	16.99726053
H	8.311231205	7.577054216	17.60384126
C	7.177676889	5.74299142	17.60306099
H	7.187693438	5.638345338	18.68441806
C	6.529428537	4.793472901	16.81070911
H	6.032920338	3.943694851	17.27039201
C	6.514165717	4.928047736	15.42386678
H	6.002198519	4.183169321	14.82537571

[(Ph ₃ P) ₂ C]InF ₃			
atom	x	y	z
In	8.863026099	3.319173234	13.21282512

P	8.329679705	5.009553382	10.46814747
P	7.096285447	6.220400451	12.99043579
C	8.051489325	5.08388066	12.15603516
F	9.968245973	3.660544566	14.65496524
F	7.315892483	2.351352628	13.6978708
F	9.72669341	2.390613801	11.84772725
C	10.12497825	4.813046938	10.11873908
C	11.04805375	5.19560251	11.09963908
H	10.68996521	5.54183853	12.06428511
C	12.41810307	5.109561927	10.85336383
H	13.12183489	5.397950918	11.62892733
C	12.88006856	4.638722763	9.625052706
H	13.94732401	4.564767132	9.434548765
C	11.96604496	4.248437154	8.645362734
H	12.31850374	3.866332202	7.691129337
C	10.59663095	4.332729547	8.889217357
H	9.903722698	4.001499353	8.124262166
C	7.828939809	6.489609186	9.485712616
C	8.765205413	7.482301295	9.162513468
H	9.800720102	7.369964853	9.46683656
C	8.376734785	8.612434323	8.442254979
H	9.114557	9.37127015	8.196873865
C	7.051763627	8.764996748	8.032215713
H	6.752826069	9.642359695	7.465292425
C	6.11295928	7.781543412	8.349682709
H	5.079684438	7.889203491	8.031086489
C	6.497064247	6.651195877	9.070715959
H	5.757661338	5.890992285	9.300813524

C	7.47405514	3.617846349	9.609338946
C	6.942254769	2.553002813	10.352886
H	6.956133744	2.55562821	11.43870313
C	6.344356375	1.475433862	9.697477752
H	5.942119355	0.655665389	10.28564931
C	6.263321057	1.447396183	8.305827654
H	5.799496708	0.603197943	7.802575914
C	6.768664972	2.513672062	7.560827387
H	6.693564267	2.509604255	6.476666916
C	7.367025647	3.593621236	8.207973849
H	7.732985482	4.426942532	7.615524976
C	7.515876601	7.977244058	12.61165952
C	8.864688992	8.353908218	12.7346719
H	9.602994709	7.616024491	13.03497037
C	9.262289379	9.663589239	12.47368936
H	10.30713519	9.940784616	12.58457731
C	8.322193433	10.61362559	12.06629807
H	8.632148825	11.63398979	11.85827185
C	6.986048832	10.24267672	11.92113105
H	6.250741404	10.97183695	11.59209343
C	6.581766738	8.933832482	12.19562357
H	5.53904036	8.661747073	12.07447252
C	5.260786681	6.076365875	12.80992736
C	4.722637695	5.109311568	11.95488273
H	5.386979185	4.461777426	11.39309635
C	3.339115181	4.944777012	11.85234056
H	2.937018746	4.183958007	11.18902215
C	2.480599106	5.740562796	12.60944582

H	1.404731709	5.609542606	12.53399446
C	3.010732692	6.694644407	13.48294334
H	2.348276498	7.304424346	14.09125223
C	4.390748843	6.856986996	13.58982693
H	4.79066627	7.582282323	14.29321156
C	7.304017673	6.035882879	14.80707375
C	7.750626667	7.084693912	15.62296615
H	8.0166328	8.043494919	15.19227537
C	7.864319557	6.900777275	17.00206793
H	8.220816408	7.7183072	17.62276089
C	7.531360133	5.675614824	17.57887427
H	7.630769503	5.532233335	18.6512137
C	7.07822652	4.632414138	16.77041372
H	6.82824144	3.669405179	17.20587202
C	6.95257057	4.807523819	15.39339346
H	6.631463237	3.96532082	14.78350154

[(Ph ₃ P) ₂ C]InCl ₃			
atom	x	y	z
In	8.998657634	3.371975893	13.3129241
P	8.285636937	4.989331779	10.45126165
P	7.068000679	6.156728762	12.97605613
C	8.030582973	4.981374696	12.16289954
Cl	10.47801643	4.303794437	14.91060176
Cl	7.33329453	1.932941593	14.24596871
Cl	10.23988085	1.951352099	11.87372134
C	10.07591001	4.877928662	10.0385214

C	11.00930839	5.415287902	10.93514492
H	10.67402764	5.811802019	11.88735062
C	12.37013723	5.403655362	10.62908715
H	13.08240345	5.806911893	11.34284263
C	12.81284788	4.854785752	9.425839181
H	13.87342445	4.835543874	9.191706635
C	11.88837922	4.310959688	8.53220394
H	12.22700973	3.863429321	7.601947963
C	10.52797808	4.319870306	8.834065681
H	9.829143115	3.867194424	8.139993719
C	7.700881465	6.481555263	9.531839638
C	8.603276951	7.485006913	9.150908305
H	9.654336269	7.394448522	9.402980106
C	8.15995617	8.600146217	8.438834209
H	8.872481071	9.366810735	8.147903742
C	6.813936138	8.727271097	8.094807895
H	6.472521333	9.592590619	7.533531299
C	5.908898331	7.732526086	8.469764011
H	4.859373092	7.818910529	8.202114371
C	6.347312818	6.616031965	9.180804581
H	5.632536731	5.84629305	9.450955181
C	7.450360859	3.610044941	9.55238554
C	6.982801244	2.491983461	10.25606229
H	7.074884668	2.436067915	11.33494739
C	6.371448351	1.436599062	9.57813981
H	6.020797351	0.57675273	10.1410388
C	6.216161174	1.486178282	8.19384268
H	5.739862984	0.663005938	7.668354706

C	6.668002804	2.600432971	7.484498301
H	6.540178145	2.651614971	6.406671967
C	7.27894724	3.657252884	8.157489205
H	7.604985968	4.525789382	7.593456201
C	7.559127616	7.891511258	12.58616133
C	8.918159348	8.216182718	12.74026666
H	9.622236607	7.452768954	13.05736157
C	9.37040706	9.510360956	12.49245814
H	10.4220305	9.747593727	12.62732126
C	8.475288921	10.49480144	12.06940406
H	8.827516143	11.5036199	11.87222506
C	7.129946897	10.17574031	11.8923447
H	6.430998152	10.93289778	11.54776536
C	6.67073775	8.882755182	12.15104191
H	5.623650246	8.65082859	11.99440642
C	5.241929363	6.045352773	12.71877207
C	4.710352115	5.012488743	11.93896461
H	5.378022977	4.297590875	11.4697764
C	3.327419775	4.87598678	11.78975089
H	2.930945536	4.064021584	11.18663639
C	2.462180952	5.767002851	12.42284052
H	1.387177078	5.660338243	12.30837627
C	2.983934969	6.786219339	13.22480406
H	2.315739179	7.470747095	13.74004975
C	4.362080702	6.919118332	13.38191369
H	4.751371864	7.694017494	14.03604644
C	7.170545646	6.020402726	14.80686276
C	7.907540007	6.91890875	15.59237633

H	8.46453589	7.726403183	15.13386145
C	7.929486237	6.7848023	16.97967147
H	8.509954428	7.48453661	17.57387852
C	7.220353368	5.756493006	17.5999718
H	7.247819017	5.649594009	18.68059458
C	6.477993782	4.864634588	16.82618947
H	5.927570315	4.055131614	17.29565304
C	6.441996984	4.999207869	15.43946302
H	5.858823716	4.294992994	14.85747723

[(Ph ₃ P) ₂ C]InBr ₃			
atom	x	y	z
In	8.944456547	3.409651021	13.30139138
P	8.144605336	4.990025018	10.42786314
P	6.956460125	6.176128134	12.94668962
C	7.918587381	4.982224435	12.14758705
Br	10.5680054	4.498710696	15.01269664
Br	7.196630128	1.751561095	14.33504277
Br	10.37285639	1.801437708	11.84668202
C	9.924572697	4.8813715	9.988879671
C	10.86554497	5.455230341	10.85472613
H	10.54093602	5.882318883	11.79714167
C	12.22110508	5.443290649	10.52924798
H	12.94152076	5.873585872	11.21844614
C	12.64791854	4.857660946	9.338234033
H	13.70531088	4.837145318	9.089840775
C	11.7164031	4.27955267	8.474807133
H	12.04648183	3.804396776	7.555423288

