#### **Supplementary Information Available**

# Rationalization of the inhibition activity of structurally related organometallic compounds against the drug target cathepsin B by DFT

Angela Casini,<sup>a</sup> Fabio Edafe,<sup>a</sup> Mikael Erlandsson,<sup>b</sup> Luca Gonsalvi,<sup>b,\*</sup> Alessandro Marrone,<sup>c</sup> Antonella Ciancetta,<sup>c</sup> Nazzareno Re,<sup>c,\*</sup> Andrea Ienco,<sup>b</sup> Luigi Messori,<sup>d</sup> Maurizio Peruzzini<sup>b</sup> and Paul J. Dyson<sup>a,\*</sup>

<sup>a</sup> Institut des Sciences et Ingénierie Chimiques, Ecole Polytechnique Fédérale de Lausanne (EPFL), CH-1015 Lausanne, Switzerland.

<sup>b</sup> Istituto di Chimica del Composti Organometallici, Consiglio Nazionale delle Ricerche (ICCOM - CNR), Via Madonna del Piano 10, 50019 Sesto Fiorentino (Firenze), Italy.

<sup>c</sup> Dipartimento di Scienze del Farmaco, Università G.d'Annunzio, Via dei Vestini 31, 66100 Chieti, Italy.

<sup>d</sup> Dipartimento di Chimica, Università di Firenze, Via della Lastruccia 3, 50019 Sesto Fiorentino (Firenze), Italy.

| Empirical formula                                | $C_{56} \ H_{93} \ Cl_6 \ F_9 \ Ir_3 \ N_{10} \ O_9 \ P_3 \ S_3$ |
|--|--|
| Formula weight                                   | 2199.79  |
| Temperature (K)                                  | 298(2)   |
| Wavelength (Å)                                   | 0.71069  |
| Crystal system                                   | Triclinic  |
| Space group                                      | P.1  |
| Unit cell dimensions                             |  |
| <i>a</i> (Å)                                     | 13.8621(3)   |
| <i>b</i> (Å)                                     | 15.8188(4)   |
| <i>c</i> (Å)                                     | 18.3948(4)   |
| α (deg)  | 102.0414(18)   |
| $\beta$ (deg)                                    | 92.5974(18)  |
| γ(deg)   | 90.3916(19)  |
| Volume (Å <sup>3</sup> )                         | 3940.29(16)  |
| Z  | 2  |
| Calcd density (g/cm <sup>3</sup> )               | 1.854  |
| Absorption coefficient (mm <sup>-1</sup> )       | 5.474  |
| F(000)   | 2156   |
| Crystal size (mm <sup>3</sup> )                  | 0.20 x 0.16 x 0.10   |
| Theta range for data collection (deg)            | 3.77 to 32.7   |
| Index ranges                                     | -20<=h<=20, -23<=k<=16, -26<=l<=26                               |
| Reflections collected                            | 56975  |
| Independent reflections                          | 25286 $[R_{(int)} = 0.0379]$                                     |
| Completeness to theta = $25.00^{\circ}$          | 99.2 %   |
| Absorption correction                            | Semi-empirical from equivalents                                  |
| Max. and min. Transmission                       | 1 and 0.37693  |
| Refinement method                                | Full-matrix least-squares on F <sup>2</sup>                      |
| Data / restraints / parameters                   | 25286 / 22 / 892   |
| Goodness-of-fit on F <sup>2</sup>                | 0.934  |
| Final R indices [I>2sigma(I)]                    | $R_1 = 0.0395, wR_2 = 0.0879$                                    |
| R indices (all data)                             | $R_1 = 0.0955, wR_2 = 0.1131$                                    |
| Largest diff. peak and hole (e <sup>-Å-3</sup> ) | 2.192 and -1.721   |

#### Table S1. Crystal data and structure refinement for 3.

#### Cartesian coordinates of optimized geometries of all considered complexes

| $ Ru(\eta^{\circ}-C_{10}H_{14})(PTA)Cl_{2} $ |
|--|
|--|

| C Ì | -13.90430 | 71.51300 | -53.62580 |
|-----|-----------|----------|-----------|
| С   | -15.17760 | 72.01940 | -53.33480 |
| С   | -15.97780 | 71.45770 | -52.28090 |
| С   | -15.55930 | 70.31840 | -51.55650 |
| С   | -14.23740 | 69.81930 | -51.82220 |
| С   | -13.42230 | 70.42900 | -52.79960 |
| Н   | -15.53810 | 72.91080 | -53.83370 |
| Η   | -16.92430 | 71.92890 | -52.03630 |
| Η   | -13.84770 | 68.98730 | -51.24270 |
| Н   | -12.39920 | 70.08970 | -52.92520 |
| Ru  | -14.01630 | 72.00180 | -51.32010 |
| Cl  | -14.89940 | 74.19630 | -50.66330 |
| Cl  | -11.72940 | 72.89150 | -51.40050 |
| Р   | -13.60540 | 71.85160 | -49.02650 |
| С   | -12.61830 | 73.19650 | -48.15940 |
| Н   | -13.12540 | 74.15190 | -48.31920 |
| Н   | -11.63260 | 73.26270 | -48.62590 |
| С   | -15.06000 | 71.80320 | -47.83560 |
| Η   | -15.64760 | 72.71640 | -47.97720 |
| Η   | -15.70900 | 70.95100 | -48.06610 |
| С   | -12.67000 | 70.37210 | -48.33810 |
| Η   | -13.19360 | 69.44260 | -48.59600 |
| Η   | -11.67880 | 70.33290 | -48.80470 |
| С   | -11.77180 | 71.65570 | -46.47200 |
| Η   | -10.81420 | 71.67290 | -47.00220 |
| Η   | -11.57360 | 71.58110 | -45.39680 |
| С   | -13.83490 | 70.47620 | -46.19990 |
| Η   | -13.65840 | 70.39070 | -45.12180 |
| Η   | -14.42190 | 69.60850 | -46.52230 |
| С   | -13.79120 | 72.86280 | -46.04680 |
| Η   | -13.61600 | 72.80320 | -44.96650 |
| Η   | -14.34480 | 73.78250 | -46.26020 |
| С   | -12.98310 | 72.08970 | -54.68540 |
| Η   | -11.98610 | 72.12870 | -54.22680 |
| С   | -13.34320 | 73.51660 | -55.11760 |
| Ν   | -12.52570 | 70.45210 | -46.87520 |
| Ν   | -12.48690 | 72.91480 | -46.72200 |
| Ν   | -14.61430 | 71.70230 | -46.43640 |
| С   | -16.46990 | 69.63230 | -50.57160 |
| Η   | -17.04340 | 68.84650 | -51.08190 |
| Η   | -15.90790 | 69.15190 | -49.76400 |
| Η   | -17.18490 | 70.33360 | -50.13140 |
| С   | -12.92310 | 71.13350 | -55.89700 |
| Η   | -12.19270 | 71.49850 | -56.62850 |
| Η   | -12.62610 | 70.11910 | -55.60460 |
| Η   | -13.89840 | 71.06860 | -56.39610 |

| Н | -12.57460 | 73.89670 | -55.79970 |
|---|-----------|----------|-----------|
| Η | -14.30060 | 73.55500 | -55.65370 |
| Н | -13.39270 | 74.19090 | -54.25650 |

## $[Os(\eta^6-C_{10}H_{14})(PTA)Cl_2]$

| С  | -13.89450 | 71.52380 | -53.62110 |
|----|-----------|----------|-----------|
| С  | -15.17930 | 72.00180 | -53.31210 |
| С  | -15.95750 | 71.42080 | -52.24480 |
| С  | -15.50470 | 70.27580 | -51.53280 |
| С  | -14.17530 | 69.80070 | -51.82260 |
| С  | -13.37500 | 70.44520 | -52.80340 |
| Η  | -15.55250 | 72.90130 | -53.78640 |
| Н  | -16.90630 | 71.87570 | -51.98000 |
| Н  | -13.75680 | 68.98030 | -51.24720 |
| Н  | -12.34400 | 70.13360 | -52.93580 |
| Os | -14.01720 | 71.96000 | -51.33510 |
| Cl | -14.89390 | 74.17290 | -50.68860 |
| Cl | -11.76840 | 72.96320 | -51.43940 |
| Р  | -13.60110 | 71.82550 | -49.02420 |
| С  | -12.54890 | 73.14040 | -48.18930 |
| Н  | -13.00090 | 74.11740 | -48.38240 |
| Н  | -11.55630 | 73.14270 | -48.64590 |
| С  | -15.06180 | 71.88600 | -47.84380 |
| Н  | -15.60180 | 72.82240 | -48.01870 |
| Η  | -15.75010 | 71.06060 | -48.05790 |
| С  | -12.74860 | 70.32130 | -48.28750 |
| Н  | -13.31810 | 69.41320 | -48.52300 |
| Н  | -11.75730 | 70.21520 | -48.74410 |
| С  | -11.79590 | 71.61050 | -46.45170 |
| Н  | -10.83480 | 71.56320 | -46.97400 |
| Н  | -11.60860 | 71.55650 | -45.37340 |
| С  | -13.91860 | 70.54750 | -46.16140 |
| Η  | -13.75210 | 70.48470 | -45.08030 |
| Η  | -14.54780 | 69.70220 | -46.46250 |
| С  | -13.75280 | 72.93260 | -46.07780 |
| Н  | -13.58840 | 72.89790 | -44.99480 |
| Н  | -14.25660 | 73.87250 | -46.32390 |
| С  | -12.99490 | 72.14060 | -54.67770 |
| Η  | -11.99500 | 72.19580 | -54.22760 |
| С  | -13.39020 | 73.56540 | -55.08570 |
| Ν  | -12.60850 | 70.43630 | -46.82690 |
| Ν  | -12.44260 | 72.89700 | -46.74300 |
| Ν  | -14.63150 | 71.80440 | -46.43960 |
| С  | -16.38500 | 69.57480 | -50.53200 |
| Η  | -16.94570 | 68.77280 | -51.03100 |
| Η  | -15.80080 | 69.11380 | -49.72860 |
| Η  | -17.11000 | 70.26280 | -50.08680 |
| С  | -12.92300 | 71.20510 | -55.90420 |
| Η  | -12.20620 | 71.59760 | -56.63510 |
| Η  | -12.60170 | 70.19320 | -55.62960 |

| H | -13.90000 | 71.12640 | -56.39790 |
|---|-----------|----------|-----------|
| H | -12.63480 | 73.97260 | -55.76710 |
| H | -14.35150 | 73.58970 | -55.61560 |
| H | -13.44900 | 74.22650 | -54.21510 |

