

CONTENTS

1. Introduction	1
2. Alkanes	21
3. Alkenes. Mechanism of Organic Reactions. Natural Gas And Petroleum	37
4. Alcohols. Esters of Inorganic Acids	56
5. Alkyl Halides. Grignard Reagents	80
6. Synthesis of Alkanes and Alkenes. Alkynes (Acetylenes)	92
7. Ethers	101
8. Carboxylic Acids and Their Derivatives	108
9. Waxwes, Fats, and Oils	138
10. Aldehydes and Ketones	150
11. Aliphatic Nitrogen Compounds	177
12. Aliphatic Sulfur Compounds	206
13. Proteins, Amino Acids, and Peptides	220
14. Derivatives of Carbonic Acid and Thiocarbonic Acid	235
15. Stereoisomerism	252
16. Carbohydrates	275
17. Benzene and Its Homologs. Sources of Aromatic Compounds	311
18. Halogen Derivatives of Aromatic Hydrocarbons	326
19. Aromatic Nitro Compounds. Mechanism of Aromatic Substitution	331
20. Aromatic Sulfonic Acids and Their Derivatives	353
21. Aromatic Amies. Diazonium Salts	361
22. Phenols, Aminophenols, and Quiones	381
23. Aromatic Alcohols, Aralkylamines, Aldehydes and Ketones Stereochemistry of the Oximes	400
24. Aromatic Carboxylic Acids and Derivatives	415
25. Arylalkaknes and Arylalkenes. Biphenyl and Its De3rivatives	427
26. Condensed Nuclear Hyddrocarbons and Their Derivatives	433
27. Heterocyclic Compounds Alkaloids	450
28. Color. Dyes and Dyeing	480
29. Dienes. Rubber and Synthetic Rubbers	505
30. Chlorinated and Fluorinated Aliphatic Hydrocarbons	516
31. Unsaturated Alcohols, Polyhydric Alcohols, and Their Derivatives. Amino Alcohols and Polyamines	527
32. Halogenayted, Hydroxy, Amino, and Unsaturated Acids	543
33. Polycarboxylic Acids	553
34. Keto Acids	565
35. Alicyclic Compounds. Terpenes and Steroids	573

36. Organometallic Compounds, Silicon Compounds	593
Index	609
Periodic Table of the Elements	Inside Back Cover
International Atomic Weights	Inside Back Cover