C	10.36104206	4.288145379	8.795796708
H	9.654715358	3.808258273	8.128235952
C	7.544361472	6.487556063	9.52832793
C	8.44067247	7.502807854	9.162487763
H	9.492498691	7.415526062	9.412332342
C	7.98964314	8.626510028	8.469763628
H	8.69696227	9.402577133	8.191711427
C	6.642189851	8.751003876	8.12982047
H	6.294534538	9.62387554	7.584462355
C	5.744068779	7.7441357	8.487903318
H	4.693879358	7.827962571	8.222456262
C	6.189907431	6.618323426	9.17970363
H	5.480428002	5.839497511	9.43658818
C	7.302662936	3.607549713	9.546011201
C	6.871823528	2.479839228	10.25779284
H	6.986277313	2.425424339	11.33489383
C	6.26801531	1.413083583	9.591309733
H	5.947445309	0.545520518	10.16011893
C	6.083212347	1.462354838	8.210585354
H	5.61333419	0.63048789	7.693298555
C	6.498093797	2.58634142	7.493638578
H	6.347568046	2.635586226	6.418734424
C	7.10257743	3.653934992	8.15493227
H	7.404034709	4.528102246	7.58593781
C	7.483554219	7.906205774	12.57637817
C	8.841346431	8.213228625	12.77614449
H	9.526420367	7.441255572	13.11528295
C	9.316430615	9.504739682	12.55503924

H	10.36608886	9.726431594	12.72639918
C	8.447411678	10.50650613	12.11695182
H	8.817293707	11.51310721	11.9436551
C	7.103957535	10.20449556	11.89705121
H	6.423596129	10.97365676	11.54220901
C	6.621394739	8.913811902	12.12567358
H	5.576932583	8.696967613	11.93377605
C	5.132598003	6.08107639	12.66051343
C	4.600506536	5.024708426	11.91305882
H	5.266920886	4.292910341	11.4689652
C	3.217643628	4.886403192	11.766006
H	2.82058294	4.0559021	11.18923512
C	2.353594477	5.798876991	12.36923664
H	1.278596907	5.689875724	12.25784808
C	2.876033871	6.842011676	13.13913565
H	2.208460447	7.542777385	13.63271871
C	4.25406836	6.977249067	13.29461753
H	4.643323449	7.769087128	13.92798351
C	7.019943316	6.035238977	14.77378874
C	7.718698683	6.94390253	15.58201338
H	8.276437643	7.761142639	15.14254542
C	7.703837129	6.803720668	16.9683135
H	8.256969271	7.508739948	17.58185147
C	6.996423045	5.759670995	17.56271951
H	6.997705121	5.646987538	18.6432431
C	6.290350877	4.858417063	16.76689178
H	5.743397674	4.036054852	17.21734881
C	6.289884935	5.000004253	15.38104424

H	5.731029437	4.291393179	14.78079416
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[(Ph ₃ P) ₂ C]ZnMe ₂			
atom	x	y	z
Zn	7.353840163	5.623917053	3.326146196
P	6.188687104	3.195084195	5.465700208
P	6.72894401	2.326217564	2.632448749
C	6.808129996	3.414815787	3.912018178
C	5.338539981	4.722436407	6.052750904
C	5.378621833	5.14947493	7.388447784
H	5.955185096	4.596519649	8.122469303
C	4.691440658	6.298121262	7.781707142
H	4.738343278	6.622614243	8.817785492
C	3.955426346	7.03384725	6.850514017
H	3.42626555	7.930997213	7.159650507
C	3.911652635	6.616044814	5.519723727
H	3.350703287	7.185831033	4.78434433
C	4.599449764	5.467816427	5.1216098
H	4.580548985	5.15607603	4.082462183
C	7.472903953	2.878855306	6.757515653
C	8.778327322	3.323028552	6.50484168
H	8.994700819	3.820341709	5.564345509
C	9.782929353	3.132302329	7.454304714
H	10.78965571	3.48587616	7.248944658
C	9.497197585	2.49182394	8.661068306
H	10.28208412	2.338785289	9.397117217
C	8.19973516	2.047367681	8.920860312

H	7.971668852	1.5458868	9.857850552
C	7.190654875	2.242083999	7.976628579
H	6.186671395	1.887596234	8.189145571
C	4.951975171	1.847743404	5.7588062
C	3.577279069	2.123531896	5.77799986
H	3.226903935	3.14570945	5.678878068
C	2.649786648	1.092123943	5.929399411
H	1.588053306	1.32315682	5.945645039
C	3.081395031	-0.22692751	6.067177299
H	2.357834699	-1.028116733	6.192452636
C	4.447799511	-0.513461881	6.046364614
H	4.792975665	-1.538268933	6.155380926
C	5.376947761	0.514622179	5.891155434
H	6.43550909	0.275800098	5.879831491
C	7.558494853	0.673764827	2.820266201
C	7.433678102	-0.338817792	1.8556229
H	6.779758216	-0.200308601	0.999680622
C	8.147448656	-1.52928065	1.98417489
H	8.035425984	-2.308541671	1.234832844
C	9.008582903	-1.718020983	3.067591235
H	9.56619335	-2.645789246	3.164498669
C	9.157625639	-0.707806211	4.017086094
H	9.836687166	-0.841440276	4.854993994
C	8.438466892	0.482885709	3.892071103
H	8.568442535	1.27591401	4.622242417
C	7.665080398	2.986823279	1.193377872
C	7.249115047	2.803907382	-0.132141555
H	6.299180512	2.324949119	-0.346233038

C	8.044473747	3.251111986	-1.189125497
H	7.703211694	3.112921789	-2.211580637
C	9.266050807	3.876472045	-0.937230142
H	9.881083397	4.226232791	-1.761557681
C	9.693467197	4.048535644	0.380792154
H	10.64400568	4.531381253	0.58940639
C	8.90224112	3.602465806	1.439173828
H	9.243866732	3.736901307	2.461463123
C	5.035552439	1.949599677	1.99663801
C	4.384837226	0.731024363	2.237271837
H	4.908240135	-0.080310808	2.731460061
C	3.051852393	0.551852895	1.859756535
H	2.562829371	-0.398228712	2.058253676
C	2.351173209	1.583907486	1.236718723
H	1.315527503	1.441428597	0.940255611
C	2.987042358	2.806906718	1.006226789
H	2.44781351	3.62098353	0.529208282
C	4.313844265	2.994106132	1.390299668
H	4.788671864	3.957659239	1.226432462
C	6.078410832	6.400813138	1.867548586
H	6.209954913	7.488758409	1.784019231
H	5.010589297	6.229822369	2.064375469
H	6.293058611	5.982929155	0.873795384
C	9.023589439	6.291027131	4.379599736
H	8.842066995	6.361947194	5.460758281
H	9.314579204	7.294446051	4.040030685
H	9.906429227	5.647225087	4.247976126

[(Ph ₃ P) ₂ C]CdMe ₂			
atom	x	y	z
Cd	7.428983371	5.850705084	3.265912071
P	6.164632251	3.144771299	5.485105201
P	6.720296892	2.262218798	2.658433175
C	6.79655992	3.338605812	3.93998345
C	5.323727307	4.688698214	6.052452827
C	5.373263082	5.139271556	7.379576174
H	5.9483428	4.594100179	8.120744535
C	4.696684253	6.300317715	7.755523399
H	4.750934959	6.64299117	8.785407458
C	3.961419558	7.024265052	6.815108373
H	3.439779514	7.930344993	7.110626165
C	3.907712467	6.582775529	5.492145968
H	3.345667471	7.14253436	4.749861374
C	4.58607139	5.423233637	5.111797234
H	4.558177058	5.08969699	4.079374869
C	7.439436937	2.830301109	6.790361447
C	8.753283546	3.245647079	6.533323248
H	8.97902301	3.723362637	5.584837528
C	9.753718618	3.046555287	7.485109018
H	10.7675038	3.377024976	7.27599606
C	9.454697459	2.42526617	8.69855636
H	10.23632396	2.264241575	9.436380224
C	8.148987221	2.008974401	8.962622571
H	7.911457248	1.521108699	9.904417957
C	7.144129083	2.212678151	8.015817405

