

CONTENTS

<i>List of Contributors</i>	vii
<i>Preface</i>	ix
<i>Contents of Other Volumes</i>	xi
<i>List of Abbreviations</i>	xv

I. Naphthoquinonoid Dyes and Pigments*B. D. Tilak*

I. Introduction	1
II. Dyes Derived from 1,4-Naphthoquinone	3
III. Dyes Derived from 2,3-Dichloro-1,4-naphthoquinone (I)	3
IV. Miscellaneous Dyes	45
V. Interrelationship between Coplanarity and Substantivity of Naphthoquinonoid Dyes for Cellulosic and Hydrophobic Fibers	52
VI. Conclusion	54

II. Acid Anthraquinone Dyes*W. Schoenauer, F. Benguerel, and J. Benz*

I. Dyes Derived from 1-Aminoanthraquinone-2-sulfonic Acid	59
II. Diaminodihydroxyanthraquinonesulfonic Acids	87
III. Dyes Formed by Sulfonation of a Dye Base	88

III. Anthraquinonoid Vat Dyes*K. Venkataraman and V. N. Iyer*

I. Introduction	132
II. Intermediates	132
III. General Properties and Reactions	136
IV. Anthraquinone Derivatives	147
V. The Scholl Reaction	193
VI. Anthrone Derivatives	200
VII. Vat Dyes Related to the Anthraquinonoids: Derivatives of Perylene-3,4,9,10-tetracarboxylic Acid and Naphthalene-1,8-dicarboxylic and 1,4,5,8-tetracarboxylic Acids	231
VIII. Solubilized Vat Dyes	236

IV. Phthalocyanines*G. Booth*

I. Introduction	241
II. Copper Phthalocyanine	242
III. Metal-Free Phthalocyanine	247
IV. Phthalocyanines of Other Metals	249
V. Nuclear-Substituted Metal Phthalocyanines	255
VI. Oxidation and Reduction Reactions	276
VII. Spectra and Physicochemical Properties	280
VIII. Prospects	281

V. Phthalogen Dyestuffs*Heinrich Vollmann*

I. Introduction	283
II. The Two Structure Types of Phthalogen Dyestuff Developers and the Routes to Their Discovery	285
III. Commercial Products of the Phthalogen Class, Including the Auxiliaries	307
IV. Technique and Reaction Mechanisms of the Application of Phthalogen Dyestuffs	310

VI. Organic Pigments*J. Lenoir*

I. General Survey	314
II. Chemistry and Properties of Organic Pigments	341
III. Evaluation of Pigments	459

VII. Hair Dyes*John F. Corbett*

I. Introduction	475
II. Oxidative Hair Dyes	478
III. Autoxidative Hair Dyes	495
IV. Metal Chelate Dyes	505
V. Direct Dyes for Human Hair	507
VI. Miscellaneous Dyes	531
VII. Colored Hair Sprays	532

VIII. Fluorescent Brightening Agents*Heinrich Gold*

I. General Considerations	536
II. Stilbene Compounds	556
III. Coumarin and Carbostryryl Compounds	590
IV. 1,3-Diphenylpyrazolines	611
V. Naphthalimide Compounds	616
VI. Aryloazolyl-(2) Compounds	620
VII. Various Systems	656
VIII. Application of Fluorescent Brightening Agents	661
IX. Evaluation of the Fluorescent Brightening Effects	665
X. Analysis of Fluorescent Brightening Agents	676
Author Index	681
Subject Index	696