

## CHAPTER OVERVIEW

### 8: Polyelectronic Atoms

One of the shortcomings of Bohr's model of the hydrogen atom was that it was not extensible to atoms that had more than one electron. The newly emerging quantum mechanics was hoped to do a better job. Unfortunately, while the hydrogen atom problem is solvable analytically, issues arise when an attempt is made to solve the problem for atoms with multiple electrons. Regardless, the first step in deriving this theory, then, is writing the Hamiltonian for the System.

[8.1: Potential Energy and the Hamiltonian](#)

[8.2: The Aufbau Principle](#)

[8.3: Orbital Diagrams](#)

[8.4: Angular Momentum Coupling](#)

[8.5: The Pauli Exclusion Principle](#)

[8.6: Atomic Spectroscopy](#)

[8.7: Vocabulary and Concepts](#)

[8.8: Learning Objectives](#)

[8.9: Problems](#)

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