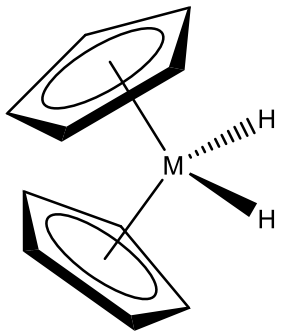
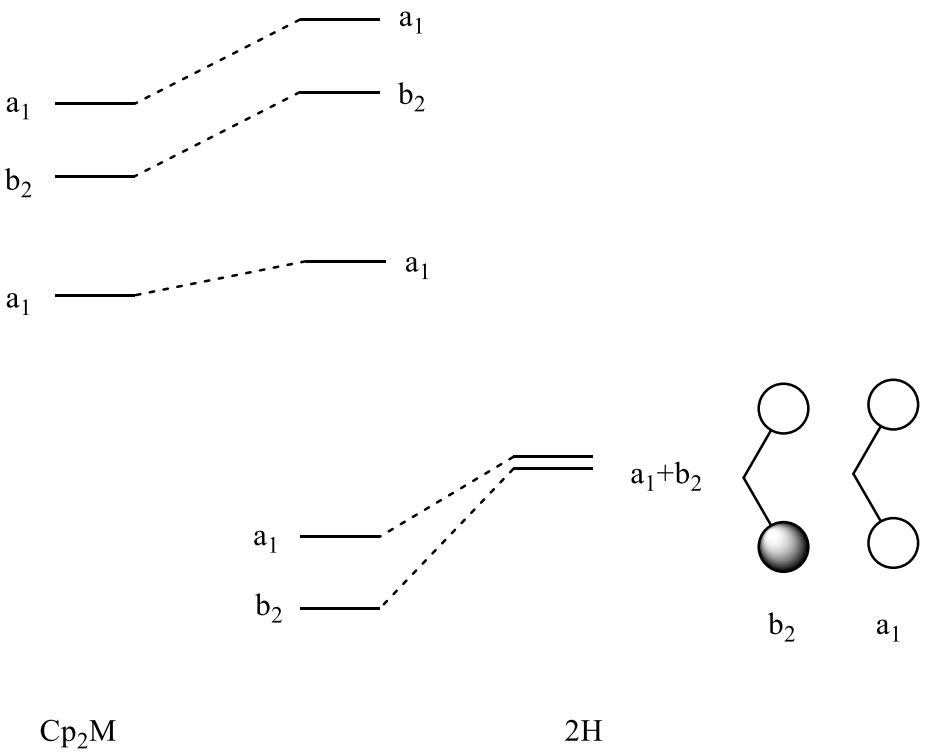
Ch 112
In class exercise
Oct 18, 2016

Problem 1
Consider $Cp_2M(H)_2$.

2.1 Predict the geometry of $Cp_2M(H)_2$.



2.2 Provide a molecular orbital theory argument.



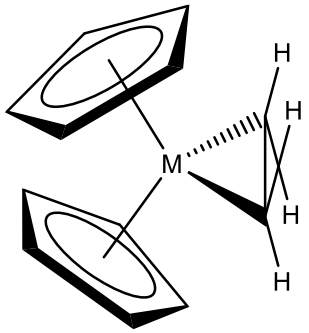
Check also class notes

2.3 Assuming that $Cp_2M(H)_2$ is an $18e^-$ complex, assign M to a second row transition metal.

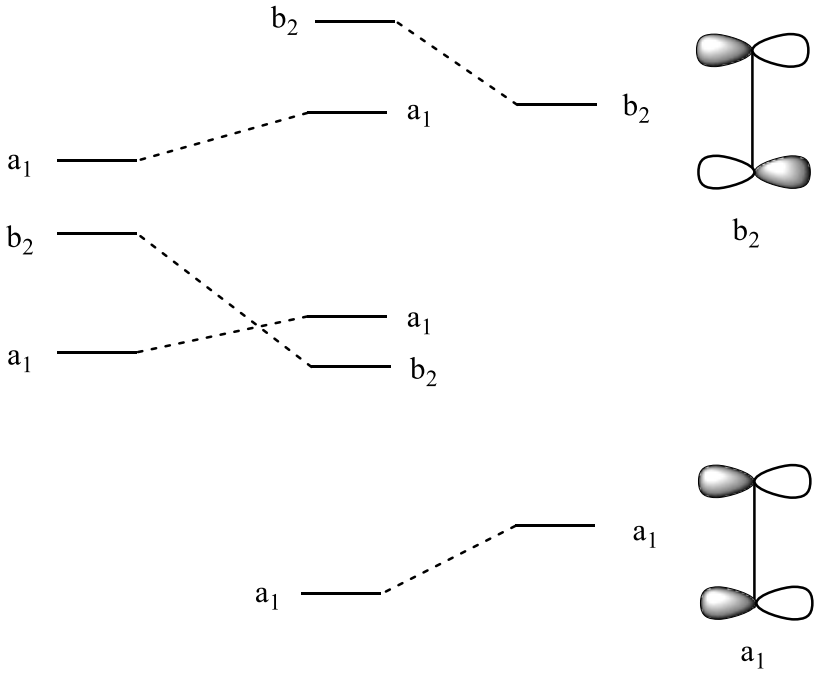
Mo

Problem 2
Consider $Cp_2M(\eta^2-C_2H_4)$.

2.1 Predict the structure of $Cp_2M(\eta^2-C_2H_4)$.



2.2 Provide a molecular orbital theory argument.



Cp_2M C_2H_4

Check also class notes

2.3 Assuming that $Cp_2M(\eta^2-C_2H_4)$ is an $18e^-$ complex, assign M to a second row transition metal.

Mo