

TABLE OF CONTENTS

Preface		ix
Chapter 1	Introduction <i>United States Department of Energy</i>	1
Chapter 2	Technical Strategy: Development of a Viable Cellulosic Biomass to Biofuel Industry <i>United States Department of Energy</i>	31
Chapter 3	Systems Biology to Overcome Barriers to Cellulosic Ethanol <i>United States Department of Energy</i>	39
Chapter 4	Feedstocks for Biofuels <i>United States Department of Energy</i>	59
Chapter 5	Deconstructing Feedstocks to Sugars <i>United States Department of Energy</i>	89
Chapter 6	Sugar Fermentation to Ethanol <i>United States Department of Energy</i>	125
Chapter 7	Crosscutting 21st Century Science, Technology, and Infrastructure for a New Generation of Biofuel Research <i>United States Department of Energy</i>	161
Chapter 8	Bioprocess Systems Engineering and Economic Analysis <i>United States Department of Energy</i>	187
Chapter 9	Appendix A. Provisions for Biofuels and Biobased Products in the Energy Policy Act of 2005 <i>United States Department of Energy</i>	191
Chapter 10	Appendix B. Workshop Participants <i>United States Department of Energy</i>	195
Chapter 11	Appendix C. Workshop Participant Biosketches <i>United States Department of Energy</i>	205
Chapter Sources		233
Index		235