## [Rh(η<sup>5</sup>-C<sub>5</sub>Me<sub>5</sub>)(PTA)Cl<sub>2</sub>]

| Rh | -13.95280 | 68.19050 | -51.42310 |
|----|-----------|----------|-----------|
| Cl | -15.05450 | 70.24490 | -50.67750 |
| Cl | -11.69420 | 69.13100 | -51.58780 |
| Р  | -13.41730 | 67.94540 | -49.19370 |
| С  | -12.70210 | 69.42320 | -48.27750 |
| Η  | -13.41770 | 70.24720 | -48.33740 |
| Η  | -11.78820 | 69.73740 | -48.78870 |
| С  | -14.75200 | 67.49740 | -47.94960 |
| Η  | -15.53320 | 68.26470 | -47.98800 |
| Η  | -15.21280 | 66.53830 | -48.21500 |
| С  | -12.13330 | 66.67730 | -48.67290 |
| Η  | -12.44560 | 65.67180 | -48.97980 |
| Η  | -11.19400 | 66.90640 | -49.18800 |
| С  | -11.42860 | 68.00790 | -46.75630 |
| Η  | -10.53400 | 68.27490 | -47.32770 |
| Η  | -11.15200 | 67.91060 | -45.70040 |
| С  | -13.15930 | 66.37800 | -46.48150 |
| Η  | -12.90190 | 66.26460 | -45.42250 |
| Η  | -13.55830 | 65.42360 | -46.84320 |
| С  | -13.63540 | 68.69900 | -46.14620 |
| Η  | -13.38490 | 68.61020 | -45.08300 |
| Η  | -14.39070 | 69.48290 | -46.26150 |
| Ν  | -11.92280 | 66.69520 | -47.21600 |
| Ν  | -12.41940 | 69.08670 | -46.87480 |
| Ν  | -14.20510 | 67.41000 | -46.58510 |
| С  | -15.75980 | 67.14690 | -52.17270 |
| С  | -14.74320 | 66.15380 | -51.94250 |
| С  | -13.61990 | 66.47200 | -52.78280 |
| С  | -14.00710 | 67.59050 | -53.64260 |
| С  | -15.31000 | 67.99910 | -53.27290 |
| С  | -17.13160 | 67.20070 | -51.56950 |
| Η  | -17.42440 | 68.23470 | -51.36290 |
| Η  | -17.87490 | 66.76640 | -52.25350 |
| Η  | -17.18290 | 66.64480 | -50.62870 |
| С  | -16.12510 | 69.10960 | -53.86030 |
| Η  | -15.56080 | 69.67600 | -54.60480 |
| Η  | -17.02350 | 68.70650 | -54.34790 |
| Η  | -16.44390 | 69.80970 | -53.08040 |
| С  | -13.13160 | 68.17290 | -54.70860 |
| Η  | -13.57700 | 69.06490 | -55.15520 |
| Η  | -12.15720 | 68.45670 | -54.29590 |
| Η  | -12.96420 | 67.43900 | -55.50870 |
| С  | -12.34360 | 65.69850 | -52.92890 |
| Η  | -11.48900 | 66.37620 | -53.01370 |

| Η    | -12.16560   | 65.04250             | -52.07180 |
|------|---|----------------------|-----------|
| Η    | -12.37080   | 65.06980             | -53.83050 |
| С    | -14.87170   | 64.94890             | -51.05750 |
| Η    | -13.90520   | 64.62490             | -50.66130 |
| Н    | -15.54730   | 65.12840             | -50.21630 |
| Н    | -15.28560   | 64.10810             | -51.63220 |
|      |   |                      |           |
| [Ir( | n <sup>5</sup> -C <sub>5</sub> Me <sub>5</sub> )(PT | [A)Cl <sub>2</sub> ] |           |
| Îr Ì | -13.95880   | 68.17190             | -51.41960 |
| Cl   | -15.00910   | 70.28360             | -50.72880 |
| Cl   | -11.75650   | 69.24720             | -51.62180 |
| Р    | -13.40940   | 67.92930             | -49.19520 |
| С    | -12.71580   | 69.40320             | -48.26170 |
| Н    | -13.44380   | 70.21770             | -48.30560 |
| Н    | -11.80990   | 69.74250             | -48.77110 |
| С    | -14.72860   | 67.44010             | -47.95340 |
| Н    | -15.52630   | 68.19120             | -47.97760 |
| Н    | -15.17160   | 66.47650             | -48.23270 |
| С    | -12.10510   | 66.67560             | -48.69880 |
| Н    | -12.40600   | 65.67070             | -49.01920 |
| Н    | -11.17170   | 66.92290             | -49.21670 |
| С    | -11.41160   | 67.98750             | -46.76650 |
| Н    | -10.52430   | 68.27740             | -47.33810 |
| Н    | -11.12780   | 67.87940             | -45.71360 |
| С    | -13.11350   | 66.32530             | -46.50840 |
| Н    | -12.85000   | 66.20010             | -45.45230 |
| Н    | -13.49830   | 65.36990             | -46.88270 |
| С    | -13.62620   | 68.63270             | -46.13670 |
| Н    | -13.36930   | 68.53180             | -45.07610 |
| Н    | -14.39510   | 69.40540             | -46.23640 |
| Ν    | -11.88580   | 66.67370             | -47.24340 |
| Ν    | -12.42030   | 69.05200             | -46.86440 |
| Ν    | -14.17670   | 67.34130             | -46.59230 |
| С    | -15.76140   | 67.15500             | -52.16850 |
| С    | -14.73610   | 66.16820             | -51.90600 |
| С    | -13.60250   | 66.46100             | -52.75640 |
| С    | -13.99070   | 67.56230             | -53.64080 |
| С    | -15.29780   | 67.98290             | -53.28430 |
| С    | -17.14910   | 67.19780             | -51.60020 |
| Η    | -17.47140   | 68.23040             | -51.43690 |
| Η    | -17.86510   | 66.72020             | -52.28450 |
| Η    | -17.20720   | 66.67710             | -50.63990 |
| С    | -16.10500   | 69.08390             | -53.90110 |
| Η    | -15.52130   | 69.65560             | -54.62620 |
| Η    | -16.98020   | 68.66790             | -54.41880 |
| Η    | -16.45850   | 69.78170             | -53.13480 |
| С    | -13.11190   | 68.12050             | -54.71770 |
| Н    | -13.54440   | 69.01600             | -55.17010 |
| Н    | -12.13010   | 68.39170             | -54.31560 |
| Η    | -12.96540   | 67.37450             | -55.51060 |

С

-12.34680

65.65420

-52.90590

| Η | -11.48190 | 66.30700 | -53.05610 |
|---|-----------|----------|-----------|
| Η | -12.15170 | 65.04380 | -52.01910 |
| Η | -12.41800 | 64.97690 | -53.76910 |
| С | -14.88250 | 64.96470 | -51.02170 |
| Η | -13.92420 | 64.63940 | -50.60700 |
| Η | -15.57240 | 65.14830 | -50.19350 |
| Η | -15.28790 | 64.12640 | -51.60580 |

## $[Ir(\eta^5-C_5Me_5)(MePTA)Cl_2]^+$

| Īr | -13.96430 | 68.13100 | -51.40910 |
|----|-----------|----------|-----------|
| Cl | -15.02210 | 70.21210 | -50.61230 |
| Cl | -11.74100 | 69.19860 | -51.51370 |
| Р  | -13.44530 | 67.81370 | -49.20560 |
| С  | -12.76660 | 69.35820 | -48.39020 |
| Η  | -13.51250 | 70.15260 | -48.47520 |
| Н  | -11.87090 | 69.67220 | -48.93240 |
| С  | -14.73250 | 67.40630 | -47.90840 |
| Н  | -15.54200 | 68.14110 | -47.97040 |
| Η  | -15.16600 | 66.41860 | -48.09420 |
| С  | -12.10300 | 66.63710 | -48.64070 |
| Н  | -12.37660 | 65.60250 | -48.87040 |
| Н  | -11.18130 | 66.86600 | -49.18570 |
| С  | -11.35850 | 68.02460 | -46.78780 |
| Η  | -10.50300 | 68.32340 | -47.39870 |
| Η  | -11.07900 | 68.01150 | -45.73030 |
| С  | -13.07140 | 66.41850 | -46.39740 |
| Η  | -12.79280 | 66.36480 | -45.34000 |
| Η  | -13.44390 | 65.44030 | -46.70820 |
| С  | -13.68340 | 68.70440 | -46.14060 |
| Н  | -13.38480 | 68.68570 | -45.08840 |
| Н  | -14.44150 | 69.47500 | -46.30190 |
| Ν  | -11.87690 | 66.75740 | -47.18630 |
| Ν  | -12.41760 | 69.16160 | -46.92940 |
| Ν  | -14.13870 | 67.41860 | -46.55640 |
| С  | -15.76540 | 67.17290 | -52.24750 |
| С  | -14.75450 | 66.15930 | -52.03200 |
| С  | -13.59860 | 66.49220 | -52.83800 |
| С  | -13.94910 | 67.66390 | -53.64180 |
| С  | -15.26340 | 68.07800 | -53.28260 |
| С  | -17.16710 | 67.18530 | -51.71550 |
| Η  | -17.49630 | 68.20560 | -51.49990 |
| Η  | -17.85870 | 66.75500 | -52.45290 |
| Η  | -17.25850 | 66.60080 | -50.79550 |
| С  | -16.04370 | 69.21920 | -53.85740 |
| Η  | -15.41080 | 69.89280 | -54.43880 |
| Η  | -16.82810 | 68.83180 | -54.52160 |
| Η  | -16.52330 | 69.80750 | -53.06990 |
| С  | -13.05510 | 68.27850 | -54.67360 |
| Η  | -13.41040 | 69.26280 | -54.98540 |
| Η  | -12.03550 | 68.39550 | -54.29530 |
| Η  | -13.01920 | 67.63270 | -55.56140 |

