Anexo 2

Adrian Leonardo Orjuela Rocha

November 30, 2023

$1 [Fe(phen)_3]^{3+}$ doublet

```
26 \, \hbox{--}0.000100000 \,\, 0.000100000 \,\, 0.000300000
```

- $6\ 3.005900000\ \hbox{-}1.530600000\ 2.728100000$
- $6\ 3.180700000\ \hbox{--}2.816700000\ 2.243500000$
- 6 2.424900000 -3.247200000 1.127000000
- 6 1.520600000 -2.315800000 0.565400000
- 6 2.082400000 -0.670700000 2.108500000
- 6 2.518700000 -4.556300000 0.539700000
- 6 0.731900000 -2.671900000 -0.564700000
- 6 0.833100000 -3.966100000 -1.126600000
- $6\ 1.753500000\ -4.901800000\ -0.539700000$
- 6 0.010500000 -4.248400000 -2.243300000
- $1\ 0.048400000\ \hbox{--}5.227700000\ \hbox{--}2.713500000$
- 6 -0.838900000 -3.267000000 -2.727700000
- 6 -0.873700000 -2.005800000 -2.107900000
- $1\ 3.211800000\ -5.272500000\ 0.971500000$
- $1\ 3.570100000\ \hbox{--}1.171500000\ 3.582800000$
- 1 3.890600000 -3.492400000 2.713400000
- $1\ 1.930700000\ 0.336600000\ 2.478700000$
- 1 1.832900000 -5.895300000 -0.971800000
- 1 -1.481200000 -3.452700000 -3.582600000
- 1 -1.529200000 -1.226000000 -2.478000000
- 7 -0.105300000 -1.707100000 -1.054200000
- $7\ 1.350000000\ \hbox{--}1.049800000\ 1.055000000$
- $6 \ \hbox{-}0.177400000 \ 3.369600000 \ 2.726800000$
- $6\ 0.849400000\ 4.163500000\ 2.242500000$
- $6\ 1.600300000\ 3.723800000\ 1.126200000$
- $6\ 1.245500000\ 2.474900000\ 0.564700000$
- $6 \, \hbox{--}0.460600000 \,\, 2.139900000 \,\, 2.107500000$
- $6\ 2.687600000\ 4.459000000\ 0.539100000$
- $6\ 1.948300000\ 1.969600000\ \text{-}0.565200000$
- $6\ 3.019000000\ 2.703800000\ -1.126900000$
- $6\ 3.369500000\ 3.968700000\ -0.539900000$
- $6\ 3.674700000\ 2.132200000\ -2.243400000$

```
1\ 4.504200000\ 2.654300000\ -2.713400000
6\ 3.249200000\ 0.905900000\ -2.727600000
6 2.174100000 0.245600000 -2.107900000
1\ 2.961600000\ 5.417300000\ 0.971000000
1 -0.770700000 3.679000000 3.581300000
1\ 1.079900000\ 5.116200000\ 2.712300000
1 - 1.257400000 \ 1.505200000 \ 2.477500000
1\ 4.190600000\ 4.533700000\ -0.971900000
1\ 3.731300000\ 0.442200000\ -3.582300000
1 1.826400000 -0.712000000 -2.477800000
7 1.531000000 0.762300000 -1.054600000
7\ 0.234100000\ 1.694700000\ 1.054300000
6 - 2.828800000 - 1.836700000 2.728800000
6 -4.030000000 -1.345400000 2.244000000
6 -4.025000000 -0.476100000 1.127000000
6 -2.766200000 -0.158800000 0.565300000
6 -1.622400000 -1.467000000 2.109100000
6 \ \hbox{-}5.205500000 \ 0.096900000 \ 0.539500000
6 - 2.680300000 \ 0.701900000 \ - 0.565200000
6 -3.851700000 1.261000000 -1.127300000
6 - 5.122300000 \ 0.931900000 \ - 0.540200000
6 -3.684900000 2.114200000 -2.244200000
1 - 4.552000000 \ 2.570900000 \ - 2.714500000
6 -2.410300000 2.359300000 -2.728500000
6 \ \hbox{-} 1.300600000 \ 1.759200000 \ \hbox{-} 2.108400000
1 -6.172400000 -0.145100000 0.971500000
1 -2.799800000 -2.504400000 3.583900000
1 -4.970100000 -1.622100000 2.714100000
1 -0.674100000 -1.839000000 2.479600000
1 - 6.022300000 \ 1.359700000 \ - 0.972400000
1 - 2.250000000 \ 3.008400000 \ - 3.583400000
1 -0.297500000 1.937000000 -2.478500000
7 -1.426100000 0.944300000 -1.054800000
```

$1 [Fe(phen)_3]^{2+}$ Singlet

```
26\ 0.000700000\ -0.000900000\ -0.000400000
6\ 3.177300000\ 1.086000000\ 2.778300000
6\ 4.238900000\ 0.350700000\ 2.282600000
6\ 4.039300000\ -0.467200000\ 1.146800000
6\ 2.743500000\ -0.479100000\ 0.577700000
6\ 1.921800000\ 1.004700000\ 2.148100000
6\ 5.065700000\ -1.277500000\ 0.549600000
6\ 2.474000000\ -1.280600000\ -0.575900000
```

7 -1.584500000 -0.643800000 1.055100000

```
\begin{array}{c} 6\ 3.498700000\ \hbox{--}2.074200000\ \hbox{--}1.144300000\\ 6\ 4.805800000\ \hbox{--}2.0500000000\ \hbox{--}0.546500000 \end{array}
```

6 3.163300000 -2.846500000 -2.280100000

1 3.914600000 -3.474000000 -2.752100000

6 1.873400000 -2.789900000 -2.776400000

 $6\ 0.922600000\ \hbox{-}1.965400000\ \hbox{-}2.146900000$

 $1\ 6.058700000\ -1.266100000\ 0.989900000$

 $1\ 3.293600000\ 1.725000000\ 3.647600000$

 $1\ 5.216500000\ 0.395800000\ 2.755100000$

 $1\ 1.077800000\ 1.569400000\ 2.528300000$

1 5.589900000 -2.659900000 -0.986200000

 $1\ 1.579900000\ -3.369300000\ -3.645700000$

1 -0.090900000 -1.904400000 -2.527400000

7 1.203600000 -1.221700000 -1.074300000

 $7\ 1.696100000\ 0.242500000\ 1.075400000$

 $6 \,\, \text{-}2.533600000 \,\, 2.206600000 \,\, 2.774300000$

 $6 \,\, \hbox{--}2.426700000 \,\, 3.4937000000 \,\, 2.2791000000$

 $6 \ \hbox{-} 1.616400000 \ 3.729900000 \ 1.144800000$

 $6 \ \hbox{-} 0.957400000 \ 2.613700000 \ 0.576600000$

 $6 \ \hbox{-} 1.834400000 \ 1.1600000000 \ 2.145200000$

6 -1.426600000 5.024000000 0.548400000

6 -0.126500000 2.781200000 -0.575500000

 $6\ 0.049800000\ 4.065600000\ \text{-}1.143100000$

6 -0.625600000 5.185400000 -0.546200000

 $6\ 0.888600000\ 4.161700000\ \text{-}2.277200000$

 $1\ 1.057500000\ 5.126200000\ -2.748400000$

6 1.485000000 3.016300000 -2.773000000

6 1.244700000 1.780400000 -2.144500000

1 -1.933700000 5.878400000 0.987900000

1 -3.146700000 1.987800000 3.642600000

1 -2.955200000 4.317800000 2.750800000

1 -1.902300000 0.146700000 2.525100000

1 -1.902300000 0.140700000 2.923100000

 $1 - 0.488400000 \ 6.169600000 \ - 0.985300000 \ 1 \ 2.135100000 \ 3.052000000 \ - 3.641100000$

1 1 60000000 0 05000000 0 5011100000

 $1\ 1.698900000\ 0.872200000\ \hbox{--}2.524900000$

 $7\ 0.458300000\ 1.651700000\ \text{-}1.073300000$

 $7 \ \hbox{-} 1.059700000 \ 1.345700000 \ 1.073900000$

 $6 \ \hbox{--}0.650500000 \ \hbox{--}3.298200000 \ 2.774100000$

6 -1.819500000 -3.847100000 2.278600000

 $6 \ \hbox{-} 2.427400000 \ \hbox{-} 3.263000000 \ 1.143600000$

6 -1.787700000 -2.135700000 0.575100000

 $6 \ \hbox{-}0.091100000 \ \hbox{-}2.170800000 \ 2.144800000$

 $6 \ \hbox{-}3.643500000 \ \hbox{-}3.743700000 \ 0.546600000$

 $6 \ \hbox{-} 2.346000000 \ \hbox{-} 1.499700000 \ \hbox{-} 0.577900000$

6 -3.546800000 -1.987500000 -1.146400000

- 6 4.046600000 1.309500000 2.281800000
- 1 4.966500000 1.644200000 2.753800000
- 6 -3.350200000 -0.222100000 -2.778000000
- $6 2.159900000 \ 0.186200000 \ 2.148500000$
- 1 -4.132000000 -4.608700000 0.986500000
- $1 0.155700000 3.720400000 \ 3.642800000$
- 1 2.270900000 4.715600000 2.750700000
- $1\ 0.821000000\ \hbox{--}1.724500000\ 2.525000000$
- 1 -5.102800000 -3.502400000 -0.988600000
- $1 3.704100000 \ 0.322700000 \ 3.647100000$
- $1 \ \hbox{-} 1.598400000 \ 1.032300000 \ \hbox{-} 2.528900000$
- 7 1.657600000 0.430200000 1.076000000
- 7 0.637800000 1.592200000 1.072900000
- $2 [Fe(bpy)_3]^{3+}$ Doublet

26 -0.000300000 -0.000100000 0.000100000

- $6 \, \hbox{-} 2.280100000 \, \hbox{-} 2.425100000 \, 2.729300000$
- $6 \, {\,\hbox{--}} 3.582500000 \, {\,\hbox{--}} 2.220700000 \, \, 2.270600000$
- 6 -3.790300000 -1.372900000 1.182200000
- 6 2.698100000 0.747100000 0.576100000
- 6 -1.232300000 -1.777700000 2.081200000
- 6 -2.794700000 0.164300000 -0.576300000
- 6 -3.993800000 0.547000000 -1.182500000
- 6 -3.968400000 1.419500000 -2.271000000
- $1 4.894500000 \ 1.723400000 \ 2.750500000$
- 6 -2.737800000 1.892400000 -2.729600000
- $6 \ \hbox{-} 1.577500000 \ 1.479200000 \ \hbox{-} 2.081400000$
- $1 2.071000000 3.074100000 \ 3.573600000$
- 1 -4.424300000 -2.712100000 2.750000000
- $1 \ \hbox{-} 0.209700000 \ \hbox{-} 1.911200000 \ 2.411100000$
- $1 \ \hbox{--} 2.669400000 \ 2.570800000 \ \hbox{--} 3.574000000$
- $1 \ \hbox{--}0.605700000 \ 1.824200000 \ \hbox{--}2.411300000$
- $7 1.596800000 \ 0.632400000 \ 1.031400000$
- $7 \, \! 1.428700000 \, \! 0.953500000 \, \, 1.031300000$
- $6\ 3.240700000\ \hbox{--}0.760100000\ 2.729100000$
- $6\ 3.715500000\ -1.989900000\ 2.270500000$
- $6\ 3.085100000\ -2.594300000\ 1.182300000$
- $6\ 1.996500000\ \hbox{--}1.962000000\ 0.576400000$
- $6\ 2.155500000\ -0.177000000\ 2.081300000$
- $6\ 1.255400000\ \hbox{--}2.502100000\ \hbox{--}0.575400000$
- $6\ 1.523900000\ -3.732100000\ -1.181200000$
- $6\ 0.755000000\ -4.147600000\ -2.268800000$
- 1 0.955200000 -5.101700000 -2.747900000
- 6 -0.271000000 -3.319400000 -2.726900000

```
6 - 0.493600000 - 2.107700000 - 2.079300000
1\ 3.698100000\ \hbox{--}0.254100000\ 3.573300000
1\ 4.562400000\ -2.472700000\ 2.749700000
1\ 1.759400000\ 0.775100000\ 2.411300000
1 -0.893300000 -3.600400000 -3.570500000
1 -1.279100000 -1.439400000 -2.409000000
7 0.250200000 -1.699700000 -1.030300000
7\ 1.540100000\ \hbox{--}0.759600000\ 1.031500000
6 - 0.961900000 \ 3.188700000 \ 2.726900000
6 - 0.132900000 \ 4.213900000 \ 2.268500000
6\ 0.706000000\ 3.969100000\ 1.180900000
6\; 0.701800000\; 2.710100000\; 0.575300000
6 \ \hbox{-} 0.925100000 \ 1.957200000 \ 2.079400000
6\ 1.540100000\ 2.337400000\ -0.576400000
6 2.471800000 3.184000000 -1.182200000
6\ 3.215200000\ 2.725300000\ -2.270100000
1 3.941900000 3.375000000 -2.749400000
6\ 3.009300000\ 1.423000000\ -2.728500000
6\ 2.070700000\ 0.625200000\ -2.080700000
1 - 1.629200000 \ 3.332700000 \ 3.570600000
1 - 0.137600000 5.188800000 2.747500000
1 -1.552600000 1.138800000 2.409200000
1\ 3.563000000\ 1.024200000\ -3.572500000
1 1.883500000 -0.389000000 -2.410500000
7\ 1.346400000\ 1.065800000\ \text{-}1.031200000
7 - 0.112400000 \ 1.714400000 \ 1.030300000
1 - 4.942200000 \ 0.173300000 - 0.813500000
1 -4.795900000 -1.206400000 0.813100000
1\ 3.444100000\ -3.548300000\ 0.813300000
1\ 2.322500000\ -4.365700000\ -0.812500000
1\ 2.622300000\ 4.192200000\ -0.813500000
1\ 1.353600000\ 4.756300000\ 0.812000000
```

$2 [Fe(bpy)_3]^{2+}$ Singlet

```
26\ 0.000400000\ 0.000300000\ 0.000200000 6\ 1.689200000\ 2.863900000\ 2.762900000 6\ 2.994200000\ 2.987400000\ 2.286200000 6\ 3.379000000\ 2.227300000\ 1.183700000 6\ 2.456400000\ 1.364000000\ 0.583200000 6\ 0.821800000\ 1.987800000\ 2.115900000 6\ 2.761800000\ 0.514400000\ -0.584700000 6\ 4.022800000\ 0.436800000\ -1.185600000 6\ 4.209900000\ -0.393600000\ -2.288600000
```

 $1\ 5.183600000\ -0.463500000\ -2.763900000$

```
6\ 3.125100000\ \hbox{--}1.129200000\ \hbox{--}2.765500000
```

- $1\ 1.341400000\ 3.433200000\ 3.618800000$
- $1\ 3.700200000\ 3.661800000\ 2.761200000$
- 1 -0.198200000 1.864700000 2.459400000
- $1\ 3.219300000\ -1.789000000\ -3.621900000$
- 1 1.033900000 -1.561700000 -2.461600000
- $7\ 1.706200000\ \hbox{--}0.206900000\ \hbox{--}1.051900000$
- $7\ 1.183300000\ 1.247900000\ 1.050400000$
- $6 \ \hbox{-} 3.321700000 \ 0.027700000 \ 2.765800000$
- 6 -4.083000000 1.094700000 2.289200000
- $6 \ \hbox{-} 3.618900000 \ 1.808500000 \ 1.186300000$
- $6 2.409600000 \ 1.443000000 \ 0.585300000$
- 6 2.129100000 0.283900000 2.118100000
- 6 -1.827700000 2.133700000 -0.582400000
- $6 2.392400000 \ 3.264300000 \ 1.182400000$
- 6 -1.767200000 3.843600000 -2.284600000
- $1 2.194500000 \ 4.721600000 \ 2.759200000$
- 6 -0.586500000 3.274200000 -2.761400000
- 0 -0.360300000 3.214200000 -2.101400000
- 6 -0.077900000 2.150900000 -2.114800000
- $1 \ \hbox{--}3.639300000 \ \hbox{--}0.558300000 \ 3.622200000$
- $1 \ \hbox{-} 5.020200000 \ 1.367600000 \ 2.764600000$
- $1 \ \hbox{-} 1.510900000 \ \hbox{-} 1.104600000 \ 2.461400000$
- $1 \ \hbox{--}0.062400000 \ 3.687400000 \ \hbox{--}3.617000000$
- $1\ 0.835700000\ 1.681000000\ \text{--}2.458600000$
- 7 -0.674200000 1.582400000 -1.049700000
- $7 \ \hbox{-} 1.670900000 \ 0.399500000 \ 1.052100000$
- $6\ 1.640200000\ \hbox{--}2.895400000\ 2.759400000$
- $6\ 1.094000000\ \hbox{-}4.087000000\ 2.282800000$
- $6\ 0.241400000\ \hbox{-}4.039700000\ 1.181800000$
- $6 \ \hbox{--}0.046200000 \ \hbox{--}2.808600000 \ 0.582700000$
- 6 1.314000000 -1.705800000 2.113600000
- $6 \ \hbox{-} 0.936700000 \ \hbox{-} 2.647800000 \ \hbox{-} 0.583600000$
- $6 \ \hbox{-} 1.636000000 \ \hbox{-} 3.700700000 \ \hbox{-} 1.183300000$
- $6 \ \hbox{-} 2.450300000 \ \hbox{-} 3.447200000 \ \hbox{-} 2.285100000$
- 1 2.998900000 4.255200000 2.759500000
- $6 \, \hbox{--} 2.544800000 \, \hbox{--} 2.139900000 \, \hbox{--} 2.762100000$
- $6 \ \hbox{-} 1.824000000 \ \hbox{-} 1.139200000 \ \hbox{-} 2.115500000$
- $1\ 2.308500000\ -2.879300000\ 3.614200000$
- $1\ 1.326100000\ -5.036000000\ 2.756700000$
- $1\ 1.718000000\ -0.761100000\ 2.457100000$
- 1 -3.164200000 -1.891300000 -3.617600000
- 1 -1.871800000 -0.113000000 -2.459200000
- 7 -1.033700000 -1.373000000 -1.050600000
- 7 0.490800000 -1.648300000 1.049500000
- $1\ 4.854600000\ 1.013700000\ -0.798400000$

