

CONTENTS OF PART I

Contributors to Part I	vii
Contents of Part II	ix
Preface	xi
Chapter 1 BASIC THEORY	1
<i>K. J. Lissant</i>	
I. Introduction	1
II. Theoretical Considerations	4
III. Basic Geometry	10
IV. Low-Internal-Phase-Ratio Emulsions	34
V. Medium-Internal-Phase-Ratio Emulsions	42
VI. High-Internal-Phase-Ratio Emulsions	49
VII. Summary	66
References	68
Chapter 2 MAKING AND BREAKING EMULSIONS	71
<i>K. J. Lissant</i>	
I. Introduction	72
II. Reasons for Using Emulsions	72
III. Selection of Emulsion Type	74
IV. Selection of Emulsifier	75
V. Techniques of Emulsification	103
VI. Techniques for Breaking Emulsions	111
References	123

Chapter 3	MICROEMULSIONS	125
<i>Leon M. Prince</i>		
I.	Introduction	126
II.	Identification	127
III.	Theory	145
IV.	Practical Applications	161
	References	175
Chapter 4	AGRICULTURAL EMULSIONS	179
<i>Paul L. Lindner</i>		
I.	Introduction	181
II.	Calculations of Formulations	183
III.	Solvents for Agricultural Formulations	185
IV.	Surfactants for Agricultural Formulations	187
V.	Emulsion Stability	190
VI.	Blending Emulsifiers and Economics	200
VII.	Water and Agricultural Formulations	201
VIII.	Testing	208
IX.	Suggested Optimization of Emulsifiable Concentrates	210
X.	Selection of Emulsion Type	214
XI.	Some Special Formulations	219
XII.	Soil Penetration, Adsorption, and Mobility	226
XIII.	Application Techniques	227
	References	236
Chapter 5	FOOD EMULSIONS	249
<i>Matthew W. Lynch and William C. Griffin</i>		
I.	Introduction	250
II.	Emulsion Properties	253
III.	Emulsification	258
IV.	Product Development	268
V.	Equipment	274
VI.	Food Emulsions	279

VII. Other Uses for Surfactants	281
VIII. Multiple Emulsifier Effects	286
References	289
 Chapter 6 MEDICINAL EMULSIONS	 291
<i>B. A. Mulley</i>	
I. Introduction	292
II. Demulsifying Agents and Other Emulsion Adjutants Used in Medicine	295
III. Some Technical Considerations in the Design and Preparation of Medicinal Emulsions	306
IV. Product Review	322
References	343
 Chapter 7 EMULSION PAINTS	 351
<i>Gerould Allyn</i>	
I. Introduction	352
II. Latex-Paint Vehicles	360
III. Paint Formulation	367
IV. Trade-Sales Coatings	374
V. Latex Maintenance Paints	379
VI. Industrial Latex Paints	380
References	384
 Chapter 8 ASPHALT EMULSIONS	 387
<i>R. L. Ferm</i>	
I. Introduction	389
II. Advantages of Asphalt Emulsions	390
III. Product Types and Nomenclature	391
IV. Emulsifiers for Asphalt	392
V. Improvement of Asphalt Emulsifiability	399
VI. Additives in Emulsions	399
VII. Manufacture of Emulsions	403
VIII. Emulsion Properties and Testing	407

IX. The Technology of Paving with Emulsions	412
X. Industrial Emulsions	419
XI. Agricultural and Water-Conservation Uses	425
References	430

Cumulative Indexes appear in Part II,