Chemistry 506: Allied Health Chemistry 2

Chapter 13: Aldehydes and Ketones

Functional Groups with Double Bonds to Oxygen

Introduction to General, Organic & Biochemistry, 5th Edition by Bettelheim and March: Chapter 13, Pages 425-450

Outline Notes by Dr. Allen D. Hunter, YSU Department of Chemistry, ©2000.

Outline

13A Section(s) 13.1/2/3 Introduction, Nomenclature, and Properties

- Carbonyl Groups
  - C - O bond and -bond
    - Relative Electronegativities of C and O
      - Polarity of Bond
      - δ^+ charge on C
      - δ^- charge on O
      - Dipole - Dipole forces cause Mp and Bp increases
    - Lone Pairs on Oxygen

- Aldehydes
  - At least one H on Carbonyl Carbon
  - Formaldehyde (Methanal)
- IUPAC Nomenclature
  - anal ending
  - Examples