

Complex ferrocenoyl 17 β - hydroxy-estra- 1,3,5(10)-trien-3-olate	Torsion angle Cp and ester (-CO ₂) group ($^{\circ}$) a ($^{\circ}$)	Torsion angle between ester group and phenyl ring ($^{\circ}$) b ($^{\circ}$)	Energy
1	0 $^{\circ}$ (co-planar)	0 $^{\circ}$	-7.11118 x 10 ⁴ eV/- 1.139337 x 10 ⁻¹⁷ KJ
2	87.0 $^{\circ}$	117 $^{\circ}$	-7.110954 x 10 ⁴ eV/- 1.1393 10 ⁻¹⁷ KJ
3	0 $^{\circ}$	62.6 $^{\circ}$	-7.110951 x 10 ⁴ / - 1.39300 10 ⁻¹⁷ KJ
4	90 $^{\circ}$	62.6 $^{\circ}$	-7.110990 x 10 ⁴ eV/- 1.139306 10 ⁻¹⁷ KJ
5	-144.1 $^{\circ}$	62.6 $^{\circ}$	-7.110981 x 10 ⁴ eV/- 1.139305 10 ⁻¹⁷ KJ
6	180 $^{\circ}$	62.6 $^{\circ}$	-7.110973 x 10 ⁴ eV/- 1.139304 x 10 ⁻¹⁷ KJ
7	7.7 $^{\circ}$	62.7 $^{\circ}$	-7.110815 x 10 ⁴ eV/- 1.139279 x 10 ⁻¹⁷ KJ
8	180 (co-planar)	62.7 $^{\circ}$	-7.110822 x 10 ⁴ eV/- 1.139280 x 10 ⁻¹⁷ KJ
9	-90	90 $^{\circ}$	-7.110811 x 10 ⁴ eV/-

Table 1. Simple point energies for nine conformations at different a and b torsion angles of ferrocenoyl 17 β -hydroxy-estra-1,3,5(10)-trien-3-olate.