CHAPTER OVERVIEW

Periodic Trends

Periodic trends are specific patterns that are present in the periodic table that illustrate different aspects of a certain element, including its size and its electronic properties. Major periodic trends include: electronegativity, ionization energy, electron affinity, atomic radius, melting point, and metallic character. Periodic trends, arising from the arrangement of the periodic table, provide chemists with an invaluable tool to quickly predict an element's properties. These trends exist because of the similar atomic structure of the elements within their respective group families or periods, and because of the periodic nature of the elements.

Characteristics of Metals
Characteristics of Nonmetals
Effective Nuclear Charge
Electron Affinity
Ionization Energy
Sizes of Atoms and Ions
Slater's Rules for Effective Nuclear Charge

Contributors and Attributions

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