CONTENTS

Preface ix
Contributors xi

1 INTRODUCTION TO AMORPHOUS SOLID DISPERSIONS 1
George Zografi and Ann Newman

2 POLYMERS AND SURFACANTS 42
Padma Narayan, William W. Porter III, Meinolf Brackhagen,
and Christopher Tucker

3 AMORPHOUS SOLID DISPERSION SCREENING 85
Ann Newman

4 SOLID-STATE CHARACTERIZATION OF AMORPHOUS
DISPERSIONS 117
Frederick G. Vogt

5 PHYSICAL STABILITY AND CRYSTALLIZATION INHIBITION 179
Lynne S. Taylor

6 SOLUBILITY AND DISSOLUTION CONSIDERATIONS FOR
AMORPHOUS SOLID DISPERSIONS 218
Grace A. Ilevbare, Wei Xu, Christopher T. John, James D. Ormes,
Jesse L. Kuiper, Allen C. Templeton, and Annette Bak

7 TRANSLATIONAL DEVELOPMENT OF AMORPHOUS
DISPERSIONS 259
Patrick R. Connelly, Brian Patrick Quinn, Steve Johnston,
Philip Bransford, Praveen Mudunuri, Andrey Peresypkin,
Majed Fawaz, Setu Roday, Anuj Kuldipkumar, Hong-Ren Wang,
Phillip Snyder, Jeff Katstra, Tapan Sanghvi, Bill Rowe,
and Patricia Hurter

8 PRECLINICAL AND CLINICAL STUDIES 288
Marcus E. Brewster, Geert Verreck, Jan Bevernage, Joachim Brouwers,
Guy Van den Mooter, and Patrick Augustijns
9 SPRAY DRYING AND SCALE-UP 315
Daniel E. Dobry, Dana M. Settell, and John M. Baumann

10 HOT MELT EXTRUSION OF AMORPHOUS SOLID DISPERSIONS 341
Kieran Crowley and Andreas Gryczke

11 FORMULATION DEVELOPMENT OF AMORPHOUS DISPERSIONS 364
Tapan Sanghvi, Jeff Katstra, Brian Patrick Quinn, Hayden Thomas, and Patricia Hurter

12 SCIENTIFIC AND REGULATORY CONSIDERATIONS IN PRODUCT DEVELOPMENT 398
Abhay Gupta, Ziyaur Rahman, and Mansoor A. Khan

13 PATENTING AMORPHOUS SOLID DISPERSIONS OF PHARMACEUTICALS 415
Jeffrey A. Lindeman

14 MONOGRAPHS ON POLYMERS AND SURFACTANTS 433
Xia Lu, Robert Wenslow, and Ann Newman

APPENDIX A 455
Xia Lu, Robert Wenslow, and Ann Newman

APPENDIX B: MARKETED PRODUCTS 470
Ann Newman

Index 473