

# Contents

## Volume 1

### Preface

### Contents

Robert Christie, Adrian Abel

**1 Anthraquinonoid pigments**

Heinz Mustroph

**2 Apocyanine dyes**

Robert Christie

**3 Azo (Hydrazone) pigments: general principles**

Gerhard Pfaff

**4 Bismuth vanadate pigments**

Gerhard Pfaff

**5 Black pigments**

Gerhard Pfaff

**6 Cadmium sulfide / selenide pigments**

Gerhard Pfaff

**7 Carbon black pigments**

Robert Christie, Adrian Abel

**8 Carbonyl pigments: general principles**

Robert Christie, Adrian Abel

**9 Carbonyl pigments: miscellaneous types**

Robert Christie, Adrian Abel

**10 Cationic (basic) dye complex pigments**

Gerhard Pfaff

**11 Ceramic colors**

Gerhard Pfaff

**12 Cerium sulfide pigments**

Gerhard Pfaff

**13 Chromate and molybdate pigments**

Gerhard Pfaff

**14 Chromium oxide pigments**

Andrew Towns

**15 Colorants: general survey**

Gerhard Pfaff

**16 Colorants in building materials**

Frank J. Maile

**17 Colorants in coating applications**

Ghita Lanzendörfer-Yu

**18 Colorants in cosmetic applications**

Gerhard Pfaff

**19 Colorants in plastic applications**

Thomas Rathschlag

**20 Colorants in printing applications**

Gerhard Pfaff

**21 Colored pigments**

Werner Rudolf Cramer

**22 Color fundamentals**

**Index**

## **Volume 2**

### **Contents**

Werner Rudolf Cramer

**23 Color measurement**

Heinz Mustroph

**24 Cyanine dyes**

Andrew Towns

**25 Diarylethene dyes**

Robert Christie, Adrian Abel

**26 Diketopyrrolopyrrole pigments**

Robert Christie, Adrian Abel

**27 Dioxazine pigments**

Robert Christie, Adrian Abel

**28 Disazo (Bishydrazone) condensation pigments**

Robert Christie, Adrian Abel

**29 Disazo (Bishydrazone) pigments based on acetoacetanilides**

Robert Christie, Adrian Abel

**30 Disazo (Bishydrazone) pigments based on pyrazolones**

Heinz Mustroph

**31 Dyes: quantum chemical calculation of electronic spectra**

Gerhard Pfaff

**32 Effect pigments**

Heinz Langhals

**33 Fluorescence and fluorescent dyes**

Andrew Towns

**34 Fulgide dyes**

Heinz Mustroph

**35 Hemicyanine dyes**

Heinz Mustroph

**36 Hemioxonol dyes**

Magdalene Gärtner

**37 Historical pigments, dyes and binders**

Heinz Mustroph, Andrew Towns

**38 Indophenol and related dyes**

Gerhard Pfaff

**39 Inorganic luminescent pigments**

Gerhard Pfaff

**40 Iron blue pigments**

Gerhard Pfaff

**41 Iron oxide pigments**

Heinz Mustroph

**42 Merocyanine dyes**

**Index**

## **Volume 3**

### **Contents**

Robert Christie, Adrian Abel

**43 Metal complex pigments**

Gerhard Pfaff, Michael Bartelt, Frank J. Maile

**44 Metal effect pigments**

Gerhard Pfaff

**45 Mixed metal oxide pigments**

Robert Christie, Adrian Abel

**46 Monoazo (Monohydrazone) pigments based on acetoacetanilides**

Robert Christie, Adrian Abel

**47 Monoazo (Monohydrazone) pigments based on benzimidazolones**

Robert Christie, Adrian Abel

**48 Monoazo (Monohydrazone) pigments based on 2-naphthol and derivatives**

Andrew Towns

**49 Naphthopyran dyes**

Robert Christie, Adrian Abel

**50 Organic pigments: general principles**

Gerhard Pfaff

**51 Oxonitride pigments**

Heinz Mustroph

**52 Oxonol dyes**

Robert Christie, Adrian Abel

**53 Perylene and perinone pigments**

Andrew Towns

**54 Photochromic dyes**

Robert Christie, Adrian Abel

**55 Phthalocyanine blue pigments**

Robert Christie, Adrian Abel

**56 Phthalocyanine green pigments**

Robert Christie, Adrian Abel

**57 Phthalocyanine pigments: general principles**

Uwe Hempelmann

**58 Pigments: general aspects**

Heinz Mustroph

**59 Polymethine dyes**

Robert Christie, Adrian Abel

**60 Quinacridone pigments**

Gerhard Pfaff

**61 Special effect pigments**

Andrew Towns

**62 Spirooxazine dyes**

Andrew Towns

**63 Spiropyran dyes**

Heinz Muströph

**64 Streptocyanine dyes**

Heinz Muströph

**65 Streptomerocyanine dyes**

Gerhard Pfaff

**66 Titanium dioxide pigments**

Gerhard Pfaff

**67 Transparent pigments**

Gerhard Pfaff

**68 Ultramarine pigments**

Gerhard Pfaff

**69 White pigments**

Gerhard Pfaff

**70 Zinc oxide pigments**

Gerhard Pfaff

**71 Zinc sulfide pigments**

**Index**