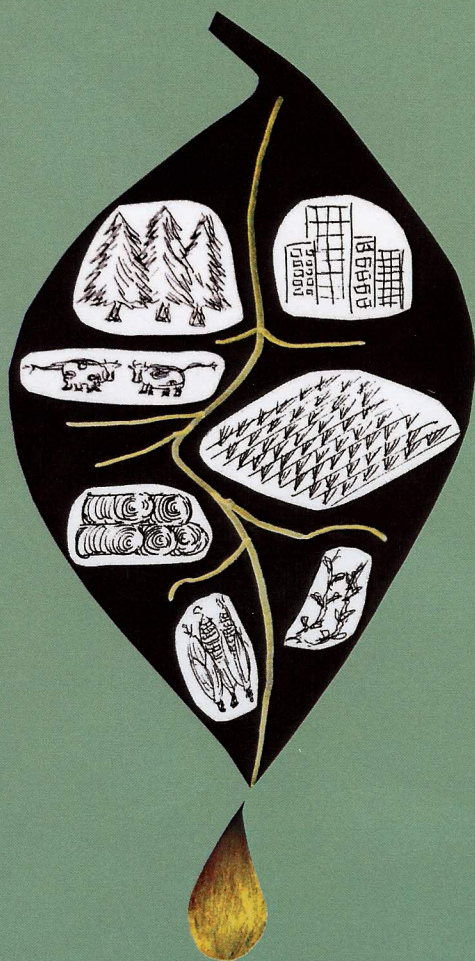


# INTRODUCTION TO BIOMASS ENERGY CONVERSIONS



**Sergio C. Capareda**



CRC Press  
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# INTRODUCTION TO BIOMASS ENERGY CONVERSIONS

"I like the approach the authors have taken ... offers a complete picture of the myriad conversion technologies that are available for bioenergy ... The completeness of biomass conversions processes sets this text apart from others."

—Troy Runge, University of Wisconsin-Madison, USA

"... a valuable addition to the extensive references already published and referenced herein. ... will provide students with a valuable understanding of biomass energy conversion processes and an introduction to sustainability and economic issues."

—From the Foreword by B.A. Stout, Professor Emeritus, Biological and Agricultural Engineering Department, Texas A&M University, USA

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Although much has been written about biomass conversions, no single textbook contains all the information needed to teach a biomass conversion course—until now. **Introduction to Biomass Energy Conversions** presents a comprehensive review of biomass resources available for conversion into heat, power, and biofuels.

The textbook covers biomass characterization and discusses facilities, equipment, and standards (e.g., ASTM or NREL) used for analysis. It examines the range of biomass resources available for conversion and presents traditional biomass conversion processes along with extensive biomass characterization data tables, illustrations, and graphical presentations of the various biomass energy conversion processes. The author also describes how to set up a laboratory for biomass energy conversion, and presents economics and sustainability issues.

No one knows what the price of oil will be next year or in future decades. It is governed by many factors other than supply and demand (politics, wars, etc.); however, whatever the future of energy is, biofuels will play an important role. This technical guide prepares students for managing biorefineries, no matter what type of biofuel is produced. It also provides practicing engineers with a resource for starting a small biofuel business.



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