

CHAPTER OVERVIEW

5: Electronic Basis for the Properties of the Elements

We shall now present an interpretation of the physical and chemical properties of the elements based on the atomic orbital description of their electronic structures. Our discussion of the properties of the atoms will be a qualitative one, but it should be pointed out that many of the properties of atoms can now be accurately predicted by quantum mechanical calculations employing a very extended version of the atomic orbital concept.

[5.1: Introduction](#)

[5.2: Horizontal Variations](#)

[5.3: Vertical Relationships](#)

[5.4: Some Chemical Implications](#)

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