H	6.133441834	1.878537941	8.230000937
C	4.912821588	1.812395203	5.795749261
C	3.540790686	2.098011698	5.831006669
H	3.196666428	3.122932895	5.738626128
C	2.606947182	1.072932394	5.988837489
H	1.547152971	1.311837076	6.01594768
C	3.029504623	-0.249620742	6.117726072
H	2.301176517	-1.045851809	6.246706084
C	4.393319419	-0.546273366	6.08079505
H	4.731893595	-1.574186806	6.181331039
C	5.328004157	0.475156195	5.918110473
H	6.384627418	0.227764156	5.891550223
C	7.573551352	0.615534351	2.814036947
C	7.503435354	-0.357536349	1.80417452
H	6.88310998	-0.191483012	0.928098228
C	8.231028438	-1.541427838	1.911315693
H	8.162982789	-2.289420098	1.125632699
C	9.05118344	-1.76285475	3.020147838
H	9.620687713	-2.685016482	3.100156963
C	9.144635147	-0.792330198	4.016662517
H	9.791985648	-0.951639101	4.87497632
C	8.411542046	0.392028732	3.912217315
H	8.50050684	1.156987441	4.677985088
C	7.636764155	2.938996216	1.21172578
C	7.19065698	2.801675411	-0.108678867
H	6.229809544	2.342556406	-0.316799723
C	7.971107961	3.268485145	-1.16807009
H	7.608391741	3.166929514	-2.187480727

C	9.206514948	3.866417523	-0.921662304
H	9.810804518	4.230394432	-1.748107871
C	9.664714758	3.994121721	0.390860612
H	10.62831643	4.453964096	0.591918567
C	8.887028855	3.530440793	1.451228445
H	9.249087518	3.626164545	2.470848358
C	5.029863209	1.867380229	2.023923076
C	4.414030497	0.621992968	2.210678859
H	4.961939883	-0.195100942	2.667604835
C	3.086725254	0.421355845	1.823731874
H	2.624789441	-0.550051842	1.979460805
C	2.357389222	1.458439653	1.243560595
H	1.326763581	1.299020292	0.938292415
C	2.958470928	2.707535361	1.066122463
H	2.397285122	3.525156533	0.621471864
C	4.278980614	2.915104207	1.460664605
H	4.727584438	3.896720648	1.33357783
C	5.906050323	6.495187508	1.720167704
H	5.960076258	7.574601663	1.532882991
H	4.873166935	6.270799803	2.01524891
H	6.094390393	5.991370174	0.763804754
C	9.285583323	6.305815228	4.470573668
H	9.079072321	6.300353513	5.547163547
H	9.69197069	7.29238321	4.218454468
H	10.07934563	5.570087173	4.284908093

[κ^2 -Ph ₃ PC{PPh ₂ (C ₆ H ₄)}]MgMe, monomeric			
atom	x	y	z
Mg	9.533932322	5.702865952	2.779500215
P	12.22841654	4.759852591	4.595021091
P	10.07198446	2.744072691	3.761621945
C	10.7673089	4.283164505	3.912807593
C	9.662603062	7.817062163	2.648317372
H	10.58364907	8.235194125	3.077103746
H	9.624137862	8.167936241	1.606649545
H	8.828500361	8.318068536	3.16217234
C	12.04351149	5.882803826	6.051784024
C	13.06881845	6.049897937	6.996441306
H	13.99378399	5.489477605	6.90348361
C	12.90539758	6.924986666	8.070430833
H	13.70481613	7.040256921	8.797209783
C	11.71845382	7.644909429	8.213480655
H	11.59158116	8.325346708	9.050878434
C	10.69481404	7.484954771	7.279284107
H	9.768593479	8.042944627	7.382375216
C	10.85517725	6.607389853	6.207261499
H	10.05497072	6.48346811	5.485232518
C	13.22496779	5.739615005	3.388770445
C	13.12183681	5.403104537	2.031655569
H	12.44685743	4.605150939	1.735348432
C	13.86932406	6.089344951	1.074758433
H	13.78065902	5.819917268	0.026118253
C	14.72091331	7.124041606	1.463915803

H	15.29589377	7.665883906	0.718234813
C	14.82592362	7.467195749	2.812347808
H	15.47986039	8.278905248	3.118501528
C	14.08458784	6.778252843	3.772227431
H	14.16632252	7.063621625	4.815593706
C	13.40544871	3.481954864	5.229905661
C	13.10659002	2.797713954	6.42086708
H	12.20547989	3.03950085	6.976187361
C	13.96178459	1.806604521	6.90105553
H	13.71893671	1.289494986	7.825126046
C	15.12748808	1.483253743	6.200682434
H	15.79545262	0.714483674	6.578673133
C	15.42989187	2.156714114	5.017239983
H	16.33432529	1.913252764	4.466792072
C	14.57555398	3.15038117	4.534015609
H	14.82406116	3.667644784	3.613357692
C	11.09450823	1.475005125	2.892227484
C	10.98386344	1.354136889	1.497690133
H	10.23479826	1.932549978	0.966106573
C	11.81902468	0.488805651	0.791925639
H	11.71654417	0.40297051	-0.286378524
C	12.77532847	-0.270930389	1.467344522
H	13.42314335	-0.947957366	0.917164462
C	12.89479947	-0.157204694	2.852676565
H	13.6378465	-0.742379438	3.387379965
C	12.06315152	0.710658454	3.561170336
H	12.17385854	0.788769206	4.637356472
C	9.580017959	1.931662367	5.349546361

C	9.255416351	2.764564454	6.429762199
H	9.367095939	3.839301011	6.319252253
C	8.80247529	2.2234467	7.632747281
H	8.55290881	2.881721753	8.460364841
C	8.671059089	0.840847339	7.772838909
H	8.321096179	0.417759635	8.71043626
C	8.991270546	0.003305163	6.703872545
H	8.893101309	-1.073975244	6.807149585
C	9.440053895	0.5436552	5.498026259
H	9.691027898	-0.121571704	4.678207049
C	8.187463073	4.117954868	2.215443011
C	7.002066132	4.13020091	1.449613904
H	6.679066629	5.060615166	0.982637631
C	6.212917715	2.994958938	1.260629101
H	5.307076892	3.051284496	0.65989928
C	6.579862311	1.780096904	1.847557423
H	5.966608455	0.89315183	1.710442334
C	7.739167979	1.715054585	2.61351932
H	8.021614015	0.77032502	3.071649683
C	8.523944394	2.87007101	2.780812776

{[κ²-Ph₃PC{PPh₂(C₆H₄)}]MgMe₂}, dimeric

atom	x	y	z
Mg	1.331476498	0.072677691	0.379871564
P	3.984630598	-0.161721939	2.110675737
P	1.68205364	1.002816644	3.716606154
C	-0.002068852	1.821016509	-0.18016766

C	2.368348944	0.305041623	2.346565548
C	4.304855138	-0.464789433	0.328281161
C	3.228776441	-0.352250771	-0.575801153
C	3.561715111	-0.601360751	-1.926359636
H	2.784628861	-0.530528909	-2.686670511
C	4.851043396	-0.934197063	-2.343702567
H	5.055113577	-1.113038315	-3.398281037
C	5.887310245	-1.041335773	-1.410086055
H	6.894461578	-1.301839716	-1.725491973
C	5.612079617	-0.808489279	-0.066821107
H	6.417925842	-0.885512493	0.659180845
C	5.290653194	1.049684191	2.609088601
C	5.631623751	2.062014905	1.696253833
H	5.189227441	2.060452012	0.704696109
C	6.544806167	3.054863327	2.045814205
H	6.80289745	3.82682202	1.325837525
C	7.134938193	3.050662017	3.311175068
H	7.850763614	3.82208942	3.582064225
C	6.801452557	2.052170693	4.225349277
H	7.251374837	2.044870619	5.214286928
C	5.883549148	1.059155727	3.879297514
H	5.629425685	0.295305151	4.605945871
C	4.467944857	-1.739868224	2.956715578
C	5.797475935	-2.125631992	3.186476299
H	6.613421604	-1.456197392	2.934113046
C	6.086506717	-3.36507745	3.757382099
H	7.120757045	-3.646835258	3.936409026
C	5.054078105	-4.240072403	4.098306106

H	5.282380254	-5.205311573	4.542052739
C	3.729295517	-3.868850619	3.867912672
H	2.919306609	-4.544660387	4.128540201
C	3.439538146	-2.626535143	3.303255663
H	2.4100208	-2.328599616	3.128807963
C	1.014169547	2.692683856	3.383323219
C	-0.213378999	3.160308109	3.869554734
H	-0.859250814	2.507270167	4.445847909
C	-0.627492095	4.465422271	3.59681643
H	-1.589583177	4.81142768	3.964186892
C	0.183299792	5.317821912	2.848112959
H	-0.142687955	6.332472309	2.636213657
C	1.406930404	4.85804496	2.357589871
H	2.037335994	5.512942798	1.762468683
C	1.814748535	3.550056451	2.613485386
H	2.751951465	3.181075757	2.206779153
C	2.713818399	1.248995667	5.234687203
C	3.129432159	2.515301182	5.663838153
H	2.854015301	3.398441331	5.098157597
C	3.895848313	2.652525933	6.822928716
H	4.208978935	3.641789728	7.145140191
C	4.252537324	1.528914209	7.566191505
H	4.842641214	1.638590368	8.472003319
C	3.844804318	0.260611502	7.144675139
H	4.116686062	-0.619732139	7.720525366
C	3.080645446	0.120743457	5.988042026
H	2.764225606	-0.869112949	5.673001244
C	0.269904257	0.045526116	4.431553673