| С    | -12.35670                  | 65.67310                | -53.02530 |
|------|----------------------------|-------------------------|-----------|
| Η    | -11.47850                  | 66.31330                | -53.14640 |
| Н    | -12.17470                  | 65.00950                | -52,17500 |
| Н    | -12.44450                  | 65.04590                | -53.92310 |
| С    | -14.92430                  | 64.91010                | -51.21850 |
| Н    | -13.97120                  | 64.54050                | -50.82900 |
| Н    | -15.61500                  | 65.05490                | -50.38300 |
| Н    | -15.34390                  | 64.11720                | -51.85270 |
| С    | -11.88680                  | 70.43850                | -46.36150 |
| Н    | -11.63580                  | 70.29320                | -45.30790 |
| Н    | -10.99540                  | 70.73290                | -46.92020 |
| Н    | -12.64880                  | 71.21510                | -46.45960 |
| [tra | ns-RuCL(dms                | so-S)(Im)] <sup>-</sup> |           |
| C    | -7 25540                   | -3 44710                | -0 60050  |
| C    | -7 31340                   | -2 11710                | -0.92090  |
| Ň    | -6.80000                   | -1.94290                | -2.19440  |
| C    | -6.41510                   | -3.13270                | -2.62340  |
| Ň    | -6 66140                   | -4 07370                | -1 68240  |
| Ru   | -6 62100                   | -0 11010                | -3 23020  |
| S    | -6 25980                   | 2 00770                 | -4 32220  |
| Č    | -4.62460                   | 2.65020                 | -3.84180  |
| Cl   | -5.15590                   | 0.57480                 | -1.35920  |
| Cl   | -4.65560                   | -1.01650                | -4.40960  |
| 0    | -7.23300                   | 3.15710                 | -4.23600  |
| C    | -5.93250                   | 1.75080                 | -6.09970  |
| Cl   | -8.51990                   | 0.76840                 | -1.93050  |
| Η    | -5.95790                   | -3.33110                | -3.57870  |
| Н    | -7.66970                   | -1.27300                | -0.35290  |
| Η    | -6.70640                   | -5.06080                | -1.89780  |
| Н    | -7.55870                   | -3.98810                | 0.28310   |
| Η    | -5.17050                   | 0.97850                 | -6.21430  |
| Η    | -5.62400                   | 2.71370                 | -6.51560  |
| Η    | -6.87120                   | 1.42120                 | -6.54650  |
| Η    | -3.88110                   | 1.86240                 | -3.98510  |
| Η    | -4.68800                   | 2.90490                 | -2.78360  |
| Η    | -4.42970                   | 3.53280                 | -4.45870  |
| Cl   | -8.13790                   | -0.69180                | -5.09780  |
| [Ru( | n <sup>6</sup> -C10H14)(P] | $(A)CIH_{0}OI^{+}$      |           |
| C    | -13.83280                  | 71.50290                | -53.61780 |
| С    | -15.15050                  | 71.91400                | -53.37680 |
| С    | -15.93480                  | 71.32900                | -52.32240 |
| С    | -15.46420                  | 70.24260                | -51.54950 |
| С    | -14.09010                  | 69.87410                | -51.74010 |
| С    | -13.28630                  | 70.52340                | -52.70750 |
| Н    | -15.58270                  | 72.71800                | -53.96240 |
| Н    | -16.94100                  | 71.70120                | -52.14890 |
| Н    | -13.64850                  | 69.10100                | -51.11930 |
| Н    | -12.23640                  | 70.25970                | -52.78560 |
| Ru   | -14.04140                  | 72.05250                | -51.30130 |

| 0             | -14.76780                  | 74.05030                            | -50.59510 |
|---------------|----------------------------|-------------------------------------|-----------|
| Cl            | -12.03260                  | 73.40880                            | -51.43370 |
| Р             | -13.55300                  | 71.77910                            | -48.99480 |
| С             | -12.42320                  | 73.00950                            | -48.11500 |
| Н             | -12.83000                  | 74.01950                            | -48.23050 |
| Н             | -11.43900                  | 72,99590                            | -48.59090 |
| С             | -14.99750                  | 71.84520                            | -47.78220 |
| Н             | -15.50120                  | 72.81300                            | -47.88330 |
| Н             | -15.72590                  | 71.06390                            | -48.02650 |
| С             | -12.74800                  | 70.19590                            | -48.35910 |
| Н             | -13.36350                  | 69.32820                            | -48.62520 |
| Н             | -11.77000                  | 70.07160                            | -48.83880 |
| С             | -11.70710                  | 71.35150                            | -46.48280 |
| Н             | -10.75750                  | 71.29010                            | -47.02340 |
| Н             | -11 50410                  | 71 23290                            | -45 41410 |
| C             | -13 87520                  | 70 36500                            | -46 20490 |
| Ĥ             | -13 69210                  | 70 23760                            | -45 13370 |
| Н             | -14 54580                  | 69 56480                            | -46 53550 |
| C             | -13 60090                  | 72,73660                            | -45 99650 |
| н             | -13 41590                  | 72 63280                            | -44 92290 |
| Н             | -14 06680                  | 73 71110                            | -46 17340 |
| C             | -12 95050                  | 72 06350                            | -54 71620 |
| н             | -11 95830                  | 72 20890                            | -54 26920 |
| C             | -13 41420                  | 73 41460                            | -55 27430 |
| N             | -12 58410                  | 70 24260                            | -46 90540 |
| N             | -12 30720                  | 72 67790                            | -46 69430 |
| N             | -14 53250                  | 71 66830                            | -46 40440 |
| C             | -16 35870                  | 69 49800                            | -50 59480 |
| н             | -16 83040                  | 68 65680                            | -51 11980 |
| Н             | -15 80110                  | 69 08070                            | -49 75100 |
| Н             | -17 15870                  | 70 13590                            | -50 20770 |
| C             | -12 81980                  | 71.00720                            | -55 83980 |
| н             | -12 11810                  | 71 36510                            | -56 60050 |
| н             | -12 44420                  | 70.04850                            | -55 46430 |
| Н             | -13 78520                  | 70.82740                            | -56 32760 |
| Н             | -12 67640                  | 73 78320                            | -55 99400 |
| н             | -14 37050                  | 73 33600                            | -55 80660 |
| Н             | -13 50650                  | 74 16710                            | -54 48350 |
| Н             | -15 49130                  | 74.10710                            | -51 10750 |
| Н             | -13 95710                  | 74.57290                            | -50 79370 |
| 11            | 15.95710                   | 71.37290                            | 50.77570  |
| [ <b>O</b> s( | m <sup>6</sup> -C10H14)(PT | TA)CIH <sub>2</sub> Ol <sup>+</sup> |           |
| C             | -13.81080                  | 71.51210                            | -53.61560 |
| Č             | -15 13850                  | 71 89220                            | -53 36300 |
| Č             | -15.89950                  | 71.29000                            | -52.29350 |
| Č             | -15.40390                  | 70.19150                            | -51.53870 |
| Č             | -14.02240                  | 69.85310                            | -51.74570 |
| Č             | -13.23140                  | 70.54210                            | -52.70910 |
| Ĥ             | -15.58700                  | 72,70040                            | -53.93040 |
| Н             | -16.90870                  | 71.64450                            | -52.10200 |
| H             | -13.55590                  | 69.09140                            | -51.12920 |
|               |                            | -                                   |           |

