

CONTENTS

1. Introduction	1
2. Alkanes	26
3. Alkanes	43
4. Natural Gas, Petroleum, and Derived Products	55
5. Alcohols, Esters of Inorganic Acids	69
6. Alkyl Halides. Grignard Reagents.	98
7. Mechanism of Organic Reactions	108
8. Synthesis of Alkanes and Alkenes. Alkynes (Acetylenes)	125
9. Ethers	135
10. Carboxylic Acids and Their Derivatives. Ortho Esters	142
11. Waxes, Fats, And Oils	177
12. Aldehydes and Ketones	192
13. Aliphatic Nitrogen Compounds	224
14. Aliphatic Nitrogen Compounds	263
15. Proteins, Amino Acids, And Peptides	281
16. Derivatives of Carbonic Acid and Thiocarbonic Acid	295
17. Stereoisomerism	315
18. Carbohydrates	345
19. Aromatic Compounds. Benzene and Its Homologs. Coal Products	405
20. Halogen Derivatives of Aromatic Hydrocarbons	422
21. Aromatic Nitro Compounds. Mechanism of Aromatic Substitution	428
22. Aromatic Sulfonic acids and Their Derivatives	454
23. Aromatic Amines	462
24. Diazonium Salts	479
25. Phenols, Aminophenols. And Quinones	488
26. Aromatic Alcohols, Aralkylamines, Aldehydes and Ketones. Stereochemistry of the Oximes	510
27. Aromatic Carboxylic Acids and Derivatives	527
28. Arylalkanes. Free Groups. Arylalkenes. Biphenyl and its Derivatives	541
29. Condensed Nuclear Hydrocarbons and Their Derivatives	556
30. Heterocyclic Compounds. Alkaloids	576
31. Color. Dyes and Dyeing. Organic Pigments	617
32. Dienes, Rubber, and synthetic Rubbers	657
33. Chlorinated and Fluorinated Aliphatic hydrocarbons	672
34. Unsaturated Alcohols, Polyhydric Alcohols, and Their Derivatives. Amino Alcohols and Polyamines	683
35. Hydroxy, Unsaturated, Halogenated, and Amino Carbonyl Compounds. Dicarbonyl Compounds	700
36. Halogenated, Hydroxy, Amino, and Unsaturated Acids	716

37. Polycarboxylic Acids	728
38. Keto Acids	744
39. Alicyclic Compounds. Terpenes and Steroids	759
40. Organic Peroxides, Autoxidation and Antioxidants	791
41. Organometallic Compounds	306
42. Phosphorus and Silicon Compounds	823
Appendix A-Pronunciation	832
Appendix B-Greek Alphabet	838
Index	839
Periodic Table of The Elements	Inside Back Cover