C	-0.229874375	0.333315782	5.712887011
H	0.199123157	1.141797169	6.297285828
C	-1.262837391	-0.428984167	6.255270072
H	-1.63873183	-0.197793547	7.248248577
C	-1.805017802	-1.491792998	5.52962875
H	-2.607225326	-2.087975797	5.955576885
C	-1.312403286	-1.785585675	4.259138351
H	-1.729853945	-2.608182648	3.685998012
C	-0.279265231	-1.021123922	3.712813978
H	0.104172431	-1.255071675	2.726542183
H	-0.781105575	2.175139505	-0.874625255
H	-0.232877037	2.328781272	0.76535706
H	0.913929609	2.305216916	-0.558729545
Mg	-1.331476498	-0.072677691	-0.379871564
P	-3.984630598	0.161721939	-2.110675737
P	-1.68205364	-1.002816644	-3.716606154
C	0.002068852	-1.821016509	0.18016766
C	-2.368348944	-0.305041623	-2.346565548
C	-4.304855138	0.464789433	-0.328281161
C	-3.228776441	0.352250771	0.575801153
C	-3.561715111	0.601360751	1.926359636
H	-2.784628861	0.530528909	2.686670511
C	-4.851043396	0.934197063	2.343702567
H	-5.055113577	1.113038315	3.398281037
C	-5.887310245	1.041335773	1.410086055
H	-6.894461578	1.301839716	1.725491973
C	-5.612079617	0.808489279	0.066821107
H	-6.417925842	0.885512493	-0.659180845

C	-5.290653194	-1.049684191	-2.609088601
C	-5.631623751	-2.062014905	-1.696253833
H	-5.189227441	-2.060452012	-0.704696109
C	-6.544806167	-3.054863327	-2.045814205
H	-6.80289745	-3.82682202	-1.325837525
C	-7.134938193	-3.050662017	-3.311175068
H	-7.850763614	-3.82208942	-3.582064225
C	-6.801452557	-2.052170693	-4.225349277
H	-7.251374837	-2.044870619	-5.214286928
C	-5.883549148	-1.059155727	-3.879297514
H	-5.629425685	-0.295305151	-4.605945871
C	-4.467944857	1.739868224	-2.956715578
C	-5.797475935	2.125631992	-3.186476299
H	-6.613421604	1.456197392	-2.934113046
C	-6.086506717	3.36507745	-3.757382099
H	-7.120757045	3.646835258	-3.936409026
C	-5.054078105	4.240072403	-4.098306106
H	-5.282380254	5.205311573	-4.542052739
C	-3.729295517	3.868850619	-3.867912672
H	-2.919306609	4.544660387	-4.128540201
C	-3.439538146	2.626535143	-3.303255663
H	-2.4100208	2.328599616	-3.128807963
C	-1.014169547	-2.692683856	-3.383323219
C	0.213378999	-3.160308109	-3.869554734
H	0.859250814	-2.507270167	-4.445847909
C	0.627492095	-4.465422271	-3.59681643
H	1.589583177	-4.81142768	-3.964186892
C	-0.183299792	-5.317821912	-2.848112959

H	0.142687955	-6.332472309	-2.636213657
C	-1.406930404	-4.85804496	-2.357589871
H	-2.037335994	-5.512942798	-1.762468683
C	-1.814748535	-3.550056451	-2.613485386
H	-2.751951465	-3.181075757	-2.206779153
C	-2.713818399	-1.248995667	-5.234687203
C	-3.129432159	-2.515301182	-5.663838153
H	-2.854015301	-3.398441331	-5.098157597
C	-3.895848313	-2.652525933	-6.822928716
H	-4.208978935	-3.641789728	-7.145140191
C	-4.252537324	-1.528914209	-7.566191505
H	-4.842641214	-1.638590368	-8.472003319
C	-3.844804318	-0.260611502	-7.144675139
H	-4.116686062	0.619732139	-7.720525366
C	-3.080645446	-0.120743457	-5.988042026
H	-2.764225606	0.869112949	-5.673001244
C	-0.269904257	-0.045526116	-4.431553673
C	0.229874375	-0.333315782	-5.712887011
H	-0.199123157	-1.141797169	-6.297285828
C	1.262837391	0.428984167	-6.255270072
H	1.63873183	0.197793547	-7.248248577
C	1.805017802	1.491792998	-5.52962875
H	2.607225326	2.087975797	-5.955576885
C	1.312403286	1.785585675	-4.259138351
H	1.729853945	2.608182648	-3.685998012
C	0.279265231	1.021123922	-3.712813978
H	-0.104172431	1.255071675	-2.726542183
H	0.781105575	-2.175139505	0.874625255

H	0.232877037	-2.328781272	-0.76535706
H	-0.913929609	-2.305216916	0.558729545

[κ^2 -Ph ₃ PC{PPh ₂ (C ₆ H ₄)}]ZnMe, monomeric			
atom	x	y	z
Zn	9.405458228	5.596791232	2.710530016
P	12.12338079	4.743055316	4.582188848
P	10.09212925	2.657563238	3.644729299
C	10.72236946	4.22155601	3.810084776
C	9.541576595	7.652675984	2.620018811
H	10.50380488	8.028548273	2.988154115
H	9.426208017	8.017070425	1.590842437
H	8.75642952	8.139097101	3.214881018
C	11.81730449	5.850569643	6.032841468
C	12.76231056	6.01594869	7.058378893
H	13.69802895	5.466005517	7.03306769
C	12.50444742	6.87565579	8.126868483
H	13.24202348	6.988661288	8.917046564
C	11.30268848	7.582509656	8.182921786
H	11.1020297	8.250719788	9.016068884
C	10.35952425	7.426144577	7.166455094
H	9.422762466	7.975374027	7.20179969
C	10.61327081	6.563525161	6.09996646
H	9.878640405	6.444342227	5.310502417
C	13.16902269	5.761928369	3.452491313
C	13.13008091	5.470660877	2.082184825
H	12.46565202	4.687077472	1.72901016

C	13.9244006	6.186463871	1.186020141
H	13.88582413	5.952946635	0.125535335
C	14.75783498	7.205209289	1.649837971
H	15.37006185	7.768938687	0.951134979
C	14.79715694	7.504743352	3.012482682
H	15.43697176	8.303971646	3.376643204
C	14.0086281	6.786877905	3.911367506
H	14.03935328	7.037631074	4.966693504
C	13.29315006	3.487868379	5.279673094
C	12.94029706	2.783250308	6.44435571
H	12.00598841	3.002864994	6.951793668
C	13.78307547	1.798699895	6.959654443
H	13.49633545	1.265370867	7.861941099
C	14.99131523	1.502574964	6.322305201
H	15.64921107	0.73848235	6.727079225
C	15.3491282	2.197868506	5.167093588
H	16.28788504	1.976752824	4.666493023
C	14.50682386	3.183882845	4.64778588
H	14.79873802	3.717332245	3.749105515
C	11.14477242	1.436082146	2.738866685
C	10.98496706	1.296836022	1.350726228
H	10.18653905	1.830496573	0.844707457
C	11.83680677	0.470647626	0.61807581
H	11.69610798	0.369992477	-0.454793285
C	12.85868259	-0.230196571	1.259688905
H	13.51892213	-0.877389754	0.68858008
C	13.02828424	-0.096453088	2.638205295
H	13.82283179	-0.636167006	3.146324136

C	12.18060719	0.732337438	3.373414965
H	12.33017939	0.827062524	4.443414585
C	9.626509369	1.807568453	5.220718737
C	9.194965509	2.616668163	6.283382468
H	9.214780767	3.696676944	6.16716412
C	8.75332641	2.047124546	7.476986075
H	8.421071543	2.687631607	8.289625117
C	8.740219706	0.658930679	7.627901086
H	8.400235071	0.214061639	8.559254593
C	9.163565625	-0.154648106	6.57685476
H	9.15491105	-1.235845676	6.687281914
C	9.599739701	0.413961335	5.378405551
H	9.92688999	-0.233385242	4.570996818
C	8.141486951	4.002706731	2.17628086
C	6.935065244	4.017792032	1.447504105
H	6.578045515	4.956704752	1.024840888
C	6.165216304	2.869965237	1.247241116
H	5.237871626	2.926381273	0.68032051
C	6.577797753	1.645026569	1.781791907
H	5.978847482	0.749664281	1.637418795
C	7.763728839	1.583437739	2.50887577
H	8.082145263	0.633050122	2.931264246
C	8.527701778	2.750201912	2.689179725