| Н    | -12.17600   | 70.30390 | -52.79210 |
|------|---|----------|-----------|
| OS   | -14.04040   | 72.01070 | -51.31030 |
| 0    | -14.86060   | 73.99000 | -50.60780 |
| Cl   | -12.13130   | 73.51570 | -51.45250 |
| Р    | -13.55520   | 71.77130 | -48.99700 |
| С    | -12.32960   | 72.93380 | -48.15700 |
| Н    | -12.65660   | 73.96960 | -48.29560 |
| Н    | -11.35170   | 72.83690 | -48.63750 |
| С    | -14.97900   | 71.97330 | -47.77640 |
| Н    | -15.41530   | 72.97060 | -47.89920 |
| Н    | -15.76130   | 71.23850 | -47.99920 |
| С    | -12.86630   | 70.15040 | -48.32640 |
| Η    | -13.54720   | 69.32510 | -48.56680 |
| Η    | -11.90440   | 69.94120 | -48.80950 |
| С    | -11.72460   | 71.26950 | -46.48740 |
| Η    | -10.78650   | 71.12360 | -47.03200 |
| Η    | -11.52220   | 71.16240 | -45.41740 |
| С    | -13.95720   | 70.45500 | -46.16920 |
| Η    | -13.77380   | 70.34190 | -45.09650 |
| Η    | -14.68860   | 69.69890 | -46.47370 |
| С    | -13.50530   | 72.80400 | -46.02470 |
| Η    | -13.31990   | 72.71480 | -44.94990 |
| Η    | -13.89900   | 73.80570 | -46.22410 |
| С    | -12.94360   | 72.11940 | -54.70230 |
| Η    | -11.96060   | 72.29920 | -54.24770 |
| С    | -13.45560   | 73.45660 | -55.25210 |
| Ν    | -12.68550   | 70.21910 | -46.87610 |
| Ν    | -12.22510   | 72.63130 | -46.72880 |
| Ν    | -14.51710   | 71.79790 | -46.39870 |
| С    | -16.27750   | 69.42920 | -50.57900 |
| Η    | -16.74510   | 68.58680 | -51.10550 |
| Η    | -15.70540   | 69.01350 | -49.74440 |
| Η    | -17.07940   | 70.05600 | -50.17790 |
| С    | -12.76520   | 71.08020 | -55.83450 |
| Η    | -12.07430   | 71.47270 | -56.58800 |
| Η    | -12.35410   | 70.13370 | -55.46550 |
| Н    | -13.72000   | 70.86700 | -56.32950 |
| Η    | -12.72840   | 73.85930 | -55.96430 |
| Η    | -14.40480   | 73.34490 | -55.79110 |
| Η    | -13.58190   | 74.19930 | -54.45680 |
| Η    | -15.61340   | 74.33120 | -51.12030 |
| Η    | -14.09170   | 74.57610 | -50.80020 |
| [Rh( | n <sup>5</sup> -C <sub>5</sub> Me <sub>5</sub> )(PT | A)CIOH]  |           |
| Rh   | -14.11790   | 68.20270 | -51.37210 |
| Cl   | -15.22050   | 70.28840 | -50.72540 |

| КШ | -14.11/90 | 08.20270 | -31.37210 |
|----|-----------|----------|-----------|
| Cl | -15.22050 | 70.28840 | -50.72540 |
| 0  | -12.28280 | 69.16640 | -51.38580 |
| Р  | -13.42480 | 67.94810 | -49.18990 |
| С  | -12.95990 | 69.48750 | -48.22260 |
| Н  | -13.83520 | 70.13860 | -48.14610 |
| Н  | -12.19210 | 70.02320 | -48.78750 |
|    |           |          |           |

| С | -14.48460 | 67.13390 | -47.86570 |
|---|-----------|----------|-----------|
| Н | -15.42070 | 67.69520 | -47.76070 |
| Η | -14.74610 | 66.11220 | -48.16630 |
| С | -11.85130 | 66.97320 | -48.89050 |
| Η | -11.97430 | 65.94270 | -49.24550 |
| Η | -11.05120 | 67.43590 | -49.47780 |
| С | -11.24710 | 68.31180 | -46.94690 |
| Η | -10.50120 | 68.80760 | -47.57610 |
| Η | -10.84220 | 68.21960 | -45.93260 |
| С | -12.53650 | 66.31990 | -46.64580 |
| Η | -12.14800 | 66.20550 | -45.62760 |
| Η | -12.75310 | 65.32280 | -47.04580 |
| С | -13.47190 | 68.44740 | -46.07990 |
| Η | -13.09420 | 68.35570 | -45.05530 |
| Η | -14.38930 | 69.04490 | -46.05940 |
| Ν | -11.48720 | 66.95140 | -47.46360 |
| Ν | -12.45730 | 69.14580 | -46.88260 |
| Ν | -13.78920 | 67.09140 | -46.56710 |
| С | -15.88920 | 67.22600 | -52.36410 |
| С | -15.00300 | 66.20500 | -51.91440 |
| С | -13.72300 | 66.40280 | -52.57280 |
| С | -13.88230 | 67.48640 | -53.52560 |
| С | -15.19180 | 68.01280 | -53.38160 |
| С | -17.32920 | 67.41890 | -51.98970 |
| Η | -17.54840 | 68.47720 | -51.81670 |
| Η | -17.99080 | 67.06170 | -52.79200 |
| Η | -17.58800 | 66.87250 | -51.07800 |
| С | -15.81260 | 69.15200 | -54.13250 |
| Η | -15.08340 | 69.66010 | -54.76840 |
| Η | -16.62840 | 68.79220 | -54.77420 |
| Η | -16.22670 | 69.89480 | -53.44190 |
| С | -12.77670 | 68.00130 | -54.39520 |
| Н | -13.13340 | 68.75620 | -55.10100 |
| Н | -12.00050 | 68.46080 | -53.76670 |
| Н | -12.32060 | 67.18690 | -54.97210 |
| C | -12.52020 | 65.50680 | -52.50010 |
| Н | -11.59530 | 66.08770 | -52.56850 |
| Н | -12.49100 | 64.93830 | -51.56540 |
| H | -12.52060 | 64.77980 | -53.32580 |
| C | -15.35130 | 65.05960 | -51.00800 |
| H | -14.48510 | 64.71280 | -50.43610 |
| H | -16.14280 | 65.32370 | -50.30080 |
| Н | -15.71030 | 64.20570 | -51.60040 |
| Н | -12.51710 | 70.11090 | -51.39100 |
|   |           |          |           |

## [Ir(η<sup>5</sup>-C<sub>5</sub>Me<sub>5</sub>)(PTA)ClOH]

| Ir | -14.08090 | 68.14830 | -51.39310 |
|----|-----------|----------|-----------|
| Cl | -15.28100 | 70.14720 | -50.59330 |
| 0  | -12.40550 | 69.36690 | -51.55750 |
| Р  | -13.37250 | 67.89360 | -49.22550 |
| С  | -12.47510 | 69.33050 | -48.42530 |

| Н | -13.12430 | 70.21090 | -48.46240 |
|---|-----------|----------|-----------|
| Н | -11.58140 | 69.55220 | -49.01540 |
| С | -14.62690 | 67.57690 | -47.86830 |
| Н | -15.36100 | 68.38990 | -47.88090 |
| Н | -15.16560 | 66.64250 | -48.06850 |
| С | -12.14770 | 66.54930 | -48.75450 |
| Η | -12.55970 | 65.56200 | -48.99730 |
| Η | -11.23360 | 66.67940 | -49.34580 |
| С | -11.19680 | 67.87880 | -46.94720 |
| Η | -10.33010 | 68.05880 | -47.59170 |
| Η | -10.84810 | 67.79350 | -45.91170 |
| С | -13.01280 | 66.39350 | -46.48130 |
| Н | -12.68020 | 66.29490 | -45.44200 |
| Н | -13.50650 | 65.46030 | -46.77520 |
| С | -13.29340 | 68.75280 | -46.20200 |
| Н | -12.96940 | 68.68380 | -45.15740 |
| Η | -13.99780 | 69.58560 | -46.29350 |
| Ν | -11.81770 | 66.59310 | -47.32030 |
| Ν | -12.10970 | 69.02700 | -47.03170 |
| Ν | -13.98560 | 67.49580 | -46.54510 |
| С | -15.81670 | 67.11120 | -52.32560 |
| С | -14.84500 | 66.13700 | -51.92840 |
| С | -13.60300 | 66.42010 | -52.64580 |
| С | -13.87700 | 67.50880 | -53.57330 |
| С | -15.21140 | 67.95530 | -53.36170 |
| С | -17.25430 | 67.19230 | -51.90250 |
| Η | -17.55400 | 68.23110 | -51.73420 |
| Η | -17.91080 | 66.76850 | -52.67590 |
| Η | -17.43320 | 66.64220 | -50.97410 |
| С | -15.92940 | 69.06690 | -54.06900 |
| Н | -15.24670 | 69.66200 | -54.68110 |
| Н | -16.71100 | 68.66350 | -54.72760 |
| Η | -16.40570 | 69.74400 | -53.35190 |
| С | -12.84700 | 68.11960 | -54.47370 |
| Η | -13.29780 | 68.80230 | -55.19910 |
| Η | -12.12900 | 68.68980 | -53.86630 |
| Η | -12.30390 | 67.34530 | -55.02840 |
| С | -12.36050 | 65.57610 | -52.66270 |
| Η | -11.46890 | 66.19320 | -52.80860 |
| Η | -12.23350 | 65.02460 | -51.72610 |
| Η | -12.39710 | 64.83850 | -53.47810 |
| С | -15.09290 | 64.94710 | -51.04600 |
| Η | -14.18580 | 64.63100 | -50.52220 |
| Η | -15.86500 | 65.14910 | -50.29790 |
| Η | -15.43250 | 64.09430 | -51.65090 |
| Η | -12.73420 | 70.27580 | -51.44630 |

#### [trans-RuCl<sub>2</sub>(dmso-S)(Im)H<sub>2</sub>OOH]

| C | -0.03960 | -3.37560 | 3.67080 |
|---|----------|----------|---------|
| С | 0.52480  | -2.22190 | 3.19790 |
| Ν | -0.20830 | -1.78020 | 2.11340 |

| С  | -1.19540 | -2.64150 | 1.92150  |
|----|----------|----------|----------|
| Ν  | -1.12630 | -3.62480 | 2.85080  |
| Ru | 0.22490  | -0.06380 | 0.96560  |
| S  | 0.61100  | 1.92530  | -0.22180 |
| С  | 2.33190  | 2.50930  | -0.15030 |
| 0  | 1.34170  | 0.48410  | 2.53900  |
| Cl | 1.96230  | -1.16130 | -0.19770 |
| 0  | -0.27880 | 3.05010  | 0.28210  |
| С  | 0.40870  | 1.77760  | -2.01660 |
| 0  | -1.22550 | 1.10740  | 2.15700  |
| Η  | -1.93680 | -2.57270 | 1.14010  |
| Н  | 1.38230  | -1.66350 | 3.53860  |
| Η  | -1.76240 | -4.40660 | 2.92030  |
| Η  | 0.22550  | -4.02610 | 4.49000  |
| Η  | 1.09990  | 1.01000  | -2.37430 |
| Η  | 0.60700  | 2.75590  | -2.46240 |
| Н  | -0.62050 | 1.45880  | -2.18570 |
| Н  | 2.98680  | 1.69860  | -0.47990 |
| Н  | 2.53860  | 2.77870  | 0.88780  |
| Η  | 2.42520  | 3.39470  | -0.78450 |
| Η  | -0.61070 | 1.27440  | 2.90170  |
| Н  | -1.27970 | 1.96190  | 1.66860  |
| Cl | -1.57910 | -0.55910 | -0.57820 |
| Η  | 2.11950  | 1.01290  | 2.30240  |

