

Chemistry 1500: Chemistry in Modern Living

Topic 2: Protecting the Ozone Layer

Atoms and Light

Chemistry in Context, 2nd Edition (1997): Chapter 2, Pages 35-72

Chemistry in Context, 3rd Edition (2000): Chapter 2, Pages 45-92

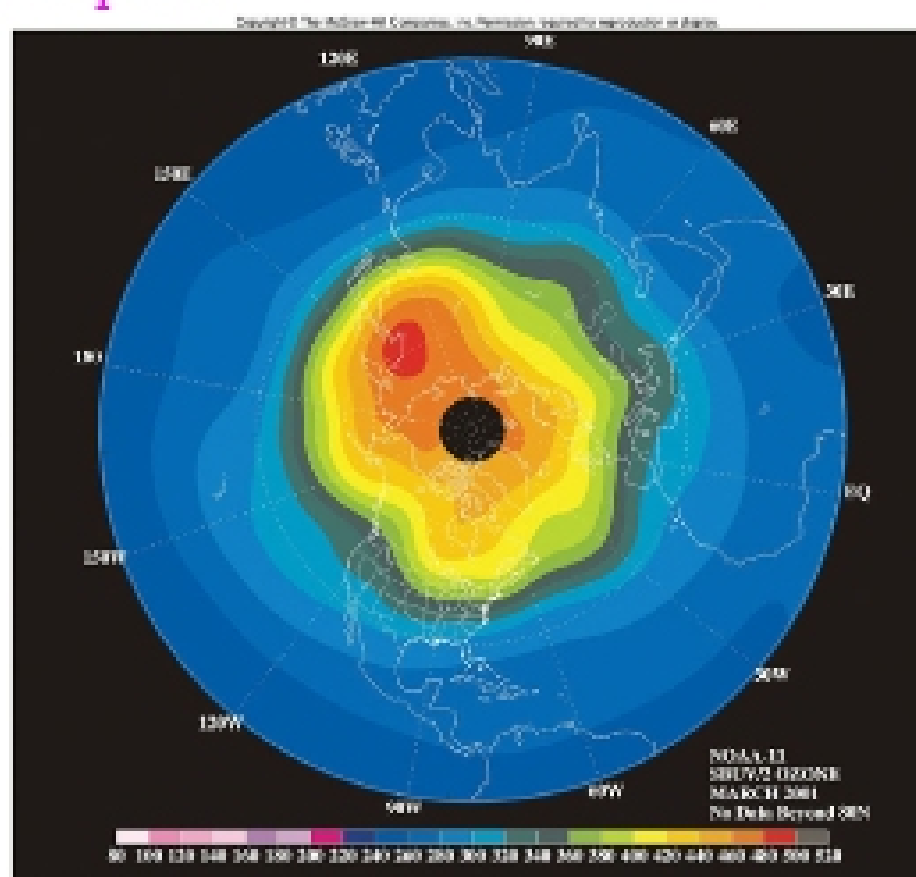
Chemistry in Context, 4th Edition (2003): Chapter 2, Pages 47-96

Chemistry in Context, 5th Edition (2006): Chapter 2, Pages 60-113

The Figure, Table, & Problem numbers in these notes are taken from the 4th edition of the text unless otherwise noted.

Outline Notes by Dr. Allen D. Hunter, YSU Department of Chemistry, ©2000 - 2007.

- Graphics from Text: Figure 2.0, Antarctic Ozone Hole as seen from space



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2A What is Ozone?

➤ Ozone Formation

➤ Produced from a variety of processes:

➤ Photochemical Smog (Topic 1)

➤ High Voltage Electrical Discharges

Molecular Oxygen + Energy → Ozone



➤ Can be smelled at 10 ppb

➤ Arc Welding

➤ Lightning Storms

➤ Laser Printers

➤ Tesla Coils

➤ Pools