{[κ^2 -Ph₃PC{PPh₂(C₆H₄)}]ZnMe₂]₂, dimeric

atom	x	y	z
Zn	1.381138743	0.509081846	0.403535161

P	3.933984332	-0.196262999	2.149544926
P	1.631410045	0.928528602	3.815638627
C	-0.018828077	2.018555677	-0.009888416
C	2.350255585	0.350614667	2.406090456
C	4.109022272	-0.715206587	0.399646959
C	3.079558939	-0.369664942	-0.496991799
C	3.29488216	-0.75265273	-1.837636734
H	2.539357015	-0.518310789	-2.585756641
C	4.441841055	-1.43363382	-2.25252862
H	4.562366065	-1.710921101	-3.298750196
C	5.434917215	-1.771217525	-1.327315556
H	6.324280528	-2.312453352	-1.640537965
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C	5.283604341	1.050577096	2.399930341
C	5.761138636	1.765909664	1.289673089
H	5.406300963	1.514413178	0.295102832
C	6.694376243	2.789952527	1.451375263
H	7.055835824	3.33010795	0.579869895
C	7.16829471	3.113145057	2.723230794
H	7.898681167	3.908628521	2.848516785
C	6.700476012	2.408780585	3.833755025
H	7.063259632	2.654714159	4.828360509
C	5.763648863	1.387165016	3.676031371
H	5.410702175	0.853139275	4.552472984
C	4.468736357	-1.666679344	3.141183583
C	5.792585886	-1.898489433	3.543403403
H	6.564151346	-1.166773302	3.326152696

C	6.132274423	-3.06582294	4.231769259
H	7.162132001	-3.225087513	4.541571322
C	5.158828859	-4.022831772	4.520483638
H	5.425325113	-4.930517587	5.055401582
C	3.839610107	-3.80562702	4.114064362
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C	3.497274864	-2.637358727	3.432979896
H	2.469014053	-2.467288078	3.125794642
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C	-0.322596673	3.007261325	4.1310759
H	-0.909907767	2.31395904	4.724155295
C	-0.792681335	4.306037689	3.928982792
H	-1.740620667	4.609053732	4.365471486
C	-0.056336342	5.20816341	3.161323397
H	-0.42656142	6.217704315	3.002803459
C	1.149390839	4.806037946	2.583932239
H	1.721540539	5.50045802	1.974203072
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H	2.537644141	3.178984599	2.301488484
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C	3.059394898	2.425720686	5.785268484
H	2.736598834	3.312169761	5.249573536
C	3.877641206	2.564234742	6.908756733
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C	4.307947049	1.438241948	7.610608422
H	4.944952982	1.547447662	8.484165818
C	3.907737146	0.168335183	7.185517792
H	4.233406893	-0.715901286	7.726883367

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H	-7.063259632	-2.654714159	-4.828360509
C	-5.763648863	-1.387165016	-3.676031371
H	-5.410702175	-0.853139275	-4.552472984
C	-4.468736357	1.666679344	-3.141183583
C	-5.792585886	1.898489433	-3.543403403
H	-6.564151346	1.166773302	-3.326152696
C	-6.132274423	3.06582294	-4.231769259
H	-7.162132001	3.225087513	-4.541571322
C	-5.158828859	4.022831772	-4.520483638
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H	-2.469014053	2.467288078	-3.125794642
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H	0.909907767	-2.31395904	-4.724155295

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H	1.740620667	-4.609053732	-4.365471486
C	0.056336342	-5.20816341	-3.161323397
H	0.42656142	-6.217704315	-3.002803459
C	-1.149390839	-4.806037946	-2.583932239
H	-1.721540539	-5.50045802	-1.974203072
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H	-2.537644141	-3.178984599	-2.301488484
C	-2.657258593	-1.155485602	-5.346983028
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C	-3.877641206	-2.564234742	-6.908756733
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C	-4.307947049	-1.438241948	-7.610608422
H	-4.944952982	-1.547447662	-8.484165818
C	-3.907737146	-0.168335183	-7.185517792
H	-4.233406893	0.715901286	-7.726883367
C	-3.087843214	-0.026568774	-6.065830397
H	-2.786472577	0.967531345	-5.749405583
C	-0.255815316	0.142802952	-4.43800871
C	0.256368518	0.028408719	-5.740948017
H	-0.154705378	-0.706227244	-6.42792667
C	1.283150455	0.869418959	-6.172095286
H	1.667471884	0.772118721	-7.184365242
C	1.809578737	1.836831763	-5.312213631
H	2.60739417	2.491844738	-5.651841883
C	1.301835893	1.957958167	-4.017783522
H	1.701060236	2.705773853	-3.338188817

C	0.274438054	1.117398495	-3.584344182
H	-0.12349038	1.219539374	-2.581197211
H	0.792122541	-1.943547106	0.783249514
H	0.534597657	-2.339280127	-0.900759104
H	-0.627235295	-2.855840929	0.319532448

$^{31}\text{P}\{^1\text{H}\}$ NMR (C_6D_6)

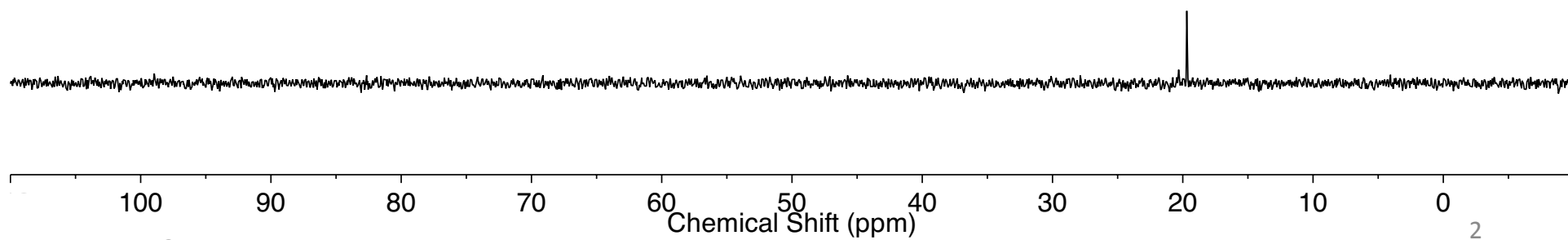
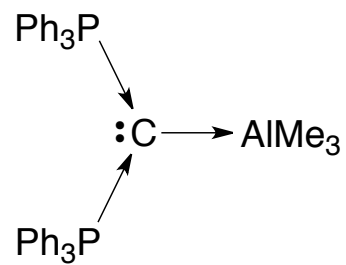


Figure S1.

^1H NMR (C_6D_6)