# $[Ru(\eta^{6}-C_{10}H_{14})(PTA)Cl]^{+}$

| С  | -2.80850 | -2.35170 | -29.76270 |
|----|----------|----------|-----------|
| С  | -2.71810 | -3.14820 | -28.60800 |
| С  | -1.44350 | -3.57210 | -28.11450 |
| С  | -0.23360 | -3.37180 | -28.85390 |
| С  | -0.31870 | -2.55680 | -30.00980 |
| С  | -1.56370 | -1.98440 | -30.39560 |
| Н  | -3.60110 | -3.34980 | -28.01260 |
| Н  | -1.39730 | -4.09770 | -27.16480 |
| Н  | 0.58140  | -2.29650 | -30.55750 |
| Н  | -1.58560 | -1.28460 | -31.22630 |
| Ru | -1.24190 | -1.39110 | -28.30840 |
| Cl | -2.52780 | 0.04760  | -27.00610 |
| Р  | 0.58440  | 0.01130  | -27.72960 |
| С  | 0.45000  | 1.84100  | -28.21690 |
| Н  | -0.48250 | 2.23970  | -27.80550 |
| Н  | 0.40380  | 1.91930  | -29.30860 |
| С  | 0.94670  | 0.27140  | -25.88580 |
| Н  | 0.03060  | 0.62030  | -25.39930 |
| Н  | 1.22800  | -0.68690 | -25.43560 |
| С  | 2.35940  | -0.27800 | -28.30440 |
| Н  | 2.70750  | -1.25560 | -27.95150 |
| Н  | 2.39830  | -0.28440 | -29.40030 |
| С  | 2.86950  | 2.10710  | -28.27450 |
| Η  | 2.80500  | 2.09580  | -29.36730 |
| Н  | 3.65770  | 2.80760  | -27.98280 |

| С | 3.28690  | 0.78850  | -26.31700 |
|---|----------|----------|-----------|
| Η | 4.07910  | 1.47770  | -26.00940 |
| Η | 3.53500  | -0.21050 | -25.94410 |
| С | 1.67780  | 2.56770  | -26.24200 |
| Η | 2.45540  | 3.27280  | -25.93360 |
| Η | 0.72340  | 2.89430  | -25.81850 |
| С | -4.11200 | -1.81410 | -30.32260 |
| Η | -3.90970 | -0.78600 | -30.65410 |
| С | -5.26530 | -1.76790 | -29.31170 |
| Ν | 3.24800  | 0.76690  | -27.79080 |
| Ν | 1.59540  | 2.58780  | -27.71340 |
| Ν | 2.02340  | 1.23820  | -25.70870 |
| С | 1.05970  | -3.98920 | -28.39600 |
| Η | 1.10730  | -5.02900 | -28.74560 |
| Η | 1.92880  | -3.46510 | -28.80270 |
| Η | 1.13440  | -4.00740 | -27.30420 |
| С | -4.49080 | -2.64410 | -31.57360 |
| Η | -5.38980 | -2.22160 | -32.03460 |
| Η | -3.69560 | -2.64470 | -32.32790 |
| Η | -4.70640 | -3.68460 | -31.30390 |
| Η | -6.12910 | -1.27590 | -29.77000 |
| Η | -5.58960 | -2.77320 | -29.01570 |
| Η | -4.99520 | -1.20420 | -28.41280 |

#### $[Os(\eta^{6}-C_{10}H_{14})(PTA)CI]^{+}$

| 1 × × (•1 | ~1014/(- |          |           |
|-----------|----------|----------|-----------|
| С         | -2.86550 | -2.35990 | -29.68520 |
| С         | -2.72230 | -3.14590 | -28.52890 |
| С         | -1.41700 | -3.53510 | -28.06490 |
| С         | -0.23590 | -3.33970 | -28.85870 |
| С         | -0.37090 | -2.52330 | -30.01050 |
| С         | -1.64080 | -1.95350 | -30.34380 |
| Н         | -3.58020 | -3.35270 | -27.89970 |
| Н         | -1.33170 | -4.05910 | -27.11760 |
| Н         | 0.50680  | -2.24480 | -30.58460 |
| Н         | -1.69860 | -1.25380 | -31.17210 |
| Os        | -1.25790 | -1.37470 | -28.28420 |
| Cl        | -2.57740 | 0.06740  | -27.02270 |
| Р         | 0.56710  | -0.00670 | -27.68090 |
| С         | 0.45890  | 1.82630  | -28.16230 |
| Н         | -0.47890 | 2.23320  | -27.77110 |
| Н         | 0.43830  | 1.90900  | -29.25440 |
| С         | 0.88430  | 0.24360  | -25.82720 |
| Н         | -0.03970 | 0.60030  | -25.36150 |
| Н         | 1.14440  | -0.71920 | -25.37410 |
| С         | 2.34770  | -0.31390 | -28.21390 |
| Н         | 2.67620  | -1.29600 | -27.85560 |
| Н         | 2.41230  | -0.31800 | -29.30860 |
| С         | 2.88080  | 2.06690  | -28.16240 |
| Н         | 2.84170  | 2.06040  | -29.25640 |
| Н         | 3.66930  | 2.75800  | -27.84960 |
| С         | 3.23850  | 0.73730  | -26.20050 |

| Η | 4.03030  | 1.41700  | -25.87190 |
|---|----------|----------|-----------|
| Η | 3.46720  | -0.26540 | -25.82530 |
| С | 1.64670  | 2.53330  | -26.15650 |
| Η | 2.42410  | 3.22900  | -25.82730 |
| Η | 0.68640  | 2.86890  | -25.75410 |
| С | -4.19650 | -1.84750 | -30.20500 |
| Н | -4.03050 | -0.80810 | -30.52130 |
| С | -5.32710 | -1.85290 | -29.16750 |
| Ν | 3.23340  | 0.72110  | -27.67500 |
| Ν | 1.59890  | 2.55950  | -27.62930 |
| Ν | 1.96560  | 1.19840  | -25.62020 |
| С | 1.07830  | -3.94540 | -28.44630 |
| Н | 1.11840  | -4.98650 | -28.79220 |
| Н | 1.92780  | -3.41780 | -28.88840 |
| Н | 1.19360  | -3.95640 | -27.35790 |
| С | -4.58280 | -2.66540 | -31.46070 |
| Η | -5.50280 | -2.25980 | -31.89450 |
| Η | -3.80540 | -2.63260 | -32.23250 |
| Н | -4.76480 | -3.71570 | -31.20430 |
| Η | -6.21700 | -1.38360 | -29.59890 |
| Η | -5.61130 | -2.87250 | -28.87920 |
| Η | -5.05660 | -1.29280 | -28.26650 |

# $[Rh(\eta^5-C_5Me_5)(PTA)Cl]^+$

| С  | -2.41670 | -3.21720 | -28.43090 |
|----|----------|----------|-----------|
| С  | -0.97640 | -3.40220 | -28.66160 |
| С  | -0.60730 | -2.69200 | -29.85730 |
| С  | -1.77330 | -1.97060 | -30.29190 |
| С  | -2.90400 | -2.34170 | -29.42760 |
| С  | -3.19960 | -3.86310 | -27.33190 |
| Н  | -4.10620 | -3.30130 | -27.09690 |
| Н  | -3.49830 | -4.87670 | -27.63390 |
| Н  | -2.61240 | -3.95190 | -26.41380 |
| С  | -4.31120 | -1.86630 | -29.60530 |
| Н  | -4.34860 | -0.83420 | -29.96600 |
| Н  | -4.82530 | -2.49500 | -30.34640 |
| Н  | -4.87580 | -1.91640 | -28.67180 |
| С  | -1.88430 | -1.11350 | -31.51130 |
| Н  | -2.57510 | -0.27940 | -31.35990 |
| Н  | -0.91640 | -0.71120 | -31.81990 |
| Н  | -2.27530 | -1.71330 | -32.34630 |
| С  | 0.70370  | -2.78500 | -30.57950 |
| Н  | 0.92580  | -1.87780 | -31.14710 |
| Η  | 1.53670  | -2.97370 | -29.89750 |
| Η  | 0.67180  | -3.61840 | -31.29480 |
| С  | -0.10040 | -4.31330 | -27.86410 |
| Η  | 0.95910  | -4.07600 | -27.98690 |
| Η  | -0.34310 | -4.27940 | -26.79820 |
| Η  | -0.24900 | -5.35020 | -28.19970 |
| Rh | -1.27270 | -1.26810 | -28.28110 |
| Cl | -2.35880 | -0.02000 | -26.63220 |

| Р | 0.56830  | 0.17730  | -27.94220 |
|---|----------|----------|-----------|
| С | 0.24730  | 2.02840  | -28.18400 |
| Η | -0.60920 | 2.31180  | -27.56470 |
| Н | -0.01260 | 2.21620  | -29.23170 |
| С | 1.26470  | 0.26740  | -26.18320 |
| Н | 0.44110  | 0.49410  | -25.49930 |
| Η | 1.67760  | -0.70940 | -25.90760 |
| С | 2.21240  | 0.07690  | -28.86700 |
| Η | 2.67280  | -0.90430 | -28.70340 |
| Η | 2.04140  | 0.18850  | -29.94400 |
| С | 2.59260  | 2.47770  | -28.65600 |
| Η | 2.32060  | 2.57440  | -29.71200 |
| Η | 3.38510  | 3.19950  | -28.43660 |
| С | 3.44740  | 0.99820  | -26.97530 |
| Η | 4.24640  | 1.70880  | -26.74320 |
| Η | 3.81540  | -0.01280 | -26.77290 |
| С | 1.79050  | 2.63610  | -26.39980 |
| Η | 2.57350  | 3.36150  | -26.15960 |
| Η | 0.91860  | 2.84450  | -25.77300 |
| Ν | 3.12710  | 1.12580  | -28.40900 |
| Ν | 1.42700  | 2.80450  | -27.81830 |
| Ν | 2.30310  | 1.28810  | -26.09550 |