 $^{6\ 1.898600000\ \}hbox{--}1.006900000\ \hbox{--}2.117900000$

- $1\ 4.387800000\ 2.312100000\ 0.796800000$
- $1 \ \hbox{-} 4.198200000 \ 2.638900000 \ 0.799500000$
- 1 -3.308800000 3.694400000 -0.795300000
- 1 -1.552300000 -4.709600000 -0.796200000
- 1 0.1900000000 4.9556000000 0.7950000000
- $3 \left[Fe(Pyr_2Py)_2 \right]^{3+}$ Doublet
- $26 \, -0.001800000 \, -0.011100000 \, -0.012400000$
- 7 0.455500000 1.381100000 1.380500000
- 7 -1.924000000 0.061500000 0.048800000
- $7 0.246100000 \ 1.397900000 \ 1.383500000$
- $7\ 0.362600000\ 1.337700000\ -1.432600000$
- $7\ 1.924400000\ \hbox{--}0.051000000\ \hbox{--}0.036200000$
- 7 0.338500000 -1.430700000 1.344300000
- $6\ 0.351100000\ -2.234600000\ -2.289900000$
- 6 -0.663500000 -3.233700000 -2.896200000
- 6 -2.047900000 -2.582000000 -2.639700000
- 6 -1.729500000 -1.569700000 -1.581400000
- 6 -2.632500000 -0.744900000 -0.762700000
- 6 -4.032500000 -0.715000000 -0.740100000
- 6 -4.662300000 0.169200000 0.144400000
- 6 -3.901500000 1.000100000 0.981700000
- 6 -2.508100000 0.919700000 0.906600000
- 6 -1.489500000 1.673700000 1.662100000
- 6 -1.670600000 2.703400000 2.735200000
- 6 -0.232600000 3.259700000 2.902900000
- $6\ 0.671200000\ 2.193800000\ 2.238600000$
- $6 0.494300000 \ 2.152700000 2.332100000$
- $6\ 0.471800000\ 3.176400000\ -2.974800000$
- $6\ 1.881200000\ 2.568100000\ -2.752200000$
- 6 1.624400000 1.561600000 -1.672400000
- $6\ 2.579300000\ 0.769000000\ -0.879000000$
- $6\ 3.978200000\ 0.770900000\ -0.916700000$
- $6\ 4.667100000\ \hbox{--}0.098000000\ \hbox{--}0.059500000$
- $6\ 3.963200000\ \hbox{--}0.946500000\ 0.806400000$
- $6\ 2.564900000\ \hbox{--}0.896800000\ 0.792100000$
- $6\ 1.596600000\ \hbox{-}1.681300000\ 1.577600000$
- $6\ 1.836200000\ -2.766000000\ 2.583100000$
- $6\ 0.420200000\ \hbox{--}2.978400000\ 3.179400000$
- 6 -0.531800000 -2.327600000 2.147800000
- $1\ 1.156000000\ \hbox{--}2.715100000\ \hbox{--}1.726900000$
- $1\ 0.812900000\ -1.584000000\ -3.043100000$
- 1 -0.599700000 -4.198200000 -2.384800000
- 1 -0.478200000 -3.411200000 -3.957200000
- 1 2.449800000 2.070800000 3.527200000

1 - 2.814400000 - 3.296200000 - 2.3191000001 - 4.615900000 - 1.359600000 - 1.390600000 $1 - 5.747000000 \ 0.213000000 \ 0.183300000$ 1 -4.386300000 1.686900000 1.668900000 1 -2.049300000 2.217200000 3.646900000 $1 - 2.407200000 \ 3.467500000 \ 2.462700000$ $1\ 0.029600000\ 3.423700000\ 3.949700000$ $1 - 0.135900000 \ 4.217700000 \ 2.384500000$ $1\ 1.470000000\ 2.619200000\ 1.625000000$ $1\ 1.132700000\ 1.512600000\ 2.964300000$ 1 -1.300000000 2.614200000 -1.754900000 $1 - 0.952000000 \ 1.478000000 \ - 3.066300000$ $1\ 0.393600000\ 4.142500000\ -2.468500000$ $1\ 0.251700000\ 3.339400000\ -4.031400000$ 1 2.270600000 2.055900000 -3.644800000 1 2.636900000 3.307600000 -2.464600000 1 4.518100000 1.425700000 -1.594200000 $1\ 5.753200000\ -0.117200000\ -0.069100000$ $1\ 4.491600000\ -1.626200000\ 1.468100000$ $1\ 2.588700000\ -2.487300000\ 3.329200000$ 1 2.221700000 -3.660300000 2.070900000 1 0.337800000 -2.472200000 4.145200000 $1\ 0.190700000\ -4.033400000\ 3.339700000$ 1 -0.985600000 -3.057300000 1.465600000 1 - 1.339700000 - 1.748200000 2.602700000

$3 [Fe(Pyr_2Py)_2]^{2+}$ Singlet

26 0.000000000 -0.006000000 -0.006200000 7 -0.371900000 -1.409000000 -1.397900000 7 -1.922100000 -0.011400000 -0.012300000 7 -0.387600000 1.394700000 1.381900000 7 0.380900000 1.392700000 -1.399000000 7 1.922100000 -0.004200000 -0.002800000 $7\ 0.378600000\ \hbox{-}1.395200000\ 1.396700000$ $6\ 0.474100000\ -2.238400000\ -2.281900000$ 6 - 0.484800000 - 3.273000000 - 2.9178000006 -1.894300000 -2.664100000 -2.703300000 6 -1.627400000 -1.640800000 -1.634300000 6 - 2.578800000 - 0.846700000 - 0.8457000006 -3.976200000 -0.875100000 -0.875200000 $6 \ \hbox{-} 4.679500000 \ \hbox{-} 0.019200000 \ \hbox{-} 0.020000000$ $6 - 3.985900000 \ 0.840700000 \ 0.839200000$ $6 \ \hbox{-} 2.588100000 \ 0.820200000 \ 0.817600000$ 6 -1.645400000 1.619800000 1.611300000 $6 \ \hbox{-} 1.923200000 \ 2.642000000 \ 2.678700000$

```
6 \ \hbox{--}0.518100000 \ 3.258800000 \ 2.899600000
```

- 6 -0.459900000 2.225700000 -2.284200000
- $6\ 0.503700000\ 3.259700000\ -2.914100000$
- 6 1.911000000 2.647000000 -2.695700000
- $6\ 1.637700000\ 1.622600000\ \text{-}1.629300000$
- $6\ 2.584200000\ 0.826400000\ -0.836800000$
- 6 3.981800000 0.846000000 -0.866100000
- $6\ 4.679500000\ \hbox{--}0.013800000\ \hbox{--}0.010100000$
- 6 3.980400000 -0.867800000 0.850500000
- 0 0.500400000 -0.001000000 0.050500000
- $6\ 2.582800000\ \hbox{--}0.837400000\ 0.829600000$
- $6\ 1.635100000\ \hbox{--}1.628300000\ 1.626000000$
- $6\ 1.906600000\ \hbox{--}2.697500000\ 2.647900000$
- $6\ 0.498700000\ \hbox{-}2.916000000\ 3.259100000$
- $6 \ \hbox{-}0.463500000 \ \hbox{-}2.283000000 \ 2.225800000$
- $1\ 1.281500000\ \hbox{--}2.691300000\ \hbox{--}1.698800000$
- 1 0.939100000 -1.576600000 -3.024200000
- $1 \ \hbox{--}0.406200000 \ \hbox{--}4.232200000 \ \hbox{--}2.397300000$
- $1 \ \hbox{--}0.262000000 \ \hbox{--}3.452100000 \ \hbox{--}3.971700000$
- 1 -2.283300000 -2.169700000 -3.604800000
- 1 -2.644100000 -3.403300000 -2.401400000
- 1 -4.502700000 -1.546300000 -1.546200000
- 1 5.765100000 0.022200000 0.023000000
- 1 -4.519900000 1.508900000 1.507300000
- 1 -2.313400000 2.145700000 3.578500000
- $1 2.675600000 \ 3.376900000 \ 2.373100000$
- 1 -0.301500000 3.439900000 3.954400000
- 1 -0.442200000 4.217900000 2.378400000
- $1\ 1.257000000\ 2.685700000\ 1.689500000$
- $1\ 0.914200000\ 1.569600000\ 3.014100000$
- $1 1.268100000 \ 2.679100000 \ 1.702500000$
- 1 -0.923800000 1.566800000 -3.029700000
- $1\ 0.425400000\ 4.217700000\ -2.391400000$
- $1\ 0.285300000\ 3.441800000\ -3.968400000$
- $1\ 2.302000000\ 2.153300000\ -3.596700000$
- 1 2 661 400000 2 20 4000000 2 200000000
- $1\ 2.661400000\ 3.384000000\ -2.389800000$
- $1\ 4.512600000\ 1.512900000\ \text{-}1.538000000$
- $1\ 5.765100000\ \hbox{--}0.018200000\ \hbox{--}0.013700000$
- $1\ 4.510000000\ -1.538900000\ 1.519100000$
- $1\ 2.657000000\ -2.394500000\ 3.386000000$
- $1\ 2.296600000\ -3.597700000\ 2.152000000$
- $1\ 0.420200000\ \hbox{-}2.395400000\ 4.218300000$
- $1\ 0.279100000\ -3.970500000\ 3.438700000$
- 1 0.925500000 3.026300000 1.563100000
- 1 -1.272900000 -1.703600000 2.679700000

 $^{6\ 0.449600000\ 2.228900000\ 2.269300000}$

$4 [Fe(Pypep)_2]^{1+}$ Doublet

26 0.177000000 -0.000100000 0.000100000 6 -1.709200000 1.941300000 -0.809600000 7 -1.295600000 1.326100000 0.319500000 $6 \ \hbox{-} 1.914000000 \ 1.599400000 \ 1.481600000$ $6 - 2.975300000 \ 2.499500000 \ 1.554000000$ $6 \ \hbox{-} 3.414100000 \ 3.129000000 \ 0.387000000$ 6 -2.768700000 2.844500000 -0.816200000 $7\ 0.102100000\ 0.764400000\ -1.793100000$ 6 -0.933600000 1.602500000 -2.052800000 8 -1.234100000 2.102600000 -3.143000000 $7\ 1.574300000\ -1.319300000\ -0.576700000$ $6\ 1.813700000\ -2.518900000\ -0.057800000$ 7 2.769400000 -3.147100000 -0.774400000 6 3.158300000 -2.314900000 -1.805600000 6 2.408700000 -1.173000000 -1.677700000 $6\ 2.384400000\ 0.058200000\ -2.524700000$ $6\ 0.964900000\ 0.465100000\ -2.938600000$ 1 -1.547600000 1.080500000 2.359300000 $1 - 3.444900000 \ 2.693300000 \ 2.513000000$ 1 -4.243600000 3.829700000 0.416400000 $1 - 3.053100000 \ 3.298100000 \ - 1.759900000$ 1 3.131600000 -4.073000000 -0.585300000 $1\ 3.913100000\ -2.598600000\ -2.523200000$ $1\ 1.328600000\ -2.941800000\ 0.807900000$ $1\ 0.521400000\ -0.339900000\ -3.546400000$ 1 1.009800000 1.344700000 -3.590100000 1 2.975600000 -0.120000000 -3.429600000 $1\ 2.866300000\ 0.888100000\ -1.992700000$ 7 -1.296000000 -1.325700000 -0.319800000 7 0.101300000 -0.764600000 1.793100000 $7\ 1.574900000\ 1.318600000\ 0.576800000$ $6 \ \hbox{-} 1.710300000 \ \hbox{-} 1.940700000 \ 0.809200000$ $6 \, \hbox{-} 2.770000000 \, \hbox{-} 2.843600000 \, 0.815400000$ 6 -3.414800000 -3.128200000 -0.388000000 6 - 2.975400000 - 2.498900000 - 1.5549000006 -1.914000000 -1.599000000 -1.482100000 1 -3.055000000 -3.297000000 1.759000000 1 - 4.244500000 - 3.828700000 - 0.4177000001 -3.444600000 -2.692800000 -2.514100000 1 - 1.547000000 - 1.080300000 - 2.3597000006 -0.935100000 -1.601800000 2.052700000 8 -1.236400000 -2.101300000 3.142900000 6 0.963600000 -0.465200000 2.938900000 $6\ 2.383500000\ \hbox{--}0.058900000\ 2.525400000$

- $6\ 2.408500000\ 1.172200000\ 1.678400000$
- $6\ 3.158300000\ 2.314000000\ 1.806500000$
- $7\ 2.770300000\ 3.146100000\ 0.775000000$
- $6\ 1.814800000\ 2.518000000\ 0.058000000$
- $1\ 3.912800000\ 2.597500000\ 2.524600000$
- $1\ 1.330200000\ 2.941100000\ \text{-}0.807900000$
- $1\ 3.132800000\ 4.071900000\ 0.586100000$
- $1\ 0.520100000\ 0.340300000\ 3.546100000$
- 1 1.007900000 -1.344600000 3.590800000
- $1\ 2.974400000\ 0.119100000\ 3.430500000$
- 1 2.865200000 -0.889000000 1.993600000

$4 [Fe(Pypep)_2]$ Quintet

- 26 -0.005800000 -0.138700000 0.005100000
- $6\ 2.230200000\ 1.611900000\ -1.037800000$
- $7\ 1.488800000\ 1.525700000\ 0.082700000$
- $6\ 1.679300000\ 2.421900000\ 1.061600000$
- $6\ 2.617800000\ 3.448800000\ 0.967000000$
- $6\ 3.391900000\ 3.539900000\ -0.193300000$
- $6\ 3.199900000\ 2.604300000\ -1.208700000$
- 7 0.912200000 -0.201800000 -1.902600000
- $6\ 1.995300000\ 0.566300000\ -2.112600000$
- 8 2.811700000 0.502600000 -3.058200000
- 7 -1.402600000 -1.753700000 -0.731900000
- 6 -2.226100000 -2.494600000 -0.014100000
- 7 -2.892900000 -3.375700000 -0.804700000
- 6 -2.464900000 -3.177700000 -2.105000000
- 6 -1.541700000 -2.159800000 -2.049700000
- 6 0.797600000 1.504600000 3.176100000
- $6\ 0.692700000\ \hbox{--}1.234600000\ \hbox{--}2.912500000$
- $1\ 1.052500000\ 2.303300000\ 1.942100000$
- $1\ 2.735100000\ 4.154300000\ 1.784400000$
- $1\ 4.133800000\ 4.327300000\ -0.301600000$
- $1\ 3.773500000\ 2.611500000\ -2.129200000$
- 1 3.578800000 4.050400000 0.496000000
- 1 2.848800000 3.758200000 2.930800000
- 1 2.371600000 2.417300000 1.053600000
- 1 1.168800000 -0.935000000 -3.853800000
- $1\ 1.175200000\ -2.179600000\ -2.607000000$
- 1 -1.280500000 -0.549700000 -3.428800000
- $1 \ \hbox{--}0.887700000 \ \hbox{--}2.142300000 \ \hbox{--}4.065100000$
- 7 -1.659900000 1.332700000 -0.250900000
- $7 \, 0.772300000 \,\, 0.066200000 \,\, 1.966400000$ 7 1.483900000 -1.602900000 0.856800000
- $6 2.315800000 \ 1.577300000 \ 0.899600000$