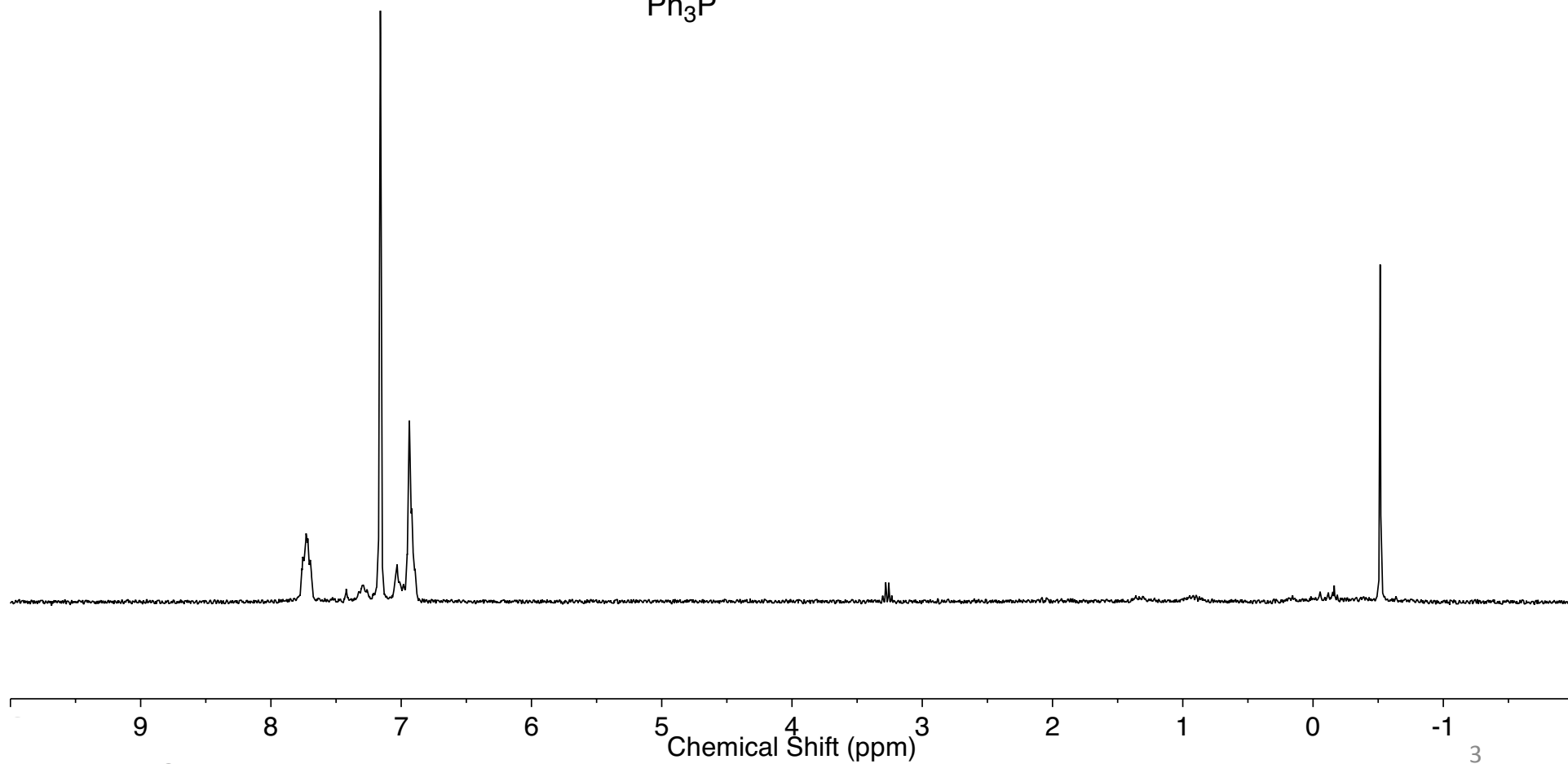
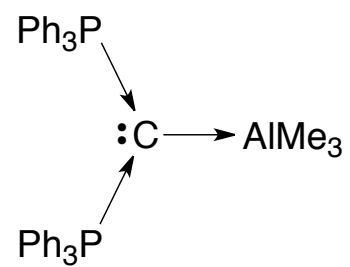


Figure S2.

$^{31}\text{P}\{^1\text{H}\}$ NMR (C_6D_6)

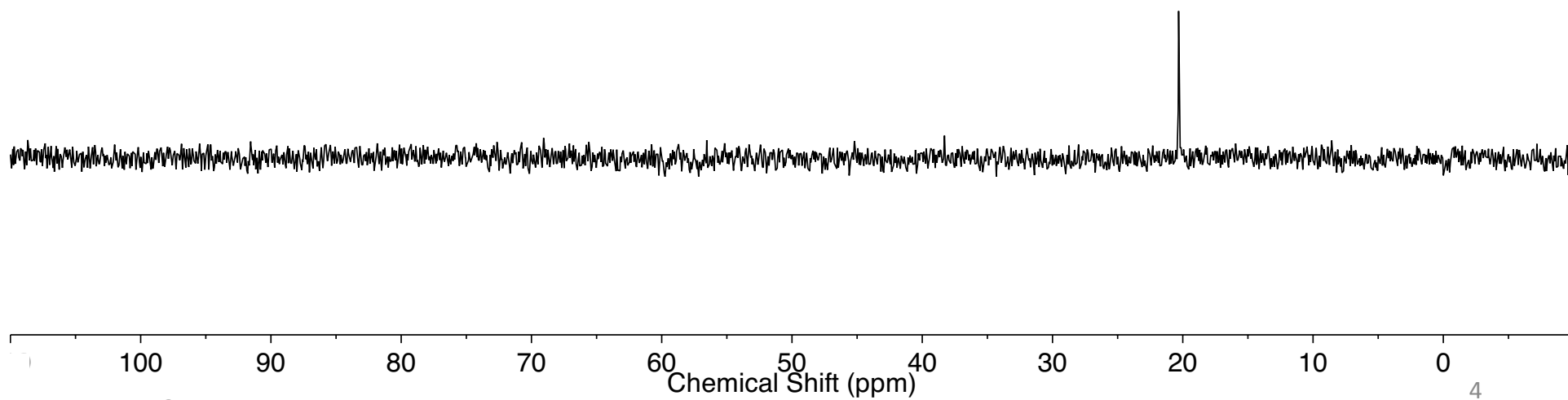
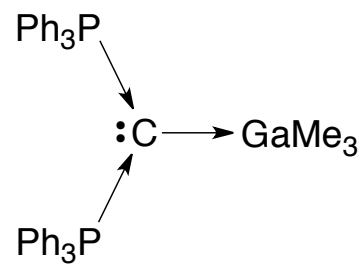


Figure S3.

$^{31}\text{P}\{^1\text{H}\}$ NMR (C_6D_6)

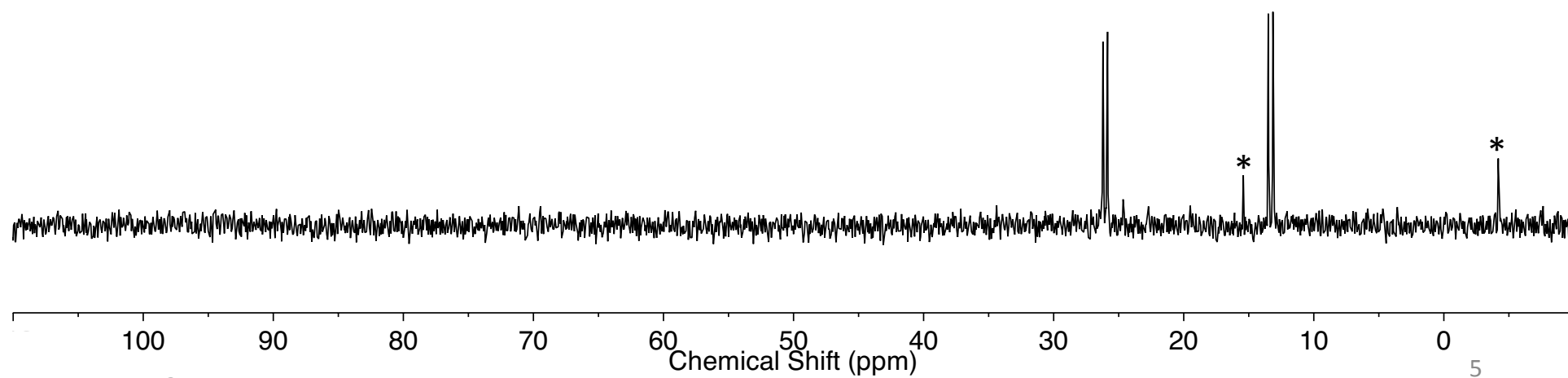
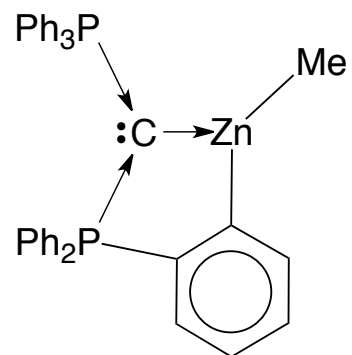


Figure S4.

