

CHAPTER OVERVIEW

12: The Chemical Bond

Chemical bond refers to the forces holding atoms together to form molecules and solids. This force is of an electric nature, and the attraction between electrons of one atom to the nucleus of another atom contributes to what is known as **chemical bonds**. A chemical bond is a lasting attraction between atoms that enables the formation of chemical compounds and may result from the electrostatic force of attraction between atoms with opposite charges, or through the sharing of electrons as in the covalent bonds. The strength of chemical bonds varies considerably.

[12.1: Lewis Structures](#)

[12.2: Valence Bond Theory](#)

[12.3: Hybridization of Atomic Orbitals](#)

[12.4: Electronegativity and Dipole Moment](#)

[12.5: Molecular Orbital Theory](#)

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[12.7: Resonance and Electron Delocalization](#)

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[12.9: Coordination Compounds in Biological Systems](#)

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