 $6 \ \hbox{-} 3.413000000 \ 2.442200000 \ 0.954100000$ $6 - 3.838500000 \ 3.067800000 \ - 0.216600000$ 6 -3.148700000 2.818300000 -1.406300000 6 -2.064000000 1.943000000 -1.374100000 1 -3.892900000 2.602600000 1.913300000 $1 - 4.689100000 \ 3.744700000 \ - 0.202700000$ 1 -3.437800000 3.291800000 -2.340100000 $1 - 1.486900000 \ 1.720400000 \ - 2.268300000$ $6 - 1.801200000 \ 0.911000000 \ 2.164600000$ 8 -2.351200000 1.212200000 3.245300000 6 -0.216700000 -0.508600000 3.191100000 $6\ 0.255600000\ \hbox{-}1.964900000\ 3.028800000$ $6\ 1.438500000\ \hbox{--}2.152300000\ 2.127400000$ $6\ 2.603800000\ \hbox{--}2.846500000\ 2.353600000$ 7 3.354300000 -2.714900000 1.198600000 $6\ 2.640900000\ -1.955700000\ 0.326400000$ $1\ 2.956500000\ \hbox{--}3.405400000\ 3.207700000$ $1\ 2.994000000\ -1.681300000\ -0.657700000$ $1\ 4.273600000\ -3.100600000\ 1.033700000$ $1\ 0.636700000\ 0.097900000\ 3.539600000$ 1 -0.968800000 -0.470400000 3.988100000 $1\ 0.509800000\ -2.359500000\ 4.021100000$ 1 - 0.586800000 - 2.568600000 2.662100000

$5 [Fe(Prpep)_2]^{1+}$ Doublet

26 0.175500000 -0.084500000 0.000600000 $6 \, \hbox{--} 2.165400000 \, \hbox{--} 1.422100000 \, 0.855100000$ 7 - 1.600300000 - 0.974900000 - 0.2873000006 -2.302600000 -1.106000000 -1.427700000 7 -3.516200000 -1.638600000 -1.517300000 6 -4.081800000 -2.069300000 -0.379700000 6 - 3.433900000 - 1.987000000 0.853100000 $7 - 0.122900000 - 0.708300000 \ 1.813700000$ 6 - 1.304300000 - 1.321800000 2.0864000008 -1.675100000 -1.826100000 3.149800000 $7\ 1.829900000\ 0.936000000\ 0.578800000$ $6\ 2.639100000\ 1.634300000\ \text{-}0.213000000$ $7\ 3.584100000\ 2.257000000\ 0.520200000$ $6\ 3.370600000\ 1.956000000\ 1.848300000$ $6\ 2.267400000\ 1.141100000\ 1.886100000$ $6\ 1.558200000\ 0.601000000\ 3.091000000$ 6 0.899800000 -0.759100000 2.858300000 1 -1.836300000 -0.748500000 -2.338400000 1 - 5.078300000 - 2.494900000 - 0.4687000001 - 3.867900000 - 2.344200000 1.780700000 $1\ 4.322600000\ 2.842600000\ 0.151100000$ $1\ 3.995900000\ 2.345200000\ 2.637500000$ 1 2.553900000 1.721500000 -1.283100000 $1\ 0.436200000\ \hbox{-}1.105700000\ 3.786300000$ 1 1.676200000 -1.489200000 2.582400000 $1\ 0.794200000\ 1.316900000\ 3.424100000$ $1\ 2.275700000\ 0.513800000\ 3.914900000$ 7 -0.880700000 1.614800000 0.161800000 7 0.346500000 0.521000000 -1.855300000 $7\ 1.183500000\ -1.777100000\ -0.414800000$ $6 - 1.000500000 \ 2.280700000 \ - 1.006500000$ $6 - 1.712800000 \ 3.471100000 \ - 1.079500000$ $6 - 2.280300000 \ 3.937800000 \ 0.105900000$ 7 -2.158600000 3.278200000 1.268300000 6 -1.469300000 2.143200000 1.249700000 $1 - 1.804600000 \ 3.986900000 \ - 2.029200000$ $1 - 2.850100000 \ 4.863300000 \ 0.135300000$ $1 - 1.368700000 \ 1.5921000000 \ 2.1779000000$ 6 -0.332500000 1.645900000 -2.196600000 8 -0.425200000 2.164600000 -3.313200000 $6\ 1.012500000\ \hbox{--}0.161300000\ \hbox{--}2.970400000$ 6 2.258400000 -0.948500000 -2.549900000 $6\ 1.975400000\ -2.007900000\ -1.534500000$ 6 2.392800000 -3.314000000 -1.508700000 $7\ 1.850500000\ -3.868200000\ -0.368000000$ 6 1.127900000 -2.920800000 0.263100000 1 3.012500000 -3.879200000 -2.188300000 $1\ 0.586600000\ -3.093700000\ 1.179400000$ $1\ 1.966700000\ -4.823400000\ -0.053600000$ 1 0.305100000 -0.849100000 -3.460400000 $1\ 1.285400000\ 0.581600000\ -3.727300000$

$5 [Fe(Prpep)_2]$ Singlet

 $\begin{array}{c} 26 - 0.003400000 - 0.136700000 \ 0.005700000 \\ 6 \ 2.2520000000 \ 1.594500000 - 1.040000000 \\ 7 \ 1.5241000000 \ 1.5144000000 \ 0.0900000000 \\ 6 \ 1.7758000000 \ 2.4080000000 \ 1.0561000000 \\ 7 \ 2.68510000000 \ 3.3825000000 \ 1.0081000000 \\ 6 \ 3.40730000000 \ 3.4573000000 - 0.1219000000 \\ 6 \ 3.23340000000 \ 2.57550000000 - 1.1849000000 \\ 7 \ 0.8947000000 \ - 0.17790000000 - 1.91430000000 \end{array}$

 $\begin{array}{c} 1\ 2.684100000\ \hbox{--}1.420400000\ \hbox{--}3.442300000\\ 1\ 3.028400000\ \hbox{--}0.265500000\ \hbox{--}2.170700000 \end{array}$

- $6\ 1.989700000\ 0.569500000\ -2.127500000$
- $8\ 2.799200000\ 0.509600000\ -3.077200000$
- 7 -1.421600000 -1.721800000 -0.729000000
- $6 \, \hbox{-} 2.234600000 \, \hbox{-} 2.475700000 \, \hbox{-} 0.011500000$
- 7 -2.922500000 -3.333200000 -0.808800000
- $6 \,\, \hbox{-} 2.520800000 \,\, \hbox{-} 3.107000000 \,\, \hbox{-} 2.112500000$
- 6 -1.590300000 -2.096400000 -2.053200000
- 6 0.864000000 1.422500000 3.179900000
- $6\ 0.635800000\ -1.182200000\ -2.945200000$
- $1\ 1.178500000\ 2.323600000\ 1.960300000$
- 1 4.148700000 4.252900000 -0.165400000
- $1\ 3.819500000\ 2.620000000\ -2.095900000$
- 1 -3.607000000 -4.010400000 -0.502100000
- 1 -2.926000000 -3.664600000 -2.943700000
- 1 2.357100000 2.425200000 1.060600000
- 1 1.095200000 -0.865000000 -3.888700000
- 1 1.112400000 -2.140000000 -2.673900000
- 1 -1.338600000 -0.455500000 -3.398800000
- 1 -0.983400000 -2.036100000 -4.082000000
- 1 -0.303400000 -2.030100000 -4.002000000
- 7 -1.654300000 1.361400000 -0.235400000
- $7 \ \hbox{-} 0.748300000 \ 0.087100000 \ 1.973700000$
- 7 1.468400000 -1.619300000 0.834900000
- $6 \ \hbox{-} 2.301200000 \ 1.590900000 \ 0.923500000$
- $6 \ \hbox{-} 3.398200000 \ 2.451700000 \ 0.964200000$
- $6 \ \hbox{-} 3.782900000 \ 3.045900000 \ \hbox{-} 0.234700000$
- 7 -3.137600000 2.826000000 -1.392100000 6 -2.099000000 1.992100000 -1.330300000
- 1 -3.902700000 2.633400000 1.906300000
- 1 -4.631400000 3.725800000 -0.280200000
- 1 -1.553300000 1.803600000 -2.251200000
- 6 -1.783500000 0.919100000 2.184100000
- 8 -2.342100000 1.209900000 3.261200000
- 6 -0.179500000 -0.492700000 3.191400000
- $6\ 0.265000000\ -1.957000000\ 3.027000000$
- $6\ 1.428800000\ \hbox{--}2.168800000\ 2.106100000$
- $6\ 2.580100000\ \hbox{--}2.891200000\ 2.313700000$
- 7 3.315500000 -2.777400000 1.147800000
- 6 2.608700000 -2.000600000 0.286800000
- 1 2.932000000 -3.458700000 3.162400000
- 1 2.952000000 -5.456700000 5.102400000
- $1\ 2.953500000\ -1.736200000\ -0.702900000$ $1\ 4.222800000\ -3.185200000\ 0.969200000$
- 1 0 000 100000 0 100500000 0 515500000
- $1\ 0.689400000\ 0.102700000\ 3.517700000$
- $1 0.916100000 0.437700000 \ 4.001200000$
- $1\ 0.530000000\ -2.351000000\ 4.016400000$
- 1 -0.594200000 -2.548300000 2.679400000

$6 [Fe(PypepO)_2]^{1-}$ Sextet

 $26\ 0.0000000000\ 0.000000000\ 0.520900000$ $7\ 0.0000000000\ 2.080600000\ 0.196400000$ 7 1.535500000 0.379400000 -1.103200000 $8 - 1.406600000 \ 0.545400000 \ 1.744800000$ $6 - 1.712900000 \ 1.835200000 \ 1.787300000$ $6\ 2.306800000\ -0.540600000\ -1.696300000$ 6 3.300300000 -0.198800000 -2.614400000 $6\ 3.490900000\ 1.152200000\ -2.917800000$ 6 2.689800000 2.107800000 -2.296400000 $6\ 1.718000000\ 1.683000000\ -1.384300000$ $1\ 2.116800000\ -1.572900000\ -1.416700000$ $1\ 3.905800000\ -0.975900000\ -3.071600000$ 1 4.257200000 1.454300000 -3.628500000 $1\ 2.786500000\ 3.171300000\ -2.485600000$ 6 -2.734800000 2.339300000 2.610700000 $6 \ \hbox{-} 3.016900000 \ 3.708700000 \ 2.626200000$ $6 \, \hbox{--} 2.286500000 \, \, 4.592200000 \, \, 1.822400000$ $6 - 1.263700000 \ 4.113100000 \ 0.992200000$ $6 - 0.967500000 \ 2.740700000 \ 0.964300000$ 1 -3.288100000 1.638900000 3.231600000 $1 - 3.808800000 \ 4.086500000 \ 3.271300000$ 1 - 2.506100000 5.657900000 1.840400000 $1 \ \hbox{--}0.687000000 \ 4.785200000 \ 0.368600000$ $6\ 0.823100000\ 2.681100000\ -0.679400000$ $8\ 0.928900000\ 3.890400000\ -0.972500000$ 7 0.000000000 -2.080600000 0.196400000 7 -1.535500000 -0.379400000 -1.103200000 $8\ 1.406600000\ -0.545400000\ 1.744800000$ $6\ 1.712900000\ \hbox{--} 1.835200000\ 1.787300000$ $6\ 2.734800000\ -2.339300000\ 2.610700000$ $6\ 3.016900000\ -3.708700000\ 2.626200000$ $6\ 2.286500000\ -4.592200000\ 1.822400000$ $6\ 1.263700000\ \text{-}4.113100000\ 0.992200000$ $6\ 0.967500000\ \hbox{--}2.740700000\ 0.964300000$ $1\ 3.288100000\ -1.638900000\ 3.231600000$ 1 3.808800000 -4.086500000 3.271300000 1 2.506100000 -5.657900000 1.840400000 $1\ 0.687000000\ -4.785200000\ 0.368600000$ 6 -2.306800000 0.540600000 -1.696300000 $6 \ \hbox{-} 3.300300000 \ 0.198800000 \ \hbox{-} 2.614400000$ 6 -3.490900000 -1.152200000 -2.917800000 6 -2.689800000 -2.107800000 -2.296400000 6 -1.718000000 -1.683000000 -1.384300000 $1 - 2.116800000 \ 1.572900000 \ - 1.416700000$

- $1 3.905800000 \ 0.975900000 \ 3.071600000$
- 1 4.257200000 1.454300000 3.628500000
- 1 -2.786500000 -3.171300000 -2.485600000
- 6 -0.823100000 -2.681100000 -0.679400000
- 8 -0.928900000 -3.890400000 -0.972500000

$6 [Fe(PypepO)_2]^{2-}$ Quintet

 $26\ 0.000000000\ 0.000000000\ 0.533200000$

 $7\ 0.0000000000\ 2.164000000\ 0.154400000$

7 1.544600000 0.394700000 -1.065700000

 $8 - 1.450400000 \ 0.7199000000 \ 1.8236000000$

 $6 \ \hbox{-} 1.663200000 \ 2.005800000 \ 1.832100000$

 $6\ 2.339100000\ -0.531000000\ -1.621800000$

 $6\ 3.323600000\ -0.217900000\ -2.560900000$

 $6\ 3.482100000\ 1.120200000\ \text{-}2.939000000$

 $6\ 2.659700000\ 2.084700000\ -2.358700000$

 $6\ 1.700800000\ 1.689700000\ \text{-}1.415500000$

 $1\ 2.169500000\ -1.553100000\ -1.293200000$

 $1\ 3.944400000\ -1.006900000\ -2.979000000$

 $1\ 4.237100000\ 1.403900000\ -3.671300000$

1 2.729000000 3.140600000 -2.598800000

 $6 \, \hbox{--} 2.621000000 \, \, 2.613400000 \, \, 2.684300000$

6 -2.838700000 3.995100000 2.669700000

 $6 \ \hbox{-} 2.109400000 \ 4.821000000 \ 1.804300000$

 $6 - 1.150600000 \ 4.254700000 \ 0.945900000$

 $6 \ \hbox{-} 0.912500000 \ 2.869800000 \ 0.942500000$

1 -3.181300000 1.962700000 3.354300000

 $1 - 3.583800000 \ 4.428700000 \ 3.339900000$

1 - 2.278000000 5.898000000 1.792300000

 $1 - 0.571900000 \ 4.874000000 \ 0.270100000$

6 0.813900000 2.718600000 -0.746300000

8 0.943300000 3.924700000 -1.097000000

 $7\ 0.0000000000\ -2.164000000\ 0.154400000$

7 -1.544600000 -0.394700000 -1.065700000

 $8\ 1.450400000\ -0.719900000\ 1.823600000$

 $6\ 1.663200000\ \hbox{--}2.005800000\ 1.832100000$

 $6\ 2.621000000\ -2.613400000\ 2.684300000$

6 2.838700000 -3.995100000 2.669700000

 $6\ 2.109400000\ -4.821000000\ 1.804300000$ $6\ 1.150600000\ -4.254700000\ 0.945900000$

 $6\ 0.912500000\ \hbox{--}2.869800000\ 0.942500000$

1 3.181300000 -1.962700000 3.354300000

 $1\ 3.583800000\ -4.428700000\ 3.339900000$

1 2.278000000 -5.898000000 1.792300000

 $1\ 0.571900000\ -4.874000000\ 0.270100000$

- $6 \ \hbox{-} 2.339100000 \ 0.531000000 \ \hbox{-} 1.621800000$
- $6 \ \hbox{-} 3.323600000 \ 0.217900000 \ \hbox{-} 2.560900000$
- 6 -3.482100000 -1.120200000 -2.939000000
- 6 -2.659700000 -2.084700000 -2.358700000
- 6 -1.700800000 -1.689700000 -1.415500000
- $1 2.169500000 \ 1.553100000 \ 1.293200000$
- 1 -3.944400000 1.006900000 -2.979000000
- 1 4.237100000 1.403900000 3.671300000
- 1 -2.729000000 -3.140600000 -2.598800000
- 6 -0.813900000 -2.718600000 -0.746300000
- 8 -0.943300000 -3.924700000 -1.097000000

$7 [Fe(PyIm2H_2)_2]^{1-}$ Doublet

- $26\ 0.0000000000\ 0.000200000\ 0.000100000$
- 7 -1.763100000 -2.553000000 -2.555100000
- 7 0.316800000 1.380700000 1.382200000
- 7 -1.949400000 -0.000100000 -0.000200000
- $7 0.317800000 \ 1.380800000 \ 1.382300000$
- 7 -1.764700000 2.552600000 2.554900000
- 1 -1.104100000 2.002000000 2.004300000
- 7 0.317200000 -1.382300000 1.380700000
- $7\ 1.763700000\ \hbox{--}2.555600000\ 2.552300000$
- $7\ 1.949400000\ 0.000200000\ 0.000200000$
- $7\ 0.317400000\ 1.382500000\ \text{-}1.380500000$
- $7\ 1.764100000\ 2.555600000\ -2.552200000$
- 6 -1.630200000 -1.602900000 -1.604400000
- 6 0.386700000 -2.214600000 -2.217000000
- 6 0.508000000 2.952700000 2.955500000
- 6 -2.602500000 -0.835700000 -0.836500000 6 -2.603100000 0.835300000 0.835700000
- $6 \ \hbox{-} 4.000600000 \ 0.860500000 \ 0.860800000$
- 6 -4.691200000 -0.000500000 -0.000800000
- 6 -4.000000000 -0.861300000 -0.862100000
- 6 -1.631300000 1.602700000 1.604000000
- $6 \, \hbox{--} 0.509800000 \,\, 2.952400000 \,\, 2.955900000$
- $6\; 0.385300000\; 2.214700000\; 2.217400000$
- 0 0.3633000000 2.214700000 2.217400000
- $6\ 1.630600000\ \hbox{-}1.604500000\ 1.602500000$
- $6\; 0.508700000\; \hbox{--}2.955900000\; 2.952300000$
- $6 \ \hbox{-}0.386100000 \ \hbox{-}2.217200000 \ 2.214600000$
- $\begin{array}{c} 6\ 2.602700000\ -0.836300000\ 0.835400000\\ 6\ 2.602900000\ 0.836700000\ -0.834800000 \end{array}$
- $6\ 4.000400000\ 0.862200000\ \text{-}0.860000000$
- $6\ 4.691200000\ 0.000300000\ 0.000600000$
- $6\ 4.000200000\ \hbox{--}0.861700000\ 0.860900000$
- 6 1.630900000 1.604800000 -1.602200000
- $6 0.385800000 \ 2.217100000 \ 2.214800000$