^1H NMR (C_6D_6)

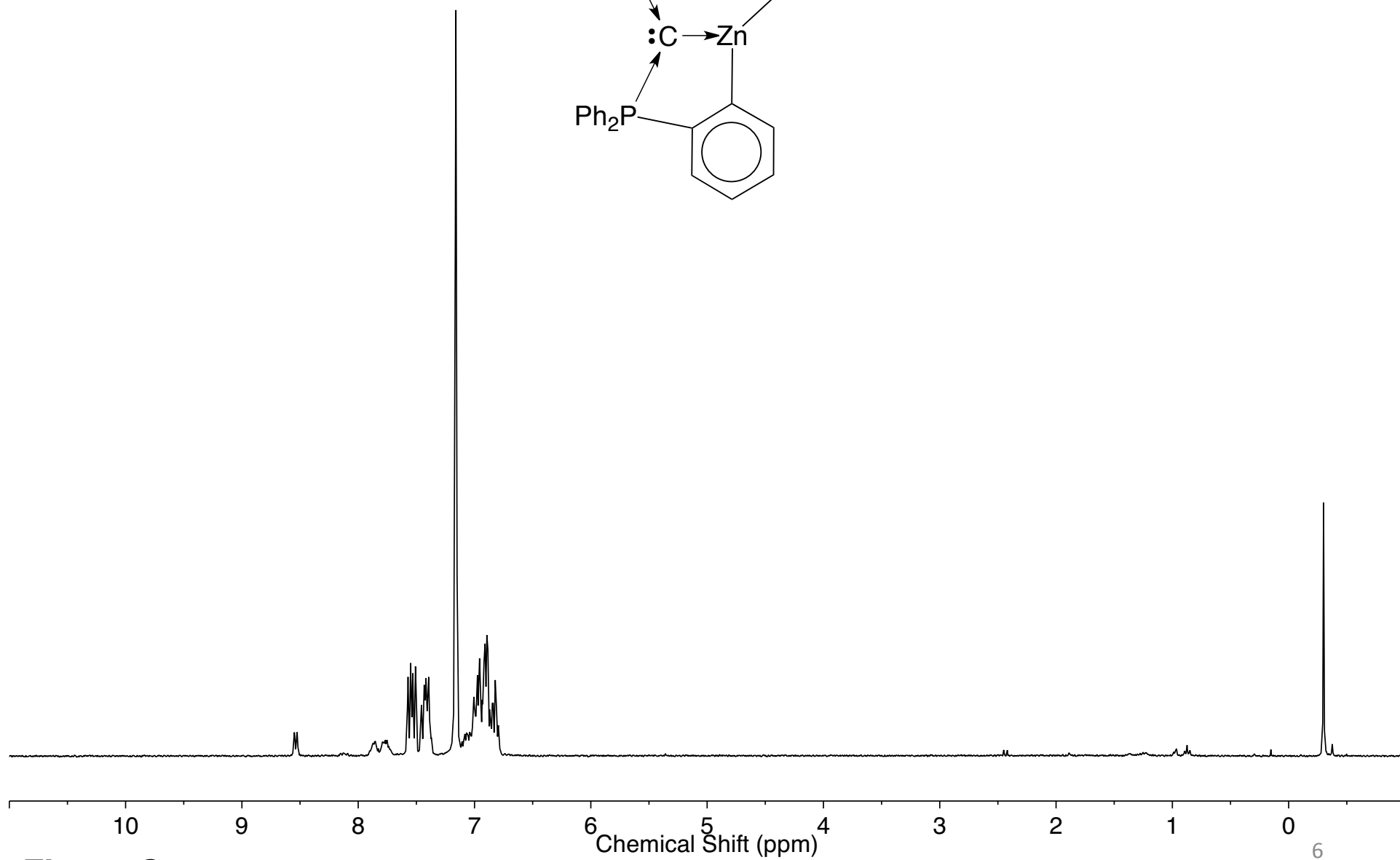
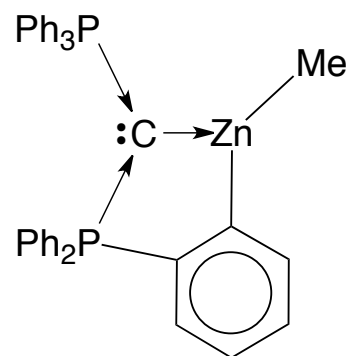


Figure S5.

$^{31}\text{P}\{^1\text{H}\}$ NMR (C_6D_6)

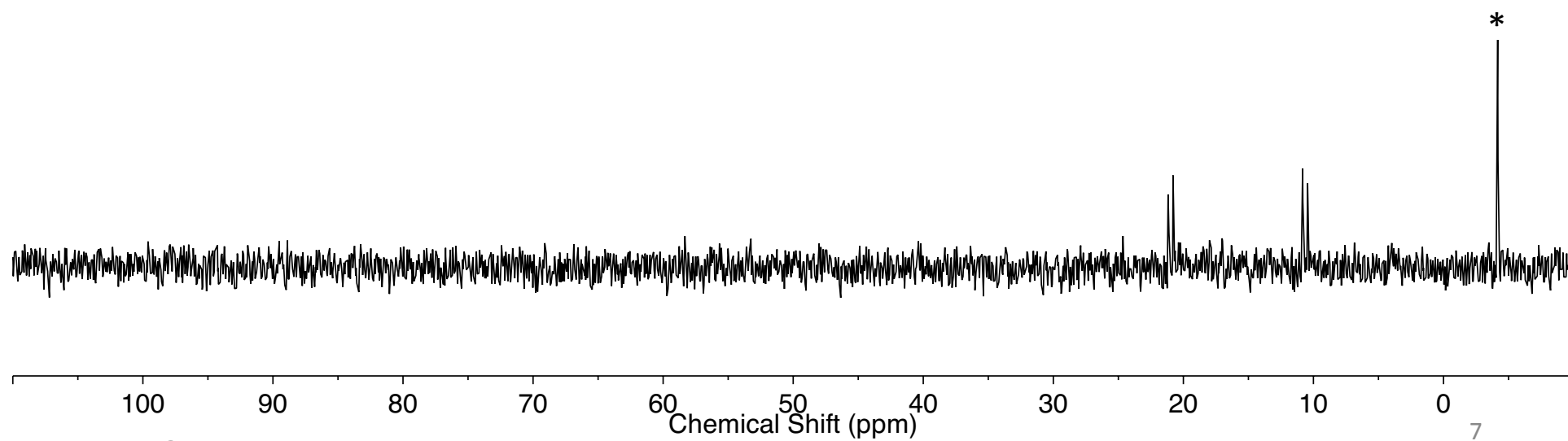
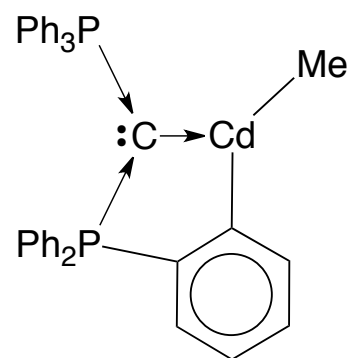


Figure S6.

$^{31}\text{P}\{^1\text{H}\}$ NMR (C_6D_6)

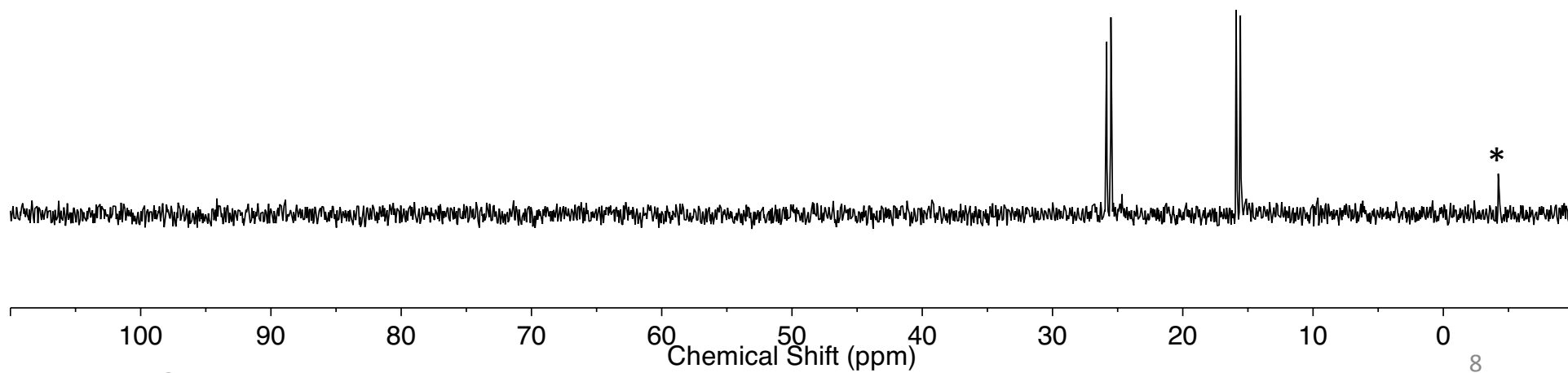
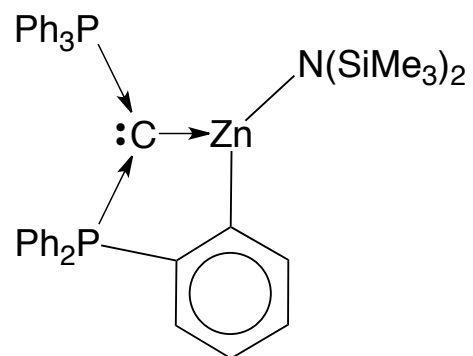


Figure S7.

