

# **Biofuel and Biorefinery Technologies**

Volume 7

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# Sustainable Approaches for Biofuels Production Technologies

From Current Status to Practical  
Implementation

 Springer

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# Foreword



Biofuels are the potential and sustainable alternative sources of fossil fuels. Efforts are continuously being made to develop economically competitive biofuels and bioenergy. Despite having tremendous efforts, green energy/fuels option did not make the substantial move and still far from practical implementation globally. To develop economic and viable biofuels, all processing aspects of biomass conversion including mapping, logistic, transportation and storage of feedstock should also be given high priority. Research at laboratory level should be done focusing on the industrial parameters which directly influence the biofuels yield and productivity. Selection of right feedstock and its handling at shop floor, and mechanization of biomass pretreatment need to be taken into consideration. Biofuels production process should be robust and consolidated having minimum processing steps with zero waste discharge. Publication of the book on '*Sustainable Approaches for Biofuels Production Technologies: From Current Status to Practical Implementation*' is a timely and good effort in this direction. This book consists of 10 specific chapters focusing on different kinds of biofuels, existing technologies and sustainable approaches to improve biofuels production process. This book is directed towards presenting drawbacks in existing process and technologies in current biofuels options. The book comprehensively presents the kind of available

biofuels options and analyses their potential for using as an alternative to conventional fossil fuel. I am sure this book will serve as one of the key collections of information for the scientists, researchers, teachers and students working in area of biofuels research and development.

I congratulate Dr. Neha Srivastava from IIT-BHU, Varanasi, Dr. Manish Srivastava from DU, Delhi, Prof. (Dr.) P. K. Mishra from IIT-BHU, Varanasi, Prof. (Dr.) S. N. Upadhyay from IIT-BHU, Varanasi, Prof. (Dr.) Pramod W. Ramteke from SHUATS, Allahabad, and Dr. Vijai Gupta from Tallinn University of Technology, Estonia for bringing out this valuable publication on '*Sustainable Approaches for Biofuels Production Technologies: From Current Status to Practical Implementation*' to satisfy the current demand of industries, scientists, teachers, researchers and students.

My sincere thanks go to the editors for their hard work and dedication in this attempt. All the authors and editors of the Series of Biofuels and Biorefinery Technologies deserve sincere appreciation for their efforts in preparing this valuable publication.

Sao Paulo, Brazil

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# Contents

<b>Bioprocessing Perspective in Biorefineries</b> . . . . .	1
Sheelendra M. Bhatt and Jatinder Singh Bal	
<b>Integrated Lignocellulosic Biorefinery for Sustainable Bio-Based Economy</b> . . . . .	25
Jitendra Kumar Saini, Rishi Gupta, Hemansi, Amit Verma, Priyanka Gaur, Ritu Saini, Rishikesh Shukla and Ramesh Chander Kuhad	
<b>Chemicals and Fuels Production from Agro Residues: A Biorefinery Approach</b> . . . . .	47
Desikan Ramesh, Iniya Kumar Muniraj, Kiruthika Thangavelu and Subburamu Karthikeyan	
<b>Green Nanotechnology for Biofuel Production</b> . . . . .	73
Susana Rodríguez-Couto	
<b>Biofuels from Protein-Rich Lignocellulosic Biomass: New Approach</b> . . . . .	83
Neha Srivastava, Manish Srivastava, S. N. Upadhyay, P. K. Mishra and Pramod W. Ramteke	
<b>Biofuels from Microorganisms</b> . . . . .	93
Mariam Amer, AbdelGawad Saad and Nahed K. Ismail	
<b>Strategies to Improve Enzymes via Solid-State Fermentation</b> . . . . .	111
Indu Bhushan, Manjot Kour and Gunet Kour	
<b>Second Generation Bioethanol Production: The State of Art</b> . . . . .	121
Hemansi, Rishi Gupta, Garima Yadav, Gaurav Kumar, Anju Yadav, Jitendra Kumar Saini and Ramesh Chander Kuhad	



<b>Bioethanol Production Using <i>Saccharomyces cerevisiae</i> Immobilized in Calcium Alginate–Magnetite Beads and Application of Response Surface Methodology to Optimize Bioethanol Yield</b> . . . . .	147
Snehal Ingale, Venkata Anand Parnandi and Sanket J. Joshi	
<b>Nanotechnology in Biofuels Production: A Novel Approach for Processing and Production of Bioenergy</b> . . . . .	183
Anindita Biswas	

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