 $6\ 0.509100000\ 2.955700000\ -2.952500000$ $1 - 4.545500000 \ 1.524100000 \ 1.524800000$ 1 -5.777400000 -0.000700000 -0.001000000 1 -4.544400000 -1.525100000 -1.526400000 1 1.464400000 2.242200000 2.245200000 $1 - 0.361100000 \ 3.709000000 \ 3.713500000$ 1 1.465800000 -2.241800000 -2.244500000 1 - 0.358900000 - 3.709500000 - 3.712800000 $1\ 4.545100000\ 1.526700000\ -1.523200000$ $1\ 5.777400000\ 0.000300000\ 0.000700000$ 1 4.544800000 -1.526100000 1.524300000 $1 - 1.464900000 \ 2.244500000 \ - 2.242500000$ $1\ 0.360200000\ 3.713100000\ -3.709400000$ 1 - 1.465200000 - 2.244600000 2.2422000001 0.359800000 -3.713500000 3.708900000 1 -2.633200000 -2.923700000 -2.925900000 $1 \ \hbox{--} 2.635100000 \ 2.923000000 \ 2.925500000$ $1\ 2.634000000\ -2.926400000\ 2.922700000$ $1\ 2.634300000\ 2.926500000\ -2.922500000$

$7 \left[Fe(PyIm2H_2)_2 \right]^{2-}$ Quintet

 $26\ 0.000000000\ 0.001700000\ 0.000500000$ 7 2.236100000 2.589800000 -2.556700000 $7\ 0.608600000\ 1.548600000\ -1.488400000$ $7\ 2.179100000\ 0.000300000\ 0.002400000$ $7\ 0.604300000\ -1.545300000\ 1.491300000$ 7 2.228800000 -2.588700000 2.562000000 7 -0.610300000 1.556600000 1.481000000 $7 - 2.239600000 \ 2.601800000 \ 2.542600000$ 7 -2.178700000 -0.001300000 -0.002600000 7 -0.602200000 -1.554600000 -1.482500000 7 -2.226000000 -2.604300000 -2.548300000 $6\ 1.935100000\ 1.656400000\ -1.614600000$ $6\ 0.055800000\ 2.437000000\ -2.376200000$ $6\ 1.056600000\ 3.095500000\ -3.052100000$ $6\ 2.844900000\ 0.837900000\ \text{-}0.813700000$ $6\ 2.842600000\ -0.838100000\ 0.819500000$ 6 4.241600000 -0.870300000 0.847500000 $6\ 4.938500000\ \hbox{--}0.001400000\ 0.004500000$ $6\ 4.244100000\ 0.868300000\ -0.839500000$ $6\ 1.930500000\ \hbox{--}1.655200000\ 1.619300000$ $6\ 1.047800000\ -3.092500000\ 3.056000000$ 60.049000000 - 2.432600000 2.3786000006 -1.937000000 1.663900000 1.605600000 $6 \ \hbox{-} 1.060900000 \ 3.111200000 \ 3.036300000$

- $6 \ \hbox{-} 0.059100000 \ 2.450100000 \ 2.364500000$ $6 \,\, \hbox{--}2.845700000 \,\, 0.840300000 \,\, 0.808500000$ 6 -2.841200000 -0.844600000 -0.815600000 6 -4.240200000 -0.877800000 -0.844200000 6 -4.938200000 -0.004800000 -0.006500000 $6 \ \hbox{-} 4.244800000 \ 0.870000000 \ 0.833300000$ 6 -1.928300000 -1.665600000 -1.610400000
- 6 0.046400000 2.446700000 2.364700000
- 6 -1.044700000 -3.110500000 -3.039000000
- $1\ 4.782500000\ -1.547200000\ 1.501100000$ 1 6.024300000 -0.002100000 0.005300000
- $1\ 4.786800000\ 1.544600000\ -1.492300000$
- 1 1.020100000 2.549300000 2.480600000
- $1\ 1.022100000\ -3.853600000\ 3.821800000$
- 1 -1.013000000 2.555300000 -2.479700000
- $1\ 1.033000000\ 3.856800000\ -3.817700000$
- 1 -4.780200000 -1.558600000 -1.494500000
- 1 -6.024000000 -0.006200000 -0.008000000 $1 - 4.788400000 \ 1.549500000 \ 1.481900000$
- $1\ 1.022800000\ -2.563600000\ -2.465700000$
- 1 -1.018400000 -3.875700000 -3.800600000
- $1\ 1.009600000\ 2.570000000\ 2.468100000$
- $1 1.038600000 \ 3.876600000 \ 3.797900000$
- $1\ 3.161000000\ 2.873800000\ -2.856400000$
- $1\ 3.152900000\ \hbox{--}2.873900000\ 2.863200000$
- $1 3.165000000 \ 2.886400000 \ 2.840300000$
- 1 -3.149900000 -2.891400000 -2.848300000

$8 [Fe(sar)]^{3+}$ Doublet

- $26\ 0.000000000\ 0.000000000\ 0.000000000$
- $7\ 1.162400000\ 1.515600000\ 0.755600000$
- $7\ 1.162400000\ -1.411900000\ 0.934500000$
- $7 \, \! 1.162300000 \, \! 0.103600000 \, 1.689800000$
- $7 1.162400000 \ 1.5156000000 \ 0.7557000000$
- 7 -1.162400000 -1.412000000 -0.934300000
- $7\ 1.162300000\ -0.103700000\ -1.689800000$
- $6\ 0.755000000\ 2.790100000\ 0.066000000$
- $6\ 2.665700000\ 1.287200000\ 0.728200000$
- $6\ 3.076600000\ 0.000400000\ 0.000000000$ $6\ 2.665700000\ -1.273700000\ 0.750300000$
- $6\ 0.754800000\ \hbox{--}1.452800000\ 2.382900000$
- 6 -0.755300000 -1.338200000 2.448700000 6 - 2.665600000 - 0.012500000 1.478400000
- 6 -3.076600000 0.000400000 0.000000000
- $6 2.665700000 \ 1.287200000 \ 0.728300000$

```
6 - 2.665700000 - 1.273800000 - 0.750300000
6 - 0.755000000 \ 2.790100000 - 0.066200000
6 2.665600000 -0.012700000 -1.478400000
6 0.755300000 -1.338400000 -2.448600000
6 -0.754800000 -1.453000000 -2.382800000
1 \ \hbox{-} 4.175800000 \ 0.000400000 \ 0.000000000
1\ 4.175800000\ 0.000400000\ 0.000000000
1\ 3.026900000\ 1.264600000\ 1.760600000
1\ 3.132800000\ 2.152500000\ 0.248800000
1\ 3.027000000\ -2.156400000\ 0.214500000
1 3.132800000 -1.291200000 1.739500000
1\ 3.026500000\ 0.892800000\ -1.975300000
1\ 3.132900000\ -0.860500000\ -1.988000000
1 - 3.026900000 \ 1.264400000 \ - 1.760700000
1 - 3.132800000 \ 2.152500000 - 0.249000000
1 - 3.026500000 \ 0.892900000 \ 1.975200000
1 -3.132900000 -0.860300000 1.988100000
1 - 3.132800000 - 1.291400000 - 1.739400000
1 - 3.027000000 - 2.156400000 - 0.214300000
1 - 1.109600000 - 2.375400000 - 2.856300000
1 -1.239100000 -0.616800000 -2.898100000
1 1.110500000 -1.288200000 -3.484100000
1\ 1.239600000\ -2.202200000\ -1.980900000
1 -1.110100000 3.661700000 -0.627600000
1 \ \hbox{-} 1.239300000 \ 2.817300000 \ 0.915700000
1\ 1.110100000\ 3.661800000\ 0.627300000
1\ 1.239300000\ 2.817200000\ -0.915900000
1 -1.110500000 -1.287900000 3.484200000
1 - 1.239600000 - 2.202100000 1.981100000
1\ 1.109600000\ -2.375200000\ 2.856500000
1\ 1.239100000\ -0.616600000\ 2.898200000
1 -0.920200000 1.645400000 -1.740500000
1\ 0.919600000\ 0.684000000\ -2.294800000
1\ 0.920200000\ 1.645600000\ 1.740300000
1 \ \hbox{-} 0.919600000 \ 0.684200000 \ 2.294700000
1\ 0.920200000\ \hbox{-}2.329500000\ 0.554200000
1 - 0.920200000 - 2.329600000 - 0.554100000
```

$8 [Fe(sar)]^{2+}$ Singlet

 $\begin{array}{c} 26\ 0.000200000\ 0.000100000\ 0.0000000000\\ 7\ 1.184000000\ 1.693700000\ 0.172300000\\ 7\ 1.184300000\ -0.996200000\ 1.380400000\\ 7\ -1.183700000\ 0.479900000\ 1.632900000\\ 7\ -1.183900000\ 1.174300000\ -1.232100000\\ 7\ -1.184000000\ -1.654400000\ -0.4007000000 \end{array}$

```
7\ 1.184100000\ -0.697700000\ -1.553000000
```

- $6\ 2.674600000\ 1.468000000\ 0.200600000$
- $6\ 3.080700000\ 0.000200000\ -0.000200000$
- 6 2.674900000 -0.907600000 1.170800000
- $6\; 0.757800000\; \hbox{--}0.523900000\; 2.733400000$
- 6 -0.758200000 -0.416600000 2.751200000
- $6 \, \hbox{--} 2.674300000 \,\, 0.467800000 \,\, 1.405800000$
- $6 3.080800000 \ 0.000100000 \ 0.000100000$
- $6 2.674600000 \ 0.983400000 \ 1.108000000$
- 6 -2.674700000 -1.451300000 -0.297700000
- $6 0.758500000 \ 2.591100000 \ 1.014800000$
- $6\ 2.674800000\ -0.560200000\ -1.371700000$
- $6\ 0.757600000\ -2.105700000\ -1.820000000$
- 6 -0.758400000 -2.174700000 -1.736200000
- $1 4.180600000 \ 0.000200000 \ 0.000300000$
- 1 4.180500000 0.000300000 -0.000200000
- $1\ 3.065700000\ 1.824700000\ 1.159200000$
- $1\ 3.142400000\ 2.086300000\ -0.573100000$
- 1 3.066100000 -1.916100000 1.000400000
- $1\ 3.142700000\ -0.546600000\ 2.093100000$
- 1 3.065700000 0.091600000 -2.160000000
- $1\ 3.142800000\ -1.539400000\ -1.520200000$
- 1 -3.064300000 0.629200000 -2.068100000
- $1 3.143400000 \ 1.956200000 \ 0.924400000$
- $1 3.064200000 \ 1.476300000 \ 1.579400000$ 1 - 3.143100000 - 0.177900000 2.156200000
- 1 -3.143600000 -1.778300000 -1.232000000
- 1 -3.064800000 -2.105800000 0.489000000
- 1 -1.117400000 -3.197500000 -1.904100000
- 1 -1.213300000 -1.542400000 -2.507000000
- $1\ 1.116000000\ \hbox{--}2.458200000\ \hbox{--}2.795000000$
- 1 1.212600000 -2.748100000 -1.057700000
- 1 -1.117700000 3.247800000 -1.816800000
- $1 1.213700000 \ 2.942300000 \ 0.082000000$
- $1\ 1.115500000\ 3.650100000\ -0.730000000$
- $1\ 1.212500000\ 2.291300000\ -1.850800000$
- 1 -1.117100000 -0.050500000 3.721000000
- 1 -1.213200000 -1.400200000 2.589100000
- $1\ 1.116100000\ -1.192400000\ 3.525900000$
- $1\ 1.212800000\ 0.457400000\ 2.908800000$
- $1 0.952300000 \ 0.966400000 \ 2.205200000$
- 1 0.953600000 -0.177600000 -2.401600000
- $1\ 0.953300000\ 2.168000000\ 1.047300000$
- $1 0.952200000 \ 1.426500000 \ 1.939500000$
- $1\ 0.953600000\ -1.991000000\ 1.353600000$

 $^{6\ 0.757400000\ 2.629500000\ -0.913100000}$

1 - 0.952600000 - 2.393200000 0.266000000

$9 [Fe(diammac)]^{3+}$ Doublet

```
26\ 0.0000000000\ 0.000000000\ 0.054000000
6 -1.607300000 -3.915800000 -0.071300000
6 -0.711800000 -2.673700000 -0.058700000
6\ 0.235700000\ \hbox{--}2.666000000\ 1.168600000
7 0.614900000 -1.243700000 1.529800000
6\ 0.0000000000\ -0.759700000\ 2.823400000
6\ 0.0000000000\ 0.759700000\ 2.823400000
7 - 0.614900000 \ 1.243700000 \ 1.529800000
6 \ \hbox{-}0.235700000 \ 2.6660000000 \ 1.1686000000
6\ 0.711800000\ 2.673700000\ -0.058700000
6\ 1.607300000\ 3.915800000\ -0.071300000
7\ 1.497200000\ 1.377000000\ 0.052500000
7\ 0.737300000\ -1.171200000\ -1.422300000
6\ 0.635400000\ -0.419800000\ -2.730000000
6 \, \hbox{--}0.635400000 \,\, 0.419800000 \,\, \hbox{--}2.730000000
7 - 0.737300000 \ 1.1712000000 \ - 1.4223000000
6 - 0.040300000 \ 2.511700000 \ - 1.391000000
7 -1.497200000 -1.377000000 0.052500000
6\ 0.040300000\ -2.511700000\ -1.391000000
1 1.733400000 -1.346000000 -1.263600000
1\ 1.631000000\ \hbox{--}1.210300000\ 1.652700000
1 -1.631000000 1.210300000 1.652700000
1 - 1.733400000 \ 1.346000000 \ - 1.263600000
1 -2.089700000 -1.403200000 0.888900000
1 -2.166000000 -1.327500000 -0.723500000
1\ 2.089700000\ 1.403200000\ 0.888900000
1\ 2.166000000\ 1.327500000\ -0.723500000
1 - 0.671000000 - 2.552000000 - 2.222100000
1\ 0.763000000\ -3.318200000\ -1.546000000
1 -0.250600000 -3.131400000 2.031200000
1\ 1.139900000\ -3.246300000\ 0.964300000
1 - 1.019800000 - 1.151600000 2.883400000
1\ 0.547900000\ -1.159500000\ 3.683900000
1\ 1.019800000\ 1.151600000\ 2.883400000
1 -0.547900000 1.159500000 3.683900000
1 \ \hbox{-} 1.139900000 \ 3.246300000 \ 0.964300000
1\ 0.250600000\ 3.131400000\ 2.031200000
1\ 0.671000000\ 2.552000000\ -2.222100000
1 -0.763000000 3.318200000 -1.546000000
1 - 0.650300000 \ 1.113500000 \ - 3.577700000
1 -1.527000000 -0.208900000 -2.820200000
1\ 0.650300000\ -1.113500000\ -3.577700000
```

- $1\ 1.527000000\ 0.208900000\ -2.820200000$
- 1 2.218800000 3.976400000 0.835800000
- 1 -0.998900000 -4.826300000 -0.116500000
- 1 -2.275000000 -3.924200000 -0.939800000
- $1\ 0.998900000\ 4.826300000\ -0.116500000$
- $1\ 2.218800000\ 3.976400000\ 0.835800000$
- $1\ 2.275000000\ 3.924200000\ \text{-}0.939800000$