$^{31}\text{P}\{^1\text{H}\}$ NMR (C_6D_6)

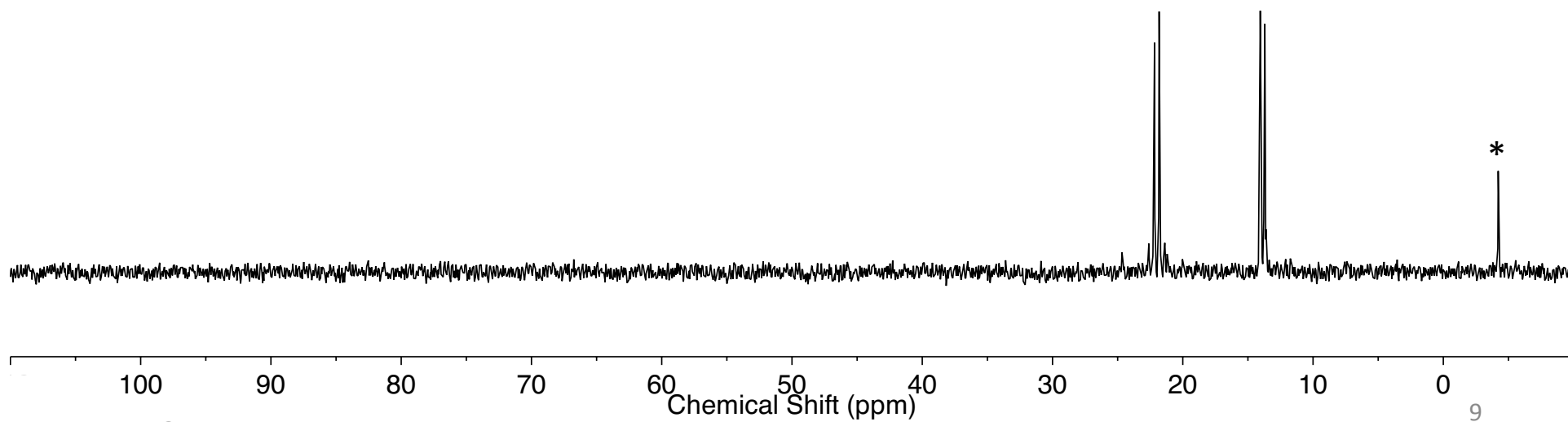
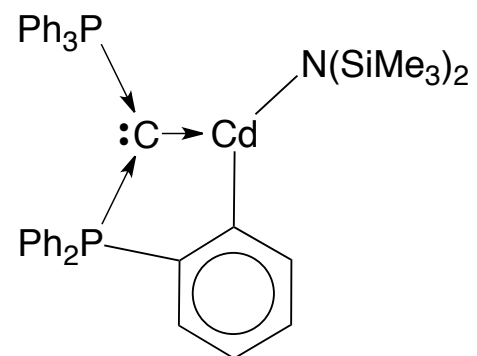


Figure S8.

$^{31}\text{P}\{^1\text{H}\}$ NMR (C_6D_6)

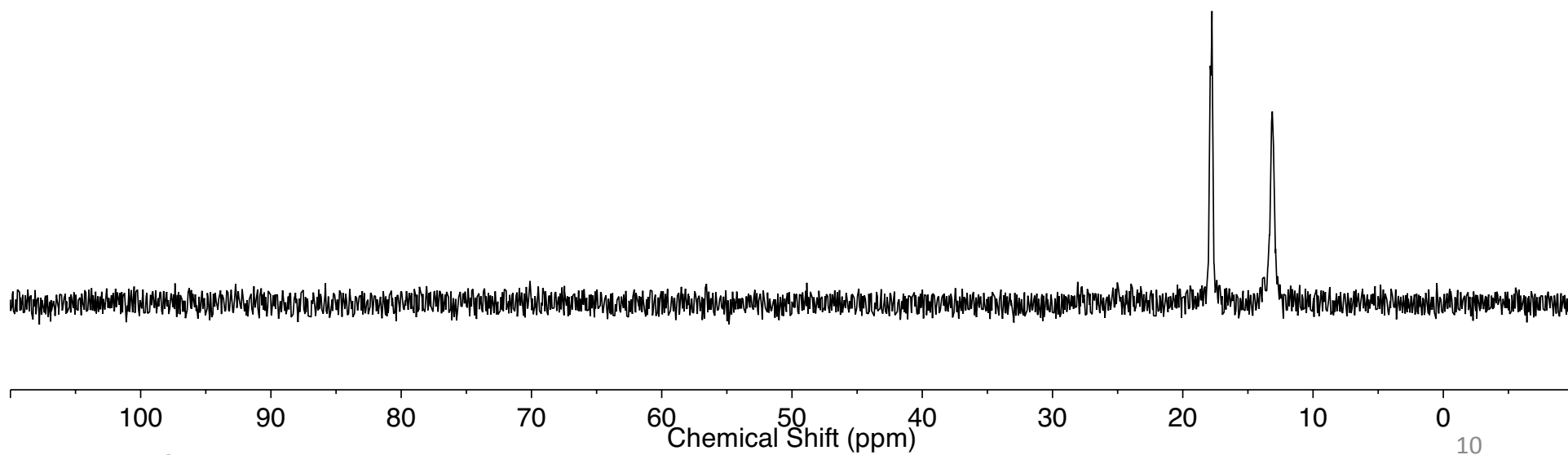
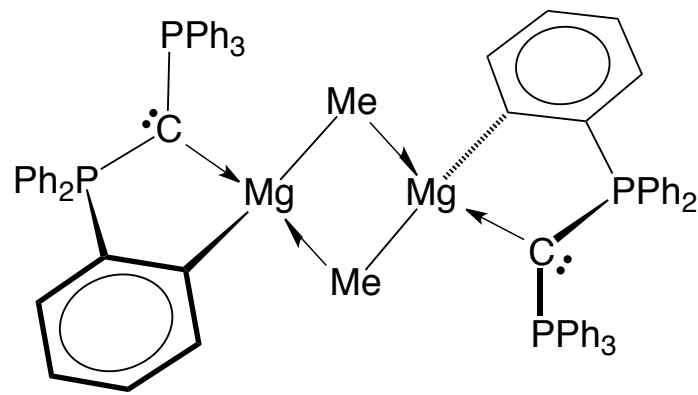


Figure S9.

$^{31}\text{P}\{^1\text{H}\}$ NMR (C_6D_6)

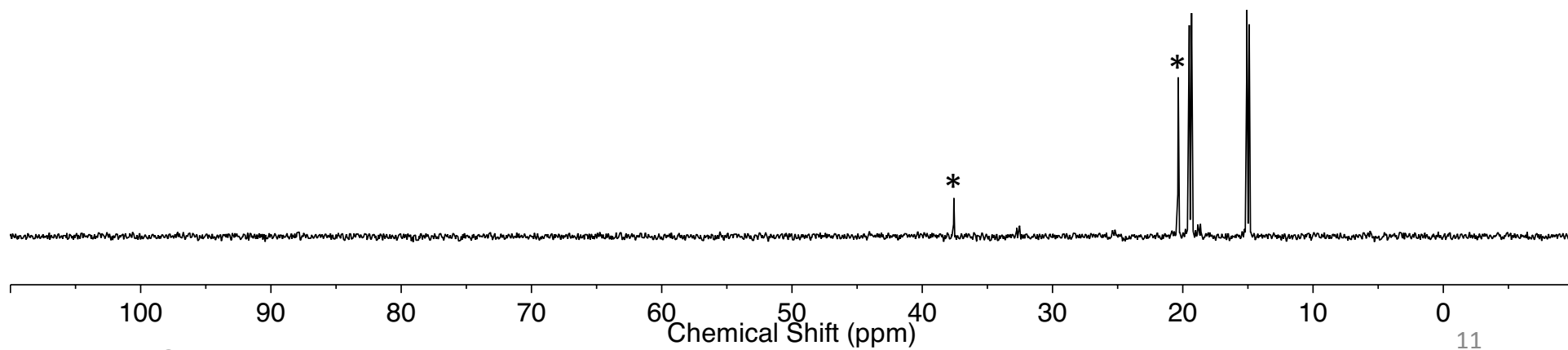
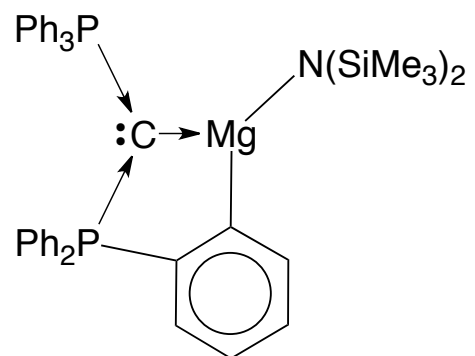


Figure S10.