# [Ir(η<sup>5</sup>-C<sub>5</sub>Me<sub>5</sub>)(PTA)Cl]<sup>+</sup>

| С  | -1.64810 | -3.27420 | -28.19990 |
|----|----------|----------|-----------|
| С  | -0.56710 | -3.13380 | -29.14700 |
| С  | -1.08030 | -2.37180 | -30.26070 |
| С  | -2.52290 | -2.16160 | -30.05740 |
| С  | -2.87010 | -2.71410 | -28.79870 |
| С  | -1.60230 | -4.02910 | -26.90910 |
| Η  | -2.26770 | -3.59160 | -26.15990 |
| Η  | -1.93060 | -5.06470 | -27.07840 |
| Н  | -0.59220 | -4.06540 | -26.49370 |
| С  | -4.22900 | -2.74570 | -28.17090 |
| Н  | -4.87090 | -1.95030 | -28.55570 |
| Н  | -4.71490 | -3.70690 | -28.38750 |
| Н  | -4.17590 | -2.63850 | -27.08410 |
| С  | -3.43960 | -1.48770 | -31.03020 |
| Н  | -4.31070 | -1.05650 | -30.53220 |
| Н  | -2.93280 | -0.68610 | -31.57410 |
| Н  | -3.79800 | -2.21720 | -31.76940 |
| С  | -0.33680 | -2.01650 | -31.50950 |
| Н  | -0.67470 | -1.06340 | -31.92530 |
| Н  | 0.74060  | -1.95460 | -31.33780 |
| Η  | -0.50920 | -2.78940 | -32.27210 |
| С  | 0.78250  | -3.78120 | -29.05850 |
| Η  | 1.54430  | -3.21760 | -29.60280 |
| Η  | 1.11570  | -3.89750 | -28.02410 |
| Η  | 0.73700  | -4.78450 | -29.50330 |
| Ir | -1.26900 | -1.13910 | -28.46840 |
| Cl | -2.45080 | 0.80220  | -27.93440 |

| Р        | 0.61380    | -0 12380   | -27 52880 |
|----------|------------|------------|-----------|
| Ċ        | 1 14420    | 1 53190    | -28 27770 |
| н        | 0 28320    | 2 20770    | -28 26790 |
| Н        | 1 44300    | 1 37630    | -29 32020 |
| C        | 0 46960    | 0 44510    | -25 72950 |
| н        | -0.41270   | 1 08660    | -25 63930 |
| Н        | 0 32190    | -0.42900   | -25 08590 |
| C        | 2 31410    | -0.92530   | -27 42200 |
| H        | 2 25240    | -1 85560   | -26 84570 |
| Н        | 2 67010    | -1 17970   | -28 42700 |
| C        | 3 44440    | 1 23400    | -27 54240 |
| Ĥ        | 3.70330    | 0.99660    | -28.57930 |
| Н        | 4.27720    | 1.78660    | -27.09720 |
| С        | 2.87730    | 0.32000    | -25.40030 |
| Н        | 3.70550    | 0.86490    | -24.93750 |
| Н        | 2.71150    | -0.60180   | -24.83350 |
| С        | 1.88970    | 2.38510    | -26.12160 |
| Н        | 2.70760    | 2.94970    | -25.66440 |
| Н        | 0.98590    | 3.00100    | -26.09810 |
| Ν        | 3.26880    | -0.01670   | -26.78160 |
| Ν        | 2.25350    | 2.09990    | -27.52120 |
| Ν        | 1.67250    | 1.16360    | -25.32610 |
| [tran    | s-RuCh(dms | a-S)(Im)OH | ŋ         |
| <i>с</i> | -0.97110   | -3 58780   | 3 20190   |
| C        | -1 15300   | -2 30120   | 2 77270   |
| N        | -0 10470   | -1 95910   | 1 93950   |
| C        | 0 70340    | -3 00540   | 1 86370   |
| Ň        | 0 20770    | -4 01670   | 2 61560   |
| Ru       | 0 19030    | -0 07360   | 1 05060   |
| S        | 0 33090    | 2 08160    | 0.09270   |
| Ĉ        | 1.95610    | 2.87080    | 0.26630   |
| Cl       | 1.79180    | 0.45130    | 2.64220   |
| Cl       | 1.62180    | -0.99440   | -0.67010  |
| 0        | -0.73250   | 3.03350    | 0.59220   |
| С        | 0.20040    | 2.01950    | -1.72090  |

| С | 0.20040  | 2.01950  | -1.72090 |
|---|----------|----------|----------|
| 0 | -1.56240 | 0.39150  | 1.72260  |
| Η | 1.61320  | -3.04920 | 1.28460  |
| Η | -1.93690 | -1.59060 | 2.98460  |
| Η | 0.63800  | -4.92360 | 2.73160  |
| Η | -1.55450 | -4.22110 | 3.85210  |
| Η | 0.98680  | 1.37120  | -2.11330 |
| Η | 0.27330  | 3.04250  | -2.10000 |
| Η | -0.78280 | 1.60190  | -1.95010 |
| Η | 2.71250  | 2.20450  | -0.15640 |
| Η | 2.12990  | 3.00370  | 1.33480  |
| Η | 1.91990  | 3.83340  | -0.25040 |
| Η | -1.74360 | 1.34750  | 1.61210  |

| [Ru(ŋ <sup>4</sup> | <sup>5</sup> -C <sub>10</sub> H <sub>14</sub> )(P | TA)ClCys] |
|--------------------|---|-----------|
|                    |   |           |

| С  | -2.81450 | -3.13990 | -28.39720 |
|----|----------|----------|-----------|
| С  | -1.61400 | -3.48650 | -27.69270 |
| С  | -0.33330 | -3.29840 | -28.26020 |
| С  | -0.27750 | -2.61630 | -29.52400 |
| С  | -1.45060 | -2.19050 | -30.17420 |
| Н  | -3.76680 | -3.30760 | -27.90930 |
| Η  | -1.69660 | -3.92060 | -26.70070 |
| Η  | 0.68670  | -2.40550 | -29.97550 |
| Η  | -1.37510 | -1.62110 | -31.09500 |
| Ru | -1.40450 | -1.26890 | -28.04880 |
| Cl | -2.51350 | 0.80690  | -28.79760 |
| Р  | 0.46140  | 0.03880  | -27.52090 |
| С  | 0.40150  | 1.92370  | -27.52150 |
| Н  | -0.29820 | 2.27650  | -26.75980 |
| Н  | 0.03630  | 2.26070  | -28.49620 |
| С  | 1.40980  | -0.20150 | -25.90930 |
| Н  | 0.75070  | 0.01060  | -25.06350 |
| Н  | 1.71780  | -1.25050 | -25.82320 |
| С  | 1.95250  | -0.13780 | -28.67180 |
| Н  | 2.28410  | -1.18270 | -28.69230 |
| Н  | 1.64800  | 0.13270  | -29.69060 |
| С  | 2.71440  | 2.13410  | -28.27320 |
| Н  | 2.32550  | 2.39660  | -29.26320 |
| Н  | 3.62580  | 2.71550  | -28.09260 |
| С  | 3.55580  | 0.35660  | -26.91140 |
| Н  | 4.47250  | 0.92560  | -26.72040 |
| Н  | 3.80090  | -0.71160 | -26.88070 |
| С  | 2.23500  | 2.09770  | -25.92860 |
| Н  | 3.13940  | 2.68080  | -25.72050 |
| Н  | 1.48040  | 2.33710  | -25.17550 |
| С  | -3.98120 | -2.05550 | -30.41960 |
| Н  | -3.79360 | -1.01770 | -30.72610 |
| С  | -5.28160 | -2.07100 | -29.60710 |
| Ν  | 3.08470  | 0.70440  | -28.26510 |
| Ν  | 1.72910  | 2.49200  | -27.25210 |
| Ν  | 2.59590  | 0.66540  | -25.84360 |
| С  | 0.90270  | -3.84430 | -27.59230 |
| Н  | 1.08530  | -4.87520 | -27.92580 |
| Н  | 1.79480  | -3.26040 | -27.83920 |
| Н  | 0.78910  | -3.86050 | -26.50410 |
| С  | -4.11890 | -2.91870 | -31.69400 |
| Н  | -4.95650 | -2.55810 | -32.30250 |
| Н  | -3.21600 | -2.88460 | -32.31440 |
| Н  | -4.31360 | -3.96810 | -31.43900 |
| Н  | -6.09380 | -1.64400 | -30.20610 |
| Н  | -5.58110 | -3.09070 | -29.33230 |
| Н  | -5.18880 | -1.47770 | -28.69230 |
| С  | -1.84010 | 4.52010  | -22.96170 |
| С  | -1.78390 | 3.49040  | -24.07900 |
| 0  | -0.77250 | 3.36310  | -24.78200 |
| Ν  | -2.89760 | 2.74150  | -24.25320 |