$9 [Fe(diammac)]^{2+} Singlet$

- $26\ 0.000000000\ 0.000000000\ 0.055600000$
- $6\ 0.495200000\ 4.208300000\ -0.068600000$
- $6\ 0.0000000000\ 2.758200000\ -0.055200000$
- $6 \ \hbox{-} 0.923600000 \ 2.504000000 \ 1.168700000$
- 7 -0.939800000 1.047000000 1.541300000
- 6 -0.198800000 0.735700000 2.808300000
- $6\ 0.198800000\ \hbox{--}0.735700000\ 2.808300000$
- $7\ 0.939800000\ \hbox{--}1.047000000\ 1.541300000$
- 6 0.923600000 -2.504000000 1.168700000
- 6 0.000000000 -2.758200000 -0.055200000
- g 0.405000000 4.00000000 0.000200000
- $6 \ \hbox{-}0.495200000 \ \hbox{-}4.208300000 \ \hbox{-}0.068600000$
- 7 -1.108400000 -1.747700000 0.059600000
- $7 \ \hbox{-} 1.028900000 \ 0.948600000 \ \hbox{-} 1.434400000$
- $6 \,\, \hbox{--}0.721600000 \,\, 0.250800000 \,\, \hbox{--}2.724900000$
- $6\ 0.721600000\ \hbox{--}0.250800000\ \hbox{--}2.724900000$
- 7 1.028900000 -0.948600000 -1.434400000
- $6\ 0.681600000\ -2.406600000\ -1.393300000$
- $7\ 1.108400000\ 1.747700000\ 0.059600000$
- $6 \ \hbox{--}0.681600000 \ 2.406600000 \ \hbox{--}1.393300000$
- $1 \ \hbox{--} 2.035700000 \ 0.870100000 \ \hbox{--} 1.290500000$
- 1 -1.912000000 0.770600000 1.685200000
- 1 1.912000000 -0.770600000 1.685200000
- 1 2.035700000 -0.870100000 -1.290500000 1 1.664500000 1.942600000 0.896600000
- 1 1 767200000 1 00100000 0 71270000
- $1\ 1.765200000\ 1.891000000\ -0.712500000$
- $1 \ \hbox{-} 1.664500000 \ \hbox{-} 1.942600000 \ 0.896600000$
- 1 -1.765200000 -1.891000000 -0.712500000
- $1\ 0.010300000\ 2.627800000\ -2.213900000$
- 1 -1.571300000 3.024200000 -1.554200000
- $1 \ \hbox{-} 0.584800000 \ 3.099400000 \ 2.023700000$
- $1 1.941800000 \ 2.834900000 \ 0.942800000$
- $1\ 0.694700000\ 1.367300000\ 2.845400000$
- $1 0.796800000 \ 0.979600000 \ 3.694700000$
- $1 \ \hbox{--}0.694700000 \ \hbox{--}1.367300000 \ 2.845400000$
- 1 0.796800000 -0.979600000 3.694700000
- $1\ 1.941800000\ -2.834900000\ 0.942800000$

- $1\ 0.584800000\ \hbox{--}3.099400000\ 2.023700000$
- 1 -0.010300000 -2.627800000 -2.213900000
- 1 1.571300000 -3.024200000 -1.554200000
- 1 0.899800000 -0.899800000 -3.590900000
- $1\ 1.417800000\ 0.590000000\ -2.812100000$
- $1 0.899800000 \ 0.899800000 \ 3.590900000$
- 1 -1.417800000 -0.590000000 -2.812100000
- $1\ 1.067000000\ 4.438700000\ 0.837400000$
- 1 -0.345300000 4.910000000 -0.114300000
- $1\ 1.136400000\ 4.404500000\ -0.935400000$
- 1 0.345300000 -4.910000000 -0.114300000
- 1 1.067000000 4.438700000 0.837400000
- 1 -1.136400000 -4.404500000 -0.935400000

$10 [Fe(tacn)_2]^{3+}$ Doublet

- $26\ 0.0000000000\ 0.076800000\ 0.000000000$
- $7\ 1.354600000\ 0.042300000\ 1.534000000$
- $7\ 1.337000000\ -1.290700000\ -0.746700000$
- $7\ 1.251000000\ 1.434700000\ -0.845600000$
- 7 -1.337000000 -1.290600000 0.746900000
- 7 -1.354600000 0.042000000 -1.534000000
- $7 \ \hbox{-} 1.251000000 \ 1.434900000 \ 0.845300000$
- $6\ 1.847600000\ -1.374400000\ 1.725900000$
- $6\ 1.826800000\ \hbox{--}2.159700000\ 0.388000000$
- $6\ 2.473000000\ -0.620200000\ -1.496100000$
- $6\ 2.042600000\ 0.768500000\ \text{-}1.940300000$
- $6\ 2.062100000\ 2.070100000\ 0.257000000$
- $6\ 2.489800000\ 1.020100000\ 1.273900000$
- 6 -1.847600000 -1.374700000 -1.725700000
- $6 \ \hbox{-} 1.826800000 \ \hbox{-} 2.159700000 \ \hbox{-} 0.387600000$
- 6 -2.473000000 -0.619900000 1.496200000
- $6 2.042600000 \ 0.768900000 \ 1.940200000$
- $6 2.062100000 \ 2.070100000 \ 0.257300000$
- $6 2.489800000 \ 1.019800000 \ 1.274000000$
- $1\ 1.392100000\ 0.714900000\ -2.819600000$
- 1 2.907100000 1.380800000 -2.221300000
- $1\ 2.933400000\ 2.590200000\ -0.157100000$
- $1\ 1.430400000\ 2.834400000\ 0.721400000$
- $1\ 3.352200000\ 0.453600000\ 0.923900000$
- $1\ 2.788700000\ 1.493300000\ 2.214600000$
- $1\ 2.848000000\ \hbox{-}1.349300000\ 2.167800000$
- $1\ 1.201600000\ -1.858200000\ 2.463600000$
- $1\ 2.813800000\ \hbox{--}2.560300000\ 0.139100000$
- 1 1.158100000 -3.020700000 0.466100000
- $1\ 3.341400000\ -0.580000000\ -0.838900000$

- $1\ 2.762600000\ -1.231600000\ -2.356700000$ 1 - 2.813900000 - 2.560200000 - 0.1387000001 -1.158200000 -3.020800000 -0.465500000 1 -3.341500000 -0.579700000 0.839000000 1 -2.762600000 -1.231100000 2.356900000 $1 - 2.907000000 \ 1.3812000000 \ 2.2211000000$ $1 - 1.392000000 \ 0.715400000 \ 2.819500000$ $1 \ \hbox{-} 2.933400000 \ 2.590200000 \ 0.156700000$ 1 -1.430400000 2.834300000 -0.721900000 $1 - 3.352200000 \ 0.453400000 - 0.923800000$ 1 -2.788800000 1.492900000 -2.214800000 1 - 2.847900000 - 1.349700000 - 2.1677000001 -1.201500000 -1.858600000 -2.463300000 $1\ 0.922000000\ 0.318900000\ 2.417900000$ $1\ 0.745900000\ 2.203200000\ -1.294300000$ 1 0.882500000 -1.918200000 -1.412700000 $1 - 0.745900000 \ 2.203400000 \ 1.293900000$ 1 - 0.882500000 - 1.918000000 1.4130000001 -0.922000000 0.318500000 -2.417900000
- $10 [Fe(tacn)_2]^{2+}$ Singlet

 $26\ 0.000000000\ 0.000000000\ 0.000000000$ $7\ 0.786900000\ 1.375300000\ 1.341800000$ 7 -1.584400000 -0.006200000 1.341800000 $7\ 0.797600000\ -1.369100000\ 1.341800000$ $7 - 0.786900000 \ 1.375300000 \ - 1.341800000$ 7 -0.797600000 -1.369100000 -1.341800000 7 1.584400000 -0.006200000 -1.341800000 $6 \ \hbox{-}0.231300000 \ 1.779800000 \ 2.376900000$ $6 - 1.635500000 \ 1.361000000 \ 1.942600000$ 6 -1.425700000 -1.090200000 2.376900000 6 -0.360900000 -2.096900000 1.942600000 $6\ 1.657000000\ -0.689600000\ 2.376900000$ $6\ 1.996500000\ 0.735900000\ 1.942600000$ 6 - 1.657000000 - 0.689600000 - 2.376900000 $6 - 1.996500000 \ 0.735900000 \ - 1.942600000$ $6\ 0.231300000\ 1.779800000\ -2.376900000$ 6 1.635500000 1.361000000 -1.942600000 $6\ 1.425700000\ -1.090200000\ -2.376900000$ 6 0.360900000 -2.096900000 -1.942600000 $1 \ \hbox{-}0.753400000 \ \hbox{-}2.774400000 \ 1.177600000$ 1 -0.054500000 -2.718200000 2.794000000 $1\ 1.117800000\ -0.682400000\ 3.327300000$ 1 2.574400000 -1.260600000 2.550700000 $1\ 2.381300000\ 1.311900000\ 2.794000000$

 $1\ 2.779400000\ 0.734700000\ 1.177600000$ $1\ 0.032000000\ 1.309200000\ 3.327300000$ 1 -0.195400000 2.859800000 2.550700000 $1 - 2.326800000 \ 1.406300000 \ 2.794000000$ 1 -2.026000000 2.039600000 1.177600000 1 - 1.149900000 - 0.626900000 3.3273000001 -2.378900000 -1.599200000 2.550700000 $1 - 2.381300000 \ 1.3119000000 \ - 2.7940000000$ 1 - 2.779400000 0.734700000 - 1.1776000001 -0.032000000 1.309200000 -3.327300000 1 0.195400000 2.859800000 -2.550700000 $1\ 2.326800000\ 1.406300000\ -2.794000000$ $1\ 2.026000000\ 2.039600000\ -1.177600000$ $1\ 1.149900000\ -0.626900000\ -3.327300000$ 1 2.378900000 -1.599200000 -2.550700000 $1\ 0.054500000\ -2.718200000\ -2.794000000$ 1 0.753400000 -2.774400000 -1.177600000 1 -1.117800000 -0.682400000 -3.327300000 1 - 2.574400000 - 1.2606000000 - 2.5507000000 $1\ 1.102600000\ 2.228500000\ 0.880500000$ $1\ 1.378600000\ -2.069200000\ 0.880500000$ 1 -2.481300000 -0.159300000 0.880500000 $1\ 2.481300000\ -0.159300000\ -0.880500000$ 1 -1.102600000 2.228500000 -0.880500000

11 $[Fe(EDTA)(H_2O)]^{1-}$ Sextet

1 - 1.378600000 - 2.069200000 - 0.880500000

7 -1.472900000 -0.143200000 1.102300000 $6 \, \hbox{-} 0.727700000 \,\, 0.140200000 \,\, 2.340300000$ $1 \ \hbox{--}0.642300000 \ 1.225800000 \ 2.443300000$ 1 -1.272200000 -0.228900000 3.226500000 $6\ 0.668000000\ -0.487500000\ 2.306100000$ 1 1.191000000 -0.257600000 3.250800000 $1\ 0.592500000\ \hbox{-}1.575800000\ 2.235800000$ $7\ 1.428200000\ \hbox{--}0.002900000\ 1.144400000$ $6 \ \hbox{-} 2.532100000 \ 0.836700000 \ 0.802800000$ $1 - 3.453000000 \ 0.640600000 \ 1.369900000$ $1 - 2.172400000 \ 1.836500000 \ 1.063000000$ $6 \, \hbox{--} 2.844700000 \,\, 0.854300000 \,\, \hbox{--} 0.706900000$ 6 -1.967200000 -1.533400000 1.037400000 1 - 2.873000000 - 1.554000000 0.4226000001 -2.237900000 -1.911600000 2.032900000 6 - 0.972600000 - 2.504600000 0.372600000 $6\ 1.860200000\ 1.403800000\ 1.285600000$ $1\ 2.846100000\ 1.521700000\ 0.824400000$

 $\begin{array}{c} 1\ 1.967000000\ 1.683500000\ 2.342300000\\ 6\ 0.933900000\ 2.420000000\ 0.588300000\\ 6\ 2.537600000\ -0.882600000\ 0.736200000\\ 1\ 3.421200000\ -0.766100000\ 1.379600000\\ 1\ 2.199500000\ -1.922000000\ 0.788000000\\ 6\ 2.918500000\ -0.596100000\ -0.730600000\\ 8\ 0.135100000\ 1.925200000\ -0.305500000\\ 8\ 1.022700000\ 3.606600000\ 0.900800000\\ 8\ 1.949100000\ -0.107400000\ -1.441900000\\ 8\ 4.056200000\ -0.845700000\ -1.124800000\\ 8\ -0.124800000\ -1.946400000\ -0.438000000\\ 8\ -1.052400000\ -3.706300000\ 0.618700000\\ \end{array}$

 $\begin{array}{l} 8 \ -1.891600000 \ 0.399600000 \ -1.460400000 \\ 8 \ -3.926600000 \ 1.294800000 \ -1.091500000 \\ 26 \ 0.001700000 \ -0.0060000000 \ -0.768400000 \\ 8 \ -0.006400000 \ -0.138400000 \ -3.013000000 \\ 1 \ -0.703000000 \ 0.500500000 \ -3.245100000 \\ 1 \ 0.871800000 \ 0.222600000 \ -3.227500000 \end{array}$

- 11 $[Fe(EDTA)(H_2O)]^{2-}$ Quintet
- 7 -1.484700000 0.028100000 1.129200000
- $6 \, \hbox{--}0.678500000 \,\, 0.3612000000 \,\, 2.3113000000$
- $1 0.511900000 \ 1.441700000 \ 2.318400000$
- 1 -1.211400000 0.102200000 3.247100000
- $6\ 0.680100000\ \hbox{--}0.370500000\ 2.309500000$
- $1\ 1.213600000\ -0.115200000\ 3.245900000$
- 1 0.513500000 -1.451000000 2.312400000
- 7 1.485600000 -0.032800000 1.128200000
- $6 \ \hbox{-} 2.440900000 \ 1.060900000 \ 0.693700000$
- $1 3.391300000 \ 1.014900000 \ 1.248900000$
- 1 -1.986400000 2.044100000 0.852500000
- 6 -2.734200000 0.958000000 -0.831300000
- 6 -2.099700000 -1.312100000 1.207300000
- $1 \ \hbox{-} 3.007400000 \ \hbox{-} 1.305900000 \ 0.593600000$
- 1 -2.405600000 -1.545600000 2.239600000
- 6 -1.219200000 -2.469200000 0.656100000
- 6 2.100600000 1.307200000 1.211100000
- 0 2.100000000 1.307200000 1.211100000
- $1\ 3.007900000\ 1.303400000\ 0.597000000$
- 0 1.213700000 2.400400000 0.000000000
- $6\ 2.441500000\ \hbox{--}1.063800000\ 0.688000000$
- $1\ 3.392200000\ \hbox{-} 1.020000000\ 1.242800000$
- $1\ 1.987000000\ \hbox{--}2.047600000\ 0.843000000$
- 6 2.734000000 -0.954800000 -0.836700000
- $8\ 0.378100000\ 2.145000000\ -0.233700000$

- $8\ 1.446900000\ 3.602800000\ 1.133800000$
- $8\ 1.786900000\ -0.439200000\ -1.541200000$
- 8 3.820500000 -1.387200000 -1.249700000
- 8 -0.378300000 -2.144100000 -0.242000000
- 8 -1.445900000 -3.607400000 1.120500000
- $8 1.787500000 \ 0.445100000 \ 1.538100000$
- 8 -3.820800000 1.392200000 -1.242000000
- $26\ 0.000000000\ 0.000800000\ -0.617300000$
- 8 -0.003400000 0.010300000 -4.004400000
- $1 0.745400000 \ 0.210800000 \ 3.402000000$
- 1 0.740200000 -0.193800000 -3.405200000

$12 [Fe(PaPy_2O)(Cl)]$ Sextet

- 26 -0.231000000 0.114100000 -0.558900000
- 17 -1.437000000 0.720200000 -2.510600000
- 8 1.786300000 -1.581300000 2.753400000
- $8\ 1.422700000\ -0.335800000\ -1.281300000$
- 7 -1.513300000 -1.684400000 -0.500200000
- 7 -2.040500000 0.764800000 0.734500000
- 7 0.404700000 -0.489700000 1.282900000
- 7 0.055200000 2.267700000 -0.165000000
- 6 -1.100800000 -2.899600000 -0.889600000
- 1 -0.104800000 -2.947500000 -1.320400000
- 6 1.895500000 4.034500000 0.751300000
- 1 -1.526400000 -4.999700000 -1.082900000
- 6 -3.157700000 -3.895100000 -0.171200000
- 1 -3.802900000 -4.758800000 -0.035800000
- 6 3.578300000 2.631000000 0.241100000
- 1 4.551900000 2.488800000 0.702000000
- $6 \ \hbox{-} 2.728400000 \ \hbox{-} 1.538200000 \ 0.053500000$
- 6 -3.164600000 -0.120800000 0.374100000
- 1 -3.619700000 0.281900000 -0.537500000
- 1 -3.934400000 -0.131300000 1.161400000
- $6 \ \hbox{-} 1.587900000 \ 0.611500000 \ 2.145200000$
- $1 2.458800000 \ 0.5122000000 \ 2.8130000000$
- $1 1.067100000 \ 1.534200000 \ 2.416200000$
- 6 -0.617700000 -0.552800000 2.322100000
- 1 -0.164500000 -0.494900000 3.318200000
- $1 \ \hbox{-} 1.149800000 \ \hbox{-} 1.517400000 \ 2.291900000$
- $6\ 1.593900000\ -1.070800000\ 1.633500000$
- $6\ 2.714300000\ \hbox{--}1.078600000\ 0.627700000$
- $6\ 3.975700000\ -1.493800000\ 1.087600000$
- $1\ 4.053100000\ \hbox{--}1.771000000\ 2.134200000$
- 6 5.083600000 -1.555200000 0.246200000
- $1\ 6.047000000\ -1.874800000\ 0.634500000$

