

Ch 112
In class exercise
Oct 18, 2016

Problem 1

Consider $\text{Cp}_2\text{M}(\text{H})_2$.

2.1 Predict the geometry of $\text{Cp}_2\text{M}(\text{H})_2$.

2.2 Provide a molecular orbital theory argument.

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

Problem 2

Consider $\text{Cp}_2\text{M}(\eta^2\text{-C}_2\text{H}_4)$.

2.1 Predict the structure of $\text{Cp}_2\text{M}(\eta^2\text{-C}_2\text{H}_4)$.

2.2 Provide a molecular orbital theory argument.

2.3 Assuming that $\text{Cp}_2\text{M}(\eta^2\text{-C}_2\text{H}_4)$ is an $18e^-$ complex, assign M to a second row transition metal.