| С          | -3.03510                  | 1.68190              | -25.25160 |
|------------|---------------------------|----------------------|-----------|
| С          | -4.54070                  | 1.37840              | -25.32140 |
| 0          | -5.24870                  | 1.48930              | -24.31130 |
| С          | -2.19480                  | 0.45520              | -24.81240 |
| S          | -2.29700                  | -1.10670             | -25.77130 |
| Ν          | -5.01460                  | 1.02340              | -26.52990 |
| С          | -6.39920                  | 0.62680              | -26.71950 |
| Н          | -2.79530                  | 4.53310              | -22.42710 |
| Н          | -1.03430                  | 4.31440              | -22.24900 |
| Н          | -1.65610                  | 5.51170              | -23.38830 |
| Н          | -3.68880                  | 2.82300              | -23.62150 |
| Н          | -2.67410                  | 2.04500              | -26.21700 |
| Н          | -1.16230                  | 0.79810              | -24.71520 |
| Н          | -2.53350                  | 0.16030              | -23.81150 |
| Н          | -4 34560                  | 0 88240              | -27 28530 |
| Н          | -6 63070                  | 0.65780              | -27 78740 |
| Н          | -6 58660                  | -0 38550             | -26 33730 |
| Н          | -7.05680                  | 1 31870              | -26 18630 |
|            | 1.02000                   | 1.51070              | 20.10050  |
|            | n <sup>6</sup> -C10H14)(P | TA)CICvs]            |           |
| [03()<br>C | -2 76750                  | -2 48620             | -29 60670 |
| C          | -2 79200                  | -3 15840             | -28 37400 |
| C          | -1 56550                  | -3 49160             | -27 68990 |
| C          | -0 29460                  | -3 28820             | -28 29090 |
| C          | -0 27440                  | -2 58040             | -29 54620 |
| C          | -0.27440<br>-1.47700      | -2.38040<br>-2.14140 | -29.34020 |
| н          | -3 73020                  | -3 32630             | -27 86040 |
| н          | -1.62140                  | -3.93060             | -26.69880 |
| Н          | 0.67580                   | -2 33810             | -30 01050 |
| н          | -1.42830                  | -2.55810<br>-1.54170 | -31.06180 |
|            | -1.42050                  | -1.34170             | -28 06030 |
| C1         | 2 50820                   | -1.32090             | -28.00030 |
| D          | -2.30820                  | 0.78490              | -20.79000 |
| I<br>C     | 0.40710                   | 1 80200              | -27.52220 |
| ч          | -0.31/30                  | 2 2/800              | -26 78940 |
| и<br>П     | -0.31430                  | 2.24800              | -20.78940 |
| C II       | 1 30010                   | 0.21630              | -28.31980 |
| с<br>ц     | 0.71770                   | -0.21030             | -25.89550 |
| и<br>П     | 1 60040                   | -0.00030             | -25.00070 |
| $\Gamma$   | 1.09940                   | -1.20390             | -23.79840 |
| С<br>Ц     | 2 20050                   | -0.10040             | -28.04940 |
| п<br>u     | 2.30930                   | -1.20980             | -28.00430 |
| II<br>C    | 2 72220                   | 0.10030              | -29.07280 |
| С<br>U     | 2.72230                   | 2.10920              | -28.23390 |
| п<br>u     | 2.54810                   | 2.30430              | -29.23100 |
| пС         | 2.0203U                   | 2.09330              | -20.00300 |
|            | J.J400U<br>1 16000        | 0.34240              | -20.80900 |
| п<br>u     | 4.40080                   | 0.91490              | -20.00/10 |
| п          | J. 19030                  | -0.12490             | -20.02030 |
| U          | 2.20090                   | 2.00320              | -23.71/00 |

Η

Н

3.10580

1.44020

2.67300

2.32650

-25.69900

-25.17700

| ~     |  |           |           |
|-------|--|-----------|-----------|
| С     | -4.01820   | -2.05020  | -30.35030 |
| Н     | -3.85210   | -1.00300  | -30.63620 |
| С     | -5.30100   | -2.10590  | -29.51200 |
| Ν     | 3.09720  | 0.68120   | -28.23130 |
| Ν     | 1.71980  | 2.46910   | -27.25050 |
| Ν     | 2.57140  | 0.65470   | -25.81810 |
| С     | 0.95840  | -3.83430  | -27.65690 |
| Н     | 1.13740  | -4.85790  | -28.01390 |
| Н     | 1.84220  | -3.24190  | -27.91150 |
| Η     | 0.86660  | -3.87050  | -26.56720 |
| С     | -4.16810   | -2.88490  | -31.64180 |
| Η     | -5.02230   | -2.52220  | -32.22530 |
| Η     | -3.27760   | -2.82210  | -32.27780 |
| Η     | -4.34290   | -3.94300  | -31.40910 |
| Н     | -6.13110   | -1.67410  | -30.08250 |
| Η     | -5.58080   | -3.13710  | -29.26040 |
| Н     | -5.19840   | -1.53810  | -28.58220 |
| С     | -1.84900   | 4.49430   | -22.97930 |
| С     | -1.80490   | 3.46750   | -24.09960 |
| 0     | -0.79510   | 3.32930   | -24.80270 |
| Ν     | -2.92800   | 2.73330   | -24.27680 |
| С     | -3.07890   | 1.68310   | -25.28260 |
| С     | -4.58890   | 1.39940   | -25.35210 |
| 0     | -5.29930   | 1.53060   | -24.34640 |
| С     | -2.24700   | 0.44450   | -24.85660 |
| S     | -2.37850   | -1.11720  | -25.81650 |
| Ν     | -5.06300   | 1.04020   | -26.56040 |
| С     | -6.45150   | 0.65910   | -26.75460 |
| Н     | -2.80260   | 4.51370   | -22,44210 |
| Н     | -1.04290   | 4.27990   | -22.26970 |
| Н     | -1.65820   | 5.48550   | -23.40380 |
| Н     | -3.72020   | 2.82390   | -23.64750 |
| Н     | -2.71670   | 2.05070   | -26.24580 |
| Н     | -1.20990   | 0.77560   | -24.77330 |
| Н     | -2.57700   | 0.15250   | -23.85250 |
| Н     | -4.39130   | 0.87700   | -27.30770 |
| Н     | -6.68140   | 0.69910   | -27.82260 |
| Н     | -6.65080   | -0.35350  | -26.37920 |
| Н     | -7.10150   | 1.35520   | -26.21810 |
|       |  |           |           |
| [Rh(1 | n <sup>5</sup> -C <sub>5</sub> Me <sub>5</sub> )(P | TA)ClCvs] |           |
| Ċ     | -2.39720   | -3.27960  | -28.23430 |
| С     | -0.94480   | -3.34360  | -28.28520 |
| Ċ     | -0.52370   | -2.73860  | -29.53360 |
| Ċ     | -1.66690   | -2.15140  | -30.14310 |
| С     | -2.83210   | -2.49750  | -29.33140 |
| Ċ     | -3.24050   | -3.94670  | -27.19460 |
| H     | -4.30330   | -3.89450  | -27.44450 |
| Н     | -2.96500   | -5.00510  | -27.10300 |
| H     | -3.10780   | -3.47940  | -26.20850 |
| С     | -4.24010   | -2.13880  | -29.69340 |
|       |  |           |           |

| Н  | -4.32040 | -1.07070 | -29.92060 |
|----|----------|----------|-----------|
| Η  | -4.56400 | -2.69920 | -30.58170 |
| Η  | -4.93490 | -2.36310 | -28.88020 |
| С  | -1.73980 | -1.43750 | -31.45920 |
| Н  | -2.33760 | -0.52400 | -31.37420 |
| Н  | -0.74690 | -1.15600 | -31.82170 |
| Η  | -2.20530 | -2.07530 | -32.22450 |
| С  | 0.83600  | -2.88670 | -30.14860 |
| Η  | 1.08010  | -2.06610 | -30.82780 |
| Η  | 1.62450  | -2.95930 | -29.39460 |
| Η  | 0.86750  | -3.81670 | -30.73450 |
| С  | -0.10360 | -4.17280 | -27.36040 |
| Η  | 0.95360  | -3.89670 | -27.41730 |
| Η  | -0.42460 | -4.04650 | -26.32180 |
| Η  | -0.18130 | -5.24090 | -27.61150 |
| Rh | -1.38520 | -1.16510 | -28.08800 |
| Cl | -2.64720 | 0.87880  | -28.68020 |
| Р  | 0.49160  | 0.15360  | -27.69130 |
| С  | 0.29940  | 2.01980  | -27.49630 |
| Η  | -0.34250 | 2.24860  | -26.64200 |
| Η  | -0.18720 | 2.41310  | -28.39350 |
| С  | 1.61410  | -0.16350 | -26.21340 |
| Η  | 1.03030  | -0.08420 | -25.29230 |
| Η  | 2.00030  | -1.18910 | -26.26230 |
| С  | 1.85450  | 0.19940  | -28.99860 |
| Η  | 2.25430  | -0.80690 | -29.15280 |
| Η  | 1.42590  | 0.53700  | -29.95000 |
| С  | 2.49700  | 2.48020  | -28.44690 |
| Η  | 1.98710  | 2.80340  | -29.36100 |
| Η  | 3.38120  | 3.11130  | -28.30110 |
| С  | 3.59680  | 0.65400  | -27.36270 |
| Η  | 4.48750  | 1.27280  | -27.20700 |
| Η  | 3.91580  | -0.38980 | -27.46480 |
| С  | 2.27260  | 2.18640  | -26.08210 |
| Η  | 3.15140  | 2.81630  | -25.90390 |
| Η  | 1.58710  | 2.29400  | -25.23760 |
| Ν  | 2.96030  | 1.08950  | -28.61920 |
| Ν  | 1.60450  | 2.66330  | -27.30160 |
| Ν  | 2.73720  | 0.78490  | -26.17780 |
| С  | -1.86670 | 4.28810  | -22.72440 |
| С  | -1.78220 | 3.29730  | -23.87440 |
| 0  | -0.81170 | 3.28730  | -24.64250 |
| Ν  | -2.82870 | 2.44680  | -24.00420 |
| С  | -2.92240 | 1.40950  | -25.03000 |
| С  | -4.38490 | 0.93590  | -25.00900 |
| 0  | -5.01640 | 0.90530  | -23.94410 |
| С  | -1.92280 | 0.27340  | -24.69670 |
| S  | -1.92100 | -1.24650 | -25.72110 |
| Ν  | -4.91060 | 0.58820  | -26.19710 |
| С  | -6.25440 | 0.04640  | -26.30550 |
| Н  | -2.77230 | 4.17920  | -22.11910 |

