

1. Record Nr.	UNINA9910829934303321
Titolo	Bioenergy research : evaluating strategies for commercialization and sustainability // edited by Neha Srivastava, Manish Srivastava
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , [2021] ©2021
ISBN	1-119-77211-7 1-119-77212-5 1-119-77210-9
Descrizione fisica	1 online resource (339 pages)
Disciplina	662.88
Soggetti	Biomass energy Renewable energy sources
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	"Bio-fuels represent an efficient and fruitful choice of traditionally available fossil fuels. The widely and most appropriate conventional procedure of bio-fuel manufacturing from available plant oil has always been the transesterification reaction catalyzed by suitable alkali. Use of chemicals has been found to be recessive when compared with enzymatic reaction or bio catalyst. Enzymatic therapy has significant benefits compared to chemical production, because it requires low energy consumption and the adverse effects of other substances are not possible with that, resulting in formation of pure substance. As compared to ancient chemical processes, reactions with the help of enzymes had various advantages and benefits like sustainability and efficiency. Enzymes therapy has been found for broad-based commercial processes such as pharmaceuticals, dairy, food industry, meat and beverages industry, fuel sector and many more. Although there is need of further modifications with more in the reactivity, stability and bio catalytic effect of efficient bio-catalyst is required. Advance processes in the renewable energy field for the biofuel production and natural gas conversion is required. Viability of lipases,

amylases and now cellulases, xylanases, and mono-oxygenase is still extensively investigated for biofuel production. This chapter highlights on the development of bio-catalysis experiments on the production of fuel based on alcohol, biodiesel, and hydrogen based fuels"--

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