

Answer on Question#59697 - Chemistry - Organic Chemistry

which is more energetic , an sp^3 or sp molecular orbital ?

Answer:

The energy of the orbital increases as the distance of the electron from the atomic nucleus. Besides, within the range of the one energetic level, s-electrons are nearer to the nucleus than p-electrons. That is why for the different types of the hybrid AO the energy decreases with the increase of the contribution of the s-AO into the general hybrid state.