- $6\ 4.941300000\ -1.207500000\ -1.104700000$ $1\ 5.795400000\ -1.256500000\ -1.776800000$ 6 3.704000000 -0.803200000 -1.592300000 $1\ 3.564000000\ -0.538600000\ -2.637000000$ 6 2.579000000 -0.728600000 -0.741000000 $6 \ \hbox{-} 2.306600000 \ 2.179200000 \ 0.406800000$ $1 - 2.962100000 \ 2.654200000 \ 1.153800000$ $1 - 2.811100000 \ 2.210500000 \ - 0.564600000$ $6 - 1.012600000 \ 2.958000000 \ 0.273200000$ $6 - 0.936000000 \ 4.327300000 \ 0.532900000$ 1 -1.809700000 4.860400000 0.897400000 $6\; 0.271400000\; 4.991900000\; 0.314600000$ $1\ 0.352500000\ 6.058300000\ 0.507200000$ $6\ 1.371100000\ 4.267600000\ -0.147100000$ 1 2.329600000 4.743600000 -0.327300000 $6\ 1.219400000\ 2.900900000\ -0.370400000$
- 12 $[Fe(PaPy_2O)(Cl)]^{1-}$ Quintet

 $1\ 2.038600000\ 2.283000000\ -0.725200000$

26 -0.255800000 0.110200000 -0.596300000 17 -1.918100000 0.495300000 -2.554500000 8 2.180500000 -1.363700000 2.683500000

- $\begin{array}{c} 8\ 1.532600000\ 0.062800000\ -1.332400000\ 7\ -1.135300000\ -1.936300000\ -0.573200000\ 7\ -2.135500000\ 0.292700000\ 0.8161000000\ 7\ 0.597200000\ -0.425300000\ 1.297700000\ 7\ -0.494600000\ 2.258300000\ -0.205200000\ 6\ -0.477000000\ -3.020800000\ -1.002900000\ 1\ 0.465700000\ -2.827500000\ -1.508400000\ 6\ -0.957000000\ -4.316200000\ -0.814800000\ 1\ -0.388100000\ -5.1660000000\ -1.180700000\ 6\ -2.167800000\ -4.484000000\ -0.139900000\ 1\ -2.572100000\ -5.477900000\ 0.037500000\ 6\ -2.846100000\ -3.353700000\ 0.316700000\ 1\ -3.784400000\ -3.445200000\ 0.858700000\ 6\ -2.299200000\ -2.089200000\ 0.078200000\ \end{array}$
- 1 -3.750400000 -1.031900000 1.276800000 6 -1.580600000 0.217500000 2.190200000

 $\begin{array}{l} 6 \ -3.032200000 \ -0.816000000 \ 0.465400000 \\ 1 \ -3.596500000 \ -0.506300000 \ -0.421600000 \end{array}$

- $1 \ \hbox{-} 2.380800000 \ \hbox{-} 0.056500000 \ 2.903900000$
- 1 1 220700000 1 20700000 2 440400000
- $1 \ \hbox{-} 1.239700000 \ 1.225200000 \ 2.448400000$
- $6 \ \hbox{-}0.384600000 \ \hbox{-}0.728500000 \ 2.321300000$
- $1\ 0.037200000\ \hbox{--}0.613000000\ 3.330300000$
- 1 0.720600000 1.780500000 2.267300000

 $6\ 1.852200000\ \hbox{--}0.808400000\ 1.598000000$ $6\ 2.934300000\ \hbox{--}0.534600000\ 0.574700000$ $6\ 4.257800000\ -0.723100000\ 1.011300000$ 1 4.380900000 -1.048400000 2.040600000 6 5.364800000 -0.516000000 0.189800000 $1\ 6.372500000\ \hbox{--}0.667500000\ 0.572600000$ 6 5.152500000 -0.115300000 -1.138300000 $1\ 5.998200000\ 0.049100000\ -1.806500000$ $6\ 3.858500000\ 0.068200000\ -1.608900000$ $1\ 3.670900000\ 0.367500000\ -2.638100000$ 6 2.716000000 -0.129900000 -0.782000000 $6 \ \hbox{-} 2.719400000 \ 1.611700000 \ 0.528500000$ $1 - 3.440300000 \ 1.9259000000 \ 1.3050000000$ $1 - 3.242500000 \ 1.536800000 \ - 0.431200000$ 6 -1.643100000 2.668900000 0.363000000 $6 - 1.844500000 \ 4.0020000000 \ 0.728200000$ $1 - 2.779600000 \ 4.299300000 \ 1.197000000$ $6 \,\, \hbox{--}0.833900000 \,\, 4.934500000 \,\, 0.485400000$ $1 \ \hbox{--} 0.969200000 \ 5.977900000 \ 0.760600000$ $6\ 0.353900000\ 4.5000000000\ -0.106700000$ $1\ 1.171000000\ 5.186400000\ -0.309700000$ 6 0.481400000 3.149900000 -0.430600000

 $1\ 1.382100000\ 2.747100000\ -0.886100000$

13 $[Fe(NTA)(H_2O)_2]$ Sextet

7 0.859200000 -1.076500000 0.035500000 6 1.003100000 -1.365500000 1.478200000 $1\ 1.190500000\ -2.428500000\ 1.667900000$ $1\ 1.860800000\ -0.804800000\ 1.866300000$ $6\ 0.132400000\ -2.115500000\ -0.721500000$ 1 0.810900000 -2.851800000 -1.167500000 1 -0.532200000 -2.654000000 -0.036000000 6 -0.230900000 -0.902200000 2.271300000 6 -0.757600000 -1.493300000 -1.814300000 8 -0.921900000 0.061000000 1.676300000 $8 - 0.501500000 - 1.375300000 \ 3.356200000$ 8 -1.153800000 -2.152400000 -2.753700000 8 -1.079200000 -0.226900000 -1.589400000 $6\ 2.116900000\ \hbox{--}0.643200000\ \hbox{--}0.606500000$ 1 2.977100000 -1.229400000 -0.262900000 $1\ 2.027600000\ -0.784900000\ -1.689600000$ $6\ 2.366000000\ 0.855500000\ -0.363800000$ $8\ 3.482700000\ 1.330300000\ -0.423900000$ 8 1.260300000 1.544600000 -0.137500000 26 -0.501600000 0.749000000 -0.061300000

- $8 \ \hbox{-} 2.828700000 \ 1.1066000000 \ 0.161700000$
- $1 \ \hbox{--}3.230300000 \ 0.620600000 \ \hbox{--}0.579200000$
- $1 2.983500000 \ 0.578000000 \ 0.965700000$
- 8 -0.898400000 2.837000000 -0.380700000
- $1 1.660400000 \ 3.252000000 \ 0.055100000$
- 1 -0.089700000 3.351200000 -0.207000000

13 [Fe(NTA)] Quintet

- $7\ 1.091300000\ -0.066700000\ 0.883000000$
- $6\ 0.250100000\ -0.160700000\ 2.089300000$
- $1\ 0.755900000\ \hbox{--}0.691200000\ 2.907600000$
- $1\ 0.040800000\ 0.855600000\ 2.444300000$
- $6\ 1.893400000\ \hbox{--}1.274800000\ 0.612600000$
- $1\ 2.912600000\ \hbox{--}1.192700000\ 1.014600000$
- $1\ 1.415500000\ -2.124900000\ 1.114400000$
- 6 -1.131800000 -0.814800000 1.838900000
- 6 1.967000000 -1.650800000 -0.892900000
- 8 -1.565600000 -0.751000000 0.612700000
- 8 -1.742500000 -1.289900000 2.796000000
- 8 -1.742500000 -1.289900000 2.790000000
- $8\ 2.889600000\ \hbox{-}2.375100000\ \hbox{-}1.264800000$
- $8\ 0.996900000\ \hbox{-}1.205300000\ \hbox{-}1.636600000$
- $6\ 1.838400000\ 1.199000000\ 0.776100000$
- $1\ 2.291900000\ 1.498100000\ 1.732000000$
- $1\ 2.654400000\ 1.054200000\ 0.057600000$
- $6\ 0.969200000\ 2.368900000\ 0.232900000$
- 8 1.314100000 3.521500000 0.498500000 8 -0.039800000 2.016400000 -0.503800000
- 26 -0.305500000 0.032600000 -0.840300000
- 8 -3.926800000 -0.394200000 -0.558800000
- 1 -4.281800000 -1.242200000 -0.863400000
- 1 -3.188000000 -0.627500000 0.071400000
- 8 -1.965600000 0.727100000 -2.090700000
- 1 -2.802400000 0.411800000 -1.658200000
- 1 -1.896400000 1.682100000 -1.916500000

$14 \left[Fe(Py_3tacn) \right]^{3+}$ Doublet

- $26 \ \hbox{-} 0.009400000 \ \hbox{-} 0.009100000 \ 0.308800000$
- $7\ 1.240700000\ \hbox{--}1.172600000\ \hbox{--}0.777100000$
- $7\ 1.574500000\ 0.020500000\ 1.577100000$
- 7 -1.646000000 -0.441300000 -0.793300000
- $7\ 0.454000000\ 1.666900000\ -0.732300000$

6 1.854100000 -2.743900000 -2.493100000

6 3.170900000 -2.745900000 -2.495100000

6 3.510300000 -1.962000000 -0.932800000

6 2.530000000 -1.174600000 -0.336200000

6 2.819300000 -0.195500000 0.770400000

6 1.553300000 1.382500000 2.217500000

 $6\ 1.410100000\ \hbox{--}1.072800000\ 2.627100000$

 $6\ 0.123700000\ 1.719600000\ 2.634200000$

 $6\ 0.414800000\ \hbox{--}2.131000000\ 2.165800000$

 $6 - 2.161200000 \ 0.257900000 \ - 1.833100000$

6 -2.280300000 -1.580500000 -0.392500000

6 1.345800000 1.806200000 -1.742200000

6 -0.240300000 2.766700000 -0.321200000

 $6 \ \hbox{-} 1.564900000 \ \hbox{-} 2.368100000 \ 0.675500000$

 $6 \ \hbox{-} 1.637400000 \ \hbox{-} 0.780200000 \ 2.588300000$

 $6 \ \hbox{-} 1.285800000 \ 2.511400000 \ 0.736100000$

 $6 - 2.064500000 \ 0.622500000 \ 2.164000000$

6 -3.323100000 -0.131600000 -2.489300000

6 -3.452600000 -2.019800000 -1.000800000

 $6\ 1.583800000\ 3.025500000\ \text{-}2.366400000$

 $6 - 0.039500000 \ 4.019400000 \ - 0.893900000$

6 -3.987100000 -1.285500000 -2.063600000

 $6\ 0.885800000\ 4.155700000\ -1.932900000$

1 - 0.107900000 - 1.904500000 - 2.182100000

 $1\ 1.547200000\ -3.341600000\ -3.345700000$

 $1\ 3.921100000\ -3.384800000\ -2.507700000$

 $1\ 4.527200000\ -1.944400000\ -0.551100000$

 $1\ 3.112200000\ 0.765900000\ 0.334600000$

1 3.648100000 -0.521500000 1.407500000

 $1\ 1.925800000\ 2.099500000\ 1.484800000$

 $1\ 2.224800000\ 1.414300000\ 3.084300000$

 $1\ 1.083900000\ -0.602700000\ 3.555900000$

 $1\ 2.380600000\ \hbox{-}1.530300000\ 2.839000000$

 $1 \ \hbox{-}0.149800000 \ 1.202700000 \ 3.554700000$

 $1\ 0.036700000\ 2.789500000\ 2.844800000$

 $1\ 0.859500000\ -2.785800000\ 1.414800000$

 $1\ 0.094700000\ -2.757800000\ 3.007300000$

1 -1.619500000 1.145000000 -2.138400000

 $1\ 1.867500000\ 0.910800000\ -2.056900000$

1 - 0.875200000 - 3.074900000 0.200900000

 $1 \ \hbox{--} 2.256100000 \ \hbox{--} 2.959000000 \ 1.285800000$

1 -1.076800000 -0.753500000 3.523400000

1 - 2.517700000 - 1.4020000000 2.7760000000

- $1 \ \hbox{--} 2.242200000 \ 2.280200000 \ 0.254300000$
- $1 1.452400000 \ 3.389300000 \ 1.369400000$
- $1 2.850900000 \ 0.583000000 \ 1.409100000$
- $1 2.454900000 \ 1.183200000 \ 3.022200000$
- 1 -3.697500000 0.462900000 -3.316800000
- 1 -3.937300000 -2.928100000 -0.653800000
- $1\ 2.305500000\ 3.082800000\ -3.175300000$
- $1 \ \hbox{--}0.601900000 \ 4.876900000 \ \hbox{--}0.535100000$
- 1 -4.901700000 -1.611100000 -2.551500000
- $1\ 1.056900000\ 5.124700000\ -2.393400000$

$14 [Fe(Py_3tacn)]^{2+}$ Singlet

- 26 -0.000600000 0.000000000 0.286300000
- 7 -1.724800000 0.142300000 -0.777900000
- 7 -1.189600000 -1.083300000 1.555900000
- $7\ 0.987300000\ 1.422100000\ -0.776200000$
- $7\ 0.739600000\ -1.565900000\ -0.775400000$
- $7 0.346300000 \ 1.571400000 \ 1.555000000$
- $7\ 1.531400000\ \hbox{--}0.486700000\ 1.557800000$
- 6 -2.015900000 0.966300000 -1.807400000
- 6 -3.257700000 0.985500000 -2.436300000
- $6 \ \hbox{-} 4.255300000 \ 0.121400000 \ \hbox{-} 1.983000000$
- 6 -3.963300000 -0.740600000 -0.924000000
- 6 2.691800000 0.713600000 0.353600000
- 6 -2.265000000 -1.685200000 0.722800000
- 6 0.300300000 2.107900000 2.175800000
- 6 -1.765700000 -0.154300000 2.600300000
- $6\ 1.013700000\ -1.448100000\ 2.603500000$
- $6 \ \hbox{-} 1.679400000 \ 1.3136000000 \ 2.172700000$
- $6\ 1.848700000\ 1.262400000\ \text{-}1.803700000$
- $6\ 0.728500000\ 2.687400000\ -0.352500000$
- $6\ 0.172900000\ -2.230900000\ -1.805000000$
- 6 1.964000000 -1.974600000 -0.349700000
- $6 \,\, \hbox{--}0.328300000 \,\, 2.803800000 \,\, 0.722000000$
- $6\ 0.744300000\ 1.605700000\ 2.601400000$
- $6\ 2.591000000\ \hbox{-}1.118500000\ 0.726800000$
- $6\ 1.973200000\ 0.797000000\ 2.176100000$
- 6 2.487600000 2.328200000 -2.431300000
- $6\ 1.341800000\ 3.802200000\ \text{-}0.921700000$
- $6\ 0.778100000\ -3.316000000\ -2.432700000$
- $6\ 2.624300000\ \hbox{--}3.062200000\ \hbox{--}0.919000000$
- $6\ 2.236700000\ 3.624300000\ -1.978600000$
- $6\ 2.025200000\ -3.747000000\ -1.978100000$
- 1 -1.217200000 1.622800000 -2.134200000
- 1 -3.433100000 1.668200000 -3.261600000

 $1 - 5.238800000 \ 0.116100000 \ - 2.443500000$ 1 - 4.711500000 - 1.431800000 - 0.5471000001 -1.854600000 -2.581300000 0.244200000 $1 \ \hbox{-}3.118400000 \ \hbox{-}2.010600000 \ 1.331100000$ 1 -0.113700000 -2.878500000 1.426000000 $1 - 0.776100000 - 2.593200000 \ 3.039200000$ 1 -1.221900000 -0.312600000 3.533700000 $1 \ \hbox{--} 2.808300000 \ \hbox{--} 0.418200000 \ 2.808400000$ $1\ 0.878000000\ -0.896200000\ 3.535600000$ $1\ 1.763300000\ -2.218800000\ 2.813800000$ $1 - 2.438700000 \ 1.5372000000 \ 1.4216000000$ $1 - 1.863300000 \ 1.968400000 \ 3.035800000$ $1\ 2.019000000\ 0.242500000\ -2.130100000$ 1 - 0.795000000 - 1.868300000 - 2.132900000 $1 - 1.308700000 \ 2.896800000 \ 0.241700000$ $1 - 0.184200000 \ 3.705400000 \ 1.330600000$ $1\ 0.333300000\ 1.213700000\ 3.533900000$ $1\ 1.036700000\ 2.640600000\ 2.810200000$ $1\ 3.163300000\ \hbox{--}0.316100000\ 0.248100000$ 1 3.298200000 -1.694900000 1.336500000 $1\ 2.547900000\ 1.342700000\ 1.426100000$ $1\ 2.630600000\ 0.629000000\ 3.040500000$ $1\ 3.168400000\ 2.138900000\ -3.254900000$ $1\ 1.116300000\ 4.795800000\ -0.545300000$ $1\ 0.275600000\ \hbox{-}3.810000000\ \hbox{-}3.258100000$ 1 3.596800000 -3.363900000 -0.541000000

