

## CONTENTS

Foreword	xv
Preface	xvii
Symbols	xix
1. WHAT ARE COATINGS?	1
2. POLYMERIZATION AND FILM FORMATION	6
3. FLOW	38
4. MECHANICAL PROPERTIES	63
5. EXTERIOR DURABILITY	89
6. ADHESION	109
7. CORROSION PROTECTION BY COATINGS	125
8. LATEXES	143
9. AMINO RESINS	162
10. BINDERS BASED ON ISOCYANATES: POLYURETHANES	180
11. EPOXY AND PHENOLIC RESINS	208
12. ACRYLIC RESINS	231
13. POLYESTER RESINS	246
14. DRYING OILS	258
15. ALKYD RESINS	268
16. OTHER RESINS AND CROSS-LINKERS	286
17. SOLVENTS	306
18. COLOR AND APPEARANCE	335
19. PIGMENTS	370
20. PIGMENT DISPERSION	385
21. PIGMENT VOLUME RELATIONSHIPS	407
22. APPLICATION METHODS	417
23. FILM DEFECTS	433
24. SOLVENT-BORNE AND HIGH SOLIDS COATINGS	453
25. WATER-BORNE COATINGS	567
26. ELECTRODEPOSITION COATINGS	477
27. POWDER COATINGS	486
28. RADIATION CURE COATINGS	508
29. PRODUCT COATINGS FOR METAL SUBSTRATES	527
30. PRODUCT COATINGS FOR NONMETALLIC SUBSTRATES	547
31. ARCHITECTURAL COATINGS	559
32. SPECIAL PURPOSE COATINGS	576
33. PERSPECTIVES ON COATINGS DESIGN	590
APPENDIX : SOURCES	597
INDEX	603