

CHAPTER OVERVIEW

13: Molecular Orbital Theory

- 13.1: Introductions
- 13.2: Wave Behavior and Bonding in the Hydrogen Molecule
- 13.3: Molecular Orbitals- Lessons from Dihydrogen
- 13.4: Sigma Bonding with p Orbitals
- 13.5: Pi Bonding with p Orbitals
- 13.6: Assembling the Complete Diagram and Electron Population
- 13.7: Experimental Evidence for Molecular Orbital Results
- 13.8: Symmetry and Mixing
- 13.9: When Different Atoms Bond Together
- 13.10: Another Complication in HF- Orbital Mixing
- 13.11: Geometry and Orbital Contribution to Bonding
- 13.12: Approximations in More Complicated Structures
- 13.13: Building a Molecule from Pieces
- 13.14: Delocalization
- 13.15: Polyenes
- 13.16: Delocalization in Aromatics
- 13.17: Heteroaromatics
- 13.18: Frontier Orbitals
- 13.19: Solutions to Selected Problems

This page titled [13: Molecular Orbital Theory](#) is shared under a [CC BY-NC 3.0](#) license and was authored, remixed, and/or curated by [Chris Schaller](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.