15 $[Fe(bpy)CN_4]^{1-}$ Doublet

 $\begin{array}{c} 26 - 0.001300000 - 1.134300000 \ 0.00000000000\\ 7 - 1.303400000 \ 0.431900000 \ 0.0000000000\\ 7 - 1.304600000 \ 0.429500000 \ 0.0000000000\\ 7 - 0.001400000 - 0.892700000 \ 3.130200000\\ 7 - 2.302800000 - 3.191600000 \ 0.000000000\\ 7 - 2.297900000 - 3.194400000 \ 0.0000000000\\ 7 - 0.001400000 - 0.892700000 \ - 3.130200000\\ 6 - 1.380200000 - 2.470100000 \ 0.0000000000\\ 6 - 0.001400000 - 1.066100000 \ - 1.971500000\\ 6 - 0.001400000 \ - 1.066100000 \ 1.971500000\\ 6 - 0.736000000 \ 1.660200000 \ 0.0000000000\\ 6 - 1.519000000 \ 2.819700000 \ 0.0000000000\\ 6 - 2.906100000 \ 2.705400000 \ 0.0000000000\\ 6 - 3.476700000 \ 1.433400000 \ 0.0000000000\\ 6 - 3.476700000 \ 1.433400000 \ 0.0000000000\\ \end{array}$

 $\begin{array}{c} 1\ 2.724700000\ 4.478700000\ -2.4382000000 \\ 1\ 2.522300000\ -4.5960000000\ -2.437700000 \end{array}$

- $6 \,\, \text{--}2.640000000 \,\, 0.319700000 \,\, 0.0000000000$
- $6\; 0.739300000\; 1.658900000\; 0.0000000000$
- $6\ 2.641000000\ 0.315100000\ 0.0000000000$
- $6\ 3.479600000\ 1.427300000\ 0.000000000$
- $6\ 2.911300000\ 2.700300000\ 0.000000000$
- $6\ 1.524300000\ 2.817000000\ 0.000000000$
- $1\ 1.059100000\ 3.796300000\ 0.000000000$
- $1\ 3.535400000\ 3.590000000\ 0.000000000$
- $1\ 4.555400000\ 1.284100000\ 0.0000000000$
- $1\ 3.025100000\ \hbox{--}0.698800000\ 0.000000000$
- $1 1.052100000 \ 3.798200000 \ 0.0000000000$
- $1 \ \hbox{-} 3.528700000 \ 3.596200000 \ 0.0000000000$
- $1 4.552800000 \ 1.292100000 \ 0.0000000000$
- 1 -3.025800000 -0.693500000 0.0000000000

15 $[Fe(bpy)CN_4]^{2-}$ Singlet

- $26 \ \hbox{--}0.000700000 \ \hbox{--}1.097600000 \ 0.0000000000$
- $7 1.280900000 \ 0.414500000 \ 0.0000000000$
- $7\ 1.281500000\ 0.412700000\ 0.0000000000$
- 7 -0.000700000 -0.966100000 3.156500000
- 7 -2.356100000 -3.157400000 0.0000000000
- $7\ 2.351900000\ \hbox{--}3.160500000\ 0.0000000000$
- 7 -0.000700000 -0.966100000 -3.156500000
- $6 \ \hbox{-} 1.423700000 \ \hbox{-} 2.438700000 \ 0.0000000000$
- $6\ 1.420400000\ -2.440600000\ 0.0000000000$
- 6 0.000700000 1.093500000 1.986500000
- $6 \, \hbox{--}0.000700000 \, \hbox{--}1.093500000 \, 1.986500000$
- $6 \,\, \hbox{-}0.730500000 \,\, 1.661800000 \,\, 0.0000000000$
- $6 \ \hbox{-} 1.522900000 \ 2.820000000 \ 0.0000000000$
- $6 \ \hbox{-} 2.908100000 \ 2.706300000 \ 0.0000000000$
- $6 \ \hbox{-}3.467200000 \ 1.421000000 \ 0.0000000000$
- $6 \ \hbox{-} 2.627300000 \ 0.313900000 \ 0.0000000000$
- $6\ 0.732800000\ 1.660800000\ 0.0000000000$
- $6\ 2.627800000\ 0.310400000\ 0.0000000000$
- $6\ 3.469100000\ 1.416300000\ 0.0000000000$
- $6\ 2.911800000\ 2.702400000\ 0.0000000000$
- $6\ 1.526800000\ 2.817900000\ 0.0000000000$
- $1\ 1.059600000\ 3.798300000\ 0.000000000$
- 1 3.541800000 3.589800000 0.0000000000
- $1\ 4.545800000\ 1.265200000\ 0.0000000000$
- $1\ 3.007000000\ \hbox{--}0.706500000\ 0.000000000$
- $1 1.054400000 \ 3.799700000 \ 0.000000000$
- $1 \ \hbox{-} 3.536900000 \ 3.594700000 \ 0.0000000000$
- $1 \ \hbox{-} 4.544000000 \ 1.271300000 \ 0.0000000000$
- 1 3.007900000 0.702400000 0.0000000000

$16 [Fe(DITim)_2]^{1+}$ Doublet

```
26\ 0.0000000000\ 0.006200000\ 0.000000000
16 0.894900000 1.460000000 -1.416800000
16 - 0.895000000 \ 1.459900000 \ 1.416700000
7 -1.760000000 0.152700000 -1.015400000
7\ 1.760000000\ 0.152900000\ 1.015300000
7 0.691700000 -1.555600000 -1.222800000
7 -0.691500000 -1.555600000 1.222900000
6 -0.114000000 -2.336100000 -2.031500000
6\ 0.678400000\ -3.173500000\ -2.777000000
7\ 1.977200000\ -2.889300000\ -2.405900000
6\ 1.942300000\ -1.906300000\ -1.476800000
6 -1.593900000 -2.146200000 -2.062400000
6 -2.009600000 -0.674900000 -2.216300000
6 -2.583000000 1.121200000 -0.757900000
6 \, \hbox{-} 2.351800000 \, \, 2.042500000 \, \, 0.429800000
6 - 3.789500000 \ 1.422800000 \ - 1.627100000
6 -2.078000000 3.481500000 -0.076300000
6 -3.588800000 2.044300000 1.359800000
6 0.114300000 -2.336000000 2.031600000
6 \, \hbox{--}0.678100000 \, \hbox{--}3.173400000 \, 2.777200000
7 -1.976900000 -2.889200000 2.406100000
6 - 1.942100000 - 1.906300000 1.476800000
6\ 1.594200000\ -2.146000000\ 2.062400000
6\ 2.009800000\ \hbox{--}0.674700000\ 2.216200000
6\ 2.582900000\ 1.121600000\ 0.757900000
6\ 3.789300000\ 1.423300000\ 1.627100000
6\ 2.351600000\ 2.042800000\ -0.429900000
6\ 2.077500000\ 3.481800000\ 0.076200000
6 3.588600000 2.044800000 -1.359800000
1 2.812400000 -3.318300000 -2.782500000
1 2.824300000 -1.458200000 -1.047500000
1\ 0.440300000\ -3.918400000\ -3.521300000
1 - 2.062300000 - 2.570100000 - 1.165900000
1 - 2.003100000 - 2.697000000 - 2.916700000
1 -1.457000000 -0.224200000 -3.051300000
1 -3.069400000 -0.660300000 -2.478000000
1 - 4.301300000 \ 2.325400000 \ - 1.296400000
1 -3.495900000 1.568700000 -2.672500000
1 - 4.520400000 \ 0.604900000 \ - 1.599600000
1 - 1.894200000 \ 4.129900000 \ 0.785900000
1 -1.196800000 3.505800000 -0.722200000
1 -2.933600000 3.892900000 -0.626000000
1 - 3.369300000 \ 2.6508000000 \ 2.2440000000
```

 $1 \ \hbox{-} 4.471300000 \ 2.476500000 \ 0.873600000$ $1 - 3.835500000 \ 1.034600000 \ 1.704900000$ 1 -2.812100000 -3.318300000 2.782800000 1 -0.439900000 -3.918100000 3.521600000 1 -2.824100000 -1.458300000 1.047500000 $1\ 2.003400000\ \hbox{--}2.696800000\ 2.916600000$ $1\ 2.062500000\ -2.569900000\ 1.165900000$ $1\ 3.069700000\ \hbox{--}0.660100000\ 2.477700000$ $1\ 1.457400000\ -0.224100000\ 3.051400000$ $1\ 4.300800000\ 2.326100000\ 1.296600000$ $1\ 3.495700000\ 1.569000000\ 2.672500000$ $1\ 4.520400000\ 0.605600000\ 1.599400000$ $1\ 1.893600000\ 4.130100000\ -0.786100000$ $1\ 1.196300000\ 3.506000000\ 0.722100000$ $1\ 2.933000000\ 3.893300000\ 0.625900000$ 1 3.369000000 2.651300000 -2.244000000 $1\ 4.471000000\ 2.477100000\ -0.873500000$ $1\ 3.835500000\ 1.035100000\ \text{-}1.704900000$

$16 [Fe(DITim)_2]^{2-}$ Singlet

 $26\ 0.000000000\ 0.063200000\ 0.000000000$ 16 0.959000000 1.476600000 -1.692500000 16 -0.959800000 1.476000000 1.692600000 7 -2.306100000 0.045600000 -0.550700000 $7\ 2.306100000\ 0.046500000\ 0.550600000$ $7\ 0.105300000\ -1.662300000\ -1.523600000$ $7 - 0.104500000 - 1.662300000 \ 1.523600000$ 6 -0.943400000 -2.438500000 -1.977900000 6 -0.519500000 -3.193100000 -3.046600000 $7\ 0.811300000\ \hbox{--}2.861200000\ \hbox{--}3.232300000$ $6\ 1.137800000\ \hbox{--}1.927500000\ \hbox{--}2.299600000$ 6 - 2.312100000 - 2.317100000 - 1.3885000006 -2.905600000 -0.899000000 -1.502200000 6 -2.948200000 1.128700000 -0.276600000 6 -2.418200000 2.131600000 0.756700000 $6 - 4.259400000 \ 1.479200000 \ - 0.965100000$ $6 - 2.029400000 \ 3.441500000 \ 0.025900000$ $6 \ \hbox{-} 3.536700000 \ 2.430800000 \ 1.786500000$ $6\ 0.944600000\ -2.438100000\ 1.977800000$ $6\ 0.521100000\ \hbox{--}3.193000000\ 3.046500000$ 7 -0.809800000 -2.861600000 3.232400000 6 - 1.136700000 - 1.927900000 2.299800000

```
6\ 2.313100000\ \hbox{--}2.316200000\ 1.388200000
6\ 2.906100000\ \hbox{--}0.898000000\ 1.501900000
6\ 2.947700000\ 1.129900000\ 0.276500000
6\ 4.258800000\ 1.481000000\ 0.964900000
6 2.417200000 2.132800000 -0.756600000
6\ 2.027800000\ 3.442400000\ \text{-}0.025600000
6\ 3.535400000\ 2.432700000\ -1.786500000
1\ 1.419800000\ \hbox{--}3.212200000\ \hbox{--}3.958500000
1 2.097300000 -1.435600000 -2.246800000
1 -1.029200000 -3.906000000 -3.677800000
1 -2.302200000 -2.612100000 -0.331900000
1 -2.983400000 -3.010800000 -1.909900000
1 -2.764900000 -0.530300000 -2.529100000
1 -3.988100000 -0.979800000 -1.333900000
1 - 4.555100000 \ 2.511900000 \ - 0.781600000
1 \ \hbox{-} 4.183600000 \ 1.336500000 \ \hbox{-} 2.049000000
1 -5.074000000 0.834500000 -0.606900000
1 \ \hbox{-} 1.677700000 \ 4.167000000 \ 0.766700000
1 - 1.220400000 \ 3.259100000 \ - 0.687300000
1 - 2.880900000 \ 3.889500000 \ - 0.507500000
1 - 3.138500000 \ 3.106700000 \ 2.549400000
1 -4.414000000 2.913500000 1.334400000
1 - 3.861000000 \ 1.514700000 \ 2.293300000
1 - 1.418000000 - 3.212900000 3.958700000
1\ 1.031200000\ -3.905800000\ 3.677600000
1 -2.096400000 -1.436400000 2.247200000
1\ 2.984800000\ -3.009700000\ 1.909500000
1 2.303300000 -2.611300000 0.331600000
1\ 3.988600000\ -0.978300000\ 1.333500000
1\ 2.765400000\ -0.529400000\ 2.528800000
1\ 4.554100000\ 2.513800000\ 0.781600000
1\ 4.183100000\ 1.338100000\ 2.048800000
1\ 5.073700000\ 0.836700000\ 0.606700000
1\ 1.675700000\ 4.167800000\ -0.766200000
1\ 1.218900000\ 3.259500000\ 0.687600000
1\ 2.879100000\ 3.890600000\ 0.507800000
1\ 3.136800000\ 3.108400000\ \text{-}2.549200000
1\ 4.412500000\ 2.915700000\ -1.334400000
1 3.860100000 1.516700000 -2.293400000
```

17 $[Fe(H_2O)_6]^{3+}$ Sextet

- $1\ 1.311800000\ 2.056800000\ \text{-}1.270400000$
- $8\ 1.606500000\ \hbox{--}0.254300000\ 1.246600000$
- 1 1.794600000 -1.041100000 1.806000000
- $8\ 1.061500000\ -0.839500000\ -1.538500000$
- 1 0.745200000 -0.980800000 -2.459100000
- $8 \ \hbox{-} 0.701800000 \ \hbox{-} 1.852000000 \ 0.526200000$
- 1 -1.311400000 -2.057100000 1.270400000
- $8 \ \hbox{-} 1.061400000 \ 0.839600000 \ 1.538600000$
- $1 1.984400000 \ 1.177300000 \ 1.497200000$
- 1 -2.335500000 -0.388100000 -1.399600000
- $1\ 0.492200000\ 2.704800000\ -0.083500000$
- 1 0.492800000 2.704700000 0.082700000
- $1\ 2.336200000\ 0.387500000\ 1.399000000$
- $1\ 1.984200000\ \hbox{-}1.177900000\ \hbox{-}1.496700000$
- 1 -0.744900000 0.981000000 2.459200000

17 $[Fe(H_2O)_6]^{2+}$ Quintet

- $26\ 0.000000000\ 0.000000000\ 0.000000000$
- 8 -1.853500000 -0.006000000 -1.113800000
- $1 \ \hbox{-} 1.941900000 \ \hbox{-} 0.004900000 \ \hbox{-} 2.083900000$
- 8 1.151300000 0.008100000 -1.792800000
- $1\ 1.482900000\ -0.773700000\ -2.270800000$
- 8 1.853500000 0.006100000 1.113800000
- $1\ 1.941900000\ 0.005100000\ 2.083900000$
- 8 0.009500000 -2.170200000 -0.003600000
- 1 0.556700000 2.753100000 0.540600000
- 8 -1.151300000 -0.008100000 1.792800000
- $1 1.482900000 \ 0.773800000 \ 2.270800000$
- $8 \ \hbox{-} 0.009400000 \ 2.170200000 \ 0.003500000$
- $1 0.581000000 \ 2.749800000 \ 0.531400000$
- 1 2.755600000 0.010700000 0.746300000
- $1\ 1.476100000\ 0.794500000\ -2.267900000$
- 1 -1.476200000 -0.794400000 2.268000000
- $1\ 2.755600000\ 0.010400000\ 0.746300000$
- $1\ 0.580900000\ \hbox{--}2.749800000\ 0.531500000$
- $1\ 0.556900000\ 2.753100000\ 0.540400000$

$$18^{2+} [Fe(Ohishis)(H_2O)_3]^{2+}$$
 Quintet

- $6\ 4.320700000\ 0.220200000\ 0.142000000$
- 6 3.094600000 -1.586200000 -0.178200000
- $6\ 2.995600000\ 0.539600000\ 0.313300000$
- $6 \ \hbox{-} 4.281300000 \ \hbox{-} 0.096700000 \ 0.205200000$
- $6 \, \hbox{-} 2.905600000 \, \hbox{-} 1.780700000 \, \hbox{-} 0.169500000$
- $6 \ \hbox{-} 2.986400000 \ 0.345600000 \ 0.325100000$

 $7\ 4.360900000\ \hbox{--}1.120000000\ \hbox{--}0.168400000$ $7\ 2.232600000\ \hbox{--}0.613900000\ 0.108600000$ 7 -4.208400000 -1.434800000 -0.109300000 7 -2.126500000 -0.732000000 0.085600000 $6\ 2.458600000\ 1.883700000\ 0.726700000$ $6\ 1.709100000\ 2.724200000\ \text{-}0.347500000$ $6\ 0.286800000\ 2.265400000\ -0.536800000$ $6 \, \hbox{-} 2.547100000 \,\, 1.736300000 \,\, 0.693400000$ 7 -0.725400000 3.114800000 -0.387400000 8 0.028500000 1.060700000 -0.817700000 6 -2.122400000 2.664400000 -0.490600000 $1\ 5.215100000\ 0.818900000\ 0.224500000$ $1\ 2.842800000\ -2.615700000\ -0.381900000$ $1 \ \hbox{-}5.223900000 \ 0.415600000 \ 0.324900000$ 1 -2.566500000 -2.783300000 -0.380800000 $1\ 1.817800000\ 1.777800000\ 1.610800000$ $1\ 3.314900000\ 2.480200000\ 1.053200000$ $1 \ \hbox{-} 3.378500000 \ 2.210800000 \ 1.222400000$ $1 - 1.726300000 \ 1.687100000 \ 1.416300000$ 1 2.222500000 2.644000000 -1.312400000 1 1.731600000 3.777700000 -0.054000000 1 -0.532400000 4.089600000 -0.192500000 $1 - 2.248200000 \ 2.153400000 \ - 1.447900000$ $1 - 2.737500000 \ 3.564700000 \ - 0.509500000$ 1 - 4.994500000 - 2.055500000 - 0.2570000001 5.195400000 -1.665200000 -0.345700000 26 0.059500000 -0.754900000 0.019900000 8 0.044600000 -0.647500000 2.226600000 1 -0.740200000 -0.723700000 2.788600000 $1\ 0.823400000\ -0.688600000\ 2.800400000$ $8\ 0.081100000\ -1.604700000\ -2.096900000$ 1 0.836900000 -1.359200000 -2.651400000 1 -0.704900000 -1.431900000 -2.636700000 $8\ 0.111900000\ \hbox{--}3.000100000\ 0.291000000$ $1\ 0.157800000\ -3.569900000\ -0.490300000$