| Η | -0.98890 | 4.16210  | -22.08190 |
|---|----------|----------|-----------|
| Н | -1.83150 | 5.30360  | -23.13310 |
| Η | -3.57520 | 2.42430  | -23.31610 |
| Η | -2.67350 | 1.84030  | -26.00310 |
| Η | -0.92810 | 0.72340  | -24.65140 |
| Η | -2.15760 | -0.09800 | -23.69120 |
| Η | -4.30770 | 0.60180  | -27.01830 |
| Η | -6.51930 | -0.01760 | -27.36380 |
| Η | -6.32130 | -0.95130 | -25.85300 |
| Η | -6.96840 | 0.69870  | -25.79340 |

# [Ir(η<sup>5</sup>-C<sub>5</sub>Me<sub>5</sub>)(PTA)ClCys]

| С  | -2.01150 | -3.39340 | -28.15220 |
|----|----------|----------|-----------|
| С  | -0.63980 | -3.25060 | -28.59050 |
| С  | -0.65730 | -2.51550 | -29.85480 |
| С  | -2.00630 | -2.13300 | -30.11470 |
| С  | -2.85290 | -2.65680 | -29.05150 |
| С  | -2.47890 | -4.22200 | -26.99550 |
| Η  | -3.36760 | -3.79480 | -26.52440 |
| Н  | -2.73170 | -5.23100 | -27.35080 |
| Η  | -1.71110 | -4.31530 | -26.22370 |
| С  | -4.34890 | -2.56180 | -29.00220 |
| Η  | -4.69700 | -1.62980 | -29.45720 |
| Η  | -4.81530 | -3.39620 | -29.54600 |
| Η  | -4.71360 | -2.58560 | -27.97120 |
| С  | -2.51180 | -1.39720 | -31.31780 |
| Η  | -3.16140 | -0.56700 | -31.02470 |
| Η  | -1.69410 | -0.98450 | -31.91450 |
| Η  | -3.08970 | -2.07770 | -31.95850 |
| С  | 0.48770  | -2.38700 | -30.81840 |
| Η  | 0.47180  | -1.43490 | -31.35620 |
| Η  | 1.45560  | -2.47770 | -30.32120 |
| Η  | 0.43310  | -3.18960 | -31.56850 |
| С  | 0.52890  | -4.00710 | -28.02560 |
| Η  | 1.47910  | -3.51770 | -28.25820 |
| Η  | 0.45800  | -4.09650 | -26.93810 |
| Η  | 0.57270  | -5.02330 | -28.44370 |
| Ir | -1.37820 | -1.20960 | -28.10190 |
| Cl | -2.56170 | 0.88660  | -28.68430 |
| Р  | 0.52200  | 0.00270  | -27.54310 |
| С  | 0.50040  | 1.88390  | -27.54610 |
| Η  | -0.22850 | 2.24980  | -26.81780 |
| Η  | 0.18400  | 2.23130  | -28.53500 |
| С  | 1.38970  | -0.26180 | -25.89300 |
| Η  | 0.70080  | -0.04270 | -25.07390 |
| Η  | 1.67100  | -1.31820 | -25.80260 |
| С  | 2.05490  | -0.22130 | -28.61770 |
| Η  | 2.35840  | -1.27480 | -28.60570 |
| Η  | 1.81130  | 0.04140  | -29.65350 |
| С  | 2.84810  | 2.03730  | -28.19500 |
| Η  | 2.50860  | 2.30340  | -29.20220 |

| Н | 3.76390  | 2.59890  | -27.97830 |
|---|----------|----------|-----------|
| С | 3.59030  | 0.24870  | -26.79180 |
| Η | 4.50870  | 0.80050  | -26.56190 |
| Η | 3.81220  | -0.82390 | -26.74660 |
| С | 2.26310  | 2.01980  | -25.87410 |
| Η | 3.16860  | 2.58390  | -25.62350 |
| Η | 1.47930  | 2.27490  | -25.15630 |
| Ν | 3.18570  | 0.60000  | -28.16500 |
| Ν | 1.82730  | 2.42510  | -27.21950 |
| Ν | 2.58870  | 0.58050  | -25.77070 |
| С | -1.95890 | 4.40190  | -22.97990 |
| С | -1.90310 | 3.36770  | -24.09270 |
| 0 | -0.92150 | 3.28500  | -24.84270 |
| Ν | -2.98570 | 2.56230  | -24.21040 |
| С | -3.11420 | 1.50920  | -25.21470 |
| С | -4.59880 | 1.11390  | -25.22300 |
| 0 | -5.27550 | 1.17950  | -24.18770 |
| С | -2.18280 | 0.32860  | -24.83460 |
| S | -2.21860 | -1.22190 | -25.81530 |
| Ν | -5.09030 | 0.71590  | -26.41190 |
| С | -6.44520 | 0.20960  | -26.54820 |
| Η | -2.87610 | 4.35340  | -22.38420 |
| Η | -1.09550 | 4.26210  | -22.32100 |
| Η | -1.87510 | 5.39960  | -23.42400 |
| Η | -3.75180 | 2.60740  | -23.54540 |
| Η | -2.81600 | 1.90350  | -26.18840 |
| Η | -1.17200 | 0.73640  | -24.77380 |
| Η | -2.45960 | -0.00770 | -23.82740 |
| Η | -4.44390 | 0.63760  | -27.19410 |
| Η | -6.68440 | 0.13190  | -27.61190 |
| Η | -6.55550 | -0.77700 | -26.07930 |
| Η | -7.15120 | 0.89360  | -26.06840 |
|   |          |          |           |

### [trans-RuCl2(dmso-S)(Im)OHCys]

| С  | -0.56860 | -3.50170 | 3.43400  |
|----|----------|----------|----------|
| С  | -0.68160 | -2.18360 | 3.08140  |
| Ν  | -0.04700 | -1.99600 | 1.86770  |
| С  | 0.45860  | -3.15970 | 1.50180  |
| Ν  | 0.17920  | -4.10170 | 2.43520  |
| Ru | 0.08330  | -0.15370 | 0.87280  |
| S  | 0.27510  | 2.00530  | -0.05260 |
| С  | 1.87090  | 2.76210  | 0.37960  |
| Cl | 1.25740  | 0.69310  | 2.92130  |
| Cl | 2.27970  | -0.77850 | -0.13750 |
| 0  | -0.81190 | 3.01190  | 0.27180  |
| С  | 0.46930  | 1.98470  | -1.86370 |
| 0  | -1.66400 | 0.28980  | 1.79600  |
| Н  | 1.02540  | -3.33210 | 0.60020  |
| Н  | -1.15080 | -1.34970 | 3.57920  |
| Н  | 0.21770  | -5.09450 | 2.25050  |
| Η  | -0.93270 | -4.05390 | 4.28700  |

| Η | 1.28970  | 1.30630  | -2.11170 |
|---|----------|----------|----------|
| Η | 0.65990  | 3.00970  | -2.19490 |
| Η | -0.46660 | 1.60890  | -2.28100 |
| Η | 2.66440  | 2.07160  | 0.08300  |
| Η | 1.87210  | 2.87580  | 1.46410  |
| Η | 1.93240  | 3.72630  | -0.13410 |
| С | -3.63930 | -6.63980 | -0.23780 |
| С | -2.81320 | -5.40490 | 0.11060  |
| 0 | -1.70100 | -5.52470 | 0.64250  |
| Ν | -3.38540 | -4.22270 | -0.19980 |
| С | -2.83570 | -2.88540 | 0.03600  |
| С | -4.05420 | -1.93940 | -0.02990 |
| 0 | -5.07120 | -2.28730 | -0.66310 |
| С | -1.75540 | -2.56280 | -1.03120 |
| S | -1.06800 | -0.85920 | -1.09860 |
| Ν | -3.94880 | -0.77920 | 0.62590  |
| С | -4.99940 | 0.21910  | 0.52890  |
| Η | -4.60250 | -6.40660 | -0.70390 |
| Η | -3.05800 | -7.27350 | -0.91640 |
| Η | -3.81700 | -7.21410 | 0.67810  |
| Η | -4.30820 | -4.18830 | -0.62770 |
| Η | -2.38530 | -2.84870 | 1.02980  |
| Η | -0.95160 | -3.29500 | -0.91470 |
| Η | -2.20340 | -2.72130 | -2.01980 |
| Η | -3.04450 | -0.46930 | 1.04260  |
| Η | -4.72270 | 1.06570  | 1.16220  |
| Η | -5.12530 | 0.56960  | -0.50360 |
| Η | -5.95780 | -0.19180 | 0.86630  |
| Η | -1.76280 | 1.25670  | 1.75400  |