Session #11: Homework Solution

Problem #1

What are the electron orbital configurations resulting from (1) sp, (2) sp^2 and (3) sp^3 hybridization?

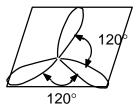
Solution

sp hybrid



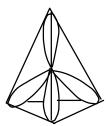
linear bonding orbital configuration; bond angle 180°

 sp^2



planar bonding orbital configuration; bond angle 120°

 sp^3



tetrahedral bonding orbital configuration; bond angle 109.5°

3.091SC Introduction to Solid State Chemistry Fall 2009

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