$18^{3+} [Fe(Ohishis)(H_2O)_3]^{3+}$ Sextet

 $1\ 0.151900000\ -3.560300000\ 1.078700000$

 $\begin{array}{c} 6\ 4.264900000\ 0.189800000\ 0.139600000\\ 6\ 3.029400000\ -1.606400000\ -0.203800000\\ 6\ 2.948600000\ 0.542900000\ 0.293700000\\ 6\ -4.205000000\ -0.216900000\ 0.206800000\\ 6\ -2.783500000\ -1.876500000\ -0.089100000\\ 6\ -2.933900000\ 0.293100000\ 0.295000000\\ 7\ 4.286200000\ -1.152200000\ -0.175100000\\ \end{array}$

```
7\ 2.167400000\ \hbox{--}0.608200000\ 0.070200000
7 -4.082700000 -1.566800000 -0.039900000
7 -2.031800000 -0.774400000 0.101300000
6\ 2.457900000\ 1.895600000\ 0.745000000
6 1.666000000 2.768200000 -0.267000000
6\; 0.238800000\; 2.326700000\; \hbox{-} 0.395100000
6 - 2.601200000 \ 1.723100000 \ 0.640500000
7 - 0.784900000 \ 3.146500000 \ - 0.419700000
8 -0.022600000 1.067900000 -0.474200000
6 -2.184300000 2.673100000 -0.528100000
1\ 5.171200000\ 0.769900000\ 0.240400000
1\ 2.770300000\ -2.632400000\ -0.414700000
1 \ \hbox{-}5.168400000 \ 0.261800000 \ 0.311300000
1 - 2.413900000 - 2.877100000 - 0.250800000
1.878800000 \ 1.800600000 \ 1.671900000
1\ 3.346700000\ 2.469200000\ 1.021100000
1 -3.504400000 2.141700000 1.093100000
1 - 1.845000000 \ 1.762600000 \ 1.431000000
1\ 2.125800000\ 2.717600000\ \text{-}1.262900000
1\ 1.704300000\ 3.815800000\ 0.046000000
1 - 0.611700000 \ 4.147900000 \ - 0.373500000
1 -2.308700000 2.191700000 -1.502000000
1 - 2.802300000 \ 3.570900000 \ - 0.523700000
1 - 4.851700000 - 2.222500000 - 0.1500000000
1\ 5.120000000\ \hbox{-}1.708600000\ \hbox{-}0.344600000
26 0.071000000 -0.736900000 -0.032100000
8\ 0.090300000\ -0.761900000\ 2.106000000
1 -0.692500000 -0.775800000 2.681000000
1\ 0.880100000\ -0.734400000\ 2.670700000
8 0.082600000 -1.359600000 -2.098400000
1\ 0.838500000\ -1.171300000\ -2.680100000
1 -0.713200000 -1.300800000 -2.653800000
8 0.166800000 -2.909800000 0.167800000
1 0.211100000 -3.542500000 -0.567500000
1\ 0.218200000\ -3.409100000\ 0.999300000
```

$19^{2+} [Fe(Ohishis)(Im)(H_O)_2]^{2+}$ Quintet

 $\begin{array}{c} 6 \ -3.818300000 \ -2.094000000 \ 0.082300000 \\ 6 \ -3.211900000 \ -0.035500000 \ -0.397500000 \\ 6 \ -2.476400000 \ -1.950700000 \ 0.313400000 \\ 6 \ 4.216800000 \ 0.913700000 \ 0.136100000 \\ 6 \ 2.404300000 \ 2.024500000 \ -0.426000000 \\ 6 \ 3.123200000 \ 0.105900000 \ 0.294700000 \\ 7 \ -4.264300000 \ -0.875800000 \ -0.369100000 \\ 7 \ -2.109200000 \ -0.645500000 \ 0.006600000 \end{array}$

```
7\ 3.743700000\ 2.119100000\ -0.322700000
7\ 1.985100000\ 0.821400000\ \text{-}0.064500000
6 -1.560300000 -3.001900000 0.856600000
6 -0.573800000 -3.649800000 -0.135400000
6 0.621600000 -2.780000000 -0.375900000
6\ 3.121300000\ \hbox{--}1.305600000\ 0.786000000
7 1.845200000 -3.252700000 -0.142000000
8\ 0.489600000\ -1.601200000\ -0.774700000
6 3.016100000 -2.394200000 -0.309400000
1 - 4.478500000 - 2.940900000 0.210200000
1 -3.282600000 1.000700000 -0.705100000
1\ 5.268100000\ 0.734700000\ 0.315900000
1\ 1.771500000\ 2.842600000\ -0.748700000
1 - 0.999100000 - 2.612700000 1.718700000
1 -2.193300000 -3.802000000 1.256600000
1\ 4.046100000\ -1.458100000\ 1.354100000
1 2.304800000 -1.452000000 1.505400000
1 -1.069300000 -3.818600000 -1.100600000
1 - 0.265400000 - 4.630300000 0.244700000
1 1.963700000 -4.214500000 0.152500000
1 2.963400000 -1.934800000 -1.303000000
1 3.893000000 -3.045300000 -0.297600000
1\ 4.301300000\ 2.937100000\ \text{-}0.534600000
1 -5.217800000 -0.645700000 -0.619900000
1 - 1.150100000 \ 2.872400000 \ - 1.873800000
6 -1.189000000 3.089400000 -0.813700000
7 \, - 0.849200000 \,\, 2.249600000 \,\, 0.155800000
7 -1.591800000 4.267500000 -0.295400000
6 - 1.046300000 \ 2.933000000 \ 1.339800000
6 \ \hbox{-} 1.508100000 \ 4.189700000 \ 1.074000000
1 \ \hbox{-} 1.901300000 \ 5.072200000 \ \hbox{-} 0.827100000
1 -1.777800000 5.012400000 1.720000000
1 - 0.847300000 \ 2.482800000 \ 2.302200000
26 -0.119300000 0.237900000 -0.080400000
8\ 0.036000000\ \hbox{--}0.073200000\ 2.114500000
1\ 0.760600000\ 0.254300000\ 2.662900000
1 - 0.710200000 - 0.258700000 2.699100000
8 -0.280100000 0.647000000 -2.319900000
1\ 0.574100000\ 0.581200000\ -2.767400000
1 \, \hbox{--} 0.849200000 \,\, 0.003900000 \,\, \hbox{--} 2.763200000
```

 $19^3 + [Fe(Ohishis)(Im)(H_2O)_2]^{3+}$ Sextet

 $\begin{array}{c} 6 \ -2.984600000 \ -3.119100000 \ 0.180900000 \\ 6 \ -3.051900000 \ -0.947400000 \ -0.202800000 \end{array}$

```
6 \ \hbox{-} 1.714900000 \ \hbox{-} 2.619300000 \ 0.318400000
```

7 -3.798200000 -2.057200000 -0.149500000

7 - 1.767400000 - 1.234800000 0.068700000

7 2.786300000 3.225700000 -0.047300000

 $7\ 1.563700000\ 1.397200000\ 0.080400000$

6 -0.516300000 -3.414800000 0.765700000

 $6\ 0.628500000\ -3.642600000\ -0.256500000$

6 1.513500000 -2.436800000 -0.384600000

 $6\ 3.446400000\ \hbox{--}0.303400000\ 0.709300000$

 $7\ 2.827100000\ -2.514700000\ -0.358200000$

8 0.991000000 -1.274600000 -0.510100000

6 3.694300000 -1.322000000 -0.447900000

1 -3.368800000 -4.121700000 0.301400000

1 -3.448000000 0.029700000 -0.428800000

 $1\ 4.713600000\ 2.366400000\ 0.392300000$

 $1\ 0.674600000\ 3.321100000\ -0.340700000$

1 -0.098300000 -2.992600000 1.687700000

1 -0.889100000 -4.403500000 1.046100000

1 4.406000000 -0.123500000 1.201800000

 $1\ 2.815900000\ \hbox{--}0.770100000\ 1.472500000$

1 0.217900000 -3.871700000 -1.248100000

 $1\ 1.220900000\ -4.509800000\ 0.048800000$

1 3.262600000 -3.429000000 -0.276700000

 $1\ 3.546400000\ -0.858200000\ -1.426900000$

1 4.718900000 -1.692600000 -0.412600000

 $1\ 3.039300000\ 4.202100000\ -0.165900000$

1 - 4.799600000 - 2.105700000 - 0.312100000

 $1 - 1.875300000 \ 2.331400000 \ - 2.064400000$

6 -2.042000000 2.512100000 -1.013900000

7 -1.502600000 1.817200000 0.003700000

7 -2.833500000 3.484400000 -0.532800000

 $6 \ \hbox{-} 1.994100000 \ 2.398700000 \ 1.172700000$

 $6 \ \hbox{-} 2.821800000 \ 3.435700000 \ 0.846300000$

 $1 - 3.356300000 \ 4.148700000 \ - 1.096700000$

 $1 - 3.386700000 \ 4.123500000 \ 1.458400000$

1 -1.725100000 2.041700000 2.152900000

 $26 - 0.178100000 \ 0.175100000 \ - 0.085600000$

8 -0.056400000 0.023700000 2.059600000

 $1\ 0.575000000\ 0.499200000\ 2.622500000$

1 -0.667300000 -0.467900000 2.631000000 $8 \ \hbox{-} 0.335400000 \ 0.426900000 \ \hbox{-} 2.268300000$

1 0.467800000 0.679900000 -2.753300000

1 -0.747700000 -0.284600000 -2.786000000

 $^{6\ 3.655400000\ 2.199800000\ 0.251500000}$

^{6 1.548400000 2.723800000 -0.134600000}

 $^{6\ 2.907500000\ 1.052200000\ 0.331900000}$

20^{2+} [Fe(Nhishis)(Ph)(H₂O)] Quintet

```
6 -1.690000000 4.009300000 -0.431500000
6 - 2.461600000 \ 1.931700000 \ - 0.531400000
6 -0.641100000 3.130200000 -0.547200000
6\ 3.996100000\ -2.328800000\ -0.535000000
6 2.430900000 -1.581400000 -1.907100000
6\ 3.007800000\ -1.707400000\ 0.190800000
7 -2.836800000 3.232200000 -0.425100000
7 - 1.145000000 \ 1.840500000 \ - 0.611100000
7\ 3.612200000\ -2.242600000\ -1.860000000
7\ 2.036500000\ -1.244600000\ -0.687400000
6 0.838500000 3.356700000 -0.567200000
6\ 1.566200000\ 2.787300000\ 0.665100000
6\ 2.928500000\ -1.569300000\ 1.690300000
6\ 1.809400000\ \hbox{--}0.650700000\ 2.203600000
1 - 1.723500000 \ 5.084600000 \ - 0.352200000
1 -3.153300000 1.101900000 -0.524500000
1 4.910700000 -2.813300000 -0.230700000
1 1.896900000 -1.353600000 -2.817200000
1\ 1.257700000\ 2.903500000\ -1.477100000
1 1.043100000 4.431100000 -0.629400000
1\ 2.786200000\ \hbox{--}2.567400000\ 2.125200000
1 3.887800000 -1.198200000 2.069400000
1\ 1.228600000\ 3.324000000\ 1.563500000
1\ 2.637900000\ 3.008700000\ 0.571400000
1 0.841800000 -1.003300000 1.826800000
1\ 1.779000000\ -0.732100000\ 3.294100000
1\ 4.122400000\ -2.597400000\ -2.654800000
1 -3.784900000 3.567300000 -0.339400000
7\ 1.359500000\ 1.346800000\ 0.838400000
6\ 2.047700000\ 0.831600000\ 1.886900000
8\ 2.840000000\ 1.471200000\ 2.603000000
26\ 0.293000000\ 0.140900000\ -0.385100000
8 -0.073100000 -0.172800000 -2.829200000
1 -0.724800000 -0.751200000 -2.362700000
1 -0.572400000 0.599500000 -3.123900000
8 -1.119300000 -1.195200000 -0.665200000
6 -2.217200000 -1.610500000 -0.032100000
6 \ \hbox{--} 2.471700000 \ \hbox{--} 1.282300000 \ 1.318900000
6 -3.172500000 -2.400400000 -0.711000000
6 \ \hbox{--}3.632000000 \ \hbox{--}1.726300000 \ 1.956200000
1 -1.745900000 -0.679000000 1.858400000
6 -4.329200000 -2.836800000 -0.064700000
```

```
1 - 2.980300000 - 2.668800000 - 1.746500000
```

$$6 \ \hbox{-} 4.572600000 \ \hbox{-} 2.504800000 \ 1.273400000$$

- 1 -3.798900000 -1.462300000 2.997700000
- 1 -5.045400000 -3.446300000 -0.610600000
- 1 -5.472000000 -2.850400000 1.774000000

$20^{3+} [Fe(Nhishis)(Ph)(H_2O)]^{1+}$ Sextet

$6 - 1.438000000 \ 4.134500000 \ - 0.543800000$

- $6 \ \hbox{-} 1.223000000 \ 2.472800000 \ \hbox{-} 1.990100000$
- $6 0.672100000 \ 3.145500000 \ 0.021100000$
- $6\ 3.253800000\ -2.915300000\ -0.794400000$
- $6\ 1.088900000\ -2.715000000\ -1.227100000$
- 6 2.854300000 -1.633500000 -0.509300000
- 7 -1.768900000 3.693400000 -1.810900000
- 7 -0.544100000 2.112800000 -0.904500000
- 7 -0.544100000 2.112500000 -0.304500000
- 7 2.125900000 -3.577500000 -1.245200000
- $7\ 1.499600000\ \hbox{--}1.527800000\ \hbox{--}0.792900000$
- $6 \ \hbox{--}0.079500000 \ 3.060800000 \ 1.396500000$
- $6 \ \hbox{-} 0.070600000 \ 1.621200000 \ 1.943000000$
- $6\ 3.624900000\ -0.497000000\ 0.086900000$
- $6\ 3.289900000\ -0.197700000\ 1.568700000$
- $1 1.771700000 \ 5.085800000 \ 0.160200000$
- 1 -1.350000000 1.880200000 -2.883700000
- 1 4.211600000 -3.403900000 -0.706400000
- 1 0.079600000 -2.963300000 -1.518400000
- $1\ 0.946800000\ 3.445400000\ 1.410800000$
- 1 -0.661800000 3.700000000 2.068800000
- $1\ 4.688500000\ -0.747500000\ 0.028800000$
- 1 3.495000000 0.410100000 -0.517200000
- 1 -1.056600000 1.165100000 1.795900000
- 1 0.134000000 1.648300000 3.014900000
- 1 3.079400000 -1.140200000 2.090500000
- $1\ 4.176400000\ 0.223900000\ 2.046900000$
- 1 2 05000000 4 546500000 1 520100000
- $1\ 2.079000000\ \hbox{-}4.546500000\ \hbox{-}1.530100000$
- 6 2.169500000 0.778200000 1.946800000
- 0 2.109300000 0.778200000 1.940800000
- $8\ 2.376000000\ 1.519400000\ 2.908500000$
- 26 0.310800000 0.183800000 -0.449000000 8 1.368400000 0.7600000000 -2.391700000
- $1\ 1.569000000\ 1.686300000\ \text{-}2.586300000$
- $1\ 2.062900000\ 0.212400000\ -2.783500000$
- 8 -1.262900000 -0.745300000 -0.616600000
- 6 -2.285000000 -1.336500000 0.017900000
- 6 2.202900000 1.670300000 1.386200000

- $6 \ \hbox{--}3.457000000 \ \hbox{--}1.640600000 \ \hbox{--}0.704800000$
- $6 \ \hbox{-} 3.280100000 \ \hbox{-} 2.293000000 \ 2.013200000$
- 1 1.293500000 1.442500000 1.934500000
- $6 \ \hbox{-} 4.525900000 \ \hbox{-} 2.262500000 \ \hbox{-} 0.063800000$
- 1 3.506300000 1.378700000 1.757200000
- $6 \ \hbox{-} 4.444900000 \ \hbox{-} 2.590800000 \ 1.295200000$
- $1 \ \hbox{-} 3.211500000 \ \hbox{-} 2.548600000 \ 3.066400000$
- 1 -5.426900000 -2.492700000 -0.624600000
- $1 \ \hbox{--}5.280500000 \ \hbox{--}3.075500000 \ 1.789600000$