

Contents

Preface to the Distillation Collection.....	vii
Preface to <i>Distillation: Fundamentals and Principles</i>	ix
List of Contributors.....	xi

CHAPTER 1 History of Distillation	1
Norbert Kockmann	
CHAPTER 2 Vapor–Liquid Equilibrium and Physical Properties for Distillation	45
Jürgen Gmehling, Michael Kleiber	
CHAPTER 3 Mass Transfer in Distillation.....	97
Ross Taylor, Hendrik A. Kooijman	
CHAPTER 4 Principles of Binary Distillation	145
Eva Sorensen	
CHAPTER 5 Design and Operation of Batch Distillation.....	187
Eva Sorensen	
CHAPTER 6 Energy Considerations in Distillation.....	225
Megan Jobson	
CHAPTER 7 Conceptual Design of Zeotropic Distillation Processes	271
Vishesh H. Shah, Rakesh Agrawal	
CHAPTER 8 Conceptual Design of Azeotropic Distillation Processes	305
Mirko Skiborowski, Andreas Harwardt, Wolfgang Marquardt	
CHAPTER 9 Hybrid Distillation Schemes: Design, Analysis, and Application	357
Deenesh K. Babi, Rafiqul Gani	

CHAPTER 10	Modeling of Distillation Processes.....	383
Eugen Y. Kenig, Sergei Blagov		
CHAPTER 11	Optimization of Distillation Processes	437
José A. Caballero, Ignacio E. Grossmann		
Index	501	