This is a textbook map of the McMurry's "Organic Chemistry" textbook. As with all Textmaps, it is not a copy of the original textbook, but is a map of comparable content on LibreTexts to recreate the flow.

- Front Matter

- 1: Structure and Bonding

- 2: Polar Covalent Bonds; Acids and Bases

- 3: Organic Compounds- Alkanes and Their Stereochemistry
4: Organic Compounds- Cycloalkanes and their Stereochemistry

5: Stereochemistry at Tetrahedral Centres

6: An Overview of Organic Reactions

7: Alkenes- Structure and Reactivity
8: Alkenes - Reactions and Synthesis

- 9: Alkynes - An Introduction to Organic Synthesis

- 10: Organohalides

- 11: Reactions of Alkyl Halides - Nucleophilic Substitutions and Eliminations
12: Structure Determination - Mass Spectrometry and Infrared Spectroscopy

![Diagram of energy levels with magnetic field effects]

13: Structure Determination - Nuclear Magnetic Resonance Spectroscopy

- \( \sigma^* \) (anti-bonding)
- \( \pi^* \) (anti-bonding)
- \( n \) (non-bonding)
- \( \pi \) (bonding)
- \( \sigma \) (bonding)

14: Conjugated Compounds and Ultraviolet Spectroscopy

![Diagram of conjugated compounds]

15: Benzene and Aromaticity
16: Chemistry of Benzene - Electrophilic Aromatic Substitution

17: Alcohols and Phenols

18: Ethers and Epoxides; Thiols and Sulfides

19: Aldehydes and Ketones- Nucleophilic Addition Reactions
20: Carboxylic Acids and Nitriles

\[ \text{R} \quad \text{C} \quad \text{X} \quad \text{θ} \quad \text{:Nu} \]

- 21: Carboxylic Acid Derivatives- Nucleophilic Acyl Substitution Reactions

\[ \text{H}_3\text{C} \quad \text{C} \quad \text{O} \quad \text{θ} \quad \text{H} \quad \text{H} \]

- 22: Carbonyl Alpha-Substitution Reactions

- 23: Carbonyl Condensation Reactions
24: Amines and Heterocycles

25: Biomolecules- Carbohydrates

26: Biomolecules- Amino Acids, Peptides, and Proteins

27: Biomolecules - Lipids
28: Biomolecules - Nucleic Acids

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